

WSCF Laboratory

PO Box 650 S3-30
Richland, WA 99352



December 18, 2012

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

Dear Scot Fitzgerald,

REVISED121239 - 698934 [Report ID: 121239]

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 WSCF121239

- * 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 # WSCF121239
 Data Deliverable Date 11/05/12

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
W13-010	B2M0Y3	121239001	WATER	10/04/12	10/04/12
W13-010	B2M0Y9	121239002	WATER	10/04/12	10/04/12
W13-010	B2M1Y8	121239003	WATER	10/04/12	10/04/12
W13-010	B2M1Y9	121239004	WATER	10/04/12	10/04/12
W13-010	B2M1Y7	121239005	WATER	10/04/12	10/04/12
W13-010	B2M200	121239006	WATER	10/04/12	10/04/12
W13-010	B2M201	121239007	WATER	10/04/12	10/04/12
W13-010	B2M202	121239008	WATER	10/04/12	10/04/12
W13-010	B2M0Y5	121239009	WATER	10/04/12	10/04/12
W13-010	B2M101	121239010	WATER	10/04/12	10/04/12
W13-010	B2M8D5	121239011	WATER	10/04/12	10/04/12
W13-010	B2M8D6	121239012	WATER	10/04/12	10/04/12
W13-010	B2M8D9	121239013	WATER	10/04/12	10/04/12
W13-010	B2M8D8	121239014	WATER	10/04/12	10/04/12
W13-010	B2M190	121239015	WATER	10/04/12	10/04/12
W13-010	B2M188	121239016	WATER	10/04/12	10/04/12
W13-010	B2M245	121239017	WATER	10/04/12	10/04/12
W13-010	B2M246	121239018	WATER	10/04/12	10/04/12
W13-010	B2M247	121239019	WATER	10/04/12	10/04/12

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ATTACHMENT 2

NARRATIVE

Consisting of 8 pages
Including cover page

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Attachment 2
Narrative Rev2
WSCF121239

Revision 2: This case narrative replaces the prior in its entirety. 1,4-Dioxane was added per SDR13-064 to samples B2M0Y3 and B2M0Y9.

Revision 1: This case narrative replaces the prior in its entirety. P&D correction is adding Kerosene to samples B2M0Y3 and B2M0Y9.

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 by Method 8270 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

Chemical Oxygen Demand – Hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- All 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.
- 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):

- Vanadium was detected in the Blank and evaluated.
- All other 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.

Total Organic Carbon – 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.

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Total Organic Halides – 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.

Organic Comments

PCB – 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.

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):

- 4-Nitrophenol and Pentachlorophenol did not meet the MS / MSD RPD acceptance limits. Sample results for this analyte were not flagged. The quality control report was flagged for RPD failure.
- The Blank, MS, MSD and samples B2M0Y3 (121239001) and B2M0Y9 (121239002) did not meet the acceptance limits for surrogate Phenol-d5. Sample results were not flagged. The quality control report was flagged for surrogate recovery failure.
- All other applicable QC controls are within the established limits.

TPHD-WA – 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.

TPHG-WA – The hold time requirement for this analysis was met. A Duplicate, 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.

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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.

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Attachment 2
Narrative Rev2
WSCF121239

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 B2M0Y3, B2M0Y9, B2M105, B2M111, B2M117, B2M123, B2M129, B2M135, B2M141, B2M147, B2M153, B2M159, B2M165, B2M171, B2M177, B2M194, B2M1B0, B2M9W6

SAMPLE MATRIX WATER

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

SDG NUM WSCF121241, WSCF121242, WSCF121284, WSCF121226, WSCF121275, WSCF121230, WSCF121223, WSCF121274, WSCF121232, WSCF121239

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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Narrative Rev2
WSCF121239

Problem and Discrepancy Report

WSCF

SDG WSCF121239

11/06/2012

1. The data package has the following issues:

- a) TPHKEROSENE for sample number B2M0Y3, and B2M0Y9 was not reported in the electronic or hardcopy data packages.

Resolution: *Provide appropriate correction*

Lab Response: **the results have been added**

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Attachment 2
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WSCF121239

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 130 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 # WSCF121239
Report Date December 18, 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.

This information is intended for the use of the addressee only. If the reader of this report is not the intended recipient or is not authorized by the recipient to receive the report, you are hereby notified that any dissemination, distribution or copying of this report is strictly prohibited. If you have received this report in error, please notify WSCF Laboratory immediately by telephone at (509) 373-7005. Information designation of this report is the responsibility of the customer.

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Batch QC List

Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121239

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
208285	208308	5	BLANK	82497	BLANK		ICP-6010 - All possible metals
208285	208308	7	LCS	82499	LCS		ICP-6010 - All possible metals
208285	208308	9	MS	82500	B2M6C8(121234009MS) 121234009		ICP-6010 - All possible metals
208285	208308	10	MSD	82501	B2M6C8(121234009MSD 121234009		ICP-6010 - All possible metals
208285	208308	16	SAMPLE	121239001	B2M0Y3		ICP-6010 - All possible metals
208285	208308	17	SAMPLE	121239002	B2M0Y9		ICP-6010 - All possible metals
208285	208308	18	SAMPLE	121239009	B2M0Y5		ICP-6010 - All possible metals
208285	208308	19	SAMPLE	121239010	B2M101		ICP-6010 - All possible metals
208285	208308	22	SAMPLE	121239015	B2M190		ICP-6010 - All possible metals
208285	208308	23	SAMPLE	121239016	B2M188		ICP-6010 - All possible metals
208289	208303	4	BLANK	82511	BLANK		ICP-2008 MS All possible metal
208289	208303	5	LCS	82512	LCS		ICP-2008 MS All possible metal
208289	208303	7	MS	82513	B2M9W5(121232004MS) 121232004		ICP-2008 MS All possible metal
208289	208303	8	MSD	82514	B2M9W5(121232004MSD 121232004		ICP-2008 MS All possible metal
208289	208303	16	SAMPLE	121239001	B2M0Y3		ICP-2008 MS All possible metal
208289	208303	17	SAMPLE	121239002	B2M0Y9		ICP-2008 MS All possible metal
208289	208303	20	SAMPLE	121239009	B2M0Y5		ICP-2008 MS All possible metal
208289	208303	21	SAMPLE	121239010	B2M101		ICP-2008 MS All possible metal
208289	208303	22	SAMPLE	121239011	B2M8D5		ICP-2008 MS All possible metal
208289	208303	23	SAMPLE	121239012	B2M8D6		ICP-2008 MS All possible metal
208289	208303	24	SAMPLE	121239013	B2M8D9		ICP-2008 MS All possible metal
208289	208303	25	SAMPLE	121239014	B2M8D8		ICP-2008 MS All possible metal
208507	208508	3	BLANK	82881	BLANK		Chemical Oxygen Demand

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Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
208507	208508	4	LCS	82882	LCS		Chemical Oxygen Demand
208507	208508	9	MS	82885	B2M129(121223013MS)	121223013	Chemical Oxygen Demand
208507	208508	10	MSD	82886	B2M129(121223013MSD)	121223013	Chemical Oxygen Demand
208507	208508	16	SAMPLE	121239001	B2M0Y3		Chemical Oxygen Demand
208507	208508	17	SAMPLE	121239002	B2M0Y9		Chemical Oxygen Demand
209140	209141	1	BLANK	83629	BLANK		Total Organic Halides
209140	209141	2	LCS	83630	LCS		Total Organic Halides
209140	209141	4	MS	83632	B2M188(121239016MS)	121239016	Total Organic Halides
209140	209141	5	MSD	83633	B2M188(121239016MSD)	121239016	Total Organic Halides
209140	209141	6	SAMPLE	121239016	B2M188		Total Organic Halides
209140	209141	7	SAMPLE	121239017	B2M245		Total Organic Halides
209140	209141	8	SAMPLE	121239018	B2M246		Total Organic Halides
209140	209141	9	SAMPLE	121239019	B2M247		Total Organic Halides
209143	209144	1	BLANK	83634	BLANK		Total Organic Halides
209143	209144	2	LCS	83635	LCS		Total Organic Halides
209143	209144	20	MS	83641	B2M0Y3(121239001MS)	121239001	Total Organic Halides
209143	209144	21	MSD	83642	B2M0Y3(121239001MSD)	121239001	Total Organic Halides
209143	209144	22	SAMPLE	121239001	B2M0Y3		Total Organic Halides
209143	209144	23	SAMPLE	121239002	B2M0Y9		Total Organic Halides
209143	209144	24	SAMPLE	121239003	B2M1Y8		Total Organic Halides
209143	209144	25	SAMPLE	121239004	B2M1Y9		Total Organic Halides
209143	209144	26	SAMPLE	121239005	B2M1Y7		Total Organic Halides
209143	209144	27	SAMPLE	121239006	B2M200		Total Organic Halides

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Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
209143	209144	28	SAMPLE	121239007	B2M201		Total Organic Halides
209143	209144	29	SAMPLE	121239008	B2M202		Total Organic Halides

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Batch QC List

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121239

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
208276	208284	1	BLANK	82474	BLANK		Extractable Diesel and Petroleum
208276	208284	2	LCS	82475	LCS		Extractable Diesel and Petroleum
208276	208284	3	MS	82476	B2M0Y3(121239001MS)	121239001	Extractable Diesel and Petroleum
208276	208284	4	MSD	82477	B2M0Y3(121239001MSD)	121239001	Extractable Diesel and Petroleum
208276	208284	5	SAMPLE	121239002	B2M0Y9		Extractable Diesel and Petroleum
208276	208284	7	SAMPLE	121239001	B2M0Y3		Extractable Diesel and Petroleum
208488	208850	1	BLANK	82826	BLANK		SW-846 8270D Semivolatiles
208488	208850	2	LCS	82827	LCS		SW-846 8270D Semivolatiles
208488	208850	3	MS	82828	B2M0Y3(121239001MS)	121239001	SW-846 8270D Semivolatiles
208488	208850	4	MSD	82829	B2M0Y3(121239001MSD)	121239001	SW-846 8270D Semivolatiles
208488	208850	12	SAMPLE	121239002	B2M0Y9		SW-846 8270D Semivolatiles
208488	208850	14	SAMPLE	121239001	B2M0Y3		SW-846 8270D Semivolatiles
208650	208887	1	BLANK	82953	BLANK		PCBs by EPA SW-846 Method 8082
208650	208887	2	LCS	82954	LCS		PCBs by EPA SW-846 Method 8082
208650	208887	3	MS	82955	B2M129(121223013MS)	121223013	PCBs by EPA SW-846 Method 8082
208650	208887	4	MSD	82956	B2M129(121223013MSD)	121223013	PCBs by EPA SW-846 Method 8082
208650	208887	10	SAMPLE	121239002	B2M0Y9		PCBs by EPA SW-846 Method 8082
208650	208887	12	SAMPLE	121239001	B2M0Y3		PCBs by EPA SW-846 Method 8082

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Batch QC List

Attention Scot Fitzgerald
Department Organic, Volatiles

Group #

WSCF121239

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
208456	208457	1	BLANK	82689	BLANK		SW-846 8260B Volatiles
208456	208457	2	LCS	82690	LCS		SW-846 8260B Volatiles
208456	208457	3	MS	82691	B2M129(121223013MS)	121223013	SW-846 8260B Volatiles
208456	208457	4	MSD	82692	B2M129(121223013MSD)	121223013	SW-846 8260B Volatiles
208456	208457	12	SAMPLE	121239002	B2M0Y9		SW-846 8260B Volatiles
208456	208457	14	SAMPLE	121239001	B2M0Y3		SW-846 8260B Volatiles
208756	208757	1	BLANK	82983	BLANK		Gasoline Range (W)
208756	208757	2	LCS	82984	LCS		Gasoline Range (W)
208756	208757	3	MS	82985	B2M129(121223013MS)	121223013	Gasoline Range (W)
208756	208757	4	MSD	82986	B2M129(121223013MSD)	121223013	Gasoline Range (W)
208756	208757	5	DUP	82987	B2M129(121223013DUP)	121223013	Gasoline Range (W)
208756	208757	11	SAMPLE	121239001	B2M0Y3		Gasoline Range (W)
208756	208757	12	SAMPLE	121239002	B2M0Y9		Gasoline Range (W)

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Batch QC List

Attention Scot Fitzgerald
Department Wet Chemistry

Group #

WSCF121239

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
208268	208268	30	BLANK	82447	BLANK		Total Organic Carbon
208268	208268	31	LCS	82448	LCS		Total Organic Carbon
208268	208268	32	MS	82449	B2M0Y3(121239001MS)	121239001	Total Organic Carbon
208268	208268	33	MSD	82450	B2M0Y3(121239001MSD)	121239001	Total Organic Carbon
208268	208268	34	SAMPLE	121239001	B2M0Y3		Total Organic Carbon
208268	208268	35	SAMPLE	121239002	B2M0Y9		Total Organic Carbon
208268	208268	36	SAMPLE	121239003	B2M1Y8		Total Organic Carbon
208268	208268	37	SAMPLE	121239004	B2M1Y9		Total Organic Carbon
208268	208268	38	SAMPLE	121239005	B2M1Y7		Total Organic Carbon
208268	208268	39	SAMPLE	121239006	B2M200		Total Organic Carbon
208268	208268	40	SAMPLE	121239007	B2M201		Total Organic Carbon
208268	208268	41	SAMPLE	121239008	B2M202		Total Organic Carbon
208268	208268	42	SAMPLE	121239016	B2M188		Total Organic Carbon
208268	208268	43	SAMPLE	121239017	B2M245		Total Organic Carbon
208268	208268	45	MS	82452	B2M246(121239018MS)	121239018	Total Organic Carbon
208268	208268	46	MSD	82453	B2M246(121239018MSD)	121239018	Total Organic Carbon
208268	208268	47	SAMPLE	121239018	B2M246		Total Organic Carbon
208268	208268	48	SAMPLE	121239019	B2M247		Total Organic Carbon
208476	208482	1	BLANK	82749	BLANK		Cyanide (W) by Midi/Spectrophotometer
208476	208482	4	LCS	82752	LCS		Cyanide (W) by Midi/Spectrophotometer
208476	208482	5	MS	82753	B2LDT5(121203010MS)	121203010	Cyanide (W) by Midi/Spectrophotometer
208476	208482	6	MSD	82754	B2LDT5(121203010MSD)	121203010	Cyanide (W) by Midi/Spectrophotometer
208476	208482	21	SAMPLE	121239001	B2M0Y3		Cyanide (W) by Midi/Spectrophotometer

REVISED121239 -

Batch QC List

Attention Scot Fitzgerald
 Department Wet Chemistry

Group # WSCF121239

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
208476	208482	22	SAMPLE	121239002	B2M0Y9		Cyanide (W) by Midi/Spectrophotometer
208754	208754	1	LCS	82975	LCS		Total Alkalinity as mg/L CaCO3 (Water)
208754	208754	7	SAMPLE	121239001	B2M0Y3		Total Alkalinity as mg/L CaCO3 (Water)
208754	208754	8	SAMPLE	121239002	B2M0Y9		Total Alkalinity as mg/L CaCO3 (Water)
208754	208754	9	DUP	82976	B2M0Y9(121239002DUP) 121239002		Total Alkalinity as mg/L CaCO3 (Water)
208754	208754	10	SAMPLE	121239016	B2M188		Total Alkalinity as mg/L CaCO3 (Water)
208754	208754	13	LCS	82977	LCS		Total Alkalinity as mg/L CaCO3 (Water)
208754	208754	24	LCS	82978	LCS		Total Alkalinity as mg/L CaCO3 (Water)

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

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-523-444	Total Organic Halides Based on SW-846 Method 9020B		
	EPA SW-846	9020B	Total Organic Halides (TOX)
	HEIS	9020_TOX	Total Organic Halides (TOX)
LA-523-470	Chemical Oxygen Demand		
	EPA-600/4-79-020	410.4	Chemical Oxygen Demand
	HEIS	410.4_COD	Chemical Oxygen Demand

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>

REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

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-523-427	Polychlorinated Biphenyls (PCB'S) by Gas Chromatography		
	EPA SW-846	3510C	Separatory Funnel Liquid-Liquid Extraction
	EPA SW-846	3545	Pressurized Fluid Extraction (PFE)
	EPA SW-846	3665A	Sulfuric Acid/Permanganate Cleanup
	EPA SW-846	8000B	Determinative Chromatographic Separations
	EPA SW-846	8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography
	HEIS	8082_PCB_GC	Polychlorinated Biphenyls (PCBs) by Gas Chromatography
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)
			Chromatography/Mass Spectrometry (GC/MS)
	HEIS	8270_SVOA_GCMS	Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry(GC/MS)
LA-523-493	NWTPH-Dx, Extractible Diesel and Petroleum Productions Analysis in Soil and Water		
	WDOE	WDOE	Total Petroleum Hydrocarbons in Diesel
	HEIS	WTPH_DIESEL	TPH Diesel

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>

REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

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-523-443	Gas Chromatography Analysis of Gasoline Range Total Petroleum Hydrocarbons in Water		
	EPA	NWTPH-G	"Analytical Methods for Petroleum Hydrocarbons, June 1997, NWTPH-G, Volatile Petroleum Products Method for Soil and Water
	HEIS	WTPH_GASOLINE	Total Petroleum Hydrocarbons, Gasoline
LA-523-455	Volatile Sample Analysis by SW-846 Method 8260B		
	EPA SW-846	8000B	Determinative Chromographic Separations
	EPA SW-846	8260B	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
	HEIS	8260_VOA_GCMS	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

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

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

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-344-406	Total Organic Carbon (TOC) Based on SW-846		
	EPA SW-846	9060	Total Organic Carbon
	HEIS	9060_TOC	Total Organic Carbon
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>

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										10/09/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	B	38.9		ug/L	1	19	95	10/10/12
Magnesium	7439-95-4	LA-505-411		15900		ug/L	1	4.0	20	10/10/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Nickel	7440-02-0	LA-505-411	B	4.90		ug/L	1	4.0	20	10/10/12
Potassium	7440-09-7	LA-505-411		6940		ug/L	1	76	380	10/10/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Sodium	7440-23-5	LA-505-411		23500		ug/L	1	10	50	10/10/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	10/10/12
Barium	7440-39-3	LA-505-411		59.9		ug/L	1	4.0	20	10/10/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Chromium	7440-47-3	LA-505-411	B	10.4		ug/L	1	5.0	25	10/10/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Vanadium	7440-62-2	LA-505-411	B	16.9		ug/L	1	5.0	25	10/10/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	10/10/12
Calcium	7440-70-2	LA-505-411		49900		ug/L	1	49	240	10/10/12
Strontium	7440-24-6	LA-505-411		235		ug/L	1	9.0	45	10/10/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Titanium	7440-32-6	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
ICPMS Prep (W)										
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	UD	<10		ug/L	2	10	100	10/10/12
Manganese	7439-96-5	LA-505-412	BD	0.696		ug/L	2	0.20	2.0	10/10/12
Nickel	7440-02-0	LA-505-412	D	3.39		ug/L	2	0.20	2.0	10/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	10/10/12
Barium	7440-39-3	LA-505-412	D	50.0		ug/L	2	0.40	4.0	10/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	10/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Chromium	7440-47-3	LA-505-412	D	7.51		ug/L	2	0.20	2.0	10/10/12
Cobalt	7440-48-4	LA-505-412	BD	0.102		ug/L	2	0.10	0.50	10/10/12
Copper	7440-50-8	LA-505-412	BD	0.280		ug/L	2	0.20	2.0	10/10/12
Vanadium	7440-62-2	LA-505-412	DC	15.3		ug/L	2	0.40	4.0	10/10/12
Zinc	7440-66-6	LA-505-412	UD	<2.0		ug/L	2	2.0	20	10/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Molybdenum	7439-98-7	LA-505-412	D	5.26		ug/L	2	0.10	1.0	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239001
SAF# W13-010
Sample ID B2M0Y3

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Strontium	7440-24-6	LA-505-412	D	217		ug/L	2	0.20	2.0	10/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Arsenic	7440-38-2	LA-505-412	BD	3.33		ug/L	2	0.40	4.0	10/10/12
Selenium	7782-49-2	LA-505-412	BD	3.97		ug/L	2	2.0	20	10/10/12
Preparation for COD (W)										10/11/12
Chemical Oxygen Demand										
Chemical Oxygen Demand	COD	LA-523-470	U	<10		mg/L	1	10	50	10/11/12
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										10/09/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	B	34.5		ug/L	1	19	95	10/10/12
Magnesium	7439-95-4	LA-505-411		17600		ug/L	1	4.0	20	10/10/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Nickel	7440-02-0	LA-505-411	B	5.20		ug/L	1	4.0	20	10/10/12
Potassium	7440-09-7	LA-505-411		8000		ug/L	1	76	380	10/10/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Sodium	7440-23-5	LA-505-411		23900		ug/L	1	10	50	10/10/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	10/10/12
Barium	7440-39-3	LA-505-411		76.2		ug/L	1	4.0	20	10/10/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Chromium	7440-47-3	LA-505-411	B	11.3		ug/L	1	5.0	25	10/10/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Vanadium	7440-62-2	LA-505-411	B	15.2		ug/L	1	5.0	25	10/10/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	10/10/12
Calcium	7440-70-2	LA-505-411		52100		ug/L	1	49	240	10/10/12
Strontium	7440-24-6	LA-505-411		269		ug/L	1	9.0	45	10/10/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Titanium	7440-32-6	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
ICPMS Prep (W)										
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	UD	<10		ug/L	2	10	100	10/10/12
Manganese	7439-96-5	LA-505-412	BD	0.610		ug/L	2	0.20	2.0	10/10/12
Nickel	7440-02-0	LA-505-412	D	3.60		ug/L	2	0.20	2.0	10/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	10/10/12
Barium	7440-39-3	LA-505-412	D	67.0		ug/L	2	0.40	4.0	10/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	10/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Chromium	7440-47-3	LA-505-412	D	8.26		ug/L	2	0.20	2.0	10/10/12
Cobalt	7440-48-4	LA-505-412	BD	0.134		ug/L	2	0.10	0.50	10/10/12
Copper	7440-50-8	LA-505-412	BD	0.248		ug/L	2	0.20	2.0	10/10/12
Vanadium	7440-62-2	LA-505-412	DC	15.3		ug/L	2	0.40	4.0	10/10/12
Zinc	7440-66-6	LA-505-412	UD	<2.0		ug/L	2	2.0	20	10/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Molybdenum	7439-98-7	LA-505-412	D	6.12		ug/L	2	0.10	1.0	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Strontium	7440-24-6	LA-505-412	D	268		ug/L	2	0.20	2.0	10/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Arsenic	7440-38-2	LA-505-412	BD	3.68		ug/L	2	0.40	4.0	10/10/12
Selenium	7782-49-2	LA-505-412	BD	5.06		ug/L	2	2.0	20	10/10/12
Preparation for COD (W)										10/11/12
Chemical Oxygen Demand										
Chemical Oxygen Demand	COD	LA-523-470	B	37.3		mg/L	1	10	50	10/11/12
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239003
SAF# W13-010
Sample ID B2M1Y8

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239004
SAF# W13-010
Sample ID B2M1Y9

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239005
SAF# W13-010
Sample ID B2M1Y7

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239006
SAF# W13-010
Sample ID B2M200

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239007
SAF# W13-010
Sample ID B2M201

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239008
SAF# W13-010
Sample ID B2M202

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239009	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y5	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										10/09/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411		146		ug/L	1	19	95	10/10/12
Magnesium	7439-95-4	LA-505-411		15800		ug/L	1	4.0	20	10/10/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Potassium	7440-09-7	LA-505-411		6930		ug/L	1	76	380	10/10/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Sodium	7440-23-5	LA-505-411		23300		ug/L	1	10	50	10/10/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	10/10/12
Barium	7440-39-3	LA-505-411		59.3		ug/L	1	4.0	20	10/10/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Chromium	7440-47-3	LA-505-411	B	5.60		ug/L	1	5.0	25	10/10/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Vanadium	7440-62-2	LA-505-411	B	19.1		ug/L	1	5.0	25	10/10/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	10/10/12
Calcium	7440-70-2	LA-505-411		50400		ug/L	1	49	240	10/10/12
Strontium	7440-24-6	LA-505-411		237		ug/L	1	9.0	45	10/10/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239009	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y5	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Titanium	7440-32-6	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
ICPMS Prep (W)										
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	UD	<10		ug/L	2	10	100	10/10/12
Manganese	7439-96-5	LA-505-412	BD	0.590		ug/L	2	0.20	2.0	10/10/12
Nickel	7440-02-0	LA-505-412	D	2.43		ug/L	2	0.20	2.0	10/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	10/10/12
Barium	7440-39-3	LA-505-412	D	51.9		ug/L	2	0.40	4.0	10/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	10/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Chromium	7440-47-3	LA-505-412	D	4.27		ug/L	2	0.20	2.0	10/10/12
Cobalt	7440-48-4	LA-505-412	BD	0.104		ug/L	2	0.10	0.50	10/10/12
Copper	7440-50-8	LA-505-412	BD	0.368		ug/L	2	0.20	2.0	10/10/12
Vanadium	7440-62-2	LA-505-412	DC	16.6		ug/L	2	0.40	4.0	10/10/12
Zinc	7440-66-6	LA-505-412	UD	<2.0		ug/L	2	2.0	20	10/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Molybdenum	7439-98-7	LA-505-412	D	5.55		ug/L	2	0.10	1.0	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239009	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y5	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Strontium	7440-24-6	LA-505-412	D	229		ug/L	2	0.20	2.0	10/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Arsenic	7440-38-2	LA-505-412	BD	3.55		ug/L	2	0.40	4.0	10/10/12
Selenium	7782-49-2	LA-505-412	BD	4.34		ug/L	2	2.0	20	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239010	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M101	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										10/09/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	B	19.9		ug/L	1	19	95	10/10/12
Magnesium	7439-95-4	LA-505-411		18100		ug/L	1	4.0	20	10/10/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Potassium	7440-09-7	LA-505-411		8220		ug/L	1	76	380	10/10/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Sodium	7440-23-5	LA-505-411		24500		ug/L	1	10	50	10/10/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	10/10/12
Barium	7440-39-3	LA-505-411		77.6		ug/L	1	4.0	20	10/10/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Chromium	7440-47-3	LA-505-411	B	5.60		ug/L	1	5.0	25	10/10/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Vanadium	7440-62-2	LA-505-411	B	16.7		ug/L	1	5.0	25	10/10/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	10/10/12
Calcium	7440-70-2	LA-505-411		54100		ug/L	1	49	240	10/10/12
Strontium	7440-24-6	LA-505-411		277		ug/L	1	9.0	45	10/10/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239010	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M101	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Titanium	7440-32-6	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
ICPMS Prep (W)										
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	UD	<10		ug/L	2	10	100	10/10/12
Manganese	7439-96-5	LA-505-412	BD	0.498		ug/L	2	0.20	2.0	10/10/12
Nickel	7440-02-0	LA-505-412	D	2.63		ug/L	2	0.20	2.0	10/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	10/10/12
Barium	7440-39-3	LA-505-412	D	67.1		ug/L	2	0.40	4.0	10/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	10/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Chromium	7440-47-3	LA-505-412	D	3.89		ug/L	2	0.20	2.0	10/10/12
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	10/10/12
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	10/10/12
Vanadium	7440-62-2	LA-505-412	DC	14.9		ug/L	2	0.40	4.0	10/10/12
Zinc	7440-66-6	LA-505-412	UD	<2.0		ug/L	2	2.0	20	10/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Molybdenum	7439-98-7	LA-505-412	D	6.15		ug/L	2	0.10	1.0	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239010
SAF# W13-010
Sample ID B2M101

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Strontium	7440-24-6	LA-505-412	D	269		ug/L	2	0.20	2.0	10/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	10/10/12
Arsenic	7440-38-2	LA-505-412	BD	3.60		ug/L	2	0.40	4.0	10/10/12
Selenium	7782-49-2	LA-505-412	BD	5.19		ug/L	2	2.0	20	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239011
SAF# W13-010
Sample ID B2M8D5

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPMS Prep (W)										10/09/12
ICP-2008 MS All possible metal										
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239012
SAF# W13-010
Sample ID B2M8D6

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPMS Prep (W)										10/09/12
ICP-2008 MS All possible metal										
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239013
SAF# W13-010
Sample ID B2M8D9

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPMS Prep (W)										10/09/12
ICP-2008 MS All possible metal										
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239014
SAF# W13-010
Sample ID B2M8D8

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPMS Prep (W)										10/09/12
ICP-2008 MS All possible metal										
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239015	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M190	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										10/09/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	B	23.7		ug/L	1	19	95	10/10/12
Magnesium	7439-95-4	LA-505-411		17300		ug/L	1	4.0	20	10/10/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Potassium	7440-09-7	LA-505-411		8580		ug/L	1	76	380	10/10/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Sodium	7440-23-5	LA-505-411		20900		ug/L	1	10	50	10/10/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	10/10/12
Barium	7440-39-3	LA-505-411		60.0		ug/L	1	4.0	20	10/10/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Chromium	7440-47-3	LA-505-411	B	13.8		ug/L	1	5.0	25	10/10/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Vanadium	7440-62-2	LA-505-411	B	21.8		ug/L	1	5.0	25	10/10/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	10/10/12
Calcium	7440-70-2	LA-505-411		57500		ug/L	1	49	240	10/10/12
Strontium	7440-24-6	LA-505-411		283		ug/L	1	9.0	45	10/10/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239015
SAF# W13-010
Sample ID B2M190

Matrix WATER
Sampled 10/04/12
Received 10/04/12

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	10/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample #	121239016	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M188	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										10/09/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	B	43.2		ug/L	1	19	95	10/10/12
Magnesium	7439-95-4	LA-505-411		17400		ug/L	1	4.0	20	10/10/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Nickel	7440-02-0	LA-505-411	B	4.60		ug/L	1	4.0	20	10/10/12
Potassium	7440-09-7	LA-505-411		8750		ug/L	1	76	380	10/10/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Sodium	7440-23-5	LA-505-411		21200		ug/L	1	10	50	10/10/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	10/10/12
Barium	7440-39-3	LA-505-411		60.0		ug/L	1	4.0	20	10/10/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Chromium	7440-47-3	LA-505-411	B	20.6		ug/L	1	5.0	25	10/10/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	10/10/12
Vanadium	7440-62-2	LA-505-411	B	21.1		ug/L	1	5.0	25	10/10/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	10/10/12
Calcium	7440-70-2	LA-505-411		57600		ug/L	1	49	240	10/10/12
Strontium	7440-24-6	LA-505-411		289		ug/L	1	9.0	45	10/10/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239016
SAF# W13-010
Sample ID B2M188

Matrix WATER
Sampled 10/04/12
Received 10/04/12

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	10/10/12
Preparation for TOX (W)										
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239017
SAF# W13-010
Sample ID B2M245

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239018
SAF# W13-010
Sample ID B2M246

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Sample # 121239019
SAF# W13-010
Sample ID B2M247

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for TOX (W)										10/08/12
Total Organic Halides										
Total Organic Halides	59473-04-0	LA-523-444	U	<5.0		ug/L	1	5.0	15	10/08/12

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.

REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (W) SPE										10/09/12
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1221	11104-28-2	LA-523-427	U	<0.2		ug/L	1	0.2	0.4	10/17/12
Aroclor-1232	11141-16-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1242	53469-21-9	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1248	12672-29-6	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1254	11097-69-1	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1260	11096-82-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Preparation for 8270 (W) CLE										10/10/12
SW-846 8270D Semivolatiles										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

J - Analyte < lowest calibration but >= MDL.

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

T - MS/MSD recovery outside control limits(GC/MS only).

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	10/16/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

J - Analyte < lowest calibration but >= MDL.

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

T - MS/MSD recovery outside control limits(GC/MS only).

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Dimethylphthalate	131-11-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

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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.

REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.9		ug/L	1	0.9	2	10/16/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
3-Nitroaniline	99-09-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosomethylethylamine	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	10/16/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	10/16/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1-Naphthylamine	134-32-7	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	10/16/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Ethyl methanesulfonate	62-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed	
2-Methyl-5-nitroaniline	99-55-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	10/16/12	
N-Nitrosodiphenylamin/Di phenyl Methaprylene	91-80-5	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Total Petroleum Hydrocarbons (Water Prep)										10/08/12	
Extractable Diesel and Petroleum											
Diesel	TPHDIESEL	LA-523-493	U	<70		ug/L	1	70	100	10/08/12	

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample # 121239001
SAF# W13-010
Sample ID B2M0Y3

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Kerosene	TPHKEROSEN LA-523-493		U	<70		ug/L	1	70	100	10/08/12

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (W) SPE										10/09/12
PCBs by EPA SW-846 Method 8082										
Aroclor-1016	12674-11-2	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1221	11104-28-2	LA-523-427	U	<0.2		ug/L	1	0.2	0.4	10/17/12
Aroclor-1232	11141-16-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1242	53469-21-9	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1248	12672-29-6	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1254	11097-69-1	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Aroclor-1260	11096-82-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	10/17/12
Preparation for 8270 (W) CLE										10/10/12
SW-846 8270D Semivolatiles										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	10/16/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Dimethylphthalate	131-11-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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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.

REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.9		ug/L	1	0.9	2	10/16/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
3-Nitroaniline	99-09-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosomethylethylamine	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	10/16/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	10/16/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1-Naphthylamine	134-32-7	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	10/16/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Ethyl methanesulfonate	62-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	10/16/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed	
2-Methyl-5-nitroaniline	99-55-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12	
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	10/16/12	
N-Nitrosodiphenylamin/Di phenyl Methaprylene	91-80-5	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	10/16/12
Total Petroleum Hydrocarbons (Water Prep)										10/08/12	
Extractable Diesel and Petroleum											
Diesel	TPHDIESEL	LA-523-493	U	<70		ug/L	1	70	100	10/08/12	

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Sample # 121239002
SAF# W13-010
Sample ID B2M0Y9

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Kerosene	TPHKEROSEN LA-523-493		U	<70		ug/L	1	70	100	10/08/12

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Gasoline Range Prep (W)										10/16/12
Gasoline Range (W)										
Gasoline	TPHGASOLIN	LA-523-443	U	<50		ug/L	1	50	200	10/16/12
Preparation for 8260B (W)										10/11/12
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12

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

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chloroform	67-66-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12

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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.

REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	10/16/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	10/16/12
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	10/16/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	10/16/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	10/16/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12

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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)

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Sample #	121239001	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y3	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	10/16/12

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Gasoline Range Prep (W)										10/16/12
Gasoline Range (W)										
Gasoline	TPHGASOLIN	LA-523-443	U	<50		ug/L	1	50	200	10/16/12
Preparation for 8260B (W)										10/11/12
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12

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

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chloroform	67-66-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12

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

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PQL is equivalent to Estimated Quantitation Limit (EQL)

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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	10/16/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	10/16/12
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	10/16/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	10/16/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	10/16/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	10/16/12

MDL = Minimum Detection Limit

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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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REVISED121239 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Sample #	121239002	Matrix	WATER
SAF#	W13-010	Sampled	10/04/12
Sample ID	B2M0Y9	Received	10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	10/16/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	10/16/12

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TP Err = Total Propagated Error

DF = Dilution Factor

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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.

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REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239001
SAF# W13-010
Sample ID B2M0Y3

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for Cyanide (W)										10/10/12
Cyanide (W) by Midi/Spectrophotometer										10/15/12
Cyanide	57-12-5	LA-695-402	B	4.48		ug/L	1	4.0	20	10/10/12
										10/15/12
Total Alkalinity as mg/L CaCO₃ (Water)										10/15/12
Total Alkalinity as CaCO ₃	ALKALINITY	LA-531-411		120		mg/L	1	1	10	10/15/12
										10/05/12
Total Organic Carbon										10/05/12
Total Organic Carbon	TOC	LA-344-406	B	0.172		mg/L	1	0.10	0.30	10/05/12

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.

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REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239002
SAF# W13-010
Sample ID B2M0Y9

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for Cyanide (W)										10/10/12
Cyanide (W) by Midi/Spectrophotometer										10/15/12
Cyanide	57-12-5	LA-695-402	B	4.25		ug/L	1	4.0	20	10/10/12
										10/15/12
Total Alkalinity as mg/L CaCO₃ (Water)										10/15/12
Total Alkalinity as CaCO ₃	ALKALINITY	LA-531-411		120		mg/L	1	1	10	10/15/12
										10/05/12
Total Organic Carbon										10/05/12
Total Organic Carbon	TOC	LA-344-406	B	0.148		mg/L	1	0.10	0.30	10/05/12

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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.

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REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239003
SAF# W13-010
Sample ID B2M1Y8

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Organic Carbon	TOC	LA-344-406	B	0.186		mg/L	1	0.10	0.30	10/05/12
10/05/12										

MDL = Minimum Detection Limit

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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.

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

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REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239004
SAF# W13-010
Sample ID B2M1Y9

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Organic Carbon	TOC	LA-344-406	B	0.156		mg/L	1	0.10	0.30	10/05/12
10/05/12										

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

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PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239005
SAF# W13-010
Sample ID B2M1Y7

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										10/05/12
Total Organic Carbon										
Total Organic Carbon	TOC	LA-344-406	B	0.157		mg/L	1	0.10	0.30	10/05/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.

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

D - Analyte was reported at a secondary dilution factor.

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

U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239006
SAF# W13-010
Sample ID B2M200

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										10/05/12
Total Organic Carbon										
Total Organic Carbon	TOC	LA-344-406	B	0.152		mg/L	1	0.10	0.30	10/05/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.

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

D - Analyte was reported at a secondary dilution factor.

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

U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239007
SAF# W13-010
Sample ID B2M201

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Organic Carbon	TOC	LA-344-406	B	0.157		mg/L	1	0.10	0.30	10/05/12
10/05/12										

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.

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

D - Analyte was reported at a secondary dilution factor.

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

U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239008
SAF# W13-010
Sample ID B2M202

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Organic Carbon	TOC	LA-344-406	B	0.167		mg/L	1	0.10	0.30	10/05/12
10/05/12										

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.

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

D - Analyte was reported at a secondary dilution factor.

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

U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239016
SAF# W13-010
Sample ID B2M188

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										10/15/12
Total Alkalinity as mg/L CaCO₃ (Water)										
Total Alkalinity as CaCO ₃	ALKALINITY	LA-531-411		99		mg/L	1	1	10	10/15/12
										10/05/12
Total Organic Carbon										
Total Organic Carbon	TOC	LA-344-406	B	0.279		mg/L	1	0.10	0.30	10/05/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.

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

D - Analyte was reported at a secondary dilution factor.

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

U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239017
SAF# W13-010
Sample ID B2M245

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Organic Carbon	TOC	LA-344-406	B	0.250		mg/L	1	0.10	0.30	10/05/12
10/05/12										

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.

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

D - Analyte was reported at a secondary dilution factor.

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

U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239018
SAF# W13-010
Sample ID B2M246

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Organic Carbon	TOC	LA-344-406	B	0.231		mg/L	1	0.10	0.30	10/05/12
10/05/12										

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.

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

D - Analyte was reported at a secondary dilution factor.

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

U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Sample # 121239019
SAF# W13-010
Sample ID B2M247

Matrix WATER
Sampled 10/04/12
Received 10/04/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Total Organic Carbon	TOC	LA-344-406	B	0.249		mg/L	1	0.10	0.30	10/05/12
10/05/12										

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.

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

D - Analyte was reported at a secondary dilution factor.

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

U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121239 -

Attention Scot Fitzgerald
 Department Wet Chemistry

Group # WSCF121239

Analytical Batch 208268 (QC Batch: 208268) **Test** Total Organic Carbon
Associated Samples 121239001, 121239002, 121239003, 121239004, 121239005, 121239006, 121239007, 121239008, 121239016,
 121239017, 121239018, 121239019

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed	
BLANK		QC Sample #82447									
Total Organic Carbon	TOC		<0.045	mg/L					U	10/05/12	
LCS		QC Sample #82448									
Total Organic Carbon	TOC		2.17	mg/L	108.6	80 - 120				10/05/12	
MS		QC Sample #82449 Original 121239001									
Total Organic Carbon	TOC	0.172	2.18	mg/L	109.1	75 - 125				10/05/12	
MSD		QC Sample #82450 Original 121239001									
Total Organic Carbon	TOC	0.172	2.15	mg/L	107.5	75 - 125	1.40	20		10/05/12	
MS		QC Sample #82452 Original 121239018									
Total Organic Carbon	TOC	0.231	2.20	mg/L	110.2	75 - 125				10/05/12	
MSD		QC Sample #82453 Original 121239018									
Total Organic Carbon	TOC	0.231	2.19	mg/L	109.5	75 - 125	0.60	20		10/05/12	

* - 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 # WSCF121239

Analytical Batch 208284 (QC Batch: 208276) **Test** Extractable Diesel and Petroleum
Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed	
BLANK		QC Sample #82474									
Diesel	TPHDIESEL	<80		ug/L					U	10/08/12	
Kerosene	TPHKEROSE	<80		ug/L					U	10/08/12	
LCS		QC Sample #82475									
Diesel	TPHDIESEL	2800		ug/L	113.3	65 - 128				10/08/12	
MS		QC Sample #82476 Original 121239001									
Diesel	TPHDIESEL	<70	2400	ug/L	103.2	73 - 123				10/08/12	
MSD		QC Sample #82477 Original 121239001									
Diesel	TPHDIESEL	<70	2500	ug/L	106.6	73 - 123	3.30	20	Paired 82476	10/08/12	

* - QC result out of range

n/a - Not Applicable

REVISED121239 -

Quality Control Report

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REVISION 2

Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121239

Analytical Batch 208303 (QC Batch: 208289) Test ICP-2008 MS All possible metal
 Associated Samples 121239001, 121239002, 121239009, 121239010, 121239011, 121239012, 121239013, 121239014

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #82511
Aluminum	7429-90-5		<5.0	ug/L				U		10/10/12
Manganese	7439-96-5		<0.10	ug/L				U		10/10/12
Nickel	7440-02-0		<0.10	ug/L				U		10/10/12
Silver	7440-22-4		<0.050	ug/L				U		10/10/12
Antimony	7440-36-0		<0.30	ug/L				U		10/10/12
Barium	7440-39-3		<0.20	ug/L				U		10/10/12
Beryllium	7440-41-7		<0.10	ug/L				U		10/10/12
Cadmium	7440-43-9		<0.050	ug/L				U		10/10/12
Chromium	7440-47-3		<0.10	ug/L				U		10/10/12
Cobalt	7440-48-4		<0.050	ug/L				U		10/10/12
Copper	7440-50-8		<0.10	ug/L				U		10/10/12
Vanadium	7440-62-2		0.576	ug/L				B		10/10/12
Zinc	7440-66-6		<1.0	ug/L				U		10/10/12
Lead	7439-92-1		<0.050	ug/L				U		10/10/12
Mercury	7439-97-6		<0.050	ug/L				U		10/10/12
Molybdenum	7439-98-7		<0.050	ug/L				U		10/10/12
Strontium	7440-24-6		<0.10	ug/L				U		10/10/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Thallium	7440-28-0	<0.050		ug/L					U	10/10/12
Tin	7440-31-5	<0.050		ug/L					U	10/10/12
Arsenic	7440-38-2	<0.20		ug/L					U	10/10/12
Selenium	7782-49-2	<1.0		ug/L					U	10/10/12
LCS			QC Sample #82512							
Aluminum	7429-90-5	415		ug/L	103.8	85 - 115				10/10/12
Manganese	7439-96-5	41.7		ug/L	104.2	85 - 115				10/10/12
Nickel	7440-02-0	41.3		ug/L	103.2	85 - 115				10/10/12
Silver	7440-22-4	41.7		ug/L	104.4	85 - 115				10/10/12
Antimony	7440-36-0	40.0		ug/L	100.1	85 - 115				10/10/12
Barium	7440-39-3	42.2		ug/L	105.5	85 - 115				10/10/12
Beryllium	7440-41-7	41.7		ug/L	104.2	85 - 115				10/10/12
Cadmium	7440-43-9	40.7		ug/L	101.8	85 - 115				10/10/12
Chromium	7440-47-3	41.5		ug/L	103.8	85 - 115				10/10/12
Cobalt	7440-48-4	41.5		ug/L	103.7	85 - 115				10/10/12
Copper	7440-50-8	41.3		ug/L	103.4	85 - 115				10/10/12
Vanadium	7440-62-2	42.2		ug/L	105.6	85 - 115				10/10/12
Zinc	7440-66-6	37.3		ug/L	93.3	85 - 115				10/10/12
Lead	7439-92-1	43.8		ug/L	109.6	85 - 115				10/10/12
Mercury	7439-97-6	1.72		ug/L	86	85 - 115				10/10/12
Molybdenum	7439-98-7	41.7		ug/L	104.4	85 - 115				10/10/12
Strontium	7440-24-6	419		ug/L	104.8	85 - 115				10/10/12

* - QC result out of range

n/a - Not Applicable

REVISED121239 -

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Attention Scot Fitzgerald
Department Inorganic

Group #

WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits		RPD	RPD Limit	RQ	Analyzed
Thallium	7440-28-0	43.2	ug/L		108.1	85 - 115				10/10/12
Tin	7440-31-5	41.7	ug/L		104.4	85 - 115				10/10/12
Arsenic	7440-38-2	39.9	ug/L		99.7	85 - 115				10/10/12
Selenium	7782-49-2	36.9	ug/L		92.3	85 - 115				10/10/12
MS		QC Sample #82513 Original 121232004								
Aluminum	7429-90-5	402	ug/L		100.5	70 - 130				10/10/12
Manganese	7439-96-5	39.7	ug/L		99.2	70 - 130				10/10/12
Nickel	7440-02-0	37.9	ug/L		94.8	70 - 130				10/10/12
Silver	7440-22-4	37.6	ug/L		94	70 - 130				10/10/12
Antimony	7440-36-0	39.8	ug/L		99.5	70 - 130				10/10/12
Barium	7440-39-3	41.0	ug/L		102.6	70 - 130				10/10/12
Beryllium	7440-41-7	40.2	ug/L		100.5	70 - 130				10/10/12
Cadmium	7440-43-9	38.7	ug/L		96.8	70 - 130				10/10/12
Chromium	7440-47-3	39.6	ug/L		99.1	70 - 130				10/10/12
Cobalt	7440-48-4	38.8	ug/L		96.9	70 - 130				10/10/12
Copper	7440-50-8	35.7	ug/L		89.2	70 - 130				10/10/12
Vanadium	7440-62-2	41.6	ug/L		104	70 - 130				10/10/12
Zinc	7440-66-6	33.8	ug/L		84.6	70 - 130				10/10/12
Lead	7439-92-1	43.6	ug/L		108.9	70 - 130				10/10/12
Mercury	7439-97-6	1.80	ug/L		90.2	70 - 130				10/10/12
Molybdenum	7439-98-7	41.9	ug/L		104.8	70 - 130				10/10/12
Strontium	7440-24-6	409	ug/L		102.2	70 - 130				10/10/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Inorganic

Group #

WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Thallium	7440-28-0	43.7	ug/L	109.2	70 - 130					10/10/12
Tin	7440-31-5	40.6	ug/L	101.4	70 - 130					10/10/12
Arsenic	7440-38-2	39.6	ug/L	99.1	70 - 130					10/10/12
Selenium	7782-49-2	36.7	ug/L	91.7	70 - 130					10/10/12
MSD		QC Sample #82514								
		Original 121232004								
		Paired 82513								
Aluminum	7429-90-5	392	ug/L	97.9	70 - 130	2.70	20			10/10/12
Manganese	7439-96-5	38.7	ug/L	96.7	70 - 130	2.50	20			10/10/12
Nickel	7440-02-0	37.4	ug/L	93.4	70 - 130	1.40	20			10/10/12
Silver	7440-22-4	38.0	ug/L	95	70 - 130	1.10	20			10/10/12
Antimony	7440-36-0	39.8	ug/L	99.6	70 - 130	0.10	20			10/10/12
Barium	7440-39-3	42.2	ug/L	105.5	70 - 130	1.20	20			10/10/12
Beryllium	7440-41-7	39.3	ug/L	98.2	70 - 130	2.40	20			10/10/12
Cadmium	7440-43-9	39.1	ug/L	97.7	70 - 130	1.00	20			10/10/12
Chromium	7440-47-3	38.6	ug/L	96.5	70 - 130	2.30	20			10/10/12
Cobalt	7440-48-4	37.8	ug/L	94.5	70 - 130	2.50	20			10/10/12
Copper	7440-50-8	35.1	ug/L	87.7	70 - 130	1.70	20			10/10/12
Vanadium	7440-62-2	40.3	ug/L	100.8	70 - 130	2.20	20			10/10/12
Zinc	7440-66-6	33.0	ug/L	82.6	70 - 130	2.30	20			10/10/12
Lead	7439-92-1	43.4	ug/L	108.5	70 - 130	0.30	20			10/10/12
Mercury	7439-97-6	1.80	ug/L	89.8	70 - 130	0.40	20			10/10/12
Molybdenum	7439-98-7	42.0	ug/L	105	70 - 130	0.10	20			10/10/12
Strontium	7440-24-6	418	ug/L	104.5	70 - 130	1.20	20			10/10/12

* - QC result out of range

n/a - Not Applicable

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Department Inorganic**Group #**

WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Thallium	7440-28-0	43.3	ug/L	108.4	70 - 130	0.80	20			10/10/12
Tin	7440-31-5	40.5	ug/L	101.3	70 - 130	0.10	20			10/10/12
Arsenic	7440-38-2	39.9	ug/L	99.7	70 - 130	0.50	20			10/10/12
Selenium	7782-49-2	36.7	ug/L	91.7	70 - 130	0.00	20			10/10/12

* - QC result out of range

n/a - Not Applicable

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Quality Control Report

DECEMBER 18, 2012

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Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121239

Analytical Batch 208308 (QC Batch: 208285) Test ICP-6010 - All possible metals
 Associated Samples 121239001, 121239002, 121239009, 121239010, 121239015, 121239016

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #82497
Iron	7439-89-6		<19	ug/L				U		10/10/12
Magnesium	7439-95-4		<4.0	ug/L				U		10/10/12
Manganese	7439-96-5		<4.0	ug/L				U		10/10/12
Nickel	7440-02-0		<4.0	ug/L				U		10/10/12
Potassium	7440-09-7		<76	ug/L				U		10/10/12
Silver	7440-22-4		<4.0	ug/L				U		10/10/12
Sodium	7440-23-5		15.6	ug/L				B		10/10/12
Antimony	7440-36-0		<36	ug/L				U		10/10/12
Barium	7440-39-3		<4.0	ug/L				U		10/10/12
Cadmium	7440-43-9		<4.0	ug/L				U		10/10/12
Chromium	7440-47-3		<5.0	ug/L				U		10/10/12
Cobalt	7440-48-4		<4.0	ug/L				U		10/10/12
Copper	7440-50-8		<4.0	ug/L				U		10/10/12
Vanadium	7440-62-2		<5.0	ug/L				U		10/10/12
Zinc	7440-66-6		<5.0	ug/L				U		10/10/12
Calcium	7440-70-2		<49	ug/L				U		10/10/12
Strontium	7440-24-6		<9.0	ug/L				U		10/10/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Titanium	7440-32-6	<4.0		ug/L					U	10/10/12
Beryllium	7440-41-7	<4.0		ug/L					U	10/10/12
LCS QC Sample #82499										
Iron	7439-89-6	1050		ug/L	104.9	80 - 120				10/10/12
Magnesium	7439-95-4	10600		ug/L	106.3	80 - 120				10/10/12
Manganese	7439-96-5	1070		ug/L	106.6	80 - 120				10/10/12
Nickel	7440-02-0	1030		ug/L	102.8	80 - 120				10/10/12
Potassium	7440-09-7	11200		ug/L	112.2	80 - 120				10/10/12
Silver	7440-22-4	1070		ug/L	106.8	80 - 120				10/10/12
Sodium	7440-23-5	10700		ug/L	106.6	80 - 120				10/10/12
Antimony	7440-36-0	1070		ug/L	106.6	80 - 120				10/10/12
Barium	7440-39-3	1070		ug/L	107.4	80 - 120				10/10/12
Cadmium	7440-43-9	1040		ug/L	104.5	80 - 120				10/10/12
Chromium	7440-47-3	1060		ug/L	105.9	80 - 120				10/10/12
Cobalt	7440-48-4	1040		ug/L	103.9	80 - 120				10/10/12
Copper	7440-50-8	1060		ug/L	105.6	80 - 120				10/10/12
Vanadium	7440-62-2	1060		ug/L	105.9	80 - 120				10/10/12
Zinc	7440-66-6	1080		ug/L	107.9	80 - 120				10/10/12
Calcium	7440-70-2	21100		ug/L	105.5	80 - 120				10/10/12
Strontium	7440-24-6	1020		ug/L	102.4	80 - 120				10/10/12
Titanium	7440-32-6	1060		ug/L	105.9	80 - 120				10/10/12
Beryllium	7440-41-7	1050		ug/L	104.7	80 - 120				10/10/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MS										
QC Sample #82500										
Original 121234009										
Iron	7439-89-6	1040	ug/L	104.5	75 - 125					10/10/12
Magnesium	7439-95-4	10600	ug/L	105.8	75 - 125					10/10/12
Manganese	7439-96-5	1050	ug/L	104.9	75 - 125					10/10/12
Nickel	7440-02-0	999	ug/L	99.9	75 - 125					10/10/12
Potassium	7440-09-7	11000	ug/L	110	75 - 125					10/10/12
Silver	7440-22-4	1050	ug/L	105	75 - 125					10/10/12
Sodium	7440-23-5	10400	ug/L	103.6	75 - 125					10/10/12
Antimony	7440-36-0	1060	ug/L	106.5	75 - 125					10/10/12
Barium	7440-39-3	1050	ug/L	105.5	75 - 125					10/10/12
Cadmium	7440-43-9	1030	ug/L	103.4	75 - 125					10/10/12
Chromium	7440-47-3	1040	ug/L	103.9	75 - 125					10/10/12
Cobalt	7440-48-4	1010	ug/L	101.2	75 - 125					10/10/12
Copper	7440-50-8	1030	ug/L	103.4	75 - 125					10/10/12
Vanadium	7440-62-2	1030	ug/L	103.3	75 - 125					10/10/12
Zinc	7440-66-6	1060	ug/L	106.1	75 - 125					10/10/12
Calcium	7440-70-2	21700	ug/L	108.4	75 - 125					10/10/12
Strontium	7440-24-6	1020	ug/L	101.6	75 - 125					10/10/12
Titanium	7440-32-6	1040	ug/L	104.3	75 - 125					10/10/12
Beryllium	7440-41-7	1040	ug/L	103.5	75 - 125					10/10/12
MSD										
QC Sample #82501										
Original 121234009										
Paired 82500										
Iron	7439-89-6	1040	ug/L	104.5	75 - 125	0.00	20			10/10/12

* - 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
Magnesium	7439-95-4	10300	ug/L	103	75 - 125	1.40	20			10/10/12
Manganese	7439-96-5	1050	ug/L	104.6	75 - 125	0.30	20			10/10/12
Nickel	7440-02-0	994	ug/L	99.4	75 - 125	0.50	20			10/10/12
Potassium	7440-09-7	11000	ug/L	109.6	75 - 125	0.30	20			10/10/12
Silver	7440-22-4	1050	ug/L	104.9	75 - 125	0.10	20			10/10/12
Sodium	7440-23-5	10100	ug/L	101.4	75 - 125	1.40	20			10/10/12
Antimony	7440-36-0	1060	ug/L	105.8	75 - 125	0.70	20			10/10/12
Barium	7440-39-3	1050	ug/L	105	75 - 125	0.50	20			10/10/12
Cadmium	7440-43-9	1030	ug/L	103	75 - 125	0.40	20			10/10/12
Chromium	7440-47-3	1030	ug/L	103.2	75 - 125	0.60	20			10/10/12
Cobalt	7440-48-4	1010	ug/L	101.1	75 - 125	0.10	20			10/10/12
Copper	7440-50-8	1030	ug/L	103.1	75 - 125	0.30	20			10/10/12
Vanadium	7440-62-2	1030	ug/L	103.1	75 - 125	0.20	20			10/10/12
Zinc	7440-66-6	1060	ug/L	105.7	75 - 125	0.40	20			10/10/12
Calcium	7440-70-2	20600	ug/L	102.8	75 - 125	1.70	20			10/10/12
Strontium	7440-24-6	1010	ug/L	100.7	75 - 125	0.80	20			10/10/12
Titanium	7440-32-6	1040	ug/L	104	75 - 125	0.30	20			10/10/12
Beryllium	7440-41-7	1030	ug/L	103	75 - 125	0.50	20			10/10/12

* - QC result out of range

n/a - Not Applicable

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Department Organic, Volatiles

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WSCF121239

Analytical Batch 208457 (QC Batch: 208456) **Test** SW-846 8260B Volatiles
Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #82689
1,1-Dichloroethene	75-35-4		<1	ug/L				U		10/16/12
Trichloroethene	79-01-6		<1	ug/L				U		10/16/12
Benzene	71-43-2		<1	ug/L				U		10/16/12
Toluene	108-88-3		<1	ug/L				U		10/16/12
Chlorobenzene	108-90-7		<1	ug/L				U		10/16/12
1,1-Dichloroethane	75-34-3		<1	ug/L				U		10/16/12
Ethylbenzene	100-41-4		<1	ug/L				U		10/16/12
Styrene	100-42-5		<1	ug/L				U		10/16/12
cis-1,3-Dichloropropene	10061-01-5		<1	ug/L				U		10/16/12
trans-1,3-Dichloropropene	10061-02-6		<1	ug/L				U		10/16/12
1,2-Dichloroethane	107-06-2		<1	ug/L				U		10/16/12
Methyl isobutyl ketone	108-10-1		<1	ug/L				U		10/16/12
Dibromochloromethane	124-48-1		<1	ug/L				U		10/16/12
Tetrachloroethene	127-18-4		<1	ug/L				U		10/16/12
Total Xylenes	1330-20-7		<1	ug/L				U		10/16/12

* - 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	10/16/12
Carbon tetrachloride	56-23-5	<1		ug/L				U	10/16/12
2-Hexanone	591-78-6	<1		ug/L				U	10/16/12
Acetone	67-64-1	<1		ug/L				U	10/16/12
Chloroform	67-66-3	<1		ug/L				U	10/16/12
1,1,1-Trichloroethane	71-55-6	<1		ug/L				U	10/16/12
Bromomethane	74-83-9	<1		ug/L				U	10/16/12
Chloromethane	74-87-3	<1		ug/L				U	10/16/12
Chloroethane	75-00-3	<1		ug/L				U	10/16/12
Vinyl chloride	75-01-4	<1		ug/L				U	10/16/12
Methylene chloride	75-09-2	<1		ug/L				U	10/16/12
Carbon disulfide	75-15-0	<1		ug/L				U	10/16/12
Bromoform	75-25-2	<1		ug/L				U	10/16/12
Bromodichloromethane	75-27-4	<1		ug/L				U	10/16/12
1,2-Dichloropropane	78-87-5	<1		ug/L				U	10/16/12
Methyl ethyl ketone	78-93-3	<1		ug/L				U	10/16/12
1,1,2-Trichloroethane	79-00-5	<1		ug/L				U	10/16/12
1,1,2,2-Tetrachloroethane	79-34-5	<1		ug/L				U	10/16/12
1-Butanol	71-36-3	<100		ug/L				U	10/16/12
Tetrahydrofuran	109-99-9	<2		ug/L				U	10/16/12
Trichlorofluoromethane	75-69-4	<1		ug/L				U	10/16/12

* - 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	10/16/12
Acetonitrile	75-05-8		<2	ug/L				U	10/16/12
cis-1,2-Dichloroethene	156-59-2		<1	ug/L				U	10/16/12
Propionitrile	107-12-0		<2	ug/L				U	10/16/12
Isobutyl alcohol	78-83-1		<200	ug/L				U	10/16/12
Iodomethane	74-88-4		<1	ug/L				U	10/16/12
1,1,1,2-Tetrachloroethane	630-20-6		<1	ug/L				U	10/16/12
1,2,3-Trichloropropane	96-18-4		<1	ug/L				U	10/16/12
1,2-Dibromo-3-chloropropane	96-12-8		<1	ug/L				U	10/16/12
1,2-Dibromoethane	106-93-4		<1	ug/L				U	10/16/12
Acrolein	107-02-8		<1	ug/L				U	10/16/12
Acrylonitrile	107-13-1		<1	ug/L				U	10/16/12
Allyl chloride	107-05-1		<1	ug/L				U	10/16/12
Methylene bromide	74-95-3		<1	ug/L				U	10/16/12
Dichlorodifluoromethane	75-71-8		<1	ug/L				U	10/16/12
Ethyl methacrylate	97-63-2		<1	ug/L				U	10/16/12
Methacrylonitrile	126-98-7		<1	ug/L				U	10/16/12
Methyl methacrylate	80-62-6		<1	ug/L				U	10/16/12
Trans-1,4-dichloro-2-butene	110-57-6		<1	ug/L				U	10/16/12
Vinyl acetate	108-05-4		<1	ug/L				U	10/16/12

* - 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	10/16/12
LCS										
			QC Sample #82690							
1,1-Dichloroethene	75-35-4	25		ug/L	99.9	75 - 125				10/16/12
Trichloroethene	79-01-6	24		ug/L	97.2	75 - 125				10/16/12
Benzene	71-43-2	26		ug/L	103.8	75 - 125				10/16/12
Toluene	108-88-3	25		ug/L	99.4	75 - 125				10/16/12
Chlorobenzene	108-90-7	25		ug/L	101.5	75 - 125				10/16/12
1,1-Dichloroethane	75-34-3	25		ug/L	100.4	75 - 125				10/16/12
Ethylbenzene	100-41-4	26		ug/L	102.4	75 - 125				10/16/12
Styrene	100-42-5	27		ug/L	109.9	75 - 125				10/16/12
trans-1,3-Dichloropropene	10061-02-6	27		ug/L	106.9	75 - 125				10/16/12
1,2-Dichloroethane	107-06-2	28		ug/L	111	75 - 125				10/16/12
1,1,1-Trichloroethane	71-55-6	26		ug/L	103.1	75 - 125				10/16/12
Dibromochloromethane	124-48-1	28		ug/L	111.1	75 - 125				10/16/12
Carbon disulfide	75-15-0	25		ug/L	99.2	75 - 125				10/16/12
Bromoform	75-25-2	31		ug/L	125	75 - 125				10/16/12
Bromodichloromethane	75-27-4	27		ug/L	107.9	75 - 125				10/16/12
1,2-Dichloropropane	78-87-5	27		ug/L	106.4	75 - 125				10/16/12
1,1,2-Trichloroethane	79-00-5	28		ug/L	110.6	75 - 125				10/16/12
1,1,2,2-Tetrachloroethane	79-34-5	29		ug/L	116.2	75 - 125				10/16/12

* - 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	100.8	75 - 125				10/16/12
cis-1,2-Dichloroethene	156-59-2	25		ug/L	98.2	75 - 125				10/16/12
MS										
QC Sample #82691										
Original 121223013										
1,1-Dichloroethene	75-35-4	25		ug/L	100.2	75 - 125				10/16/12
Trichloroethene	79-01-6	25		ug/L	98.9	75 - 125				10/16/12
Benzene	71-43-2	26		ug/L	105.3	75 - 125				10/16/12
Toluene	108-88-3	25		ug/L	101.8	75 - 125				10/16/12
Chlorobenzene	108-90-7	26		ug/L	104.4	75 - 125				10/16/12
1,1-Dichloroethane	75-34-3	25		ug/L	101	75 - 125				10/16/12
Ethylbenzene	100-41-4	26		ug/L	104.5	75 - 125				10/16/12
Styrene	100-42-5	28		ug/L	110.6	75 - 125				10/16/12
trans-1,3-Dichloropropene	10061-02-6	26		ug/L	104.6	75 - 125				10/16/12
1,2-Dichloroethane	107-06-2	27		ug/L	106.5	75 - 125				10/16/12
1,1,1-Trichloroethane	71-55-6	26		ug/L	104.9	75 - 125				10/16/12
Dibromochloromethane	124-48-1	28		ug/L	110	75 - 125				10/16/12
Carbon disulfide	75-15-0	25		ug/L	98.6	75 - 125				10/16/12
Bromoform	75-25-2	30		ug/L	121.3	75 - 125				10/16/12
Bromodichloromethane	75-27-4	27		ug/L	107.4	75 - 125				10/16/12
1,2-Dichloropropane	78-87-5	27		ug/L	106.6	75 - 125				10/16/12
1,1,2-Trichloroethane	79-00-5	27		ug/L	109.8	75 - 125				10/16/12

* - 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	28		ug/L	111.6	75 - 125				10/16/12
trans-1,2-Dichloroethene	156-60-5	26		ug/L	104.4	75 - 125				10/16/12
cis-1,2-Dichloroethene	156-59-2	25		ug/L	98.5	75 - 125				10/16/12
MSD										
QC Sample #82692										
Original 121223013										
Paired 82691										
1,1-Dichloroethene	75-35-4	25		ug/L	101.7	75 - 125	1.40	20		10/16/12
Trichloroethene	79-01-6	24		ug/L	97	75 - 125	2.00	20		10/16/12
Benzene	71-43-2	26		ug/L	102.2	75 - 125	3.00	20		10/16/12
Toluene	108-88-3	25		ug/L	99.2	75 - 125	2.50	20		10/16/12
Chlorobenzene	108-90-7	25		ug/L	100.5	75 - 125	3.80	20		10/16/12
1,1-Dichloroethane	75-34-3	25		ug/L	100.5	75 - 125	0.60	20		10/16/12
Ethylbenzene	100-41-4	26		ug/L	102.4	75 - 125	2.00	20		10/16/12
Styrene	100-42-5	27		ug/L	107.1	75 - 125	3.20	20		10/16/12
trans-1,3-Dichloropropene	10061-02-6	25		ug/L	100.4	75 - 125	4.10	20		10/16/12
1,2-Dichloroethane	107-06-2	25		ug/L	101.8	75 - 125	4.40	20		10/16/12
1,1,1-Trichloroethane	71-55-6	26		ug/L	103	75 - 125	1.80	20		10/16/12
Dibromochloromethane	124-48-1	26		ug/L	105.3	75 - 125	4.40	20		10/16/12
Carbon disulfide	75-15-0	25		ug/L	98.6	75 - 125	0.00	20		10/16/12
Bromoform	75-25-2	28		ug/L	113.4	75 - 125	6.80	20		10/16/12
Bromodichloromethane	75-27-4	26		ug/L	104.5	75 - 125	2.80	20		10/16/12
1,2-Dichloropropane	78-87-5	26		ug/L	103.3	75 - 125	3.10	20		10/16/12

* - 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-Trichloroethane	79-00-5	26		ug/L	104.2	75 - 125	5.20	20		10/16/12
1,1,2,2-Tetrachloroethane	79-34-5	26		ug/L	103.4	75 - 125	7.60	20		10/16/12
trans-1,2-Dichloroethene	156-60-5	24		ug/L	97.2	75 - 125	7.10	20		10/16/12
cis-1,2-Dichloroethene	156-59-2	25		ug/L	98.6	75 - 125	0.10	20		10/16/12

* - QC result out of range

n/a - Not Applicable

REVISED121239 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121239

Analytical Batch 208482 (QC Batch: 208476) **Test** Cyanide (W) by Midi/Spectrophotometer
Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #82749
Cyanide LCS										<4.0 ug/L
										QC Sample #82752
Cyanide MS	57-12-5		52.4	ug/L	104.8	85 - 115				10/10/12
										QC Sample #82753
										Original 121203010
Cyanide MSD	57-12-5		40.4	ug/L	100.9	75 - 125				10/10/12
										QC Sample #82754
										Original 121203010
Cyanide	57-12-5		40.8	ug/L	102	75 - 125	1.10	20		Paired 82753
										10/10/12

* - QC result out of range

n/a - Not Applicable

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 Department Inorganic

Group # WSCF121239

Analytical Batch 208508 (QC Batch: 208507) Test Chemical Oxygen Demand
 Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #82881
Chemical Oxygen Demand	COD		<10	mg/L					U	10/11/12
LCS										QC Sample #82882
Chemical Oxygen Demand	COD		99.2	mg/L	99.2	80 - 120				10/11/12
MS										QC Sample #82885
Original 121223013										
Chemical Oxygen Demand	COD		252	mg/L	100.8	75 - 125				10/11/12
MSD										QC Sample #82886
Original 121223013										Paired 82885
Chemical Oxygen Demand	COD		247	mg/L	99	75 - 125	1.90	20		10/11/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
 Department Wet Chemistry

Group # WSCF121239

Analytical Batch 208754 (QC Batch: 208754) Test Total Alkalinity as mg/L CaCO₃ (Water)
 Associated Samples 121239001, 121239002, 121239016

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed	
LCS										QC Sample #82975	
Total Alkalinity as CaCO ₃	ALKALINITY	97		mg/L	97	80 - 120				10/15/12	
DUP										QC Sample #82976	
		Original 121239002									
Total Alkalinity as CaCO ₃	ALKALINITY	120	120	mg/L			0.00	20		10/15/12	
LCS										QC Sample #82977	
Total Alkalinity as CaCO ₃	ALKALINITY	97		mg/L	97.5	80 - 120				10/15/12	
LCS										QC Sample #82978	
Total Alkalinity as CaCO ₃	ALKALINITY	97		mg/L	97.2	80 - 120				10/15/12	

* - QC result out of range

n/a - Not Applicable

REVISED121239 -

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group # WSCF121239

Analytical Batch 208757 (QC Batch: 208756) Test Gasoline Range (W)
 Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #82983
Gasoline LCS										TPHGASOLI <50 ug/L QC Sample #82984
Gasoline MS	TPHGASOLI	2300	ug/L	93.6	80 - 120					10/16/12
QC Sample #82985 Original 121223013										
Gasoline MSD	TPHGASOLI	1900	ug/L	78	75 - 125					10/16/12
QC Sample #82986 Original 121223013										Paired 82985
Gasoline DUP	TPHGASOLI	2100	ug/L	85.1	75 - 125	8.70	20			10/16/12
QC Sample #82987 Original 121223013										
Gasoline	TPHGASOLI	<50	ug/L			0.00	20	U		10/16/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Analytical Batch 208850 (QC Batch: 208488) **Test** SW-846 8270D Semivolatiles
Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #82826
4-Nitrophenol	100-02-7		<1	ug/L				U		10/16/12
Phenol	108-95-2		<1	ug/L				U		10/16/12
1,2,4-Trichlorobenzene	120-82-1		<1	ug/L				U		10/16/12
2,4-Dinitrotoluene	121-14-2		<1	ug/L				U		10/16/12
1,4-Dichlorobenzene	106-46-7		<1	ug/L				U		10/16/12
Pyrene	129-00-0		<1	ug/L				U		10/16/12
4-Chloro-3-methylphenol	59-50-7		<1	ug/L				U		10/16/12
n-Nitroso-di-n-propylamine	621-64-7		<1	ug/L				U		10/16/12
Acenaphthene	83-32-9		<1	ug/L				U		10/16/12
Pentachlorophenol	87-86-5		<1	ug/L				U		10/16/12
2-Chlorophenol	95-57-8		<1	ug/L				U		10/16/12
4-Nitroaniline	100-01-6		<1	ug/L				U		10/16/12
4-Bromophenyl-phenylether	101-55-3		<1	ug/L				U		10/16/12
2,4-Dimethylphenol	105-67-9		<2	ug/L				U		10/16/12
4-Chloroaniline	106-47-8		<1	ug/L				U		10/16/12

* - QC result out of range

n/a - Not Applicable

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 Department Organic, Semivolatiles

Group # WSCF121239

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	10/16/12
Bis-(2-Chloroethyl)ether	111-44-4		<1	ug/L				U	10/16/12
Bis-(2-Chloroethoxy)methane	111-91-1		<1	ug/L				U	10/16/12
Bis-(2-Ethylhexyl)phthalate	117-81-7		<1	ug/L				U	10/16/12
Di-n-octylphthalate	117-84-0		<1	ug/L				U	10/16/12
Hexachlorobenzene	118-74-1		<1	ug/L				U	10/16/12
Anthracene	120-12-7		<1	ug/L				U	10/16/12
2,4-Dichlorophenol	120-83-2		<1	ug/L				U	10/16/12
Dimethylphthalate	131-11-3		<1	ug/L				U	10/16/12
Dibenzofuran	132-64-9		<1	ug/L				U	10/16/12
Benzo(g,h,i)perylene	191-24-2		<1	ug/L				U	10/16/12
Indeno(1,2,3-cd)pyrene	193-39-5		<1	ug/L				U	10/16/12
Benzo(b)fluoranthene	205-99-2		<1	ug/L				U	10/16/12
Fluoranthene	206-44-0		<1	ug/L				U	10/16/12
Benzo(k)fluoranthene	207-08-9		<1	ug/L				U	10/16/12
Acenaphthylene	208-96-8		<1	ug/L				U	10/16/12
Chrysene	218-01-9		<1	ug/L				U	10/16/12
Benzo(a)pyrene	50-32-8		<1	ug/L				U	10/16/12
2,4-Dinitrophenol	51-28-5		<1	ug/L				U	10/16/12

* - QC result out of range

n/a - Not Applicable

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 Department Organic, Semivolatiles

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	10/16/12
4,6-Dinitro-2-methylphenol	534-52-1		<1	ug/L				U	10/16/12
1,3-Dichlorobenzene	541-73-1		<1	ug/L				U	10/16/12
Benzo(a)anthracene	56-55-3		<1	ug/L				U	10/16/12
2,6-Dinitrotoluene	606-20-2		<1	ug/L				U	10/16/12
4-Chlorophenyl-phenylether	7005-72-3		<1	ug/L				U	10/16/12
Hexachlorocyclopentadiene	77-47-4		<1	ug/L				U	10/16/12
Isophorone	78-59-1		<1	ug/L				U	10/16/12
Diethyl phthalate	84-66-2		<1	ug/L				U	10/16/12
Di-n-butylphthalate	84-74-2		<1	ug/L				U	10/16/12
Phenanthrene	85-01-8		<1	ug/L				U	10/16/12
Butylbenzylphthalate	85-68-7		<1	ug/L				U	10/16/12
Fluorene	86-73-7		<1	ug/L				U	10/16/12
Carbazole	86-74-8		<1	ug/L				U	10/16/12
Hexachlorobutadiene	87-68-3		<1	ug/L				U	10/16/12
2-Nitroaniline	88-74-4		<1	ug/L				U	10/16/12
2-Nitrophenol	88-75-5		<1	ug/L				U	10/16/12
Naphthalene	91-20-3		<1	ug/L				U	10/16/12
2-Methylnaphthalene	91-57-6		<1	ug/L				U	10/16/12
2-Chloronaphthalene	91-58-7		<1	ug/L				U	10/16/12
3,3-Dichlorobenzidine	91-94-1		<1	ug/L				U	10/16/12

* - QC result out of range

n/a - Not Applicable

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Group # WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
2-Methylphenol	95-48-7		<1	ug/L				U	10/16/12
1,2-Dichlorobenzene	95-50-1		<1	ug/L				U	10/16/12
2,4,5-Trichlorophenol	95-95-4		<1	ug/L				U	10/16/12
Nitrobenzene	98-95-3		<1	ug/L				U	10/16/12
3-Nitroaniline	99-09-2		<1	ug/L				U	10/16/12
3 & 4 Methylphenol, Total	65794-96-9		<1	ug/L				U	10/16/12
Hexachloroethane	67-72-1		<1	ug/L				U	10/16/12
2,4,6-Trichlorophenol	88-06-2		<1	ug/L				U	10/16/12
Benzyl alcohol	100-51-6		<1	ug/L				U	10/16/12
Tributyl phosphate	126-73-8		<1	ug/L				U	10/16/12
2-Naphthylamine	91-59-8		<2	ug/L				U	10/16/12
Pyridine	110-86-1		<1	ug/L				U	10/16/12
n-Nitrosopiperidine	100-75-4		<1	ug/L				U	10/16/12
n-Nitrosomethylethylamine	10595-95-6		<1	ug/L				U	10/16/12
p-Phenylenediamine	106-50-3		<1	ug/L				U	10/16/12
2-Picoline	109-06-8		<1	ug/L				U	10/16/12
3,3-Dimethylbenzidine	119-93-7		<4	ug/L				U	10/16/12
Isosafrole	120-58-1		<1	ug/L				U	10/16/12
Phentermine	122-09-8		<5	ug/L				U	10/16/12
1,4-Dioxane	123-91-1		<1	ug/L				U	10/16/12
1,4-Naphthoquinone	130-15-4		<1	ug/L				U	10/16/12

* - 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
1-Naphthylamine	134-32-7		<2	ug/L				U	10/16/12
Aramite	140-57-8		<1	ug/L				U	10/16/12
Kepone	143-50-0		<1	ug/L				U	10/16/12
Hexachloropropene	1888-71-7		<1	ug/L				U	10/16/12
Diallate	2303-16-4		<1	ug/L				U	10/16/12
Pronamide	23950-58-5		<1	ug/L				U	10/16/12
Isodrin	465-73-6		<1	ug/L				U	10/16/12
Chlorobenzilate	510-15-6		<1	ug/L				U	10/16/12
2-Acetylaminofluorene	53-96-3		<1	ug/L				U	10/16/12
n-Nitrosodiethylamine	55-18-5		<1	ug/L				U	10/16/12
3-Methylcholanthrene	56-49-5		<1	ug/L				U	10/16/12
4-Nitroquinoline-1-oxide	56-57-5		<1	ug/L				U	10/16/12
7,12-Dimethylbenz(a)anthracene	57-97-6		<1	ug/L				U	10/16/12
2,3,4,6-Tetrachlorophenol	58-90-2		<1	ug/L				U	10/16/12
n-Nitrosomorpholine	59-89-2		<1	ug/L				U	10/16/12
Pentachlorobenzene	608-93-5		<1	ug/L				U	10/16/12
Phenacetin	62-44-2		<1	ug/L				U	10/16/12
Ethyl methanesulfonate	62-50-0		<1	ug/L				U	10/16/12
Aniline	62-53-3		<1	ug/L				U	10/16/12
n-Nitrosodimethylamine	62-75-9		<1	ug/L				U	10/16/12

* - QC result out of range

n/a - Not Applicable

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 Department Organic, Semivolatiles

Group #

WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
Methyl methanesulfonate	66-27-3		<1	ug/L				U	10/16/12
Pentachloroethane	76-01-7		<1	ug/L				U	10/16/12
Pentachloronitrobenzene	82-68-8		<2	ug/L				U	10/16/12
2,6-Dichlorophenol	87-65-0		<1	ug/L				U	10/16/12
Dinoseb(..dinitromethylphenol)	88-85-7		<1	ug/L				U	10/16/12
4-Aminobiphenyl	92-67-1		<2	ug/L				U	10/16/12
n-Nitrosodibutylamine	924-16-3		<1	ug/L				U	10/16/12
n-Nitrosopyridine	930-55-2		<1	ug/L				U	10/16/12
Safrole	94-59-7		<1	ug/L				U	10/16/12
o-Toluidine	95-53-4		<1	ug/L				U	10/16/12
1,2,4,5-Tetrachlorobenzene	95-94-3		<1	ug/L				U	10/16/12
Acetophenone	98-86-2		<1	ug/L				U	10/16/12
1,3,5-Trinitrobenzene	99-35-4		<1	ug/L				U	10/16/12
2-Methyl-5-nitroaniline	99-55-8		<1	ug/L				U	10/16/12
1,3-Dinitrobenzene	99-65-0		<1	ug/L				U	10/16/12
O,O,O-Triethylthiophosphate	126-68-1		<1	ug/L				U	10/16/12
Parathion	56-38-2		<1	ug/L				U	10/16/12
Dimethylaminoazobenzene	60-11-7		<1	ug/L				U	10/16/12
Dimethoate	60-51-5		<1	ug/L				U	10/16/12
Thionazin	297-97-2		<1	ug/L				U	10/16/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Methyl parathion	298-00-0	<1		ug/L					U	10/16/12
Phorate	298-02-2	<1		ug/L					U	10/16/12
Disulfoton	298-04-4	<1		ug/L					U	10/16/12
Sulfotep	3689-24-5	<1		ug/L					U	10/16/12
Famfur	52-85-7	<5		ug/L					U	10/16/12
N-Nitrosodiphenylamin/ Diphenyl	DPA+NNDPA	<1		ug/L					U	10/16/12
Methapyrilene	91-80-5	<1		ug/L					U	10/16/12
LCS					QC Sample #82827					
4-Nitrophenol	100-02-7	14		ug/L	45.3	5 - 88				10/16/12
1,2,4-Trichlorobenzene	120-82-1	22		ug/L	73.4	50 - 105				10/16/12
Phenol	108-95-2	15		ug/L	48.7	18 - 89				10/16/12
1,4-Dichlorobenzene	106-46-7	15		ug/L	76.4	47 - 115				10/16/12
2,4-Dinitrotoluene	121-14-2	24		ug/L	81.3	59 - 110				10/16/12
Pyrene	129-00-0	26		ug/L	87.6	64 - 116				10/16/12
4-Chloro-3-methylphenol	59-50-7	25		ug/L	84.4	62 - 109				10/16/12
n-Nitroso-di-n-propylamine	621-64-7	24		ug/L	81.2	61 - 110				10/16/12
Acenaphthene	83-32-9	24		ug/L	78.6	59 - 113				10/16/12
Pentachlorophenol	87-86-5	22		ug/L	72.2	17 - 125				10/16/12
2-Chlorophenol	95-57-8	24		ug/L	78.4	55 - 109				10/16/12
1,4-Dioxane	123-91-1	20		ug/L	66.4	42 - 99				10/16/12

* - 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
n-Nitrosodimethylamine	62-75-9	21	ug/L	71.3	40 - 103					10/16/12
Benzyl alcohol	100-51-6	25	ug/L	82.3	58 - 108					10/16/12
2-Methylphenol	95-48-7	24	ug/L	79.4	59 - 107					10/16/12
Hexachloroethane	67-72-1	20	ug/L	66	43 - 105					10/16/12
2-Nitrophenol	88-75-5	23	ug/L	77.6	48 - 113					10/16/12
2,4-Dimethylphenol	105-67-9	25	ug/L	84.6	58 - 113					10/16/12
2,4-Dichlorophenol	120-83-2	23	ug/L	78.2	52 - 110					10/16/12
Anthracene	120-12-7	26	ug/L	85.8	67 - 113					10/16/12
Naphthalene	91-20-3	23	ug/L	75.3	55 - 110					10/16/12
2-Nitroaniline	88-74-4	26	ug/L	87.1	57 - 114					10/16/12
Dibenzofuran	132-64-9	25	ug/L	82.4	61 - 113					10/16/12
Fluorene	86-73-7	25	ug/L	83.1	64 - 115					10/16/12
Tributyl phosphate	126-73-8	26	ug/L	87	65 - 108					10/16/12
Hexachlorobenzene	118-74-1	25	ug/L	84.2	60 - 117					10/16/12
Dimethoate	60-51-5	13	ug/L	86.9	64 - 108					10/16/12
Carbazole	86-74-8	27	ug/L	91.5	35 - 129					10/16/12
Di-n-butylphthalate	84-74-2	27	ug/L	88.3	70 - 116					10/16/12
3,3-Dichlorobenzidine	91-94-1	18	ug/L	58.5	16 - 117					10/16/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	28	ug/L	93	64 - 133					10/16/12
Di-n-octylphthalate	117-84-0	25	ug/L	83	57 - 134					10/16/12
Benzo(a)pyrene	50-32-8	26	ug/L	88.1	63 - 115					10/16/12
2-Picoline	109-06-8	24	ug/L	80	59 - 102					10/16/12

* - 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
Bis(1-Chloro-2-propyl)ether	108-60-1		23	ug/L	76	58 - 111				10/16/12
4-Chloroaniline	106-47-8		26	ug/L	85.7	43 - 125				10/16/12
MS										
QC Sample #82828										
Original 121239001										
4-Nitrophenol	100-02-7	<0.9	7.7	ug/L	27.3	15 - 57				10/16/12
1,2,4-Trichlorobenzene	120-82-1	<0.9	19	ug/L	66.3	51 - 104				10/16/12
Phenol	108-95-2	<0.9	9.9	ug/L	34.9	24 - 65				10/16/12
1,4-Dichlorobenzene	106-46-7	<0.9	13	ug/L	70	52 - 114				10/16/12
2,4-Dinitrotoluene	121-14-2	<0.9	21	ug/L	73.1	57 - 112				10/16/12
Pyrene	129-00-0	<0.9	23	ug/L	79.9	58 - 119				10/16/12
4-Chloro-3-methylphenol	59-50-7	<0.9	21	ug/L	75.2	56 - 115				10/16/12
n-Nitroso-di-n-propylamine	621-64-7	<0.9	21	ug/L	72.5	60 - 112				10/16/12
Acenaphthene	83-32-9	<0.9	20	ug/L	69.9	60 - 113				10/16/12
Pentachlorophenol	87-86-5	<0.9	13	ug/L	45	32 - 127				10/16/12
2-Chlorophenol	95-57-8	<0.9	20	ug/L	69.3	52 - 113				10/16/12
1,4-Dioxane	123-91-1	<0.9	16	ug/L	56.8	39 - 93				10/16/12
n-Nitrosodimethylamine	62-75-9	<0.9	17	ug/L	61	41 - 92				10/16/12
Benzyl alcohol	100-51-6	<0.9	21	ug/L	73.4	56 - 107				10/16/12
2-Methylphenol	95-48-7	<0.9	19	ug/L	67.1	46 - 114				10/16/12
Hexachloroethane	67-72-1	<0.9	17	ug/L	58.9	48 - 102				10/16/12
2-Nitrophenol	88-75-5	<0.9	19	ug/L	67.3	51 - 114				10/16/12

* - QC result out of range

n/a - Not Applicable

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 Department Organic, Semivolatiles

Group #

WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
2,4-Dimethylphenol	105-67-9	<1	21	ug/L	74.5	46 - 124				10/16/12
2,4-Dichlorophenol	120-83-2	<0.9	19	ug/L	68.8	50 - 114				10/16/12
Anthracene	120-12-7	<0.9	22	ug/L	77	64 - 116				10/16/12
Naphthalene	91-20-3	<0.9	19	ug/L	67	57 - 110				10/16/12
2-Nitroaniline	88-74-4	<0.9	22	ug/L	76.1	60 - 114				10/16/12
Dibenzofuran	132-64-9	<0.9	21	ug/L	73.9	61 - 114				10/16/12
Fluorene	86-73-7	<0.9	21	ug/L	73.9	63 - 116				10/16/12
Tributyl phosphate	126-73-8	<0.9	23	ug/L	79.7	59 - 113				10/16/12
Hexachlorobenzene	118-74-1	<0.9	22	ug/L	76.3	58 - 119				10/16/12
Dimethoate	60-51-5	<0.9	11	ug/L	76.3	53 - 119				10/16/12
Carbazole	86-74-8	<0.9	22	ug/L	79.3	41 - 122				10/16/12
Di-n-butylphthalate	84-74-2	<0.9	23	ug/L	80.2	67 - 118				10/16/12
3,3-Dichlorobenzidine	91-94-1	<0.9	18	ug/L	62.9	16 - 121				10/16/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	<0.9	24	ug/L	85.1	64 - 134				10/16/12
Di-n-octylphthalate	117-84-0	<0.9	22	ug/L	77.6	40 - 143				10/16/12
Benzo(a)pyrene	50-32-8	<0.9	22	ug/L	79.1	61 - 117				10/16/12
2-Picoline	109-06-8	<0.9	20	ug/L	70.9	50 - 104				10/16/12
Bis(1-Chloro-2-propyl)ether	108-60-1	<0.9	19	ug/L	67.5	58 - 112				10/16/12
4-Chloroaniline	106-47-8	<0.9	25	ug/L	87	43 - 118				10/16/12
MSD										
					QC Sample #82829					
					Original 121239001					
								Paired 82828		
4-Nitrophenol	100-02-7	<0.9	11	ug/L	40.6	15 - 57	39.00	20	* X	10/16/12

* - QC result out of range

n/a - Not Applicable

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REVISION 2

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,2,4-Trichlorobenzene	120-82-1	<0.9	20	ug/L	69.3	51 - 104	4.50	20		10/16/12
Phenol	108-95-2	<0.9	11	ug/L	38.4	24 - 65	9.50	20		10/16/12
1,4-Dichlorobenzene	106-46-7	<0.9	13	ug/L	71.3	52 - 114	1.90	20		10/16/12
2,4-Dinitrotoluene	121-14-2	<0.9	22	ug/L	79.4	57 - 112	8.30	20		10/16/12
Pyrene	129-00-0	<0.9	22	ug/L	76.3	58 - 119	4.60	20		10/16/12
4-Chloro-3-methylphenol	59-50-7	<0.9	23	ug/L	80.6	56 - 115	6.90	20		10/16/12
n-Nitroso-di-n-propylamine	621-64-7	<0.9	22	ug/L	76.8	60 - 112	5.80	20		10/16/12
Acenaphthene	83-32-9	<0.9	21	ug/L	74.1	60 - 113	5.80	20		10/16/12
Pentachlorophenol	87-86-5	<0.9	19	ug/L	67.7	32 - 127	40.30	20	* X	10/16/12
2-Chlorophenol	95-57-8	<0.9	21	ug/L	73.4	52 - 113	5.70	20		10/16/12
1,4-Dioxane	123-91-1	<0.9	18	ug/L	63.2	39 - 93	10.80	20		10/16/12
n-Nitrosodimethylamine	62-75-9	<0.9	19	ug/L	68.3	41 - 92	11.20	20		10/16/12
Benzyl alcohol	100-51-6	<0.9	23	ug/L	80.5	56 - 107	9.30	20		10/16/12
2-Methylphenol	95-48-7	<0.9	21	ug/L	72.9	46 - 114	8.20	20		10/16/12
Hexachloroethane	67-72-1	<0.9	18	ug/L	61.9	48 - 102	5.00	20		10/16/12
2-Nitrophenol	88-75-5	<0.9	20	ug/L	72.3	51 - 114	7.20	20		10/16/12
2,4-Dimethylphenol	105-67-9	<1	22	ug/L	79.4	46 - 124	6.30	20		10/16/12
2,4-Dichlorophenol	120-83-2	<0.9	21	ug/L	73.1	50 - 114	6.10	20		10/16/12
Anthracene	120-12-7	<0.9	23	ug/L	80	64 - 116	3.80	20		10/16/12
Naphthalene	91-20-3	<0.9	20	ug/L	70.9	57 - 110	5.60	20		10/16/12
2-Nitroaniline	88-74-4	<0.9	23	ug/L	82.3	60 - 114	7.80	20		10/16/12

* - 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
Dibenzofuran	132-64-9	<0.9	22	ug/L	77.8	61 - 114	5.20	20		10/16/12
Fluorene	86-73-7	<0.9	22	ug/L	79.3	63 - 116	7.00	20		10/16/12
Tributyl phosphate	126-73-8	<0.9	23	ug/L	81.6	59 - 113	2.40	20		10/16/12
Hexachlorobenzene	118-74-1	<0.9	22	ug/L	78.4	58 - 119	2.70	20		10/16/12
Dimethoate	60-51-5	<0.9	12	ug/L	83.5	53 - 119	9.00	20		10/16/12
Carbazole	86-74-8	<0.9	25	ug/L	87.9	41 - 122	10.30	20		10/16/12
Di-n-butylphthalate	84-74-2	<0.9	24	ug/L	83.3	67 - 118	3.90	20		10/16/12
3,3-Dichlorobenzidine	91-94-1	<0.9	19	ug/L	66.7	16 - 121	6.00	20		10/16/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	<0.9	23	ug/L	81.6	64 - 134	4.20	20		10/16/12
Di-n-octylphthalate	117-84-0	<0.9	21	ug/L	75	40 - 143	3.50	20		10/16/12
Benzo(a)pyrene	50-32-8	<0.9	23	ug/L	82.9	61 - 117	4.70	20		10/16/12
2-Picoline	109-06-8	<0.9	23	ug/L	82	50 - 104	14.50	20		10/16/12
Bis(1-Chloro-2-propyl)ether	108-60-1	<0.9	20	ug/L	70.3	58 - 112	4.00	20		10/16/12
4-Chloroaniline	106-47-8	<0.9	26	ug/L	92.7	43 - 118	6.30	20		10/16/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Analytical Batch 208887 (QC Batch: 208650) **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
QC Sample #82953										
Aroclor-1016	12674-11-2	<0.1		ug/L				U		10/17/12
Aroclor-1221	11104-28-2	<0.2		ug/L				U		10/17/12
Aroclor-1232	11141-16-5	<0.1		ug/L				U		10/17/12
Aroclor-1242	53469-21-9	<0.1		ug/L				U		10/17/12
Aroclor-1248	12672-29-6	<0.1		ug/L				U		10/17/12
Aroclor-1254	11097-69-1	<0.1		ug/L				U		10/17/12
Aroclor-1260	11096-82-5	<0.1		ug/L				U		10/17/12
LCS										
QC Sample #82954										
Aroclor-1254	11097-69-1	1.7		ug/L	87.2	70 - 130				10/17/12
MS										
QC Sample #82955										
Original 121223013										
Aroclor-1254	11097-69-1	1.8		ug/L	93.6	60 - 130				10/17/12
MSD										
QC Sample #82956										
Original 121223013										
Paired 82955										
Aroclor-1254	11097-69-1	1.8		ug/L	95.1	60 - 130	1.60	20		10/17/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121239

Analytical Batch 209141 (QC Batch: 209140) Test Total Organic Halides
 Associated Samples 121239016, 121239017, 121239018, 121239019

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
QC Sample #83629										
Total Organic Halides	59473-04-0	<5.0		ug/L					U	10/08/12
LCS										
QC Sample #83630										
Total Organic Halides	59473-04-0	392		mg/L	98	80 - 120				10/08/12
MS										
QC Sample #83632										
Original 121239016										
Total Organic Halides	59473-04-0	<5.0	38.5	ug/L	96.4	75 - 125				10/08/12
MSD										
QC Sample #83633										
Original 121239016										
Total Organic Halides	59473-04-0	<5.0	40.0	ug/L	99.9	75 - 125	3.60	20		10/08/12
Paired 83632										

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121239

Analytical Batch 209144 (QC Batch: 209143) Test Total Organic Halides
 Associated Samples 121239001, 121239002, 121239003, 121239004, 121239005, 121239006, 121239007, 121239008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
QC Sample #83634										
Total Organic Halides	59473-04-0	<5.0		ug/L					U	10/08/12
LCS										
QC Sample #83635										
Total Organic Halides	59473-04-0	405		mg/L	101.3	80 - 120				10/08/12
MS										
QC Sample #83641										
Original 121239001										
Total Organic Halides	59473-04-0	<5.0	38.0	ug/L	95.1	75 - 125				10/08/12
MSD										
QC Sample #83642										
Original 121239001										
Total Organic Halides	59473-04-0	<5.0	39.8	ug/L	99.6	75 - 125	4.60	20		10/08/12
Paired 83641										

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic. Semivolatiles

Group # WSCF121239

Analytical Batch 208284 (QC Batch: 208276) **Test** Extractable Diesel and Petroleum

Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121239001								
o-Terphenyl	84-15-1				98.3	70 - 130				10/08/12
SAMPLE		Sample #121239002								
o-Terphenyl	84-15-1				102.3	70 - 130				10/08/12
BLANK		QC Sample #82474								
o-Terphenyl	84-15-1				105.8	70 - 130				10/08/12
LCS		QC Sample #82475								
o-Terphenyl	84-15-1				105.4	70 - 130				10/08/12
MS		QC Sample #82476 Original 121239001								
o-Terphenyl	84-15-1				96.2	70 - 130				10/08/12
MSD		QC Sample #82477 Original 121239001								
o-Terphenyl	84-15-1				99.7	70 - 130	n/a		Paired 82476	10/08/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Analytical Batch 208457 (QC Batch: 208456) **Test** SW-846 8260B Volatiles
Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121239001								
1,2-Dichloroethane-d4	17060-07-0				106.6	75 - 125				10/16/12
Toluene-d8	2037-26-5				98.2	75 - 125				10/16/12
4-Bromofluorobenzene	460-00-4				101.4	75 - 125				10/16/12
SAMPLE		Sample #121239002								
1,2-Dichloroethane-d4	17060-07-0				101.4	75 - 125				10/16/12
Toluene-d8	2037-26-5				98.6	75 - 125				10/16/12
4-Bromofluorobenzene	460-00-4				99.1	75 - 125				10/16/12
BLANK		QC Sample #82689								
1,2-Dichloroethane-d4	17060-07-0				101.4	75 - 125				10/16/12
Toluene-d8	2037-26-5				98.7	75 - 125				10/16/12
4-Bromofluorobenzene	460-00-4				98.6	75 - 125				10/16/12
LCS		QC Sample #82690								
1,2-Dichloroethane-d4	17060-07-0				107.9	75 - 125				10/16/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
 Department Organic, Volatiles

Group # WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Toluene-d8	2037-26-5				96.4	75 - 125				10/16/12
4-Bromofluorobenzene	460-00-4				95	75 - 125				10/16/12
MS										
QC Sample #82691										
Original 121223013										
4-Bromofluorobenzene	460-00-4				95.3	75 - 125				10/16/12
1,2-Dichloroethane-d4	17060-07-0				104.4	75 - 125				10/16/12
Toluene-d8	2037-26-5				97	75 - 125				10/16/12
MSD										
QC Sample #82692										
Original 121223013										
Paired 82691										
1,2-Dichloroethane-d4	17060-07-0				103.9	75 - 125	n/a			10/16/12
Toluene-d8	2037-26-5				97.5	75 - 125	n/a			10/16/12
4-Bromofluorobenzene	460-00-4				96.2	75 - 125	n/a			10/16/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
 Department Organic, Volatiles

Group # WSCF121239

Analytical Batch 208757 (QC Batch: 208756) Test Gasoline Range (W)
 Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121239001								
4-Bromofluorobenzene	460-00-4				94.2	50 - 150				10/16/12
SAMPLE		Sample #121239002								
4-Bromofluorobenzene	460-00-4				90.7	50 - 150				10/16/12
BLANK		QC Sample #82983								
4-Bromofluorobenzene	460-00-4				99.1	50 - 150				10/16/12
LCS		QC Sample #82984								
4-Bromofluorobenzene	460-00-4				97.1	50 - 150				10/16/12
MS		QC Sample #82985 Original 121223013								
4-Bromofluorobenzene	460-00-4				96.7	50 - 150				10/16/12
MSD		QC Sample #82986 Original 121223013								
								Paired 82985		

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
4-Bromofluorobenzene	460-00-4				98.5	50 - 150	n/a			10/16/12
DUP			QC Sample #82987							
			Original	121223013						

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Analytical Batch 208850 (QC Batch: 208488) **Test** SW-846 8270D Semivolatiles
Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE										Sample #121239001
2-Fluorophenol	367-12-4				49.6	44 - 135				10/16/12
Phenol-d5	4165-62-2				33	41 - 136		X		10/16/12
Nitrobenzene-d5	4165-60-0				68.7	53 - 129				10/16/12
2-Methylnaphthalene-d10	7297-45-2				70.8	50 - 140				10/16/12
2-Fluorobiphenyl	321-60-8				70.1	36 - 141				10/16/12
2,4,6-Tribromophenol	118-79-6				60.8	17 - 142				10/16/12
Fluoranthene-d10	93951-69-0				78.7	50 - 140				10/16/12
Terphenyl-d14	98904-43-9				82.3	61 - 142				10/16/12
SAMPLE										Sample #121239002
2-Fluorophenol	367-12-4				49.3	44 - 135				10/16/12
Phenol-d5	4165-62-2				34.3	41 - 136		X		10/16/12
Nitrobenzene-d5	4165-60-0				75.1	53 - 129				10/16/12
2-Methylnaphthalene-d10	7297-45-2				76	50 - 140				10/16/12
2-Fluorobiphenyl	321-60-8				76.2	36 - 141				10/16/12
2,4,6-Tribromophenol	118-79-6				63.1	17 - 142				10/16/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Fluoranthene-d10	93951-69-0				82.4	50 - 140				10/16/12
Terphenyl-d14	98904-43-9				89.7	61 - 142				10/16/12
BLANK					QC Sample #82826					
2-Fluorophenol	367-12-4				56.1	44 - 135				10/16/12
Phenol-d5	4165-62-2				40.6	41 - 136		X		10/16/12
Nitrobenzene-d5	4165-60-0				73.6	53 - 129				10/16/12
2-Methylnaphthalene-d10	7297-45-2				74.2	50 - 140				10/16/12
2-Fluorobiphenyl	321-60-8				73.9	36 - 141				10/16/12
2,4,6-Tribromophenol	118-79-6				64.9	17 - 142				10/16/12
Fluoranthene-d10	93951-69-0				83.9	50 - 140				10/16/12
Terphenyl-d14	98904-43-9				76.9	61 - 142				10/16/12
LCS					QC Sample #82827					
2-Fluorophenol	367-12-4				64.3	44 - 135				10/16/12
Phenol-d5	4165-62-2				46.6	41 - 136				10/16/12
Nitrobenzene-d5	4165-60-0				81.8	53 - 129				10/16/12
2-Methylnaphthalene-d10	7297-45-2				81.7	50 - 140				10/16/12
2-Fluorobiphenyl	321-60-8				81.2	36 - 141				10/16/12
2,4,6-Tribromophenol	118-79-6				79.5	17 - 142				10/16/12
Fluoranthene-d10	93951-69-0				88.1	50 - 140				10/16/12
Terphenyl-d14	98904-43-9				90.7	61 - 142				10/16/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MS										
QC Sample #82828										
Original 121239001										
2-Fluorophenol	367-12-4				50.8	44 - 135				10/16/12
Phenol-d5	4165-62-2				33.2	41 - 136		X		10/16/12
Nitrobenzene-d5	4165-60-0				70.9	53 - 129				10/16/12
2-Methylnaphthalene-d10	7297-45-2				72.3	50 - 140				10/16/12
2-Fluorobiphenyl	321-60-8				72.6	36 - 141				10/16/12
2,4,6-Tribromophenol	118-79-6				70.6	17 - 142				10/16/12
Fluoranthene-d10	93951-69-0				77.1	50 - 140				10/16/12
Terphenyl-d14	98904-43-9				84.6	61 - 142				10/16/12
MSD										
QC Sample #82829										
Original 121239001										
Paired 82828										
2-Fluorophenol	367-12-4				54.6	44 - 135	n/a			10/16/12
Phenol-d5	4165-62-2				37.3	41 - 136	n/a	X		10/16/12
Nitrobenzene-d5	4165-60-0				75.6	53 - 129	n/a			10/16/12
2-Methylnaphthalene-d10	7297-45-2				76.7	50 - 140	n/a			10/16/12
2-Fluorobiphenyl	321-60-8				75.4	36 - 141	n/a			10/16/12
2,4,6-Tribromophenol	118-79-6				76	17 - 142	n/a			10/16/12
Fluoranthene-d10	93951-69-0				85.5	50 - 140	n/a			10/16/12
Terphenyl-d14	98904-43-9				81.1	61 - 142	n/a			10/16/12

* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Analytical Batch 208887 (QC Batch: 208650) **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 121239001, 121239002

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121239001								
Tetrachloro-m-xylene	877-09-8				78.5	60 - 140				10/17/12
Decachlorobiphenyl	2051-24-3				96.7	60 - 140				10/17/12
SAMPLE		Sample #121239002								
Tetrachloro-m-xylene	877-09-8				77.7	60 - 140				10/17/12
Decachlorobiphenyl	2051-24-3				97.8	60 - 140				10/17/12
BLANK		QC Sample #82953								
Tetrachloro-m-xylene	877-09-8				78.2	60 - 140				10/17/12
Decachlorobiphenyl	2051-24-3				91.9	60 - 140				10/17/12
LCS		QC Sample #82954								
Tetrachloro-m-xylene	877-09-8				75.5	60 - 140				10/17/12
Decachlorobiphenyl	2051-24-3				94	60 - 140				10/17/12
MS		QC Sample #82955								
		Original 121223013								
Tetrachloro-m-xylene	877-09-8				81.9	60 - 140				10/17/12
Decachlorobiphenyl	2051-24-3				95.8	60 - 140				10/17/12

* - QC result out of range

n/a - Not Applicable

REVISED121239 -

Quality Control Report

DECEMBER 18, 2012

REVISION 2

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121239

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
MSD		QC Sample #82956							
		Original 121223013					Paired	82955	
Tetrachloro-m-xylene	877-09-8				81.2	60 - 140	n/a		10/17/12
Decachlorobiphenyl	2051-24-3				96.8	60 - 140	n/a		10/17/12

* - QC result out of range

n/a - Not Applicable

Quality Control Report		DECEMBER 16, 2012				REVISION Z		
Attention	Scot Fitzgerald	Group #	WSCF121239					
Department	Organic, Semivolatiles							
Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit
							RQ	Analyzed
MSD		QC Sample #82956						
		Original 121223013						
Tetrachloro-m-xylene	877-09-8			81.2	60 - 140	n/a		10/17/12
Decachlorobiphenyl	2051-24-3			96.8	60 - 140	n/a		10/17/12
* - QC result out of range			n/a - Not Applicable					

REVISED121239 -

Tentatively Identified Peak Report**DECEMBER 18, 2012****REVISION 2****Attention** Scot Fitzgerald
Department Organic, Volatiles**Group #** WSCF121239

Peak Name	CAS #	RT	RQ	Result	Units
121239001 Unknown	B2M0Y3 UNKNOWN-01	16.156	52		ug/L

REVISED121239 -

Attention: Scot Fitzgerald

Group #

WSCF121239

121239001	B2M0Y3
-----------	--------

Department Organic, Semivolatiles

Analyte Phenol-d5 - SW-846 8270D Semivolatiles

[1] Surrogate recovery outside of established laboratory control limits.

121239002	B2M0Y9
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Department Organic, Semivolatiles

Analyte Phenol-d5 - SW-846 8270D Semivolatiles

[1] Surrogate recovery outside of established laboratory control limits.

REVISED121239 -

Attention: Scot Fitzgerald

Group #

WSCF121239

Quality Control Comments**Department** Organic, Semivolatiles

82826	BLANK for HBN 208488 [ORGP/202
	Analyte Phenol-d5 - SW-846 8270D Semivolatiles
	[1] Surrogate recovery outside of established laboratory control limits.
82828	B2M0Y3(121239001MS)
	Analyte Phenol-d5 - SW-846 8270D Semivolatiles
	[1] Surrogate recovery outside of established laboratory control limits.
82829	B2M0Y3(121239001MSD)
	Analyte 4-Nitrophenol - SW-846 8270D Semivolatiles
	[1] Matrix Spike RPD outside established laboratory limits No flags assigned.
	Analyte Pentachlorophenol - SW-846 8270D Semivolatiles
	[1] Matrix Spike RPD outside established laboratory limits No flags assigned.
	Analyte Phenol-d5 - SW-846 8270D Semivolatiles
	[1] Surrogate recovery outside of established laboratory control limits.

REVISED121239 -

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 8 pages
Including cover page

REVISED121239 -

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 #: 121239

Profile #: W13-010-171

Proj. Mgr.:

Phone:

The following samples were received from you on 10/4/2012 2:45:00 PM. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample #	Sample ID	Matrix	Collected	Received
Tests scheduled				
121239001	B2M0Y3	WATER	10/4/2012 10:58	10/4/2012 14:45
2008-W; 6010-W; 8260V-W; 8270SV-W; ALK-W; CN-W; COD-W; PCB-W; TOC-W; TOX-W; TPHDWA-W; TPHGWA-W				
121239002	B2M0Y9	WATER	10/4/2012 09:35	10/4/2012 14:45
2008-W; 6010-W; 8260V-W; 8270SV-W; ALK-W; CN-W; COD-W; PCB-W; TOC-W; TOX-W; TPHDWA-W; TPHGWA-W				
121239003	B2M1Y8	WATER	10/4/2012 10:58	10/4/2012 14:45
TOC-W; TOX-W				
121239004	B2M1Y9	WATER	10/4/2012 10:58	10/4/2012 14:45
TOC-W; TOX-W				
121239005	B2M1Y7	WATER	10/4/2012 10:58	10/4/2012 14:45
TOC-W; TOX-W				
121239006	B2M200	WATER	10/4/2012 09:35	10/4/2012 14:45
TOC-W; TOX-W				
121239007	B2M201	WATER	10/4/2012 09:35	10/4/2012 14:45
TOC-W; TOX-W				
121239008	B2M202	WATER	10/4/2012 09:35	10/4/2012 14:45
TOC-W; TOX-W				
121239009	B2M0Y5	WATER	10/4/2012 10:58	10/4/2012 14:45
2008-W; 6010-W				
121239010	B2M101	WATER	10/4/2012 09:35	10/4/2012 14:45
2008-W; 6010-W				

REVISED121239 -

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

121239011	B2M8D5	WATER	10/4/2012 10:58	10/4/2012 14:45
		2008-W		
121239012	B2M8D6	WATER	10/4/2012 10:58	10/4/2012 14:45
		2008-W		
121239013	B2M8D9	WATER	10/4/2012 09:35	10/4/2012 14:45
		2008-W		
121239014	B2M8D8	WATER	10/4/2012 09:35	10/4/2012 14:45
		2008-W		
121239015	B2M190	WATER	10/4/2012 13:10	10/4/2012 14:45
		6010-W		
121239016	B2M188	WATER	10/4/2012 13:10	10/4/2012 14:45
		6010-W; ALK-W; TOC-W; TOX-W		
121239017	B2M245	WATER	10/4/2012 13:10	10/4/2012 14:45
		TOC-W; TOX-W		
121239018	B2M246	WATER	10/4/2012 13:10	10/4/2012 14:45
		TOC-W; TOX-W		
121239019	B2M247	WATER	10/4/2012 13:10	10/4/2012 14:45
		TOC-W; TOX-W		

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)
COD-W	Chemical Oxygen Demand (W)
PCB-W	PCB (8082) (W)
TOC-W	Total Organic Carbon (W)
TOX-W	Total Organic Halides (W)
TPHDWA-W	TPHD-WA (W)
TPHGWA-W	TPHG-WA (Water)

REVISED121239 -

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST									
Collector	F. M. Hall	Contact/Requester	Karen Waters-Husted		Telephone No.	376-4650					
SAF No.	W 13-010	Sampling Origin	Hanford Site		Purchase Order/Charge Code	300071HS20					
Project Title	RCRA, OCTOBER 2012	Logbook No.	HNF-N-506 48 /109		Ice Chest No.	N/A					
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE		Bill of Lading/Air Bill No.	N/A					
Protocol	RCRA	Priority:	31 Days		PRIORITY	SPECIAL INSTRUCTIONS	Hold Time	Offsite Property No.	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)1991)											
i21239											
Sample No.	Filter *	Date	* Time	No/Type Container	Sample Analysis			Holding Time	Preservative		
B2M1Y8	3 N	W 10/4/12	1058	1x1-L aG's*	9020_TOX_TOX(1) 1x150-mL aG		28 Days	H2SO4 to pH <2/Cool~4C			
B2M1Y8	✓ N	W			9060_TOC_TOC(1)		28 Days	HCl or H2SO4 to pH <2/Cool~4C			
B2M1Y7	5 N	W			9020_TOX_TOX(1)		28 Days	H2SO4 to pH <2/Cool~4C			
B2M1Y7	✓ N	W			9060_TOC_TOC(1)		28 Days	HCl or H2SO4 to pH <2/Cool~4C			
B2M1Y3	4 N	W			9020_TOX_TOX(1)		28 Days	H2SO4 to pH <2/Cool~4C			
B2M1Y9	✓ N	W			9060_TOC_TOC(1)		28 Days	HCl or H2SO4 to pH <2/Cool~4C			
B2M0Y3	1 N	W			1x500-mL GrP >200.8_METALS_CPMWS: List-1 (26)		6 Months	HNO3 to pH <2			
B2M0Y3	N	W			1x250-mL GrP >2320ALKALINITY: Alkalinity (1)		14 Days	Cool~4C			
B2M0Y3	N	W			1x500-mL GrP >410.4_COD COD (1)		20 Days	H2SO4 to pH <2/Cool~4C			
B2M0Y3	N	W			1x250-mL P >4500E_CNI: Cyanide (1)		14 Days	NaOH to pH >=12			
B2M0Y3	N	W			1x500-mL GrP >6010_METALS_ICP: List-3 (18)		6 Months	HNO3 to pH <2			
B2M0Y3	N	W			4x1-L aG >80B2_PCB GC: List-1 (7)		None	Cool~4C			
B2M0Y3	✓ N	W			1x1-L aG's* >9020_TOX_TOX(1)		28 Days	H2SO4 to pH <2/Cool~4C			
9090_SULFIDE_Sulfide(1) 10-10-12											
Received By	Print	Sign	Date Time	Received By	Print	Sign	Date Time	Received By	Print	Sign	Date Time
F. M. Hall	<u>F. M. Hall</u>	<u>✓</u>	OCT 04 2012	<u>Cynthia R Johnson</u>	<u>Cynthia R Johnson</u>	<u>✓</u>	OCT 04 2012	<u>Cynthia R Johnson</u>	<u>Cynthia R Johnson</u>	<u>✓</u>	OCT 04 2012
Relinquished By			Date/Time			Date/Time					Date/Time
Relinquished By			Date/Time			Date/Time					Date/Time
Relinquished By			Date/Time			Date/Time					Date/Time
FINAL SAMPLE DISPOSITION		Digested/Mixed (e.g. Return to customer, per lab procedure, used in process)		Disposed By		Date/Time		Disposed By		Date/Time	
PRINTED ON 9/18/2012											

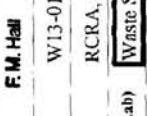
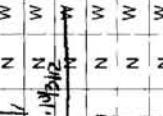
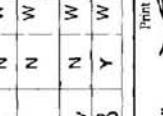
Chain of Custody

CH2MHill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST									
Collector	F.M. Hall	Sampling Origin	Contact/Requester		Karen Waters-Husted		Telephone No.		376-4650		
	SAF No.		W13-010	Hanford Site				Purchase Order/Charge Code		300071ES20	
Project Title	RCRA, OCTOBER 2012		Logbook No.	HNF-N-506 4B / 69		Ice Chest No.		N/A			
Shipped To (Lab)	Waste Sampling & Characterization		Method of Shipment	GOVERNMENT VEHICLE		Bill of Lading/Air Bill No.		N/A			
Protocol	RCRA		Priority:	31 Days	PRIORITY	SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
POSSIBLE SAMPLE HAZARDS/REMARKS *** Continue 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 SXK. Site Wide Generator Knowledge Information Form applies. The CACN is: all analytical work at WSCF is 401647.											
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis		Holding Time	Preservative		
B2M0Y3	N	W	10/4/12	1058	1x250-mL aG	9060_10C; TOC (1)		28 Days	HCl or H ₂ SO ₄ to pH <2/Cool~4C		
B2M0Y3	N	W			3x1-L aG	TPH Diesel/Kerosene Range - WTPH-D		14-40 Days	HCl to pH <2/Cool~4C		
B2M0Y3	N	W			4x40-mL aGs*	TPH-Gasoline Range - WTPH-G		14 Days	HCl to pH <2/Cool~4C		
B2M0Y3	N	W			3x40-mL aGs*	8260_VOA_GCMS_IK; COMMON; 8260_VOA_GCMS_IK; COMMON (Add-on)		14 Days	HCl or H ₂ SO ₄ to pH <2/Cool~4C		
B2M0Y3	Y	W			4x1-L aG	8270_SVOA_GCMS_IK; COMMON		7/40 Days	Cool~4C		
B2M0Y5	G	Y			1x500-mL GP	200.8_METALS_ICPMS; List-1 (26)		6 Months	HNO ₃ to pH <2		
B2M0Y5	Y	W			1x500 mL GP	6010_METALS_ICP; List-3 (18)		6 Months	HNO ₃ to pH <2		
B2M8D5	I	N			1x500-mL G	200.8_HG - ICPMS		28 Days	HNO ₃ to pH <2		
B2M8D6	I	Y			1x500-mL G	200.8_HG - ICPMS		28 Days	HNO ₃ to pH <2		

Retain/Released By	Print	Sign	Date	Time	Received By	Date	Time	Sign	Date	Time	Matrix *
F.M. Hall		OCT 04 2012		2012	Cynthia R Johnson	Oct 04 2012	10:00 AM		Oct 04 2012	10:00 AM	Soil
Retain/Released By					Received By						Drum Solids
Retain/Released By					Date/Time						Soil
Retain/Released By					Received By						Sludge
Retain/Released By					Date/Time						Tissue
Final Sample Disposition	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By		Date/Time		Date/Time		Date/Time		Wipes	
PRINTED ON 9/18/2012											
Report ID: 121239											
Group # WSCF121239											

REVISED121239 -

Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST												
C.O.C. # W13-010-173											Page 1 of 2	
Collector	F.M. Hall	Contact/Requester	Karen Waters-Husted			Telephone No.	376-4650			Purchase Order/Charge Code	300071ES20	
SAF No.	W13-010	Sampling Origin	Hanford Site			Ice Chest No.	N/A			Total Activity exemption:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Project Title	RCRA, OCTOBER 2012	Logbook No.	HNW-N-506 43 / 69			Bill of Lading/Air Bill No.	N/A			Offsite Property No.	N/A	
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE			Hold Time						
Protocol	RCRA	Priority:	31 Days	PRIORITY	SPECIAL INSTRUCTIONS							
POSSIBLE SAMPLE HAZARDS/REMARKS												
*** Contains Radioactive Material or concentrations that are not required for transportation per 49 CFR but are not releasable per DOE Order 5430.5 (1990-1993)												
Sample No.	Filter	Date	Time	No./Type Container	Sample Analysis	Holding Time				Preservative		
B2M0Y9 2	N	W	10/4/12	0935	1x500-mL G/F	200.8 METALS ICP/MS: List-1 (26)	6 Months			HNO3 to pH <2		
B2M0Y9	N	W			1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days			Coil-4C		
B2M0Y9	N	W			1x500-mL G/P	410.4 COD: COD (1)	28 Days			H2SO4 to pH >2/Cool-4C		
B2M0Y9	N	W			1x250-mL P	4500E_CN: Cyanide (1)	14 Days			NaOH to pH >12		
B2M0Y9	N	W			1x500-mL G/P	6010 METALS ICP: List-3 (18)	6 Months			HNO3 to pH <2		
B2M0Y9	N	W			4x1-L AG	8082_PCB_GC: List-1 (7)	None			Coil-4C		
B2M0Y9 10.4/12	N	W			1x1-L ags*	9020_TOX_TOX (1)	28 Days			H2SO4 to pH >2/Cool-4C		
B2M0Y9	N	W			1x250-mL G/F	9090_SAT/TPH: Solvent (1)	7 Days			ZnAc-NaOH to pH >9/Coil-4C		
B2M0Y9	N	W			1x250-mL aG	9060_TOC_TOC (1)	28 Days			HCl or H2SO4 to pH >2/Cool-4C		
B2M0Y9	N	W			3x1-L aG	TPH-Diesel/Kerosene Range -WTPHD	14/40 Days			HCl to pH >2/Cool-4C		
B2M0Y9	N	W			4x40-mL aGs*	TPH-Gasoline Range -WTPH-G	14 Days			HCl to pH >2/Cool-4C		
B2M0Y9	N	W			3x40-mL aGs*	8260_VOA_GCMS IX: COMMON;	14 Days			HCl or H2SO4 to pH >2/Cool-4C		
B2M0Y9	N	W			8260_VOA_GCMS IX: COMMON (Add-on)	8270_SVOA_GCMS IX: COMMON	7/40 Days			Cool-4C		
B2M0D9 13	Y	W			1x500-mL G	200.8 HG -ICPMS	28 Days			HNO3 to pH <2		
Retirnished By F.M. Hall	Print 	Date/Time OCT 04 2012	Print 	Date/Time OCT 04 2012	Print 	Date/Time OCT 04 2012	Matrix *					
Retirnished By	Date/Time	Received By	Sign	Date/Time	Received By	Date/Time	S	Soil	DS			
Retirnished By	Date/Time	Received By		Date/Time	Received By	Date/Time	SE	Sediment	DS			
Retirnished By	Date/Time	Received By		Date/Time	Received By	Date/Time	SI	Shale	DL			
Retirnished By	Date/Time	Received By		Date/Time	Received By	Date/Time	W	Water	LS			
Retirnished By	Date/Time	Received By		Date/Time	Received By	Date/Time	O	Oil	L			
Retirnished By	Date/Time	Received By		Date/Time	Received By	Date/Time	A	Air	X			
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)											
PRINTED ON 9/18/2012	Disposed By Date/Time											
Report ID: 121239												
Group # WSCF121239												

REVISED121239 -

Chain of Custody

C.O.C. # W13-010-173									
Page 2 of 2									
CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST									
Collector	F.M. Hall	Contact/Requester	Karen Waters-Husted	Telephone No.	376-4650				
SAF No.	W13-010	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071ES20				
Project Title	RCRA, OCTOBER 2012	Logbook No.	HNF-N-506 4B/69	Ice Chest No.	N/A				
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A				
Protocol	RCRA	Priority:	31 Days	PRIORITY	Offsite Property No.	N/A			
POSSIBLE SAMPLE HAZARDS/REMARKS									
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)									
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative	
B2M608	/4	N	W 10/4/12	0935	1x300-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2	
B2M202	8	N	W		1x1-l. aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2/Cook-4C	
B2M202	✓	N	W		1x250 mL aG	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2/Cool-4C	
B2M202	6	N	W		1x250 mL aG	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2/Cook-4C	
B2M200	✓	N	W		1x1-l. aGs*	9020_TOX: TOX (1)	28 Days	HCl or H2SO4 to pH <2/Cool-4C	
B2M101	10	Y	W		1x250-mL aG	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2/Cool-4C	
B2M101	✓	Y	W		1x500-mL G/P	200.8_METALS_ICPMS_List-1 (26)	6 Months	HNO3 to pH <2	
B2M201	7	N	W		1x500-mL G/P	6010_METALS_ICP_List-3 (18)	6 Months	HNO3 to pH <2	
B2M201	✓	N	W		1x1-l. aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2/Cool-4C	
B2M201	✓	N	W		1x250 mL aG	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2/Cool-4C	

Relinquished By	Print	Sign	Date/Time	Received By	Date/Time	Date/Time	Date/Time	Matrix *
F.M. Hall		OCT 04 2012	10:15 AM	Cynthia R Johnson	OCT 04 2012	10:15 AM	OCT 04 2012	S = Soil
Relinquished By			Date/Time	Received By	Date/Time	Date/Time	Date/Time	SF = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air
Relinquished By			Date/Time	Received By	Date/Time	Date/Time	Date/Time	T = Tissue WI = Wine L = Liquid V = Vegetation X = Other
Relinquished By			Date/Time	Received By	Date/Time	Date/Time	Date/Time	

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

Disposed By Date/Time

PRINTED ON 9/8/2012

A-6004-842 (REV 2)

Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST									
C.O.C. #		W13-010-203		Page 1 of 1					
Collector	F. M. Hall	Contact/Requester	Karen Waters-Husted	Telephone No.	376-4650	Purchase Order/Charge Code	3000071ES20		
SAF No.	W13-010	Sampling Origin	Hanford Site	Fee Chest No.	N/A				
Project Title	RCRA, OCTOBER 2012	Logbook No.	HNF-N-506 4B /69	Bill of Lading/Air Bill No.	N/A				
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE	Office Property No.	N/A				
Protocol	RCRA	PRIORITY		SPECIAL INSTRUCTIONS		Holding Time		Preservative	
POSSIBLE SAMPLE HAZARDS/REMARKS				FYI and FY13 samples cannot be in the same SDS. Site Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.		Hold Time		Cool~4C HNO3 to pH <2 H2SO4 to pH <2/Cool~4C HCl or H2SO4 to pH <2/Cool~4C H2SO4 to pH <2/Cool~4C	
Sample No.	Filter	* Date	Time	No/Type Container	Sample Analysis				
B2M188	16	N W	10/4/12	1x250-mL G/F	2320_ALKALINITY: Alkalinity (1)		14 Days	Cool~4C	
B2M188	18	N W		1x250-mL G/F	6010_METALS_ICP: List-3 (18)		6 Months	HNO3 to pH <2	
B2M188	18	N W		1x1-L aG's*	9020_TOX_TOX (1)		28 Days	H2SO4 to pH <2/Cool~4C	
B2M188	17	N W		1x250 mL aG	9060_TOC_TOC (1)		28 Days	HCl or H2SO4 to pH <2/Cool~4C	
B2M246	18	N W		1x1-L aG's*	9020_TOX_TOX (1)		28 Days	H2SO4 to pH <2/Cool~4C	
B2M246	18	N W		1x250 mL aG	9060_TOC_TOC (1)		28 Days	HCl or H2SO4 to pH <2/Cool~4C	
B2M245	17	N W		1x1-L aG's*	9020_TOX_TOX (1)		28 Days	H2SO4 to pH <2/Cool~4C	
B2M245	17	N W		1x250 mL aG	9060_TOC_TOC (1)		28 Days	HCl or H2SO4 to pH <2/Cool~4C	
B2M247	19	N W		1x1-L aG's*	9020_TOX_TOX (1)		28 Days	H2SO4 to pH <2/Cool~4C	
B2M247	19	N W		1x250 mL aG	9060_TOC_TOC (1)		28 Days	HCl or H2SO4 to pH <2/Cool~4C	
B2M190	15	Y W		1x500-mL G/F	6010_METALS_ICP: List-3 (18)		6 Months	HNO3 to pH <2	

Reinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
F.M. Hall	Susan Hall	✓	OCT 04 2011 11:15	Cynthia R Johnson	Cynthia R Johnson	✓	OCT 04 2011 14:45
Retrieval By	Date/Time			Received By	Date/Time		
Reinquished By	Date/Time			Received By	Date/Time		
Reinquished 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						

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