

WSCF Laboratory

PO Box 650 S3-30
Richland, WA 99352



December 19, 2012

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

Dear Scot Fitzgerald,

REVISED121450 - 699839 [Report ID: 121450]

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 WSCF121450

- * 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

REVISED121450 -

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

REVISED121450 -

WSCF SAF Number Cross Reference

Group # WSCF121450
Data Deliverable Date 12/13/12

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
I13-007	B2MXN4	121450001	WATER	11/12/12	11/12/12
I13-007	B2MXP5	121450002	WATER	11/12/12	11/12/12
I13-007	B2MXP4	121450003	WATER	11/12/12	11/12/12
I13-007	B2MXN3	121450004	WATER	11/12/12	11/12/12
I13-007	B2M XM8	121450005	WATER	11/12/12	11/12/12
I13-007	B2MXN9	121450006	WATER	11/12/12	11/12/12
I13-007	B2MXN8	121450007	WATER	11/12/12	11/12/12
I13-007	B2M XM7	121450008	WATER	11/12/12	11/12/12

REVISED121450 -

ATTACHMENT 2

NARRATIVE

Consisting of 8 pages
Including cover page

REVISED121450 -

Attachment 2
Narrative Rev1
WSCF121450

Revision 1: This case narrative replaces the prior in its entirety. 1,4-Dioxane was added per SDR13-064 to samples B2MXM8, B2MXN9, B2MXN8, and B2MXM7.

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 cancellation of Hexachlorophene analysis is attached to this report.
- Sample Issue Resolution Form SDR13-030 regarding clarification of VOA analysis 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.

Attachment 2
Narrative Rev1
WSCF121450

- 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

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

- All applicable QC controls are within the established limits.

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

- Calcium – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
- All other applicable QC controls are within the established limits.

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

- All applicable QC controls are within the established limits.

Organic Comments

Alcohol/Glycols - 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.

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, Laboratory Control Sample and Laboratory Control Sample Duplicate were analyzed with this delivery group. Analytical Note(s):

REVISED121450 -

Attachment 2
Narrative Rev1
WSCF121450

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

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.

Radiochemistry Comments

Rad Chem – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike (Matrix Spikes apply only to Technetium & Tritium), Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

Tracers are used to determine chemical yield. RPD is monitored in sample duplicate and is not required for tracer recovery per SOW.

Gamma Energy Analysis:

- All applicable QC controls are within the established limits.

Gross Alpha / Gross Beta:

- All applicable QC controls are within the established limits.

Isotopic Plutonium analysis:

- Plutonium-239/240 – Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results below 5X the minimum detectable activity. No flags issued.
- All other applicable QC controls are within the established limits.

REVISED121450 -

Attachment 2
Narrative Rev1
WSCF121450

Isotopic Uranium analysis:

- Uranium-235 – Duplicate Relative Percent Difference(s) (RPD) did not meet the established laboratory limits. Duplicate Relative Percent Difference (RPD) does not apply to results below 5X the minimum detectable activity. No flags issued.
- All other applicable QC controls are within the established limits.

Strontium-89/90:

- Batch QC 210929
 - The Blank is less than two times the RDL. “B” Flag not required.
 - All other applicable QC controls are within the established limits.

Tritium:

- All applicable QC controls are within the established limits.

Technetium-99:

- All applicable QC controls are within the established limits.

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

Attachment 2
Narrative Rev1
WSCF121450

SAMPLE ISSUE RESOLUTION

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

SAMPLE EVENT INFORMATION

SAF NUM(S) W13-010

OPERABLE UNIT(S)

PROJECT(S) RCRA13

SAMPLE EVENT TITLE(S) RCRA13

LABORATORY Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES 18

SAMPLE NUMBERS B2M171, B2M129, B2M135, B2M165, B2M123, B2M177, B2M9W6, B2M0Y3, B2M0Y9, B2M141, B2M147, B2M153, B2M159, B2M111, B2M194, B2M105, B2M117, B2M180, B2M183, B2MN99, B2MNB5, B2MN81, B2MN82, B2MN94, B2MN71, B2MN57, B2MN32, B2MN52, B2MN89, B2MNCO, B2MXL9, B2MN75, B2MN47, B2MN42, B2MXM8, B2MXN9, B2MXN8, B2MXM7, B2MN63, B2MN64

SAMPLE MATRIX WATER

COLLECTION DATE 10/3/2012 - 11/30/2012

SDG NUM WSCF121223, WSCF121226, WSCF121230, WSCF121232, WSCF121239, WSCF121241, WSCF121242, WSCF121274, WSCF121275, WSCF121284, WSCF121303, WSCF121398, WSCF121401, WSCF121402, WSCF121404, WSCF121439, WSCF121448, WSCF121450, WSCF121456

ISSUE BACKGROUND

CLASS Laboratory Issue

TYPE Cancellation of Analyses

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

DISPOSITION

DESCRIPTION PROPOSED DISPOSITION: Report the data without Hexachlorophene and note issue in narrative.

JUSTIFICATION ACCEPTED DISPOSITION: Accept proposed resolution and request that WSCF send a weekly update of any further SDGs that are affected to be added to this SIR.

SUBMITTED BY: Heather Medley/WSCF DATE: 10/15/12
ACCEPTED BY: Karen Waters-Husted/CHPRC DATE: 10/16/12

Attachment 2
Narrative Rev1
WSCF121450

SAMPLE ISSUE RESOLUTION

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

SAMPLE EVENT INFORMATION

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

SAMPLING INFORMATION

NUMBER OF SAMPLES 11
SAMPLE NUMBERS B2MN32, B2MN52, B2MN57, B2MN71, B2MN81, B2MN82, B2MN89, B2MN94, B2MN99, B2MNB5, B2MNCO, B2MNX8, B2MNX9, B2MP16, B2MP30, B2MP41, B2MP22, B2MP23, B2MXL9, B2MN75, B2MN47, B2MN42, B2MXM8, B2MXN9, B2MXN8, B2MXM7, B2MN63, B2MN64, B2MP06, B2MP07
SAMPLE MATRIX WATER
COLLECTION DATE -
SDG NUM WSCF121398, WSCF121401, WSCF121402, WSCF121404, WSCF121411, WSCF121419, WSCF121437, WSCF121439, WSCF121448, WSCF121450, WSCF121456

ISSUE BACKGROUND

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

DISPOSITION

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

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

Attachment 2
Narrative Rev1
WSCF121450

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 172 pages
Including cover page

REVISED121450 -

WSCF ANALYTICAL RESULTS REPORT

For

CH2M Hill Plateau Remediation

PO Box 1600
Richland, WA 99352

Attention: Scot Fitzgerald

Contract # MOA-FH-CHPRC-2008
Group # WSCF121450
Report Date December 19, 2012

Analytical: Electronically signed by Joseph Hale

Client Services: Electronically signed by Heather Medley

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

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.

REVISED121450 -

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210747	210923	5	BLANK	85452	BLANK		ICP-6010 - All possible metals
210747	210923	7	LCS	85454	LCS		ICP-6010 - All possible metals
210747	210923	8	SAMPLE	121450001	B2MXN4		ICP-6010 - All possible metals
210747	210923	9	MS	85455	B2MXN4(121450001MS)	121450001	ICP-6010 - All possible metals
210747	210923	10	MSD	85456	B2MXN4(121450001MSD)	121450001	ICP-6010 - All possible metals
210747	210923	11	SAMPLE	121450002	B2MXP5		ICP-6010 - All possible metals
210747	210923	12	SAMPLE	121450003	B2MXP4		ICP-6010 - All possible metals
210747	210923	13	SAMPLE	121450004	B2MXN3		ICP-6010 - All possible metals
210747	210923	14	SAMPLE	121450005	B2M XM8		ICP-6010 - All possible metals
210747	210923	15	SAMPLE	121450006	B2MXN9		ICP-6010 - All possible metals
210747	210923	16	SAMPLE	121450007	B2MXN8		ICP-6010 - All possible metals
210747	210923	17	SAMPLE	121450008	B2M XM7		ICP-6010 - All possible metals
211122	211289	4	BLANK	85827	BLANK		ICP-2008 MS All possible metal
211122	211289	5	LCS	85828	LCS		ICP-2008 MS All possible metal
211122	211289	7	MS	85829	B2MN49(121448006MS)	121448006	ICP-2008 MS All possible metal
211122	211289	8	MSD	85830	B2MN49(121448006MSD)	121448006	ICP-2008 MS All possible metal
211122	211289	13	SAMPLE	121450001	B2MXN4		ICP-2008 MS All possible metal
211122	211289	14	SAMPLE	121450002	B2MXP5		ICP-2008 MS All possible metal
211122	211289	15	SAMPLE	121450003	B2MXP4		ICP-2008 MS All possible metal
211122	211289	16	SAMPLE	121450004	B2MXN3		ICP-2008 MS All possible metal
211122	211289	17	SAMPLE	121450005	B2M XM8		ICP-2008 MS All possible metal
211122	211289	20	SAMPLE	121450006	B2MXN9		ICP-2008 MS All possible metal
211122	211289	21	SAMPLE	121450007	B2MXN8		ICP-2008 MS All possible metal

REVISED121450 -

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

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
211122	211289	22	SAMPLE	121450008	B2MXM7		ICP-2008 MS All possible metal

REVISED121450 -

Batch QC List

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210318	210418	1	BLANK	85000	BLANK		SW-846 8270D Semivolatiles
210318	210418	2	LCS	85001	LCS		SW-846 8270D Semivolatiles
210318	210418	3	LCSD	85004	LCSD		SW-846 8270D Semivolatiles
210318	210418	4	MS	85002	B2MXL9(121439002MS) 121439002		SW-846 8270D Semivolatiles
210318	210418	5	MSD	85003	B2MXL9(121439002MSD 121439002		SW-846 8270D Semivolatiles
210318	210418	7	SAMPLE	121450007	B2MXN8		SW-846 8270D Semivolatiles
210318	210418	9	SAMPLE	121450006	B2MXN9		SW-846 8270D Semivolatiles
210318	210418	12	SAMPLE	121450005	B2MXM8		SW-846 8270D Semivolatiles
210318	210418	13	SAMPLE	121450008	B2MXM7		SW-846 8270D Semivolatiles
210422	210625	1	BLANK	85247	BLANK		Extractable Diesel and Petroleum
210422	210625	2	LCS	85248	LCS		Extractable Diesel and Petroleum
210422	210625	3	MS	85249	B2MXM8(121450005MS) 121450005		Extractable Diesel and Petroleum
210422	210625	4	MSD	85250	B2MXM8(121450005MSD 121450005		Extractable Diesel and Petroleum
210422	210625	5	SAMPLE	121450005	B2MXM8		Extractable Diesel and Petroleum
210422	210625	6	SAMPLE	121450006	B2MXN9		Extractable Diesel and Petroleum
210422	210625	7	SAMPLE	121450007	B2MXN8		Extractable Diesel and Petroleum
210422	210625	8	SAMPLE	121450008	B2MXM7		Extractable Diesel and Petroleum
210737	211016	1	BLANK	85422	BLANK		PCBs by EPA SW-846 Method 8082
210737	211016	2	LCS	85423	LCS		PCBs by EPA SW-846 Method 8082
210737	211016	3	MS	85424	B2MXM8(121450005MS) 121450005		PCBs by EPA SW-846 Method 8082
210737	211016	4	MSD	85425	B2MXM8(121450005MSD 121450005		PCBs by EPA SW-846 Method 8082
210737	211016	5	SAMPLE	121450005	B2MXM8		PCBs by EPA SW-846 Method 8082
210737	211016	6	SAMPLE	121450006	B2MXN9		PCBs by EPA SW-846 Method 8082

REVISED121450 -

Batch QC List

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210737	211016	8	SAMPLE	121450008	B2MXM7		PCBs by EPA SW-846 Method 8082
211213	211214	1	BLANK	85887	BLANK		PCBs by EPA SW-846 Method 8082
211213	211214	2	LCS	85888	LCS		PCBs by EPA SW-846 Method 8082
211213	211214	3	MS	85889	B2MXL9(121439002MS)	121439002	PCBs by EPA SW-846 Method 8082
211213	211214	4	MSD	85890	B2MXL9(121439002MSD)	121439002	PCBs by EPA SW-846 Method 8082
211213	211214	6	SAMPLE	121450007	B2MXN8		PCBs by EPA SW-846 Method 8082

REVISED121450 -

Batch QC List

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210343	210344	1	BLANK	85121	BLANK		Gasoline Range (W)
210343	210344	2	LCS	85122	LCS		Gasoline Range (W)
210343	210344	3	MS	85123	B2MXM8(121450005MS) 121450005		Gasoline Range (W)
210343	210344	4	MSD	85124	B2MXM8(121450005MSD 121450005		Gasoline Range (W)
210343	210344	5	DUP	85125	B2MXM8(121450005DUP 121450005		Gasoline Range (W)
210343	210344	6	SAMPLE	121450005	B2MXM8		Gasoline Range (W)
210343	210344	7	SAMPLE	121450006	B2MXN9		Gasoline Range (W)
210343	210344	8	SAMPLE	121450007	B2MXN8		Gasoline Range (W)
210343	210344	9	SAMPLE	121450008	B2MXM7		Gasoline Range (W)
210345	210346	1	BLANK	85126	BLANK		SW-846 8260B Volatiles
210345	210346	2	LCS	85127	LCS		SW-846 8260B Volatiles
210345	210346	3	MS	85128	B2MXM8(121450005MS) 121450005		SW-846 8260B Volatiles
210345	210346	4	MSD	85129	B2MXM8(121450005MSD 121450005		SW-846 8260B Volatiles
210345	210346	5	SAMPLE	121450007	B2MXN8		SW-846 8260B Volatiles
210345	210346	8	SAMPLE	121450006	B2MXN9		SW-846 8260B Volatiles
210345	210346	11	SAMPLE	121450005	B2MXM8		SW-846 8260B Volatiles
210345	210346	12	SAMPLE	121450008	B2MXM7		SW-846 8260B Volatiles
210358	210419	1	BLANK	85141	BLANK		SW-846 Method 8015 for GPP
210358	210419	2	LCS	85142	LCS		SW-846 Method 8015 for GPP
210358	210419	3	MS	85143	B2MXL9(121439002MS) 121439002		SW-846 Method 8015 for GPP
210358	210419	4	MSD	85144	B2MXL9(121439002MSD 121439002		SW-846 Method 8015 for GPP
210358	210419	6	SAMPLE	121450005	B2MXM8		SW-846 Method 8015 for GPP
210358	210419	7	SAMPLE	121450006	B2MXN9		SW-846 Method 8015 for GPP

REVISED121450 -

DECEMBER 19, 2012

REVISION 1

Batch QC List

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210358	210419	8	SAMPLE	121450007	B2MXN8		SW-846 Method 8015 for GPP
210358	210419	9	SAMPLE	121450008	B2MXM7		SW-846 Method 8015 for GPP

REVISED121450 -

Batch QC List

Attention Scot Fitzgerald
 Department Radiochemistry

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210027	210350	1	BLANK	84798	BLANK		Plutonium (AEA)
210027	210350	2	LCS	84799	LCS		Plutonium (AEA)
210027	210350	4	DUP	84800	B2MXL9(121439002DUP) 121439002		Plutonium (AEA)
210027	210350	5	SAMPLE	121450005	B2MXM8		Plutonium (AEA)
210027	210350	6	SAMPLE	121450006	B2MXN9		Plutonium (AEA)
210027	210350	7	SAMPLE	121450007	B2MXN8		Plutonium (AEA)
210027	210350	8	SAMPLE	121450008	B2MXM7		Plutonium (AEA)
210027	210351	1	DUP	84800	B2MXL9(121439002DUP) 121439002		Uranium (AEA)
210027	210351	3	SAMPLE	121450005	B2MXM8		Uranium (AEA)
210027	210351	4	SAMPLE	121450006	B2MXN9		Uranium (AEA)
210027	210351	5	SAMPLE	121450007	B2MXN8		Uranium (AEA)
210027	210351	6	SAMPLE	121450008	B2MXM7		Uranium (AEA)
210027	210351	7	BLANK	84798	BLANK		Uranium (AEA)
210027	210351	8	LCS	84799	LCS		Uranium (AEA)
210115	210330	1	BLANK	84810	BLANK		TC99 by Liquid Scintillation
210115	210330	2	LCS	84811	LCS		TC99 by Liquid Scintillation
210115	210330	4	DUP	84812	B2MXL9(121439002DUP) 121439002		TC99 by Liquid Scintillation
210115	210330	5	MS	84813	B2MXL9(121439002MS) 121439002		TC99 by Liquid Scintillation
210115	210330	11	SAMPLE	121450005	B2MXM8		TC99 by Liquid Scintillation
210115	210330	12	SAMPLE	121450006	B2MXN9		TC99 by Liquid Scintillation
210115	210330	13	SAMPLE	121450007	B2MXN8		TC99 by Liquid Scintillation
210115	210330	14	SAMPLE	121450008	B2MXM7		TC99 by Liquid Scintillation
210218	210645	1	BLANK	84848	BLANK		GAB Discrete analysis Alpha only

REVISED121450 -

Batch QC List

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210218	210645	2	LCS	84849	LCS		GAB Discrete analysis Alpha only
210218	210645	4	DUP	84850	B2MK80(121444006DUP) 121444006		GAB Discrete analysis Alpha only
210218	210645	7	SAMPLE	121450005	B2MXM8		GAB Discrete analysis Alpha only
210218	210645	8	SAMPLE	121450006	B2MXN9		GAB Discrete analysis Alpha only
210218	210645	9	SAMPLE	121450007	B2MXN8		GAB Discrete analysis Alpha only
210218	210645	10	SAMPLE	121450008	B2MXM7		GAB Discrete analysis Alpha only
210218	210646	1	BLANK	84848	BLANK		GAB Discrete analysis Beta only
210218	210646	2	LCS	84849	LCS		GAB Discrete analysis Beta only
210218	210646	4	DUP	84850	B2MK80(121444006DUP) 121444006		GAB Discrete analysis Beta only
210218	210646	7	SAMPLE	121450005	B2MXM8		GAB Discrete analysis Beta only
210218	210646	8	SAMPLE	121450006	B2MXN9		GAB Discrete analysis Beta only
210218	210646	9	SAMPLE	121450007	B2MXN8		GAB Discrete analysis Beta only
210218	210646	10	SAMPLE	121450008	B2MXM7		GAB Discrete analysis Beta only
210219	210236	1	IBLANK	84851	IBLANK		Gamma Energy Analysis-general
210219	210236	2	LCS	84852	LCS		Gamma Energy Analysis-general
210219	210236	3	DUP	84853	B2MXM8(121450005DUP 121450005		Gamma Energy Analysis-general
210219	210236	4	SAMPLE	121450005	B2MXM8		Gamma Energy Analysis-general
210219	210236	5	SAMPLE	121450006	B2MXN9		Gamma Energy Analysis-general
210219	210236	6	SAMPLE	121450007	B2MXN8		Gamma Energy Analysis-general
210219	210236	7	SAMPLE	121450008	B2MXM7		Gamma Energy Analysis-general
210241	211036	1	BLANK	84914	BLANK		Strontium 89/90 (GPC/GEA)
210241	211036	2	LCS	84915	LCS		Strontium 89/90 (GPC/GEA)
210241	211036	3	DUP	84916	B2MP83(121441008DUP) 121441008		Strontium 89/90 (GPC/GEA)

REVISED121450 -

Batch QC List

Attention Scot Fitzgerald
 Department Radiochemistry

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210241	211036	8	SAMPLE	121450006	B2MXN9		Strontium 89/90 (GPC/GEA)
210241	211036	9	SAMPLE	121450007	B2MXN8		Strontium 89/90 (GPC/GEA)
210242	211277	1	BLANK	84917	BLANK		Strontium 89/90 (GPC/GEA)
210242	211277	2	LCS	84918	LCS		Strontium 89/90 (GPC/GEA)
210242	211277	3	DUP	84919	B2MXM7(121450008DUP 121450008		Strontium 89/90 (GPC/GEA)
210242	211277	4	SAMPLE	121450008	B2MXM7		Strontium 89/90 (GPC/GEA)
210248	210721	1	BLANK	84931	BLANK		Tritium by LSC
210248	210721	2	LCS	84932	LCS		Tritium by LSC
210248	210721	4	DUP	84933	B2MMW2(121446005DU 121446005		Tritium by LSC
210248	210721	5	MS	84934	B2MMW2(121446005MS) 121446005		Tritium by LSC
210248	210721	6	SAMPLE	121450005	B2MXM8		Tritium by LSC
210248	210721	7	SAMPLE	121450006	B2MXN9		Tritium by LSC
210248	210721	8	SAMPLE	121450007	B2MXN8		Tritium by LSC
210248	210721	9	SAMPLE	121450008	B2MXM7		Tritium by LSC
210929	211278	1	BLANK	85720	BLANK		Strontium 89/90 (GPC/GEA)
210929	211278	2	LCS	85721	LCS		Strontium 89/90 (GPC/GEA)
210929	211278	3	DUP	85722	B2MYP4(121501004DUP 121501004		Strontium 89/90 (GPC/GEA)
210929	211278	11	SAMPLE	121450005	B2MXM8		Strontium 89/90 (GPC/GEA)

REVISED121450 -

Batch QC List

Attention Scot Fitzgerald
 Department Wet Chemistry

Group # WSCF121450

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210629	210630	1	BLANK	85308	BLANK		Cyanide (W) by Midi/Spectrophotometer
210629	210630	3	LCS	85310	LCS		Cyanide (W) by Midi/Spectrophotometer
210629	210630	4	MS	85311	B2MXM8(121450005MS)	121450005	Cyanide (W) by Midi/Spectrophotometer
210629	210630	5	MSD	85312	B2MXM8(121450005MSD)	121450005	Cyanide (W) by Midi/Spectrophotometer
210629	210630	6	SAMPLE	121450005	B2MXM8		Cyanide (W) by Midi/Spectrophotometer
210629	210630	7	SAMPLE	121450006	B2MXN9		Cyanide (W) by Midi/Spectrophotometer
210629	210630	8	SAMPLE	121450007	B2MXN8		Cyanide (W) by Midi/Spectrophotometer
210629	210630	9	SAMPLE	121450008	B2MXM7		Cyanide (W) by Midi/Spectrophotometer

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

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.

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>

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

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>

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

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)
LA-523-494	Nonhalogenated Organics Using Gas Chromatography/Flame Ionization Detector		
	HEIS	8015_VOA_GC	Volatile Organic Analysis

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>

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

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-220-406	Strontium-89 and 90 in Aqueous Samples by SR-SPEC Separation		
	HEIS	SRTOT_SEP_PRECIP_GPC	Strontium 89/90, by Sr-Spec Sep.
LA-508-471	Thorium, Neptunium, Plutonium, Americium, and Uranium In Soil and Water Using Eichrom Column Separation (Prep)		
	HEIS	PUISO_IE_PRECIP_AEA	Isotopic Plutonium, Alpha Spec
LA-508-481	Gamma Energy Analysis using the Canberra Genie Ssystem		
	HEIS	GAMMA_GS	Gamma Energy Analysis
LA-508-471	Determination Of Uranium, Plutonium, And Americium		
	HEIS	UISO_IE_PRECIP_AEA	Uranium Iso, Alpha Spec
LA-508-421	Operation of the Tri-Carb Model 2500TR Liquid Scintillation Analyzer		
	HEIS	ALPHA_LSC	A/B Liquid Scintillation
	HEIS	BETA_LSC	A/B Liquid Scintillation
	HEIS	TC99_3MDSK_LSC	TC99 by Liquid Scintillation
	HEIS	TRITIUM_EIE_LSC	Tritium, by Eichrome ion exchange, LSC
LA-508-415	Operation Of The Protean 2-Inch Alpha/Beta Counting System For Gross Alpha/ Beta Samples		
	HEIS	ALPHA_GPC	Gross Alpha by GPC
	HEIS	BETA_GPC	Gross Beta by GPC
	HEIS	SRTOT_SEP_PRECIP_GPC	Strontium beta isotopic, GPC

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>

REVISED121450 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121450

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-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>

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450001	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN4	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										11/28/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	U	<19		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		16000		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		2910		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		6140		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		56.5		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		96600		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		338		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit

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

U - Analyzed for but not detected above limiting criteria.

RQ = Result Qualifier

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

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

TP Err = Total Propagated Error

D - Analyte was reported at a secondary dilution factor.

PQL is equivalent to Estimated Quantitation Limit (EQL)

DF = Dilution Factor

E - Analyte is an estimate, see comment section.

o - LCS recovery outside established laboratory acceptance limits.

+ - Indicates more than nine qualifier

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

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450001	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN4	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										12/06/12
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	UD	<10		ug/L	2	10	100	12/10/12
Manganese	7439-96-5	LA-505-412	BD	0.210		ug/L	2	0.20	2.0	12/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Barium	7440-39-3	LA-505-412	D	55.7		ug/L	2	0.40	4.0	12/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Chromium	7440-47-3	LA-505-412	D	3.47		ug/L	2	0.20	2.0	12/10/12
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	12/10/12
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Molybdenum	7439-98-7	LA-505-412	BD	0.754		ug/L	2	0.10	1.0	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	BD	0.706		ug/L	2	0.40	4.0	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450001
SAF# I13-007
Sample ID B2MXN4

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Selenium	7782-49-2	LA-505-412	UD	<2.0		ug/L	2	2.0	20	12/10/12
Boron	7440-42-8	LA-505-412	D	18.9		ug/L	2	1.0	10	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450002
SAF# I13-007
Sample ID B2MXP5

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										11/28/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	U	<19		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		12900		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		4610		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		15800		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		47.0		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	B	11.5		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	6.60		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		66600		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		307		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450002	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXP5	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										12/06/12
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	UD	<10		ug/L	2	10	100	12/10/12
Manganese	7439-96-5	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Barium	7440-39-3	LA-505-412	D	44.8		ug/L	2	0.40	4.0	12/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Chromium	7440-47-3	LA-505-412	D	9.96		ug/L	2	0.20	2.0	12/10/12
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	12/10/12
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Molybdenum	7439-98-7	LA-505-412	D	1.75		ug/L	2	0.10	1.0	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	BD	2.18		ug/L	2	0.40	4.0	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450002
SAF# I13-007
Sample ID B2MXP5

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Selenium	7782-49-2	LA-505-412	UD	<2.0		ug/L	2	2.0	20	12/10/12
Boron	7440-42-8	LA-505-412	D	29.9		ug/L	2	1.0	10	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450003
SAF# I13-007
Sample ID B2MXP4

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

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

MDL = Minimum Detection Limit

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

U - Analyzed for but not detected above limiting criteria.

RQ = Result Qualifier

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

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

TP Err = Total Propagated Error

D - Analyte was reported at a secondary dilution factor.

PQL is equivalent to Estimated Quantitation Limit (EQL)

DF = Dilution Factor

E - Analyte is an estimate, see comment section.

o - LCS recovery outside established laboratory acceptance limits.

+ - Indicates more than nine qualifier

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

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450003	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXP4	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	UD	<10		ug/L	2	10	100	12/10/12
Manganese	7439-96-5	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Barium	7440-39-3	LA-505-412	UD	<0.40		ug/L	2	0.40	4.0	12/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Chromium	7440-47-3	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	12/10/12
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Molybdenum	7439-98-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	UD	<0.40		ug/L	2	0.40	4.0	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450003
SAF# I13-007
Sample ID B2MXP4

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Selenium	7782-49-2	LA-505-412	UD	<2.0		ug/L	2	2.0	20	12/10/12
Boron	7440-42-8	LA-505-412	UD	<1.0		ug/L	2	1.0	10	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450004
SAF# I13-007
Sample ID B2MXN3

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										11/28/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	U	<19		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		16400		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		2920		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		6200		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		57.4		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		98700		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		345		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit

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

U - Analyzed for but not detected above limiting criteria.

RQ = Result Qualifier

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

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

TP Err = Total Propagated Error

D - Analyte was reported at a secondary dilution factor.

PQL is equivalent to Estimated Quantitation Limit (EQL)

DF = Dilution Factor

E - Analyte is an estimate, see comment section.

o - LCS recovery outside established laboratory acceptance limits.

+ - Indicates more than nine qualifier

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

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450004	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN3	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	BD	90.3		ug/L	2	10	100	12/10/12
Manganese	7439-96-5	LA-505-412	BD	0.214		ug/L	2	0.20	2.0	12/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Barium	7440-39-3	LA-505-412	D	50.5		ug/L	2	0.40	4.0	12/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Chromium	7440-47-3	LA-505-412	D	3.10		ug/L	2	0.20	2.0	12/10/12
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	12/10/12
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Molybdenum	7439-98-7	LA-505-412	BD	0.698		ug/L	2	0.10	1.0	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	BD	0.606		ug/L	2	0.40	4.0	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450004
SAF# I13-007
Sample ID B2MXN3

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Selenium	7782-49-2	LA-505-412	UD	<2.0		ug/L	2	2.0	20	12/10/12
Boron	7440-42-8	LA-505-412	D	24.7		ug/L	2	1.0	10	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450005
SAF# I13-007
Sample ID B2MXM8

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										11/28/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	U	<19		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		16600		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		2960		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		6270		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		57.9		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		98700		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		346		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit

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

U - Analyzed for but not detected above limiting criteria.

RQ = Result Qualifier

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

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

TP Err = Total Propagated Error

D - Analyte was reported at a secondary dilution factor.

PQL is equivalent to Estimated Quantitation Limit (EQL)

DF = Dilution Factor

E - Analyte is an estimate, see comment section.

o - LCS recovery outside established laboratory acceptance limits.

+ - Indicates more than nine qualifier

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

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										12/06/12
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	BD	43.6		ug/L	2	10	100	12/10/12
Manganese	7439-96-5	LA-505-412	BD	0.754		ug/L	2	0.20	2.0	12/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Barium	7440-39-3	LA-505-412	D	60.0		ug/L	2	0.40	4.0	12/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Chromium	7440-47-3	LA-505-412	D	3.61		ug/L	2	0.20	2.0	12/10/12
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	12/10/12
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Molybdenum	7439-98-7	LA-505-412	BD	0.802		ug/L	2	0.10	1.0	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	BD	0.582		ug/L	2	0.40	4.0	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450005
SAF# I13-007
Sample ID B2MXM8

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Selenium	7782-49-2	LA-505-412	BD	2.36		ug/L	2	2.0	20	12/10/12
Boron	7440-42-8	LA-505-412	D	19.7		ug/L	2	1.0	10	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450006
SAF# I13-007
Sample ID B2MXN9

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										11/28/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	U	<19		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		13200		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		4880		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		17000		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		46.8		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	B	9.00		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	5.90		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		65100		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		298		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										12/06/12
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	BD	44.3		ug/L	2	10	100	12/10/12
Manganese	7439-96-5	LA-505-412	BD	1.66		ug/L	2	0.20	2.0	12/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Barium	7440-39-3	LA-505-412	D	47.6		ug/L	2	0.40	4.0	12/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Chromium	7440-47-3	LA-505-412	D	10.5		ug/L	2	0.20	2.0	12/10/12
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	12/10/12
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Molybdenum	7439-98-7	LA-505-412	D	1.72		ug/L	2	0.10	1.0	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	BD	2.06		ug/L	2	0.40	4.0	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450006
SAF# I13-007
Sample ID B2MXN9

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Selenium	7782-49-2	LA-505-412	UD	<2.0		ug/L	2	2.0	20	12/10/12
Boron	7440-42-8	LA-505-412	D	30.0		ug/L	2	1.0	10	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450007
SAF# I13-007
Sample ID B2MXN8

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

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

MDL = Minimum Detection Limit

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

U - Analyzed for but not detected above limiting criteria.

RQ = Result Qualifier

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

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

TP Err = Total Propagated Error

D - Analyte was reported at a secondary dilution factor.

PQL is equivalent to Estimated Quantitation Limit (EQL)

DF = Dilution Factor

E - Analyte is an estimate, see comment section.

o - LCS recovery outside established laboratory acceptance limits.

+ - Indicates more than nine qualifier

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

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										12/06/12
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	BD	39.3		ug/L	2	10	100	12/10/12
Manganese	7439-96-5	LA-505-412	BD	0.612		ug/L	2	0.20	2.0	12/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Barium	7440-39-3	LA-505-412	UD	<0.40		ug/L	2	0.40	4.0	12/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Chromium	7440-47-3	LA-505-412	BD	0.716		ug/L	2	0.20	2.0	12/10/12
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	12/10/12
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Lead	7439-92-1	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Molybdenum	7439-98-7	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	UD	<0.40		ug/L	2	0.40	4.0	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450007
SAF# I13-007
Sample ID B2MXN8

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Selenium	7782-49-2	LA-505-412	UD	<2.0		ug/L	2	2.0	20	12/10/12
Boron	7440-42-8	LA-505-412	BD	2.25		ug/L	2	1.0	10	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										11/28/12
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	U	<19		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		16600		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		2970		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		6300		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		58.3		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		99800		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		348		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit

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

U - Analyzed for but not detected above limiting criteria.

RQ = Result Qualifier

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

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

TP Err = Total Propagated Error

D - Analyte was reported at a secondary dilution factor.

PQL is equivalent to Estimated Quantitation Limit (EQL)

DF = Dilution Factor

E - Analyte is an estimate, see comment section.

o - LCS recovery outside established laboratory acceptance limits.

+ - Indicates more than nine qualifier

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

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										12/06/12
ICP-2008 MS All possible metal										
Aluminum	7429-90-5	LA-505-412	D	148		ug/L	2	10	100	12/10/12
Manganese	7439-96-5	LA-505-412	BD	0.816		ug/L	2	0.20	2.0	12/10/12
Silver	7440-22-4	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Barium	7440-39-3	LA-505-412	D	52.9		ug/L	2	0.40	4.0	12/10/12
Beryllium	7440-41-7	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Cadmium	7440-43-9	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Chromium	7440-47-3	LA-505-412	D	3.33		ug/L	2	0.20	2.0	12/10/12
Cobalt	7440-48-4	LA-505-412	UD	<0.10		ug/L	2	0.10	0.50	12/10/12
Copper	7440-50-8	LA-505-412	UD	<0.20		ug/L	2	0.20	2.0	12/10/12
Lead	7439-92-1	LA-505-412	BD	0.116		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Molybdenum	7439-98-7	LA-505-412	BD	0.736		ug/L	2	0.10	1.0	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	BD	0.462		ug/L	2	0.40	4.0	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Sample # 121450008
SAF# I13-007
Sample ID B2MXM7

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Selenium	7782-49-2	LA-505-412	BD	2.11		ug/L	2	2.0	20	12/10/12
Boron	7440-42-8	LA-505-412	D	27.5		ug/L	2	1.0	10	12/10/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

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

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

D - Analyte was reported at a secondary dilution factor.

E - Analyte is an estimate, see comment section.

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (W) SPE										11/26/12
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	11/29/12
Aroclor-1221	11104-28-2	LA-523-427	U	<0.2		ug/L	1	0.2	0.4	11/29/12
Aroclor-1232	11141-16-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1242	53469-21-9	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1248	12672-29-6	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1254	11097-69-1	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1260	11096-82-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Preparation for 8270 (W) CLE										11/13/12
SW-846 8270D Semivolatiles										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

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	11/15/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

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	11/15/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

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	11/15/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

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	11/15/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosomethylethylamine	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/15/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/15/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

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	11/15/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

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	11/15/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

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	11/15/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/15/12
N-Nitrosodiphenylamin/Di phenyl Methaprylene	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Total Petroleum Hydrocarbons (Water Prep)										11/16/12
Extractable Diesel and Petroleum										
Diesel	TPHDIESEL	LA-523-493	U	<70		ug/L	1	70	100	11/19/12

MDL = Minimum Detection Limit

B - Analyte was detected in both the BLANK and SAMPLE

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

RQ = Result Qualifier

D - Analyte was reported at a secondary dilution factor.

U - Analyzed for but not detected above limiting criteria.

TP Err = Total Propagated Error

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

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

DF = Dilution Factor

J - Analyte < lowest calibration but >= MDL.

PQL is equivalent to Estimated Quantitation Limit (EQL)

+ - Indicates more than nine qualifier

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

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (W) SPE										11/26/12
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	11/29/12
Aroclor-1221	11104-28-2	LA-523-427	U	<0.2		ug/L	1	0.2	0.4	11/29/12
Aroclor-1232	11141-16-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1242	53469-21-9	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1248	12672-29-6	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1254	11097-69-1	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1260	11096-82-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Preparation for 8270 (W) CLE										11/13/12
SW-846 8270D Semivolatiles										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

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	11/16/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/16/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

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	11/16/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

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	11/16/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosomethylethylamine	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/16/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/16/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

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	11/16/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/16/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

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	11/16/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

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	11/16/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/16/12
N-Nitrosodiphenylamin/Di phenyl Methaprylene	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Total Petroleum Hydrocarbons (Water Prep)										11/16/12
Extractable Diesel and Petroleum										
Diesel	TPHDIESEL	LA-523-493	U	<70		ug/L	1	70	100	11/19/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (W) SPE										12/03/12
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	12/04/12
Aroclor-1221	11104-28-2	LA-523-427	U	<0.2		ug/L	1	0.2	0.4	12/04/12
Aroclor-1232	11141-16-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	12/04/12
Aroclor-1242	53469-21-9	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	12/04/12
Aroclor-1248	12672-29-6	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	12/04/12
Aroclor-1254	11097-69-1	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	12/04/12
Aroclor-1260	11096-82-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	12/04/12
Preparation for 8270 (W) CLE										11/13/12
SW-846 8270D Semivolatiles										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

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	11/16/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/16/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

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	11/16/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

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	11/16/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosomethylamin e	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/16/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/16/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

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	11/16/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/16/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

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	11/16/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

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	11/16/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/16/12
N-Nitrosodiphenylamin/Di phenyl Methaprylene	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Total Petroleum Hydrocarbons (Water Prep)										11/16/12
Extractable Diesel and Petroleum										
Diesel	TPHDIESEL	LA-523-493	U	<70		ug/L	1	70	100	11/19/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8082 (W) SPE										11/26/12
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	11/29/12
Aroclor-1221	11104-28-2	LA-523-427	U	<0.2		ug/L	1	0.2	0.4	11/29/12
Aroclor-1232	11141-16-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1242	53469-21-9	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1248	12672-29-6	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1254	11097-69-1	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Aroclor-1260	11096-82-5	LA-523-427	U	<0.09		ug/L	1	0.09	0.2	11/29/12
Preparation for 8270 (W) CLE										11/13/12
SW-846 8270D Semivolatiles										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

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	11/16/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/16/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

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	11/16/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

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	11/16/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosomethylethylamine	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/16/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/16/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

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	11/16/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/16/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

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	11/16/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/16/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

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	11/16/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/16/12
N-Nitrosodiphenylamin/Di phenyl Methaprylene	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/16/12
Total Petroleum Hydrocarbons (Water Prep)										11/16/12
Extractable Diesel and Petroleum										
Diesel	TPHDIESEL	LA-523-493	U	<70		ug/L	1	70	100	11/19/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Gasoline Range Prep (W)										11/15/12
Gasoline Range (W)										
Gasoline	TPHGASOLIN	LA-523-443	U	<50		ug/L	1	50	200	11/15/12
Preparation for 8015 (W)										11/15/12
SW-846 Method 8015 for GPP										
Methanol	67-56-1	LA-523-494	U	<100		ug/L	1	100	300	11/15/12
Preparation for 8260B (W)										11/15/12
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
cis-1,3-	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichloropropene										
trans-1,3-	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichloropropene										

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroform	67-66-3	LA-523-455	J	1.5		ug/L	1	1	5	11/15/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	11/15/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/15/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample # 121450005
SAF# I13-007
Sample ID B2MXM8

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample # 121450006
SAF# I13-007
Sample ID B2MXN9

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Gasoline Range Prep (W)										11/15/12
Gasoline Range (W)										
Gasoline	TPHGASOLIN	LA-523-443	U	<50		ug/L	1	50	200	11/15/12
Preparation for 8015 (W)										11/15/12
SW-846 Method 8015 for GPP										
Methanol	67-56-1	LA-523-494	U	<100		ug/L	1	100	300	11/15/12
Preparation for 8260B (W)										11/15/12
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroform	67-66-3	LA-523-455	J	3.3		ug/L	1	1	5	11/15/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample # 121450006
SAF# I13-007
Sample ID B2MXN9

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	11/15/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/15/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample # 121450006
SAF# I13-007
Sample ID B2MXN9

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Gasoline Range Prep (W)										11/15/12
Gasoline Range (W)										
Gasoline	TPHGASOLIN	LA-523-443	U	<50		ug/L	1	50	200	11/15/12
Preparation for 8015 (W)										11/15/12
SW-846 Method 8015 for GPP										
Methanol	67-56-1	LA-523-494	U	<100		ug/L	1	100	300	11/15/12
Preparation for 8260B (W)										11/15/12
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
cis-1,3-	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichloropropene										
trans-1,3-	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichloropropene										

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroform	67-66-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	11/15/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/15/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Gasoline Range Prep (W)										11/15/12
Gasoline Range (W)										
Gasoline	TPHGASOLIN	LA-523-443	U	<50		ug/L	1	50	200	11/15/12
Preparation for 8015 (W)										11/15/12
SW-846 Method 8015 for GPP										
Methanol	67-56-1	LA-523-494	U	<100		ug/L	1	100	300	11/15/12
Preparation for 8260B (W)										11/15/12
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
cis-1,3-	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichloropropene										
trans-1,3-	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichloropropene										

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroform	67-66-3	LA-523-455	J	1.6		ug/L	1	1	5	11/15/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample # 121450008
SAF# I13-007
Sample ID B2MXM7

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	11/15/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/15/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE

D - Analyte was reported at a secondary dilution factor.

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

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

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

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

U - Analyzed for but not detected above limiting criteria.

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

PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Am/Cm/Pu/U/Np Prep (AEA) W										11/15/12
Plutonium (AEA)										
Plutonium-238	13981-16-3	LA-508-471	U	-0.018	.087	pCi/L	1	0.17		11/16/12
Plutonium-239_240	PU-239/240	LA-508-471	U	9.2E-3	.019	pCi/L	1	0.025		11/16/12
Uranium (AEA)										
Uranium-234	U-233/234	LA-508-471		0.93	.3	pCi/L	1	0.024		11/15/12
Uranium-235	15117-96-1	LA-508-471	U	0.038	.055	pCi/L	1	0.089		11/15/12
Uranium-238	U-238	LA-508-471		0.79	.26	pCi/L	1	0.082		11/15/12
GAB Prep for Discrete Analysis (W)										11/20/12
GAB Discrete analysis Alpha only										
Gross Alpha	12587-46-1	LA-508-415	U	0.22	2.8	pCi/L	1	5.2		12/03/12
GAB Discrete analysis Beta only										
Gross Beta	12587-47-2	LA-508-415		2.1E4	2100	pCi/L	1	7.3		12/03/12
Preparation for GEA (W)										11/13/12
Gamma Energy Analysis-general										
Antimony-125	14234-35-6	LA-508-481	U	9.8	15	pCi/L	1	28		11/13/12
Cesium-134	13967-70-9	LA-508-481	U	5.4	31	pCi/L	1	55		11/13/12
Cesium-137	10045-97-3	LA-508-481	U	-3.1	5.3	pCi/L	1	8.7		11/13/12
Cobalt-60	10198-40-0	LA-508-481	U	-2.4	5	pCi/L	1	8.6		11/13/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Sample #	121450005	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Europium-152	14683-23-9	LA-508-481	U	-7.7	16	pCi/L	1	28		11/13/12
Europium-154	15585-10-1	LA-508-481	U	-1.8	13	pCi/L	1	24		11/13/12
Europium-155	14391-16-3	LA-508-481	U	11	19	pCi/L	1	33		11/13/12
Potassium-40	13966-00-2	LA-508-481	U	-100	75	pCi/L	1	150		11/13/12
Ruthenium-106	13967-48-1	LA-508-481	U	-3.6	43	pCi/L	1	75		11/13/12
Beryllium-7	13966-02-4	LA-508-481	U	-44	42	pCi/L	1	68		11/13/12
Strontium 89/90 WATER/LIQUID PREP										12/06/12
Strontium 89/90 (GPC/GEA)										
Strontium-89_90	SR-RAD	LA-220-406		1.2E4	2400	pCi/L	1	30		12/08/12
TC99 by Liquid Scin. WATER/LIQUID PREP										11/13/12
TC99 by Liquid Scintillation										
Technetium-99	14133-76-7	LA-508-421		21	5.7	pCi/L	1	5.6		11/14/12
Tritium by LSC EICHROM WA/LIQ PREP										11/14/12
Tritium by LSC										
Tritium	10028-17-8	LA-508-421		1.7E4	3400	pCi/L	1	290		11/22/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Am/Cm/Pu/U/Np Prep (AEA) W										11/15/12
Plutonium (AEA)										
Plutonium-238	13981-16-3	LA-508-471	U	0.041	.11	pCi/L	1	0.20		11/16/12
Plutonium-239_240	PU-239/240	LA-508-471	U	0.051	.062	pCi/L	1	0.094		11/16/12
Uranium (AEA)										
Uranium-234	U-233/234	LA-508-471		1.2	.38	pCi/L	1	0.11		11/15/12
Uranium-235	15117-96-1	LA-508-471		0.18	.1	pCi/L	1	0.091		11/15/12
Uranium-238	U-238	LA-508-471		1.2	.37	pCi/L	1	0.083		11/15/12
GAB Prep for Discrete Analysis (W)										11/20/12
GAB Discrete analysis Alpha only										
Gross Alpha	12587-46-1	LA-508-415	U	0.94	2.1	pCi/L	1	3.7		12/03/12
GAB Discrete analysis Beta only										
Gross Beta	12587-47-2	LA-508-415		6400	640	pCi/L	1	5.0		12/03/12
Preparation for GEA (W)										11/13/12
Gamma Energy Analysis-general										
Antimony-125	14234-35-6	LA-508-481	U	-0.48	24	pCi/L	1	42		11/13/12
Cesium-134	13967-70-9	LA-508-481	U	17	44	pCi/L	1	80		11/13/12
Cesium-137	10045-97-3	LA-508-481	U	-3.8	8.3	pCi/L	1	14		11/13/12
Cobalt-60	10198-40-0	LA-508-481	U	1.1	8	pCi/L	1	15		11/13/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Sample #	121450006	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN9	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Europium-152	14683-23-9	LA-508-481	U	-13	25	pCi/L	1	41		11/13/12
Europium-154	15585-10-1	LA-508-481	U	11	20	pCi/L	1	42		11/13/12
Europium-155	14391-16-3	LA-508-481	U	23	22	pCi/L	1	41		11/13/12
Potassium-40	13966-00-2	LA-508-481	U	-61	140	pCi/L	1	300		11/13/12
Ruthenium-106	13967-48-1	LA-508-481	U	14	66	pCi/L	1	120		11/13/12
Beryllium-7	13966-02-4	LA-508-481	U	17	59	pCi/L	1	110		11/13/12
Strontium 89/90 WATER/LIQUID PREP										11/28/12
Strontium 89/90 (GPC/GEA)										
Strontium-89_90	SR-RAD	LA-220-406		3400	680	pCi/L	1	1.0		12/04/12
TC99 by Liquid Scin. WATER/LIQUID PREP										11/13/12
TC99 by Liquid Scintillation										
Technetium-99	14133-76-7	LA-508-421		19	5.4	pCi/L	1	5.6		11/14/12
Tritium by LSC EICHROM WA/LIQ PREP										11/14/12
Tritium by LSC										
Tritium	10028-17-8	LA-508-421		1.1E4	2200	pCi/L	1	290		11/22/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Am/Cm/Pu/U/Np Prep (AEA) W										11/15/12
Plutonium (AEA)										
Plutonium-238	13981-16-3	LA-508-471		0.45	.2	pCi/L	1	0.19		11/16/12
Plutonium-239_240	PU-239/240	LA-508-471	U	-0.038	.047	pCi/L	1	0.12		11/16/12
Uranium (AEA)										
Uranium-234	U-233/234	LA-508-471	U	0.067	.076	pCi/L	1	0.11		11/15/12
Uranium-235	15117-96-1	LA-508-471	U	0.052	.064	pCi/L	1	0.097		11/15/12
Uranium-238	U-238	LA-508-471	U	0.038	.055	pCi/L	1	0.089		11/15/12
GAB Prep for Discrete Analysis (W)										11/20/12
GAB Discrete analysis Alpha only										
Gross Alpha	12587-46-1	LA-508-415	U	0.89	1.3	pCi/L	1	2.1		12/03/12
GAB Discrete analysis Beta only										
Gross Beta	12587-47-2	LA-508-415		8.0	2.5	pCi/L	1	3.4		12/03/12
Preparation for GEA (W)										11/13/12
Gamma Energy Analysis-general										
Antimony-125	14234-35-6	LA-508-481	U	0.051	17	pCi/L	1	30		11/13/12
Cesium-134	13967-70-9	LA-508-481	U	0.34	40	pCi/L	1	68		11/13/12
Cesium-137	10045-97-3	LA-508-481	U	-2.3	6.9	pCi/L	1	12		11/13/12
Cobalt-60	10198-40-0	LA-508-481	U	2.0	5.2	pCi/L	1	10		11/13/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Sample #	121450007	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXN8	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Europium-152	14683-23-9	LA-508-481	U	-27	21	pCi/L	1	31		11/13/12
Europium-154	15585-10-1	LA-508-481	U	0.18	18	pCi/L	1	33		11/13/12
Europium-155	14391-16-3	LA-508-481	U	-13	23	pCi/L	1	39		11/13/12
Potassium-40	13966-00-2	LA-508-481	U	-4.6	99	pCi/L	1	210		11/13/12
Ruthenium-106	13967-48-1	LA-508-481	U	12	62	pCi/L	1	110		11/13/12
Beryllium-7	13966-02-4	LA-508-481	U	4.4	52	pCi/L	1	91		11/13/12
Strontium 89/90 WATER/LIQUID PREP										11/28/12
Strontium 89/90 (GPC/GEA)										
Strontium-89_90	SR-RAD	LA-220-406	U	0.29	.63	pCi/L	1	1.1		12/04/12
TC99 by Liquid Scin. WATER/LIQUID PREP										11/13/12
TC99 by Liquid Scintillation										
Technetium-99	14133-76-7	LA-508-421	U	1.1	3.4	pCi/L	1	5.6		11/14/12
Tritium by LSC EICHROM WA/LIQ PREP										11/14/12
Tritium by LSC										
Tritium	10028-17-8	LA-508-421	U	75	180	pCi/L	1	290		11/22/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Am/Cm/Pu/U/Np Prep (AEA) W										11/15/12
Plutonium (AEA)										
Plutonium-238	13981-16-3	LA-508-471	U	0.048	.099	pCi/L	1	0.17		11/16/12
Plutonium-239_240	PU-239/240	LA-508-471	U	0.019	.027	pCi/L	1	0.026		11/16/12
Uranium (AEA)										
Uranium-234	U-233/234	LA-508-471		0.82	.27	pCi/L	1	0.067		11/15/12
Uranium-235	15117-96-1	LA-508-471	U	0.069	.079	pCi/L	1	0.12		11/15/12
Uranium-238	U-238	LA-508-471		0.82	.27	pCi/L	1	0.084		11/15/12
GAB Prep for Discrete Analysis (W)										11/20/12
GAB Discrete analysis Alpha only										
Gross Alpha	12587-46-1	LA-508-415	U	0.79	2.6	pCi/L	1	4.6		12/03/12
GAB Discrete analysis Beta only										
Gross Beta	12587-47-2	LA-508-415		2.1E4	2100	pCi/L	1	6.2		12/03/12
Preparation for GEA (W)										11/13/12
Gamma Energy Analysis-general										
Antimony-125	14234-35-6	LA-508-481	U	-9.2	15	pCi/L	1	25		11/13/12
Cesium-134	13967-70-9	LA-508-481	U	4.1	38	pCi/L	1	60		11/13/12
Cesium-137	10045-97-3	LA-508-481	U	-3.5	5.8	pCi/L	1	9.8		11/13/12
Cobalt-60	10198-40-0	LA-508-481	U	1.7	5.3	pCi/L	1	9.3		11/13/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Sample #	121450008	Matrix	WATER
SAF#	I13-007	Sampled	11/12/12
Sample ID	B2MXM7	Received	11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Europium-152	14683-23-9	LA-508-481	U	-17	15	pCi/L	1	25		11/13/12
Europium-154	15585-10-1	LA-508-481	U	6.4	16	pCi/L	1	29		11/13/12
Europium-155	14391-16-3	LA-508-481	U	5.1	20	pCi/L	1	34		11/13/12
Potassium-40	13966-00-2	LA-508-481	U	-33	87	pCi/L	1	160		11/13/12
Ruthenium-106	13967-48-1	LA-508-481	U	-16	52	pCi/L	1	90		11/13/12
Beryllium-7	13966-02-4	LA-508-481	U	-13	44	pCi/L	1	74		11/13/12
Strontium 89/90 WATER/LIQUID PREP										12/06/12
Strontium 89/90 (GPC/GEA)										
Strontium-89_90	SR-RAD	LA-220-406		1.1E4	2200	pCi/L	1	6.6		12/11/12
TC99 by Liquid Scin. WATER/LIQUID PREP										11/13/12
TC99 by Liquid Scintillation										
Technetium-99	14133-76-7	LA-508-421		22	5.9	pCi/L	1	5.6		11/14/12
Tritium by LSC EICHROM WA/LIQ PREP										11/14/12
Tritium by LSC										
Tritium	10028-17-8	LA-508-421		1.6E4	3300	pCi/L	1	290		11/22/12

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

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121450

Sample # 121450005
SAF# I13-007
Sample ID B2MXM8

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for Cyanide (W)										11/19/12
Cyanide (W) by Midi/Spectrophotometer										
Cyanide	57-12-5	LA-695-402	U	<4.0		ug/L	1	4.0	20	11/19/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121450

Sample # 121450006
SAF# I13-007
Sample ID B2MXN9

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for Cyanide (W)										11/19/12
Cyanide (W) by Midi/Spectrophotometer										
Cyanide	57-12-5	LA-695-402	U	<4.0		ug/L	1	4.0	20	11/19/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121450

Sample # 121450007
SAF# I13-007
Sample ID B2MXN8

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for Cyanide (W)										11/19/12
Cyanide (W) by Midi/Spectrophotometer										
Cyanide	57-12-5	LA-695-402	U	<4.0		ug/L	1	4.0	20	11/19/12

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.

REVISED121450 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121450

Sample # 121450008
SAF# I13-007
Sample ID B2MXM7

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

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for Cyanide (W)										11/19/12
Cyanide (W) by Midi/Spectrophotometer										
Cyanide	57-12-5	LA-695-402	U	<4.0		ug/L	1	4.0	20	11/19/12

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.

REVISED121450 -

Attention Scot Fitzgerald
 Department Radiochemistry

Group # WSCF121450

Analytical Batch 210236 (QC Batch: 210219) Test Gamma Energy Analysis-general
 Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
I BLANK										
QC Sample #84851										
Antimony-125	14234-35-6	-0.32	pCi/L					U		11/13/12
Cesium-134	13967-70-9	-20	pCi/L					U		11/13/12
Cesium-137	10045-97-3	-1.1	pCi/L					U		11/13/12
Cobalt-60	10198-40-0	-1.1	pCi/L					U		11/13/12
Europium-152	14683-23-9	2.4	pCi/L					U		11/13/12
Europium-154	15585-10-1	3.3	pCi/L					U		11/13/12
Europium-155	14391-16-3	11	pCi/L					U		11/13/12
Potassium-40	13966-00-2	-28	pCi/L					U		11/13/12
Ruthenium-106	13967-48-1	13	pCi/L					U		11/13/12
Beryllium-7	13966-02-4	15	pCi/L					U		11/13/12
LCS										
QC Sample #84852										
Cesium-137	10045-97-3	6400	pCi/sample	106.7	80 - 120					11/13/12
Cobalt-60	10198-40-0	11000	pCi/sample	109.7	80 - 120					11/13/12
DUP										
QC Sample #84853										
Original 121450005										
Antimony-125	14234-35-6	9.8	-5.7	pCi/L			752.00	20	*	U
Cesium-134	13967-70-9	5.4	-25	pCi/L			-308.70	20	*	U

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

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

WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed	
Cesium-137	10045-97-3	-3.1	4.3	pCi/L		1211.40	20	*	U	11/13/12
Cobalt-60	10198-40-0	-2.4	2.4	pCi/L		-33482.8	20	*	U	11/13/12
Europium-152	14683-23-9	-7.7	6.6	pCi/L		-2547.20	20	*	U	11/13/12
Europium-154	15585-10-1	-1.8	7.5	pCi/L		325.30	20	*	U	11/13/12
Europium-155	14391-16-3	11	-8.0	pCi/L		1222.40	20	*	U	11/13/12
Potassium-40	13966-00-2	-100	-130	pCi/L		-25.40	20	*	U	11/13/12
Ruthenium-106	13967-48-1	-3.6	5.3	pCi/L		1008.40	20	*	U	11/13/12
Beryllium-7	13966-02-4	-44	-17	pCi/L		-90.50	20	*	U	11/13/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 210330 (QC Batch: 210115) **Test** TC99 by Liquid Scintillation
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #84810
Technetium-99										14133-76-7
LCS										1.5 pCi/L
QC Sample #84811										
Technetium-99										14133-76-7
DUP										220 pCi/L
QC Sample #84812										101.6 80 - 120
Original 121439002										
Technetium-99										14133-76-7
MS										34 pCi/L
QC Sample #84813										Original 121439002
Technetium-99										14133-76-7
850 pCi/L										98.2 75 - 125
11/14/12										

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group # WSCF121450

Analytical Batch 210344 (QC Batch: 210343) Test Gasoline Range (W)
 Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed	
BLANK											
QC Sample #85121											
Gasoline	TPHGASOLI	<50		ug/L					U	11/15/12	
LCS			QC Sample #85122								
Gasoline	TPHGASOLI	2400		ug/L	96.9	80 - 120				11/15/12	
MS			QC Sample #85123								
			Original 121450005								
Gasoline	TPHGASOLI	<50	2300	ug/L	90.1	75 - 125				11/15/12	
MSD			QC Sample #85124								
			Original 121450005								
Gasoline	TPHGASOLI	<50	2400	ug/L	94.3	75 - 125	4.50	20		11/15/12	
DUP			QC Sample #85125								
			Original 121450005								
Gasoline	TPHGASOLI	<50	<50	ug/L			0.00	20	U	11/15/12	

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Analytical Batch 210346 (QC Batch: 210345) **Test** SW-846 8260B Volatiles
Associated Samples 121450005, 121450006, 121450007, 121450008

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group #

WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
trans-1,2-Dichloroethene	156-60-5		<1	ug/L				U	11/15/12
Acetonitrile	75-05-8		<2	ug/L				U	11/15/12
cis-1,2-Dichloroethene	156-59-2		<1	ug/L				U	11/15/12
Propionitrile	107-12-0		<2	ug/L				U	11/15/12
Isobutyl alcohol	78-83-1		<200	ug/L				U	11/15/12
Iodomethane	74-88-4		<1	ug/L				U	11/15/12
1,1,1,2-Tetrachloroethane	630-20-6		<1	ug/L				U	11/15/12
1,2,3-Trichloropropane	96-18-4		<1	ug/L				U	11/15/12
1,2-Dibromo-3-chloropropane	96-12-8		<1	ug/L				U	11/15/12
1,2-Dibromoethane	106-93-4		<1	ug/L				U	11/15/12
Acrolein	107-02-8		<1	ug/L				U	11/15/12
Acrylonitrile	107-13-1		<1	ug/L				U	11/15/12
Allyl chloride	107-05-1		<1	ug/L				U	11/15/12
Methylene bromide	74-95-3		<1	ug/L				U	11/15/12
Dichlorodifluoromethane	75-71-8		<1	ug/L				U	11/15/12
Ethyl methacrylate	97-63-2		<1	ug/L				U	11/15/12
Methacrylonitrile	126-98-7		<1	ug/L				U	11/15/12
Methyl methacrylate	80-62-6		<1	ug/L				U	11/15/12
Trans-1,4-dichloro-2-butene	110-57-6		<1	ug/L				U	11/15/12
Vinyl acetate	108-05-4		<1	ug/L				U	11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group #

WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Chloroprene	126-99-8	<1		ug/L					U	11/15/12
LCS										
			QC Sample #85127							
1,1-Dichloroethene	75-35-4	24		ug/L	96.1	75 - 125				11/15/12
Trichloroethene	79-01-6	28		ug/L	112.4	75 - 125				11/15/12
Benzene	71-43-2	29		ug/L	115.6	75 - 125				11/15/12
Toluene	108-88-3	29		ug/L	115.5	75 - 125				11/15/12
Chlorobenzene	108-90-7	28		ug/L	112.4	75 - 125				11/15/12
1,1-Dichloroethane	75-34-3	26		ug/L	104.6	75 - 125				11/15/12
Ethylbenzene	100-41-4	30		ug/L	121	75 - 125				11/15/12
Styrene	100-42-5	30		ug/L	121	75 - 125				11/15/12
trans-1,3-Dichloropropene	10061-02-6	29		ug/L	117.5	75 - 125				11/15/12
1,2-Dichloroethane	107-06-2	28		ug/L	110.4	75 - 125				11/15/12
1,1,1-Trichloroethane	71-55-6	30		ug/L	119	75 - 125				11/15/12
Dibromochloromethane	124-48-1	28		ug/L	112.2	75 - 125				11/15/12
Carbon disulfide	75-15-0	22		ug/L	88.4	75 - 125				11/15/12
Bromoform	75-25-2	30		ug/L	118.1	75 - 125				11/15/12
Bromodichloromethane	75-27-4	30		ug/L	120.8	75 - 125				11/15/12
1,2-Dichloropropane	78-87-5	28		ug/L	113	75 - 125				11/15/12
1,1,2-Trichloroethane	79-00-5	28		ug/L	112	75 - 125				11/15/12
1,1,2,2-Tetrachloroethane	79-34-5	27		ug/L	107.7	75 - 125				11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group #

WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
trans-1,2-Dichloroethene	156-60-5		27	ug/L	107.2	75 - 125				11/15/12
cis-1,2-Dichloroethene	156-59-2		27	ug/L	109.4	75 - 125				11/15/12
MS										
QC Sample #85128										
Original 121450005										
1,1-Dichloroethene	75-35-4	<1	23	ug/L	92.2	75 - 125				11/15/12
Trichloroethene	79-01-6	<1	27	ug/L	108.9	75 - 125				11/15/12
Benzene	71-43-2	<1	28	ug/L	112.6	75 - 125				11/15/12
Toluene	108-88-3	<1	28	ug/L	113.6	75 - 125				11/15/12
Chlorobenzene	108-90-7	<1	28	ug/L	111.5	75 - 125				11/15/12
1,1-Dichloroethane	75-34-3	<1	26	ug/L	104.4	75 - 125				11/15/12
Ethylbenzene	100-41-4	<1	30	ug/L	118.2	75 - 125				11/15/12
Styrene	100-42-5	<1	30	ug/L	119.9	75 - 125				11/15/12
trans-1,3-Dichloropropene	10061-02-6	<1	29	ug/L	117.1	75 - 125				11/15/12
1,2-Dichloroethane	107-06-2	<1	27	ug/L	109.7	75 - 125				11/15/12
1,1,1-Trichloroethane	71-55-6	<1	29	ug/L	115.3	75 - 125				11/15/12
Dibromochloromethane	124-48-1	<1	28	ug/L	110.8	75 - 125				11/15/12
Carbon disulfide	75-15-0	<1	21	ug/L	85.1	75 - 125				11/15/12
Bromoform	75-25-2	<1	29	ug/L	117.1	75 - 125				11/15/12
Bromodichloromethane	75-27-4	<1	30	ug/L	119	75 - 125				11/15/12
1,2-Dichloropropane	78-87-5	<1	28	ug/L	113.4	75 - 125				11/15/12
1,1,2-Trichloroethane	79-00-5	<1	28	ug/L	111.1	75 - 125				11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group #

WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,1,2,2-Tetrachloroethane	79-34-5	<1	26	ug/L	104	75 - 125				11/15/12
trans-1,2-Dichloroethene	156-60-5	<1	27	ug/L	106.1	75 - 125				11/15/12
cis-1,2-Dichloroethene	156-59-2	<1	27	ug/L	106.9	75 - 125				11/15/12
MSD										
QC Sample #85129										
Original 121450005 Paired 85128										
1,1-Dichloroethene	75-35-4	<1	25	ug/L	98.7	75 - 125	6.90	20		11/15/12
Trichloroethene	79-01-6	<1	28	ug/L	112.8	75 - 125	3.50	20		11/15/12
Benzene	71-43-2	<1	29	ug/L	115.7	75 - 125	2.70	20		11/15/12
Toluene	108-88-3	<1	29	ug/L	116	75 - 125	2.10	20		11/15/12
Chlorobenzene	108-90-7	<1	28	ug/L	113.4	75 - 125	1.70	20		11/15/12
1,1-Dichloroethane	75-34-3	<1	27	ug/L	107.5	75 - 125	2.90	20		11/15/12
Ethylbenzene	100-41-4	<1	30	ug/L	121.1	75 - 125	2.50	20		11/15/12
Styrene	100-42-5	<1	30	ug/L	121	75 - 125	0.90	20		11/15/12
trans-1,3-Dichloropropene	10061-02-6	<1	29	ug/L	117.6	75 - 125	0.40	20		11/15/12
1,2-Dichloroethane	107-06-2	<1	27	ug/L	109.8	75 - 125	0.10	20		11/15/12
1,1,1-Trichloroethane	71-55-6	<1	30	ug/L	118.1	75 - 125	2.40	20		11/15/12
Dibromochloromethane	124-48-1	<1	28	ug/L	113.8	75 - 125	2.60	20		11/15/12
Carbon disulfide	75-15-0	<1	22	ug/L	88.1	75 - 125	3.40	20		11/15/12
Bromoform	75-25-2	<1	30	ug/L	118.8	75 - 125	1.40	20		11/15/12
Bromodichloromethane	75-27-4	<1	30	ug/L	120.8	75 - 125	1.50	20		11/15/12
1,2-Dichloropropane	78-87-5	<1	28	ug/L	113.7	75 - 125	0.20	20		11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

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

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 210350 (QC Batch: 210027) **Test** Plutonium (AEA)
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
QC Sample #84798										
Plutonium-238	13981-16-3	0.11		pCi/L				U		11/16/12
Plutonium-239_240	PU-239/240	9.7E-3		pCi/L				U		11/16/12
LCS										
QC Sample #84799										
Plutonium-239_240	PU-239/240	5.5		pCi/sample	95.5	80 - 120				11/16/12
DUP										
QC Sample #84800										
Original 121439002										
Plutonium-238	13981-16-3	0.11		pCi/L			239.40	20	*	U
Plutonium-239_240	PU-239/240	0.34		pCi/L			189.00	20	*	X

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Radiochemistry

Group # WSCF121450

Analytical Batch 210351 (QC Batch: 210027) Test Uranium (AEA)
 Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
QC Sample #84798										
Uranium-234	U-233/234	0.063		pCi/L				U		11/15/12
Uranium-235	15117-96-1	0.030		pCi/L				U		11/15/12
Uranium-238	U-238	0.036		pCi/L				U		11/15/12
LCS										
QC Sample #84799										
Uranium-238	U-238	8.7		pCi/sample	102.6	80 - 120				11/15/12
DUP										
QC Sample #84800										
Original 121439002										
Uranium-234	U-233/234	1.5		pCi/L			13.70	20		11/15/12
Uranium-235	15117-96-1	0.11		pCi/L			53.90	20	*	11/15/12
Uranium-238	U-238	1.2		pCi/L			4.60	20		11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121450

Analytical Batch 210418 (QC Batch: 210318) Test SW-846 8270D Semivolatiles
 Associated Samples 121450005, 121450006, 121450007, 121450008

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group #

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

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

WSCF121450

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

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Analytical Batch 210419 (QC Batch: 210358) **Test** SW-846 Method 8015 for GPP
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
QC Sample #85141										
Methanol	67-56-1	<100	ug/L						U	11/15/12
LCS										
QC Sample #85142										
Methanol	67-56-1	4540	ug/L	90.9	70 - 130					11/15/12
MS										
QC Sample #85143										
Original 121439002										
Methanol	67-56-1	4190	ug/L	83.7	70 - 130					11/15/12
MSD										
QC Sample #85144										
Original 121439002										
Methanol	67-56-1	4520	ug/L	90.3	70 - 130	7.60	20			11/15/12
Paired 85143										

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Analytical Batch 210625 (QC Batch: 210422) **Test** Extractable Diesel and Petroleum
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK		QC Sample #85247								
Diesel	TPHDIESEL	<80	ug/L					U		11/19/12
LCS		QC Sample #85248								
Diesel	TPHDIESEL	2400	ug/L	96.7	65 - 128					11/19/12
MS		QC Sample #85249								
		Original 121450005								
Diesel	TPHDIESEL	<70	2300	ug/L	99	73 - 123				11/19/12
MSD		QC Sample #85250								
		Original 121450005								
Diesel	TPHDIESEL	<70	2300	ug/L	98.6	73 - 123	0.40	20		11/19/12
* - QC result out of range					n/a - Not Applicable					

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121450

Analytical Batch 210630 (QC Batch: 210629) **Test** Cyanide (W) by Midi/Spectrophotometer
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
QC Sample #85308										
Cyanide	57-12-5	<4.0		ug/L					U	11/19/12
LCS										
QC Sample #85310										
Cyanide	57-12-5		52.5	ug/L	105.1	85 - 115				11/19/12
MS										
QC Sample #85311										
Original 121450005										
Cyanide	57-12-5	<4.0	37.8	ug/L	94.6	75 - 125				11/19/12
MSD										
QC Sample #85312										
Original 121450005										
Cyanide	57-12-5	<4.0	38.9	ug/L	97.4	75 - 125	2.90	20		11/19/12
Paired 85311										

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 210645 (QC Batch: 210218) **Test** GAB Discrete analysis Alpha only
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #84848
Gross Alpha										U
LCS	12587-46-1	-1.2		pCi/L						12/03/12
QC Sample #84849										
Gross Alpha										12/03/12
DUP	12587-46-1	56		pCi/L	94.4	80 - 120				
QC Sample #84850										
Original 121444006										
Gross Alpha	12587-46-1	0.089		pCi/L			180.80	20	*	U
* - QC result out of range										12/03/12
n/a - Not Applicable										

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 210646 (QC Batch: 210218) **Test** GAB Discrete analysis Beta only
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK		QC Sample #84848								
Gross Beta	12587-47-2		0.053	pCi/L					U	12/03/12
LCS		QC Sample #84849								
Gross Beta	12587-47-2		250	pCi/L	99.1	80 - 120				12/03/12
DUP		QC Sample #84850								
		Original 121444006								
Gross Beta	12587-47-2		-0.42	pCi/L			-93.50	20	*	U

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 210721 (QC Batch: 210248) **Test** Tritium by LSC
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #84931
Tritium LCS										pCi/L
										51
QC Sample #84932										
Tritium DUP										pCi/L
										3500
QC Sample #84933										
Original 121446005										
Tritium MS										pCi/L
										620
QC Sample #84934										
Original 121446005										
Tritium										10028-17-8
										22000
										pCi/L
										105
										75 - 125
11/22/12										
U										
11/22/12										
11/22/12										
11/22/12										
11/22/12										

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121450

Analytical Batch 210923 (QC Batch: 210747) Test ICP-6010 - All possible metals
 Associated Samples 121450001, 121450002, 121450003, 121450004, 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #85452
Iron	7439-89-6		<19	ug/L				U		11/29/12
Magnesium	7439-95-4		<4.0	ug/L				U		11/29/12
Manganese	7439-96-5		<4.0	ug/L				U		11/29/12
Nickel	7440-02-0		<4.0	ug/L				U		11/29/12
Potassium	7440-09-7		<76	ug/L				U		11/29/12
Silver	7440-22-4		<4.0	ug/L				U		11/29/12
Sodium	7440-23-5		<10	ug/L				U		11/29/12
Antimony	7440-36-0		<36	ug/L				U		11/29/12
Barium	7440-39-3		<4.0	ug/L				U		11/29/12
Cadmium	7440-43-9		<4.0	ug/L				U		11/29/12
Chromium	7440-47-3		<5.0	ug/L				U		11/29/12
Cobalt	7440-48-4		<4.0	ug/L				U		11/29/12
Copper	7440-50-8		<4.0	ug/L				U		11/29/12
Vanadium	7440-62-2		<5.0	ug/L				U		11/29/12
Zinc	7440-66-6		<5.0	ug/L				U		11/29/12
Calcium	7440-70-2		<49	ug/L				U		11/29/12
Strontium	7440-24-6		<9.0	ug/L				U		11/29/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Beryllium	7440-41-7	<4.0		ug/L					U	11/29/12
LCS										
			QC Sample #85454							
Iron	7439-89-6	964		ug/L	96.4	80 - 120				11/29/12
Magnesium	7439-95-4	10500		ug/L	104.7	80 - 120				11/29/12
Manganese	7439-96-5	969		ug/L	96.9	80 - 120				11/29/12
Nickel	7440-02-0	947		ug/L	94.7	80 - 120				11/29/12
Potassium	7440-09-7	11800		ug/L	117.7	80 - 120				11/29/12
Silver	7440-22-4	1000		ug/L	100.1	80 - 120				11/29/12
Sodium	7440-23-5	11900		ug/L	118.6	80 - 120				11/29/12
Antimony	7440-36-0	990		ug/L	99	80 - 120				11/29/12
Barium	7440-39-3	1060		ug/L	105.9	80 - 120				11/29/12
Cadmium	7440-43-9	969		ug/L	96.9	80 - 120				11/29/12
Chromium	7440-47-3	972		ug/L	97.2	80 - 120				11/29/12
Cobalt	7440-48-4	950		ug/L	95	80 - 120				11/29/12
Copper	7440-50-8	1000		ug/L	100.3	80 - 120				11/29/12
Vanadium	7440-62-2	961		ug/L	96.1	80 - 120				11/29/12
Zinc	7440-66-6	1010		ug/L	101.4	80 - 120				11/29/12
Calcium	7440-70-2	19900		ug/L	99.4	80 - 120				11/29/12
Strontium	7440-24-6	929		ug/L	92.9	80 - 120				11/29/12
Beryllium	7440-41-7	1100		ug/L	110.3	80 - 120				11/29/12
MS										
			QC Sample #85455							
			Original 121450001							
Iron	7439-89-6	<19	941	ug/L	94.1	75 - 125				11/29/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Inorganic

Group #

WSCF121450

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Potassium	7440-09-7	2910	10400	ug/L	103.5	75 - 125	1.90	20		11/29/12
Silver	7440-22-4	<4.0	1000	ug/L	100.2	75 - 125	0.40	20		11/29/12
Sodium	7440-23-5	6140	10400	ug/L	104.5	75 - 125	1.90	20		11/29/12
Antimony	7440-36-0	<36	984	ug/L	98.4	75 - 125	3.70	20		11/29/12
Barium	7440-39-3	56.5	1040	ug/L	103.6	75 - 125	1.20	20		11/29/12
Cadmium	7440-43-9	<4.0	985	ug/L	98.5	75 - 125	0.20	20		11/29/12
Chromium	7440-47-3	<5.0	960	ug/L	96	75 - 125	1.60	20		11/29/12
Cobalt	7440-48-4	<4.0	938	ug/L	93.8	75 - 125	0.70	20		11/29/12
Copper	7440-50-8	<4.0	986	ug/L	98.6	75 - 125	1.60	20		11/29/12
Vanadium	7440-62-2	<5.0	955	ug/L	95.5	75 - 125	0.60	20		11/29/12
Zinc	7440-66-6	<5.0	1020	ug/L	102.3	75 - 125	1.20	20		11/29/12
Calcium	7440-70-2	96600	19600	ug/L	97.8	75 - 125	0.30	20	X	11/29/12
Strontium	7440-24-6	338	934	ug/L	93.4	75 - 125	1.40	20		11/29/12
Beryllium	7440-41-7	<4.0	1080	ug/L	108.1	75 - 125	0.50	20		11/29/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Analytical Batch 211016 (QC Batch: 210737) **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
QC Sample #85422										
Aroclor-1016	12674-11-2	<0.1		ug/L				U		11/29/12
Aroclor-1221	11104-28-2	<0.2		ug/L				U		11/29/12
Aroclor-1232	11141-16-5	<0.1		ug/L				U		11/29/12
Aroclor-1242	53469-21-9	<0.1		ug/L				U		11/29/12
Aroclor-1248	12672-29-6	<0.1		ug/L				U		11/29/12
Aroclor-1254	11097-69-1	<0.1		ug/L				U		11/29/12
Aroclor-1260	11096-82-5	<0.1		ug/L				U		11/29/12
LCS										
QC Sample #85423										
Aroclor-1254	11097-69-1	1.6		ug/L	80.8	70 - 130				11/29/12
MS										
QC Sample #85424										
Original 121450005										
Aroclor-1254	11097-69-1	<0.09	1.6		86.3	60 - 130				11/29/12
MSD										
QC Sample #85425										
Original 121450005										
Paired 85424										
Aroclor-1254	11097-69-1	<0.09	1.6		87.4	60 - 130	1.30	20		11/29/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 211036 (QC Batch: 210241) Test Strontium 89/90 (GPC/GEA)
Associated Samples 121450006, 121450007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #84914
Strontium-89_90										SR-RAD -0.27 pCi/L U 12/04/12
LCS										QC Sample #84915
Strontium-89_90										SR-RAD 90 pCi/L 101.6 80 - 120 12/04/12
DUP										QC Sample #84916
										Original 121441008
Strontium-89_90	SR-RAD	-0.40	pCi/L				-16.90	20	U	12/04/12

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

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Analytical Batch 211214 (QC Batch: 211213) **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 121450007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK	QC Sample #85887									
Aroclor-1016	12674-11-2	<0.1		ug/L				U		12/04/12
Aroclor-1221	11104-28-2	<0.2		ug/L				U		12/04/12
Aroclor-1232	11141-16-5	<0.1		ug/L				U		12/04/12
Aroclor-1242	53469-21-9	<0.1		ug/L				U		12/04/12
Aroclor-1248	12672-29-6	<0.1		ug/L				U		12/04/12
Aroclor-1254	11097-69-1	<0.1		ug/L				U		12/04/12
Aroclor-1260	11096-82-5	<0.1		ug/L				U		12/04/12
LCS	QC Sample #85888									
Aroclor-1254	11097-69-1	1.8		ug/L	90	70 - 130				12/04/12
MS	QC Sample #85889									
Aroclor-1254	11097-69-1	1.7		ug/L	90.5	60 - 130				12/04/12
MSD	Original 121439002									
Aroclor-1254	11097-69-1	1.7		ug/L	90.7	60 - 130	0.20	20	Paired 85889	
Aroclor-1254	11097-69-1									12/04/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 211277 (QC Batch: 210242) **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #84917
Strontium-89_90	SR-RAD		0.26	pCi/L					U	12/11/12
LCS										QC Sample #84918
Strontium-89_90	SR-RAD		94	pCi/L	105.9	80 - 120				12/11/12
DUP										QC Sample #84919
										Original 121450008
Strontium-89_90	SR-RAD	1.1E4	9800	pCi/L			11.00	20		12/11/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 211278 (QC Batch: 210929) Test Strontium 89/90 (GPC/GEA)
Associated Samples 121450005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										QC Sample #85720
Strontium-89_90										SR-RAD
LCS										1.1 pCi/L
QC Sample #85721										
Strontium-89_90										SR-RAD
DUP										82 pCi/L
QC Sample #85722										
Original 121501004										
Strontium-89_90	SR-RAD	0.22	pCi/L				16.40	20	U	12/08/12
* - QC result out of range										n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121450

Analytical Batch 211289 (QC Batch: 211122) Test ICP-2008 MS All possible metal
 Associated Samples 121450001, 121450002, 121450003, 121450004, 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK										
QC Sample #85827										
Aluminum	7429-90-5	<5.0	ug/L					U		12/10/12
Manganese	7439-96-5	<0.10	ug/L					U		12/10/12
Silver	7440-22-4	<0.050	ug/L					U		12/10/12
Antimony	7440-36-0	<0.30	ug/L					U		12/10/12
Barium	7440-39-3	<0.20	ug/L					U		12/10/12
Beryllium	7440-41-7	<0.10	ug/L					U		12/10/12
Cadmium	7440-43-9	<0.050	ug/L					U		12/10/12
Chromium	7440-47-3	<0.10	ug/L					U		12/10/12
Cobalt	7440-48-4	<0.050	ug/L					U		12/10/12
Copper	7440-50-8	<0.10	ug/L					U		12/10/12
Lead	7439-92-1	<0.050	ug/L					U		12/10/12
Mercury	7439-97-6	<0.050	ug/L					U		12/10/12
Molybdenum	7439-98-7	<0.050	ug/L					U		12/10/12
Thallium	7440-28-0	<0.050	ug/L					U		12/10/12
Tin	7440-31-5	<0.050	ug/L					U		12/10/12
Arsenic	7440-38-2	<0.20	ug/L					U		12/10/12
Selenium	7782-49-2	<1.0	ug/L					U		12/10/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
 Department Inorganic

Group # WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
LCS										QC Sample #85828
Aluminum	7429-90-5	424	ug/L		105.9	85 - 115				12/10/12
Manganese	7439-96-5	42.2	ug/L		105.4	85 - 115				12/10/12
Silver	7440-22-4	43.9	ug/L		109.8	85 - 115				12/10/12
Antimony	7440-36-0	41.1	ug/L		102.8	85 - 115				12/10/12
Barium	7440-39-3	42.1	ug/L		105.3	85 - 115				12/10/12
Beryllium	7440-41-7	43.1	ug/L		107.8	85 - 115				12/10/12
Cadmium	7440-43-9	41.4	ug/L		103.4	85 - 115				12/10/12
Chromium	7440-47-3	42.4	ug/L		106.1	85 - 115				12/10/12
Cobalt	7440-48-4	42.0	ug/L		105.1	85 - 115				12/10/12
Copper	7440-50-8	42.0	ug/L		105	85 - 115				12/10/12
Lead	7439-92-1	42.5	ug/L		106.4	85 - 115				12/10/12
Mercury	7439-97-6	1.90	ug/L		94.8	85 - 115				12/10/12
Molybdenum	7439-98-7	42.1	ug/L		105.3	85 - 115				12/10/12
Thallium	7440-28-0	42.0	ug/L		105	85 - 115				12/10/12
Tin	7440-31-5	41.7	ug/L		104.2	85 - 115				12/10/12
Arsenic	7440-38-2	41.9	ug/L		104.7	85 - 115				12/10/12
Selenium	7782-49-2	39.5	ug/L		98.7	85 - 115				12/10/12
MS										QC Sample #85829
										Original 121448006
Aluminum	7429-90-5	386	ug/L		96.5	70 - 130				12/10/12
Manganese	7439-96-5	37.8	ug/L		94.5	70 - 130				12/10/12
Silver	7440-22-4	40.4	ug/L		101.1	70 - 130				12/10/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Inorganic

Group #

WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0	41.5	ug/L	103.6	70 - 130					12/10/12
Barium	7440-39-3	44.5	ug/L	111.3	70 - 130					12/10/12
Beryllium	7440-41-7	40.7	ug/L	101.8	70 - 130					12/10/12
Cadmium	7440-43-9	39.7	ug/L	99.3	70 - 130					12/10/12
Chromium	7440-47-3	38.3	ug/L	95.8	70 - 130					12/10/12
Cobalt	7440-48-4	37.0	ug/L	92.4	70 - 130					12/10/12
Copper	7440-50-8	35.4	ug/L	88.5	70 - 130					12/10/12
Lead	7439-92-1	41.6	ug/L	103.9	70 - 130					12/10/12
Mercury	7439-97-6	2.04	ug/L	102.2	70 - 130					12/10/12
Molybdenum	7439-98-7	42.1	ug/L	105.2	70 - 130					12/10/12
Thallium	7440-28-0	41.4	ug/L	103.6	70 - 130					12/10/12
Tin	7440-31-5	41.3	ug/L	103.2	70 - 130					12/10/12
Arsenic	7440-38-2	41.4	ug/L	103.4	70 - 130					12/10/12
Selenium	7782-49-2	39.3	ug/L	98.2	70 - 130					12/10/12
MSD		QC Sample #85830								
		Original 121448006						Paired 85829		
Aluminum	7429-90-5	385	ug/L	96.3	70 - 130	0.20	20			12/10/12
Manganese	7439-96-5	37.9	ug/L	94.7	70 - 130	0.20	20			12/10/12
Silver	7440-22-4	39.3	ug/L	98.3	70 - 130	2.80	20			12/10/12
Antimony	7440-36-0	40.4	ug/L	100.9	70 - 130	2.70	20			12/10/12
Barium	7440-39-3	37.9	ug/L	94.8	70 - 130	5.10	20			12/10/12
Beryllium	7440-41-7	41.2	ug/L	103.1	70 - 130	1.30	20			12/10/12
Cadmium	7440-43-9	39.1	ug/L	97.8	70 - 130	1.50	20			12/10/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

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

WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Chromium	7440-47-3	38.3	ug/L	95.8	70 - 130	0.00	20			12/10/12
Cobalt	7440-48-4	36.7	ug/L	91.8	70 - 130	0.60	20			12/10/12
Copper	7440-50-8	35.1	ug/L	87.8	70 - 130	0.80	20			12/10/12
Lead	7439-92-1	40.3	ug/L	100.8	70 - 130	3.00	20			12/10/12
Mercury	7439-97-6	2.03	ug/L	101.3	70 - 130	0.80	20			12/10/12
Molybdenum	7439-98-7	40.4	ug/L	100.9	70 - 130	3.80	20			12/10/12
Thallium	7440-28-0	40.5	ug/L	101.2	70 - 130	2.30	20			12/10/12
Tin	7440-31-5	40.0	ug/L	100.1	70 - 130	3.00	20			12/10/12
Arsenic	7440-38-2	39.8	ug/L	99.6	70 - 130	3.30	20			12/10/12
Selenium	7782-49-2	37.7	ug/L	94.2	70 - 130	3.50	20			12/10/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report**DECEMBER 19, 2012****REVISION 1****Attention** Scot Fitzgerald
Department Organic, Volatiles**Group #** WSCF121450**Analytical Batch** 210344 (QC Batch: 210343) **Test** Gasoline Range (W)
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121450005								
4-Bromofluorobenzene	460-00-4				100.2	50 - 150				11/15/12
SAMPLE		Sample #121450006								
4-Bromofluorobenzene	460-00-4				98.2	50 - 150				11/15/12
SAMPLE		Sample #121450007								
4-Bromofluorobenzene	460-00-4				99.1	50 - 150				11/15/12
SAMPLE		Sample #121450008								
4-Bromofluorobenzene	460-00-4				101.3	50 - 150				11/15/12
BLANK		QC Sample #85121								
4-Bromofluorobenzene	460-00-4				99.9	50 - 150				11/15/12
LCS		QC Sample #85122								

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group #

WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
4-Bromofluorobenzene	460-00-4				98.9	50 - 150				11/15/12
MS					QC Sample #85123					
					Original 121450005					
4-Bromofluorobenzene	460-00-4				103.1	50 - 150				11/15/12
MSD					QC Sample #85124					
					Original 121450005				Paired 85123	
4-Bromofluorobenzene	460-00-4				104.1	50 - 150	n/a			11/15/12
DUP					QC Sample #85125					
					Original 121450005					
4-Bromofluorobenzene	460-00-4				98.5	50 - 150	n/a			11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Analytical Batch 210346 (QC Batch: 210345) **Test** SW-846 8260B Volatiles
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121450005								
1,2-Dichloroethane-d4	17060-07-0				102.4	75 - 125				11/15/12
Toluene-d8	2037-26-5				93.7	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				102.6	75 - 125				11/15/12
SAMPLE		Sample #121450006								
1,2-Dichloroethane-d4	17060-07-0				100.7	75 - 125				11/15/12
Toluene-d8	2037-26-5				94.1	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				101.5	75 - 125				11/15/12
SAMPLE		Sample #121450007								
1,2-Dichloroethane-d4	17060-07-0				104.1	75 - 125				11/15/12
Toluene-d8	2037-26-5				93.6	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				101.8	75 - 125				11/15/12
SAMPLE		Sample #121450008								
1,2-Dichloroethane-d4	17060-07-0				102.4	75 - 125				11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Volatiles

Group # WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Toluene-d8	2037-26-5				93.8	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				101	75 - 125				11/15/12
BLANK										
					QC Sample #85126					
1,2-Dichloroethane-d4	17060-07-0				98.5	75 - 125				11/15/12
Toluene-d8	2037-26-5				94.5	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				99.6	75 - 125				11/15/12
LCS										
					QC Sample #85127					
1,2-Dichloroethane-d4	17060-07-0				99.8	75 - 125				11/15/12
Toluene-d8	2037-26-5				92.8	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				94.8	75 - 125				11/15/12
MS										
					QC Sample #85128					
					Original 121450005					
1,2-Dichloroethane-d4	17060-07-0				99.8	75 - 125				11/15/12
Toluene-d8	2037-26-5				93.7	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				95.8	75 - 125				11/15/12
MSD										
					QC Sample #85129					
					Original 121450005					
1,2-Dichloroethane-d4	17060-07-0				97.9	75 - 125	n/a			11/15/12
Toluene-d8	2037-26-5				93	75 - 125	n/a			11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

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

WSCF121450

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

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

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 210350 (QC Batch: 210027) **Test** Plutonium (AEA)
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed		
SAMPLE			Sample #121450005									
Plutonium-242 Tracer	13982-10-0				87.6	25 - 105				11/16/12		
SAMPLE			Sample #121450006									
Plutonium-242 Tracer	13982-10-0				84.5	25 - 105				11/16/12		
SAMPLE			Sample #121450007									
Plutonium-242 Tracer	13982-10-0				87.5	25 - 105				11/16/12		
SAMPLE			Sample #121450008									
Plutonium-242 Tracer	13982-10-0				87.3	25 - 105				11/16/12		
BLANK			QC Sample #84798									
Plutonium-242 Tracer	13982-10-0				84.8	25 - 105				11/16/12		
LCS			QC Sample #84799									
Plutonium-242 Tracer	13982-10-0				88.3	25 - 105				11/16/12		
DUP			QC Sample #84800 Original 121439002									
Plutonium-242 Tracer	13982-10-0				84.5	25 - 105	n/a			11/16/12		

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 210351 (QC Batch: 210027) **Test** Uranium (AEA)
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121450005								
Uranium-232 Tracer	14158-29-3				91.8	25 - 105				11/15/12
SAMPLE		Sample #121450006								
Uranium-232 Tracer	14158-29-3				95.8	25 - 105				11/15/12
SAMPLE		Sample #121450007								
Uranium-232 Tracer	14158-29-3				86.5	25 - 105				11/15/12
SAMPLE		Sample #121450008								
Uranium-232 Tracer	14158-29-3				91.3	25 - 105				11/15/12
BLANK		QC Sample #84798								
Uranium-232 Tracer	14158-29-3				91.1	25 - 105				11/15/12
LCS		QC Sample #84799								
Uranium-232 Tracer	14158-29-3				61.4	25 - 105				11/15/12
DUP		QC Sample #84800 Original 121439002								
Uranium-232 Tracer	14158-29-3				89.6	25 - 105	n/a			11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Analytical Batch 210418 (QC Batch: 210318) **Test** SW-846 8270D Semivolatiles
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE										Sample #121450005
2-Fluorophenol	367-12-4				57.3	34 - 103				11/15/12
Phenol-d5	4165-62-2				38.2	10 - 93				11/15/12
Nitrobenzene-d5	4165-60-0				76.3	49 - 133				11/15/12
2-Methylnaphthalene-d10	7297-45-2				79	60 - 135				11/15/12
2-Fluorobiphenyl	321-60-8				80.1	48 - 132				11/15/12
2,4,6-Tribromophenol	118-79-6				71.9	33 - 134				11/15/12
Fluoranthene-d10	93951-69-0				90.6	62 - 139				11/15/12
Terphenyl-d14	98904-43-9				82.8	56 - 138				11/15/12
SAMPLE										Sample #121450006
2-Fluorophenol	367-12-4				58.2	34 - 103				11/16/12
Phenol-d5	4165-62-2				40.2	10 - 93				11/16/12
Nitrobenzene-d5	4165-60-0				78.8	49 - 133				11/16/12
2-Methylnaphthalene-d10	7297-45-2				81.6	60 - 135				11/16/12
2-Fluorobiphenyl	321-60-8				79.9	48 - 132				11/16/12
2,4,6-Tribromophenol	118-79-6				74.1	33 - 134				11/16/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Fluoranthene-d10	93951-69-0				98.1	62 - 139				11/16/12
Terphenyl-d14	98904-43-9				78.9	56 - 138				11/16/12
SAMPLE Sample #121450007										
2-Fluorophenol	367-12-4				55.5	34 - 103				11/16/12
Phenol-d5	4165-62-2				37.5	10 - 93				11/16/12
Nitrobenzene-d5	4165-60-0				76.5	49 - 133				11/16/12
2-Methylnaphthalene-d10	7297-45-2				78.8	60 - 135				11/16/12
2-Fluorobiphenyl	321-60-8				80	48 - 132				11/16/12
2,4,6-Tribromophenol	118-79-6				65.7	33 - 134				11/16/12
Fluoranthene-d10	93951-69-0				86.5	62 - 139				11/16/12
Terphenyl-d14	98904-43-9				77.9	56 - 138				11/16/12
SAMPLE Sample #121450008										
2-Fluorophenol	367-12-4				58.3	34 - 103				11/16/12
Phenol-d5	4165-62-2				39.8	10 - 93				11/16/12
Nitrobenzene-d5	4165-60-0				78.4	49 - 133				11/16/12
2-Methylnaphthalene-d10	7297-45-2				81.7	60 - 135				11/16/12
2-Fluorobiphenyl	321-60-8				81	48 - 132				11/16/12
2,4,6-Tribromophenol	118-79-6				70.1	33 - 134				11/16/12
Fluoranthene-d10	93951-69-0				91	62 - 139				11/16/12
Terphenyl-d14	98904-43-9				82.5	56 - 138				11/16/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed	
BLANK		QC Sample #85000									
2-Fluorophenol	367-12-4				59.2	34 - 103				11/15/12	
Phenol-d5	4165-62-2				43.1	10 - 93				11/15/12	
Nitrobenzene-d5	4165-60-0				75.8	49 - 133				11/15/12	
2-Methylnaphthalene-d10	7297-45-2				78	60 - 135				11/15/12	
2-Fluorobiphenyl	321-60-8				78	48 - 132				11/15/12	
2,4,6-Tribromophenol	118-79-6				74.5	33 - 134				11/15/12	
Fluoranthene-d10	93951-69-0				88.4	62 - 139				11/15/12	
Terphenyl-d14	98904-43-9				75.6	56 - 138				11/15/12	
LCS		QC Sample #85001									
2-Fluorophenol	367-12-4				63.6	34 - 103				11/15/12	
Phenol-d5	4165-62-2				48	10 - 93				11/15/12	
Nitrobenzene-d5	4165-60-0				78.5	49 - 133				11/15/12	
2-Methylnaphthalene-d10	7297-45-2				79.6	60 - 135				11/15/12	
2-Fluorobiphenyl	321-60-8				80.4	48 - 132				11/15/12	
2,4,6-Tribromophenol	118-79-6				84	33 - 134				11/15/12	
Fluoranthene-d10	93951-69-0				92.4	62 - 139				11/15/12	
Terphenyl-d14	98904-43-9				78.6	56 - 138				11/15/12	
MS		QC Sample #85002									
Original 121439002											
2-Fluorophenol	367-12-4				55.1	34 - 103				11/15/12	

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Phenol-d5	4165-62-2				37.6	10 - 93				11/15/12
Nitrobenzene-d5	4165-60-0				77.4	49 - 133				11/15/12
2-Methylnaphthalene-d10	7297-45-2				79.7	60 - 135				11/15/12
2-Fluorobiphenyl	321-60-8				80.1	48 - 132				11/15/12
2,4,6-Tribromophenol	118-79-6				82.1	33 - 134				11/15/12
Fluoranthene-d10	93951-69-0				90	62 - 139				11/15/12
Terphenyl-d14	98904-43-9				75.8	56 - 138				11/15/12
MSD					QC Sample #85003					
					Original	121439002			Paired	85002
2-Fluorophenol	367-12-4				59.5	34 - 103	n/a			11/15/12
Phenol-d5	4165-62-2				40	10 - 93	n/a			11/15/12
Nitrobenzene-d5	4165-60-0				79.6	49 - 133	n/a			11/15/12
2-Methylnaphthalene-d10	7297-45-2				81.9	60 - 135	n/a			11/15/12
2-Fluorobiphenyl	321-60-8				83.1	48 - 132	n/a			11/15/12
2,4,6-Tribromophenol	118-79-6				85.4	33 - 134	n/a			11/15/12
Fluoranthene-d10	93951-69-0				92.8	62 - 139	n/a			11/15/12
Terphenyl-d14	98904-43-9				78.9	56 - 138	n/a			11/15/12
LCSD					QC Sample #85004					
								Paired	85001	
2-Fluorophenol	367-12-4				61.9	34 - 103	n/a			11/15/12
Phenol-d5	4165-62-2				47.3	10 - 93	n/a			11/15/12
Nitrobenzene-d5	4165-60-0				76.8	49 - 133	n/a			11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

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

WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
2-Methylnaphthalene-d10	7297-45-2				71.6	60 - 135	n/a			11/15/12
2-Fluorobiphenyl	321-60-8				73.3	48 - 132	n/a			11/15/12
2,4,6-Tribromophenol	118-79-6				76.8	33 - 134	n/a			11/15/12
Fluoranthene-d10	93951-69-0				89.7	62 - 139	n/a			11/15/12
Terphenyl-d14	98904-43-9				74.7	56 - 138	n/a			11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121450

Analytical Batch 210419 (QC Batch: 210358) **Test** SW-846 Method 8015 for GPP
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121450005								
Methyl Acetate	79-20-9				92.3	70 - 130				11/15/12
SAMPLE		Sample #121450006								
Methyl Acetate	79-20-9				94.9	70 - 130				11/15/12
SAMPLE		Sample #121450007								
Methyl Acetate	79-20-9				98.5	70 - 130				11/15/12
SAMPLE		Sample #121450008								
Methyl Acetate	79-20-9				97.9	70 - 130				11/15/12
BLANK		QC Sample #85141								
Methyl Acetate	79-20-9		ug/L		98.9	70 - 130				11/15/12
LCS		QC Sample #85142								
Methyl Acetate	79-20-9		ug/L		98.3	70 - 130				11/15/12
MS		QC Sample #85143								
		Original 121439002								
Methyl Acetate	79-20-9		ug/L		98.6	70 - 130				11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report**DECEMBER 19, 2012****REVISION 1****Attention** Scot Fitzgerald
Department Organic, Volatiles**Group #** WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MSD			QC Sample #85144							
Methyl Acetate	79-20-9		Original 121439002	ug/L	102.9	70 - 130	n/a	Paired 85143		11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Analytical Batch 210625 (QC Batch: 210422) **Test** Extractable Diesel and Petroleum
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121450005								
o-Terphenyl	84-15-1				87.4	70 - 130				11/19/12
SAMPLE		Sample #121450006								
o-Terphenyl	84-15-1				87.6	70 - 130				11/19/12
SAMPLE		Sample #121450007								
o-Terphenyl	84-15-1				92.7	70 - 130				11/19/12
SAMPLE		Sample #121450008								
o-Terphenyl	84-15-1				98.9	70 - 130				11/19/12
BLANK		QC Sample #85247								
o-Terphenyl	84-15-1				81.4	70 - 130				11/19/12
LCS		QC Sample #85248								
o-Terphenyl	84-15-1				93.3	70 - 130				11/19/12
MS		QC Sample #85249								
o-Terphenyl	84-15-1				Original 121450005					
o-Terphenyl	84-15-1				95	70 - 130				11/19/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report**DECEMBER 19, 2012****REVISION 1****Attention** Scot Fitzgerald
Department Organic, Semivolatiles**Group #** WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MSD			QC Sample #85250							
o-Terphenyl	84-15-1		Original 121450005		95.9	70 - 130	n/a	Paired 85249		11/19/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Analytical Batch 211016 (QC Batch: 210737) **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 121450005, 121450006, 121450007, 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121450005								
Tetrachloro-m-xylene	877-09-8				71.1	60 - 140				11/29/12
Decachlorobiphenyl	2051-24-3				79.7	60 - 140				11/29/12
SAMPLE		Sample #121450006								
Tetrachloro-m-xylene	877-09-8				75.3	60 - 140				11/29/12
Decachlorobiphenyl	2051-24-3				77.9	60 - 140				11/29/12
SAMPLE		Sample #121450008								
Tetrachloro-m-xylene	877-09-8				72.9	60 - 140				11/29/12
Decachlorobiphenyl	2051-24-3				85.4	60 - 140				11/29/12
BLANK		QC Sample #85422								
Tetrachloro-m-xylene	877-09-8				71.1	60 - 140				11/29/12
Decachlorobiphenyl	2051-24-3				80.2	60 - 140				11/29/12
LCS		QC Sample #85423								
Tetrachloro-m-xylene	877-09-8				72	60 - 140				11/29/12
Decachlorobiphenyl	2051-24-3				76.7	60 - 140				11/29/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
 Department Organic, Semivolatiles

Group # WSCF121450

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
MS										
QC Sample #85424										
Original 121450005										
Tetrachloro-m-xylene	877-09-8				74.9	60 - 140				11/29/12
Decachlorobiphenyl	2051-24-3				81.1	60 - 140				11/29/12
MSD										
QC Sample #85425										
Original 121450005										
Tetrachloro-m-xylene	877-09-8				70.7	60 - 140	n/a			11/29/12
Decachlorobiphenyl	2051-24-3				78.2	60 - 140	n/a			11/29/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 211036 (QC Batch: 210241) **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 121450006, 121450007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121450006								
Strontium Nitrate	10042-76-9			mg	75.2	25 - 105				12/04/12
SAMPLE		Sample #121450007								
Strontium Nitrate	10042-76-9			mg	72.7	25 - 105				12/04/12
BLANK		QC Sample #84914								
Strontium Nitrate	10042-76-9			mg	76.9	25 - 105				12/04/12
LCS		QC Sample #84915								
Strontium Nitrate	10042-76-9			mg	78.5	25 - 105				12/04/12
DUP		QC Sample #84916								
		Original 121441008								
Strontium Nitrate	10042-76-9			mg	73.6	25 - 105	n/a			12/04/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121450

Analytical Batch 211214 (QC Batch: 211213) **Test** PCBs by EPA SW-846 Method 8082
Associated Samples 121450007

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE	Sample #121450007									
Tetrachloro-m-xylene	877-09-8				79.8	60 - 140				12/04/12
Decachlorobiphenyl	2051-24-3				89.3	60 - 140				12/04/12
BLANK	QC Sample #85887									
Tetrachloro-m-xylene	877-09-8				74.7	60 - 140				12/04/12
Decachlorobiphenyl	2051-24-3				88.9	60 - 140				12/04/12
LCS	QC Sample #85888									
Tetrachloro-m-xylene	877-09-8				74.7	60 - 140				12/04/12
Decachlorobiphenyl	2051-24-3				87.4	60 - 140				12/04/12
MS	QC Sample #85889									
Tetrachloro-m-xylene	877-09-8				74.7	60 - 140				12/04/12
Decachlorobiphenyl	2051-24-3				87.5	60 - 140				12/04/12
MSD	QC Sample #85890									
Tetrachloro-m-xylene	877-09-8				69.5	60 - 140	n/a			12/04/12
Decachlorobiphenyl	2051-24-3				87.6	60 - 140	n/a			12/04/12
Paired 85889										

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 211277 (QC Batch: 210242) **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 121450008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121450008								
Strontium Nitrate	10042-76-9			mg	76.9	25 - 105				12/11/12
BLANK		QC Sample #84917								
Strontium Nitrate	10042-76-9			mg	75.2	25 - 105				12/11/12
LCS		QC Sample #84918								
Strontium Nitrate	10042-76-9			mg	75.2	25 - 105				12/11/12
DUP		QC Sample #84919								
		Original 121450008								
Strontium Nitrate	10042-76-9	9.3		mg	80.2	25 - 105	n/a			12/11/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention Scot Fitzgerald
Department Radiochemistry

Group # WSCF121450

Analytical Batch 211278 (QC Batch: 210929) **Test** Strontium 89/90 (GPC/GEA)
Associated Samples 121450005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE		Sample #121450005								
Strontium Nitrate	10042-76-9			mg	76.9	25 - 105				12/08/12
BLANK		QC Sample #85720								
Strontium Nitrate	10042-76-9			mg	76	25 - 105				12/08/12
LCS		QC Sample #85721								
Strontium Nitrate	10042-76-9			mg	71.1	25 - 105				12/08/12
DUP		QC Sample #85722								
		Original 121501004								
Strontium Nitrate	10042-76-9			mg	76	25 - 105	n/a			12/08/12

* - QC result out of range

n/a - Not Applicable

REVISED121450 -

Attention: Scot Fitzgerald

Group #

WSCF121450

Quality Control Comments**Department** Inorganic

85455 B2MXN4(121450001MS)

Analyte Calcium - ICP-6010 - All possible metals

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

85456 B2MXN4(121450001MSD)

Analyte Calcium - ICP-6010 - All possible metals

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

REVISED121450 -

Attention: Scot Fitzgerald

Group #

WSCF121450

Quality Control Comments**Department** Organic, Semivolatiles

85004 LCSD for HBN 210318 [ORGP/2032]

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

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

REVISED121450 -

Attention: Scot Fitzgerald

Group #

WSCF121450

Quality Control Comments**Department** Radiochemistry

84800 B2MXL9(121439002DUP)

Analyte Plutonium-239_240 - Plutonium (AEA)

[1] The duplicate is outside of default RPD limits. RPD limit does not apply to results less than 5X the Minimum Detectable Concentration.

Analyte Uranium-235 - Uranium (AEA)

[1] The duplicate is outside of default RPD limits. RPD limit does not apply to results less than 5X the Minimum Detectable Concentration.

85720 BLANK for HBN 210929 [RADP/738]

Analyte Strontium-89_90 - Strontium 89/90 (GPC/GEA)

[1] The blank is less than 2X the MDC and is acceptable.

REVISED121450 -

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 11 pages
Including cover page

REVISED121450 -

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 #: 121450

Profile #: I13-007-017

Proj. Mgr.:

Phone:

The following samples were received from you on 11/12/2012 1:10:00 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				
121450001	B2MXN4	WATER	11/12/2012 12:00	11/12/2012 13:10
		2008-W; 6010-W		
121450002	B2MXP5	WATER	11/12/2012 10:45	11/12/2012 13:10
		2008-W; 6010-W		
121450003	B2MXP4	WATER	11/12/2012 08:00	11/12/2012 13:10
		2008-W; 6010-W		
121450004	B2MXN3	WATER	11/12/2012 12:00	11/12/2012 13:10
		2008-W; 6010-W		
121450005	B2Mxm8	WATER	11/12/2012 12:00	11/12/2012 13:10
		2008-W; 6010-W; 8015-W; 8260V-W; 8270SV-W; AEA-PU-W; AEA-U-W; CN-W; GAB-AO-W; GAB-BO-W; GEA-W; H3-COL-W; PCB-W; SR89/90-W; TC99-W; TPHDWA-W; TPHGWA-W		
121450006	B2MXN9	WATER	11/12/2012 10:45	11/12/2012 13:10
		2008-W; 6010-W; 8015-W; 8260V-W; 8270SV-W; AEA-PU-W; AEA-U-W; CN-W; GAB-AO-W; GAB-BO-W; GEA-W; H3-COL-W; PCB-W; SR89/90-W; TC99-W; TPHDWA-W; TPHGWA-W		
121450007	B2MXN8	WATER	11/12/2012 08:00	11/12/2012 13:10
		2008-W; 6010-W; 8015-W; 8260V-W; 8270SV-W; AEA-PU-W; AEA-U-W; CN-W; GAB-AO-W; GAB-BO-W; GEA-W; H3-COL-W; PCB-W; SR89/90-W; TC99-W; TPHDWA-W; TPHGWA-W		
121450008	B2Mxm7	WATER	11/12/2012 12:00	11/12/2012 13:10
		2008-W; 6010-W; 8015-W; 8260V-W; 8270SV-W; AEA-PU-W; AEA-U-W; CN-W; GAB-AO-W; GAB-BO-W; GEA-W; H3-COL-W; PCB-W; SR89/90-W; TC99-W; TPHDWA-W; TPHGWA-W		

REVISED121450 -

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

Test Acronym Description

Test Acronym	Description
2008-W	ICP-MS (W)
6010-W	ICP-AES (W)
8015-W	8015 (W)
8260V-W	Volatiles by 8260B (W)
8270SV-W	Semivolatiles by 8270D (W)
AEA-PU-W	Plutonium (AEA) (W)
AEA-U-W	Uranium Isotopic (AEA) (W)
CN-W	Cyanide (Spectroscopy) (W)
GAB-AO-W	Gross Alpha/Beta (A only)(W)
GAB-BO-W	Gross Alpha/Beta (B only)(W)
GEA-W	Gamma Energy Analysis (W)
H3-COL-W	Tritium by EICHROM Column (W)
PCB-W	PCB (8082) (W)
SR89/90-W	Strontium 89/90 (GPC) (W)
TC99-W	Technetium-99 (W)
TPHDWA-W	TPHD-WA (W)
TPHGWA-W	TPHG-WA (Water)

CH2MHill Plateau Remediation Company										C.O.C. # 113-007-017		Page 1 of 2
Collector	F. M. Hall			Contact/Requester	Karen Waters-Husted			Telephone No.	376-4650			
SAF No.	113-007			Sampling Origin	Hanford Site			Purchase Order/Charge Code	300071ES20			
Project Title	100NR2, DECEMBER 2012			Logbook No.	IINT-N-506 362 / 38			Ice Chest No.	N/A			
Shipped To (Lab)	Waste Sampling & Characterization			Method of Shipment	GOVERNMENT VEHICLE			Bill of Lading/in Bill No.	N/A			
Protocol	CERCLA			Priority:	31 Days			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)										121450		
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis			Holding Time	Preservative		
B2MNMKB	N	W	11/12/12	1200	1x500-mL G	200.8_HG - ICPMS			28 Days	HNO3 to pH <2		
B2MNMKB	N	W			1x500-mL G/P	200.8_METALS_ICPMS: LIST-3 (17)			6 Months	HNO3 to pH <2		
B2MNMKB	N	W			1x250-mL P	4500E_CN, Cyanide (1)			14 Days	NaOH to pH >=12		
B2MNMKB	N	W			1x500-mL G/P	6010_METALS_ICP: List-3 (18)			6 Months	HNO3 to pH <2		
B2MNMKB	N	W			4x1-L aG	8082_PCB_GC: List-1 (7)			None	Cool-4C		
B2MNMKB	N	W			3x40-mL aG*	8280_VOA_GCMS_IK: COMMON			14 Days	HCl or H2SO4 to pH <2/Cool-4C		
B2MNMKB	N	W			4x1-L aG	8270_SV0A_GCMS_IK: COMMON			7/40 Days	Cool-4C		
B2MNMKB	N	W			3x40-mL GS*	Alcohols, Glycols, & Ketones - 2015M			14/40 Days	Cool-4C		
B2MNMKB	N	W			1x500-mL G/P	ALPHABETA_GPC: Alpha discrete + Beta (2)			6 Months	HNO3 to pH <2		
B2MNMKB	N	W			1x500-mL G/P	GAMMA_GS: List-1 (10)			6 Months	HNO3 to pH <2		
B2MNMKB	N	W			1x1-L aG	PUISO_1E_PRECIP_AEA: Pu-238 + 239/240 (2)			180 Days	HNO3 to pH <2		
B2MNMKB	N	W			1x1-L G/P	Strontium-89,90 -- Total Sr			6 Months	HNO3 to pH <2		
B2MNMKB	N	W			1x1-L G/P	TC99_3MDSK_LSC: Tc-99 (1)			6 Months	HCl to pH <2		
B2MNMKB	N	W				TPH-Diesel Range - WTPH-D			14/40 Days	HCl to pH <2/Cool-4C		

Relinquished By	F. M. Hall	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *		
Relinquished By				NOV 12 2012 13:00	Cynthia R. Johnson			NOV 17 2012 13:00	S = Soil	DS = Drum Solids	
Relinquished By				Date/Time	Received By	Date/Time		Date/Time	SE = Sediment	DL = Drum Liquid	
Relinquished By				Date/Time	Received By	Date/Time		Date/Time	SL = Sludge	T = Tissue	
Relinquished By				Date/Time	Received By	Date/Time		Date/Time	W = Water	L = Liquid	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)										V = Vegetation
											X = Other

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #
I13-007-017
Page 2 of 2

Collector F.M. Hall	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650
SAC No. I13-007	Sampling Origin Hanford Site	Purchase Order/Change Code 300071ES20
Project Title 100NR2, DECEMBER 2012	Logbook No. IINP-N-506 <i>320/38</i>	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 CERCLA	Priority: 31 Days	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 4000.5 (1990/1993)

SPECIAL INSTRUCTIONS

Held Time
Total Activity Exemption Yes No

100 Area Generator Knowledge Information Form applies
FY12 and FY13 samples cannot be in the same SD

Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2NMXMB	N	W	11/12/12	12:00	4x40-mL g/s*	TPI-H-Gasoline Range - WTPH+G	14 Days HCl to pH <2/Cool 4C
B2NMXMB	N	W			1x250-mL G	TRITIUM_LIE_LSC; Tritium (1)	6 Months None
B2NMXMB	↓	N	W		1x1-L G/P	UISO_1E_PRECIP_AEA; List-1 (3)	6 Months HNO3 to pH <2
B2NMXNA	I	Y	W		1x500-mL G	200.8_HG - ICPOES	28 Days HNO3 to pH <2
B2NMXNA	I	Y	W		1x500-mL G/P	200.8_METALS_ICPMS; LIST-3 (17)	6 Months HNO3 to pH <2
B2NMXNA	↓	Y	W	↓	1x500-mL G/P	6010_METALS_ICP; List-3 (18)	6 Months HNO3 to pH <2

Relinquished By F.M. Hall	Print 	Sign 	Date/Time NOV 12 2012 13:10	Received By Cynthia R. Johnson	Sign 	Date/Time NOV 12 2012 13:10	Matrix *
Relinquished By			Date/Time Received By			Date/Time Received By	
Relinquished By			Date/Time Received By			Date/Time Received By	
Relinquished By			Date/Time Received By			Date/Time Received By	
Final Sample Disposition	Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Date/Time	Disposed By		Date/Time	

Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST							C.O.C. # I13-007-023	
CH2MHill Plateau Remediation Company							Page 1 of 2	
Collector F. M. H.	SAF No. 113-007	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650					
Project Title 100NR2, DECEMBER 2012	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071ES20						
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment GOVERNMENT VEHICLE	Ice Chest No. N/A						
Protocol CFRCLIA	Priority: 31 Days	Bill of Lading/Air Bill 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 11/12/12	Time 1045	No/Type Container 1x500-mL G	SPECIAL INSTRUCTIONS 100 Area Generator Knowledge Information Form applies. FY12 and FY13 samples cannot be in the same SJ	Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
B2MXP5	Y	W			200.8_HG - ICPMS		28 Days	HNO3 to pH <2
B2MXP5	Y	W			1x500-mL G/P	200.8_METALS_ICPMS_LIST-3 (17)	6 Months	HNO3 to pH <2
B2MXN9	✓	Y	W		1x500-mL G/P	6010 METALS_IOP: List-3 (18)	6 Months	HNO3 to pH <2
B2MXN9	✓	N	W		1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B2MXN9	N	W			1x500-mL G/P	200.8_METALS_ICPMS_LIST-3 (17)	6 Months	HNO3 to pH <2
B2MXN9	N	W			1x250-mL P	4500E_CN: Cyanide (1)	14 Days	NaOH to pH >=12
B2MXN9	N	W			1x500-mL G/P	6010 METALS_IOP: List-3 (18)	6 Months	HNO3 to pH <2
B2MXN9	N	W			4x1-L_aG	8082_PCB_GC: List-1 (7)	None	Cool-4C
B2MXN9	N	W			3x40-mL aG3*	8260_VOA_GCMS_IK: COMMON	14 Days	HCl or H2SO4 to pH >2/Cool-4C
B2MXN9	N	W			4x1-L_aG	8270_SVOA_GCMS_IK: COMMON	7/40 Days	Cool-4C
B2MXN9	N	W			3x40-mL GS*	Alcohols, Glycols, & Ketones - 8015M	14/40 Days	Cool-4C
B2MXN9	N	W			1x500-mL G/P	ALPHABETA_GPC: Alpha discrete + Beta (2)	6 Months	HNO3 to pH <2
B2MXN9	N	W			1x500-mL G/P	GAMMA_GS: List-1 (10)	6 Months	HNO3 to pH <2
B2MXN9	✓	N	W		PLUSO_1E_PRECIP_AEA: Plu-238 + 239/240 (2)		180 Days	HNO3 to pH <2
Relinquished By F. M. H. Print Signature NOV 12 2012 Date/Time							Received By Guthrie R. Johnson Print Signature NOV 12 2012 Date/Time	Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air L = Liquid V = Vegetation X = Other
Relinquished By							Received By	
Relinquished By							Date/Time	
Relinquished By							Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Date/Time	
							Date/Time	

Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST							C.O.C. # I13-007-023	
CH2MHill Plateau Remediation Company							Page 2 of 2	
Collector F. M. Hell	Contact/Requester Karen Waters-Husted	Telephone No. 376-4650						
S.A.F. No. 113-007	Sampling Origin Hanford Site	Purchase Order/Change Code 300071ES20						
Project Title 100NR2, DECEMBER 2012	Logbook No. IINF-N-506 3C / 3E	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 CFRCIA	Priority: 31 Days	Office 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	Sample Analysis	Holding Time	Preservative		
B2MXN9	N	W	11/12/12	1045	1x1-L G/P	Strontium-89,90 - Total Sr	6 Months	HNO3 to pH <2
B2MXN9	N	W			1x1-L G/P	TG99_3MDSK_LSC; Tc-99 (1)	6 Months	HCl to pH >2/Cool <4C
B2MXN9	N	W			3x1-L aG	TPH-Diesel Range - WTPH-D	1440 Days	HCl to pH >2/Cool <4C
B2MXN9	N	W			4x40-mL aGs*	TPH-Gasoline Range - WTPH-G	14 Days	HCl to pH >2/Cool <4C
B2MXN9	N	W			1x250-mL G	TRITIUM_EIE_LSC; Tritium (1)	6 Months	None
B2MXN9	N	W			1x1-L G/P	UISO_EIE_PRECIP_AEA; List-1 (3)	6 Months	HNO3 to pH <2

Relinquished By F. M. Hell	Print	Sign	Date/Time NOV 12 2012 13:10	Received By Cynthia R Johnson	Print	Sign	Date/Time NOV 12 2012 13:10	Matrix *
Relinquished By			Date/Time:	Received By			Date/Time	
Relinquished By			Date/Time:	Received By			Date/Time	
Relinquished By			Date/Time:	Received By			Date/Time	
Final Sample Disposition	Disposal Method (e.g., Return to customer, per lab procedure, used in process)							

Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST										C.O.C. #
										I13-007-020
										Page 1 of 2
CH2MHill Plateau Remediation Company										
Collector	F M Hall	Contact/Requester	Karen Walters-Husted	Telephone No.	376-4650					
SAF No.	113-007	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071ES20					
Project Title	100NR2, DECEMBER 2012	Logbook No.	HNF-N-506 24 / 38	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	CERCLA	Priority:	31 Days	PRIORITY	Offsite Property No.	N/A				
POSSIBLE SAMPLE HAZARDS/REMARKS										
*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR, but are not releasable per DOE Order 5400.5 (1990) (1993)										
SPECIAL INSTRUCTIONS										Hold Time
100 Area Generator Knowledge Information Form applies.										Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
The CACN for all analytical work at WSCF is 101647.										FY12 and FY13 samples cannot be in the same SD
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative		
B2MXN8	N	W	11/12/12	0800	1x500-mL G	200.8_1HG - ICPMS	20 Days	HNO3 to pH <2		
B2MXN8	N	W			1x500-mL G/P	200.8_METALS_ICPMS: LIST 3 (17)	6 Months	HNO3 to pH <2		
B2MXN8	N	W			1x250-mL P	4500E CN: Cyanide (1)	14 Days	NaOH to pH >=12		
B2MXN8	N	W			1x500-mL G/P	6010_L METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2		
B2MXN8	N	W			4x1-L aG	8082_PCB_GC: List-1 (7)	None	Cool-4C		
B2MXN8	N	W			3x40-mL aGs*	8260_VOA_GCMS_X: COMMON	14 Days	HCl or H ₂ SO ₄ to pH <2/Cool-4C		
B2MXN8	N	W			4x1-L aG	8270_SVOA_GCMS_X: COMMON	7/40 Days	Cool-4C		
B2MXN8	N	W			3x40-mL Gs*	Alcohols, Glycols, & Ketones - 8015M	14/40 Days	Cool-4C		
B2MXN8	N	W			1x500-mL G/P	ALPHABETA_GPC Alpha discrete + Beta (2)	6 Months	HNO3 to pH <2		
B2MXN8	N	W			1x500-mL G/P	GAMMA_GS: List-1 (10)	6 Months	HNO3 to pH <2		
B2MXN8	N	W			1x1-L G/P	PUISQIE_PRECIP_AEA Pu-238 + 239/240 (2)	160 Days	HNO3 to pH <2		
B2MXN8	N	W			1x1-L G/P	Strontium-89/90 - Total Sr	6 Months	HNO3 to pH <2		
B2MXN8	N	W			1x1-L G/P	TC99_3MDSK_LSC: Tc-99 (1)	6 Months	HCl to pH <2		
B2MXN8	N	W			3x1-L aG	TPH-Diesel Range - WTPHD	14/40 Days	HCl to pH <2/Cool-4C		
Retain/Released By										Matrix *
Print Sign Date/Time Received By Sign Date/Time										S = Soil DS = Drum Solids SE = Sediment DL = Dran Lands SO = Solid T = Tissue SL = Sludge WI = Wire W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
F. M. Hall NOV 12 2012 NOV 12 2012										
Retain/Released By										
Date/Time Received By Date/Time										
Retain/Released By										
Date/Time Received By Date/Time										
Final Sample Disposition										Date/Time
DISPOSITION										Disposed By

Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST								C.O.C. #	
CH2MHill Plateau Remediation Company								113-007-020	
Collector	F.M. Hall			Contact/Requester	Karen Waters-Husted			Telephone No.	376-4650
SAF No.	113-007			Sampling Origin	Hanford Site			Purchase Order/Charge Code	300071ES20
Project Title	100NR2, DECEMBER 2012			Logbook No.	HNF-N-506 <u>24 / 30</u>			Ice Chest No.	N/A
Shipped To (Lab)	Waste Sampling & Characterization			Method of Shipment	GOVERNMENT VEHICLE			Bill of Lading/Air Bill No.	N/A
Protocol	CERCLA			Priority:	31 Days			Office Property No.	N/A
POSSIBLY SAMPLE HAZARDS REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1996/1993)								SPECIAL INSTRUCTIONS	
								Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
								100 Atom Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647. FY12 and FY13 samples cannot be in the same SD	
Sample No.	Filter	Date	Time	Sample Type Container	Sample Analysis			Holding Time	Preservative
B2MXNB	N	W	1/12/12	4x40-mL BCs*	TPH-CBaseline Range - WTPH-C			14 Days	HCl to pH <2 Cool-4C
B2MXN8	N	W		1x250-mL G	TRITIUM_EIE_LSC; Tritium (1)			6 Months	None
B2MXN8	N	W		1x1-L G/P	UISO_IIE_PRECIP_AEA_Lst-1 (3)			6 Months	HNO3 to pH <2
B2MXP4	3	Y	W	1x500-mL G	200.8_HG - ICPOES			28 Days	HNO3 to pH <2
B2MXP4	Y	W		1x500-mL G/P	200.8_METALS_ICPMS_Lst-3 (17)			6 Months	HNO3 to pH <2
B2MXP4	Y	W		1x500-mL G/P	6010_MEALS_ICP_Lst-3 (18)			6 Months	HNO3 to pH <2

REVISED121450 -

Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST										C.O.C. #
CH2MHill Plateau Remediation Company										I13-007-014
Collector	F. M. Hall			Contact/Requester	Karen Waters-Husted			Telephone No.	376-4650	
SAC No.	113-007			Sampling Origin	Hanford Site			Purchase Order/Charge Code	300071ES20	
Project Title	100NR2, DECEMBER 2012			Logbook No.	HNF-N-506 362/38			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	CERCLA			Priority:	31 Days			Office 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 (590/1993)										
Sample No.	Filter	*	Date	Time	Sample Type	Container	Sample Analysis	Holding Time	Preservative	
B2MXM7	N	W	11/12/12	1300	1x500-mL	G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2	
B2MXM7	N	W			1x500-mL	G/P	200.8_METALS_ICPMS_LIST-3 (17)	6 Months	HNO3 to pH <2	
B2MXM7	N	W			1x250-mL	P	4500E-CN_Cyanide (1)	14 Days	NaOH to pH >=12	
B2MXM7	N	W			1x500-mL	G/P	6010_METALS_ICP>List-3 (18)	6 Months	HNO3 to pH <2	
B2MXM7	N	W			4x1-L	aG	8082_PCB_GC; List-1 (7)	None	Cool-4C	
B2MXM7	N	W			3x40-mL	aGs*	8260_VOA_GCMS_X; COMMON	14 Days	HCl or H2SO4 to pH >2/Cool-4C	
B2MXM7	N	W			4x1-L	aG	8270_SVOA_GCMS_X; COMMON	7/40 Days	Cool-4C	
B2MXM7	N	W			3x40-mL	Gs*	Alcohols, Glycols, & Ketones - 8015M	1/4/0 Days	Cool-4C	
B2MXM7	N	W			1x500-mL	G/P	ALPHABETTA_GPC: Alpha discrete + Beta (2)	6 Months	HNO3 to pH <2	
B2MXM7	N	W			1x500-mL	G/P	GAMMA_GS; List-1 (10)	6 Months	HNO3 to pH <2	
B2MXM7	N	W			1x1-L	P	PURSO_1E_PRECIP_A/KA; Pu-238 + 239/240 (2)	180 Days	HNO3 to pH <2	
B2MXM7	N	W			1x1-L	G/P	Stronium 89/90 - Total Sr	6 Months	HNO3 to pH <2	
B2MXM7	N	W			1x1-L	G/P	TC99_3MDSK_LSC; Tc-99 (1)	6 Months	HCl to pH <2	
B2MXM7	N	W			TPH-Diesel Range	- WTPH-D		14/40 Days	HCl to pH <2/Cool-4C	
Retain/Released By										Matrix *
 Print Name: F. M. Hall Sign Date/Time: NOV 12 2012 1310  Print Name: Cynthia R. Johnson Sign Date/Time: NOV 12 2012 1310										S = Soil DS = Drum Solids SE = Sediment DL = Drum Liquids SO = Solid T = Tissue SI = Sludge WI = Water W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Retain/Released By	Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	Disposed By	Date/Time	
Retain/Released By	Date/Time	Received By	Date/Time	Received By	Date/Time	Disposed By	Date/Time			
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)									

Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST										C.O.C. #
CH2MHill Plateau Remediation Company										II3-007-014
Collector	F.M. Hall			Contact/Requester	Karen Waters-Husted			Telephone No.	376-4650	
SAF No.	113-007			Sampling Origin	Hanford Site			Purchase Order/Charge Code	300071ES20	
Project Title	100NR2, DECEMBER 2012			Logbook No.	HNF-N-505_36 / 38			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	CFRCIA			Priority:	31 Days			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 selectable per DOE Order 5400.5 (1990)1993)										
SPECIAL INSTRUCTIONS										Hold Time
										Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
100 Area Generator Knowledge information form applies. The CACN for all analytical work at WACCF is 401647 FY12 and FY13 samples cannot be in the same SD										
Sample No.	Filter	*	Date	Time	Sample Type/Container	Sample Analysis	Holding time	Preservative		
B2MXM7	N	W	11/12/12	1200	4x40-mL 8Ca*	TRIPL-Gasoline Range - WTPH-G	14 Days	HCl to pH <2/Cool-4C		
B2MXM7	N	W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	6 Months	None		
B2MXM7	N	W			1x1-L_G/P	UISO IE_PRECIP_AEA: List-1 (3)	6 Months	HNO3 to pH <2		
B2MXN3	Y	W			1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2		
B2MXN3	Y	W			1x500-mL G/P	200.8_METALS_ICPMS_LIST-3 (17)	6 Months	HNO3 to pH <2		
B2MXN3	Y	W			1x500-mL G/P	8010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2		
Relinquished By	F.M. Hall	Print	Sign	Date/Time	Received By	Print	Date/Time	Matrix *		
Relinquished By				NOV 12 2012 13:00	Cynthia R. Johnson	Print	NOV 12 2012 13:00	S = Soil		
Relinquished By				Date/Time	Received By	Date/Time	Date/Time	DS = Drift Solids		
Relinquished By								SE = Sediment		
Relinquished By								SJ = Solid		
Relinquished By								T = Tissue		
Relinquished By								SL = Sludge		
Relinquished By								WI = Wine		
Final Sample Disposition	Disposal Method (e.g., Return to customer, per lab procedure, used in process)									
FINAL SAMPLE DISPOSITION	Disposed By Date/Time									

REVISED121450 -