

RECEIVED NOVEMBER 11, 2008

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FLUOR[®]

M4W41-SLF-08-1238

November 11, 2008

Mr. M. A. Neely, Manager
 Analytical Services
 CH2M HILL Plateau Remediation Contract
 1933 Jadwin MSIN B6-06
 Richland, WA 99352

Dear Mike:

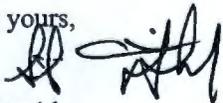
FINAL RESULTS FOR SAMPLE DELIVERY GROUP WSCF20082068 – SAF NUMBER F08-086

- Reference: (1) Memorandum of Agreement #MOA-FH-CHPRC-2008, Rev. 0, for the
 Performance & Payment of Services, dated October 1, 2008
- (2) HNF-SD-CD-QAPP-017, Rev. 9, Waste Sampling & Characterization Facility
 Quality Assurance Plan

This letter contains the following attachments for sample delivery group WSCF20082068:

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

Very truly yours,



S. L. Fitzgerald
 WSCF Analytical Lab

SLF/grf

Attachments 4

cc: w/Attachments

| | |
|-----------------|-------|
| T. F. Dale | S3-30 |
| A. J. Kopriva | S3-30 |
| H. K. Meznarich | S3-30 |
| P. D. Mix | S3-30 |

| | |
|----------------|-------|
| J. E. Trechter | S3-30 |
| S. J. Trent | B6-06 |
| File/LB | |

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EDMC

M4W41-SLF-08-1238

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20082068
Data Deliverable Date: 10-nov-2008
Data Deliverable: Cover Sheet

| SAF# | Sample ID | WSCF# | Matrix |
|---------|-----------|------------|--------|
| F08-086 | B1TRD5 | W08GR03895 | WATER |
| | B1TRH7 | W08GR03894 | WATER |
| | B1TRJ8 | W08GR03892 | WATER |
| | B1TRJ9 | W08GR03893 | WATER |
| | B1TRN3 | W08GR03896 | WATER |

M4W41-SLF-08-1238

ATTACHMENT 2

NARRATIVE

**Consisting of 4 pages
Including cover page**

Introduction

Five (5) S&GRP samples were received at the WSCF Laboratory on September 24, 2008. These samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Memorandum of Agreement (MOA-FH-CHPRC-2008, Rev. 0)*, referenced in the cover letter.

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.

Per authorization given by Dana Widrig via email on September 26, 2008, the WSCF laboratory filtered samples B1TRJ8 and B1TRJ9 before analysis by 6010 (ICP).

It should be noted that the attached chain of custody was stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving, indicating the presence of ice in the sample container.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report*, pages 14 through 16, for a complete listing of approved analytical methods.

Inorganic Comments

Anions – The hold time requirement for this analysis was met. A Duplicates, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 21 through 22 for QC details. Analytical Note(s):

- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1WWY9 and B1WX01 (SDG# 20082066, SAF# F06-027).
- Sample results less than the reportable limit, however greater than the method detection limit, were B flagged.

All QC controls are within the established limits.

ICP-AES Metals – 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. See pages 23 through 26 for QC details. Analytical Note(s):

- Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1TRJ7 (SDG# 20082053, SAF# F08-086) and B1TRD5 (SDG# 20082068, SAF# F08-086).
- Sample results less than 5X the method detection limit, were B flagged.

All QC controls are within the established limits.

ICP-MS Metals – 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. See page 27 for QC details. Analytical Note(s):

- Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1WJK1 and B1WKW1 (SDG# 20081993). Matrix Spike and Matrix Spike Duplicate recoveries (B1WJK1) were greater than ten times the spike level. Therefore, Spike recovery data are not valid. Affected sample results were X flagged.

All other QC controls are within the established limits.

Organic Comments

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. See pages 32 through 34 for QC details.

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1WPF3 (SDG# 20082048, SAF# F08-146).

All QC controls are within the established limits.

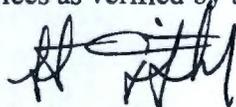
Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 37 through 43 for QC details. Analytical Note(s):

- Gross Alpha & Beta: Duplicate QC was analyzed on sample# B1TR41, (SDG# 20082036, SAF# F08-083).
- Neptunium by AEA: Matrix Spike, Matrix Spike Duplicate, and Duplicate were analyzed on sample# B1W1C5 (SDG#20081896, SAF# F08-098).
 - Matrix Spike recoveries on samples B1W1C5, B1TRD4 and B1TRN3 were slightly less than the established laboratory limit of 75%. No flags issued.
 - Neptunium LCS: The Neptunium recovery was slightly less than the established laboratory limit of 80% at 72.5%. No flags issued.
- Sr 89/90 and 85 (tracer): Duplicate QC was analyzed on sample# B1WPF3 (SDG# 20082048, SAF# F08-146).
- TC-99 by LSC: Matrix Spike and Duplicate were analyzed on sample# B1TRD7 (SDG# 20082087, SAF# F08-086).

- Tritium Analysis by LSC: Matrix Spike and Duplicate was analyzed on sample# B1WPV6, (SDG#20082062, SAF# F08-154).

All other QC controls are within the established limits.

I certify that this data package is in compliance with the MOA, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager and Client Services as verified by the following signatures.



Scot L. Fitzgerald
WSCF Analytical Laboratory Manager



Andrew Kopriva
WSCF Client Services

M4W41-SLF-08-1238

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 37 pages
Including cover page

**WSCF
ANALYTICAL RESULTS REPORT**

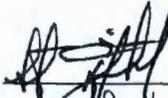
for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical:

 S. Fitzgerald 11/11/08

Client Services:

 P.D. Mix 11/11/2008

All results are reported on an "as received" basis unless otherwise noted in the comment section.

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) 373-7020 or (509) 531-8004. Information designation of this report is the responsibility of the customer.

Contract#: FH-EIS-2003-MEM-001

Report#: WSCF20082068

Report Date: 10-nov-2008

Report WGPP/ver. 5.2

Groundwater Remediation Program

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20082068

| WL# | S# | Batch | QC# | Tray Type | Sample# | Test |
|-------|----|-------|-------|-----------|------------|--------------------------------|
| 38188 | 1 | 38613 | 43038 | BLANK | | ICP-200.8 MS All possible meta |
| 38188 | 2 | 38613 | 43038 | BLANK | | ICP-200.8 MS All possible meta |
| 38188 | 3 | 38613 | 43038 | LCS | | ICP-200.8 MS All possible meta |
| 38188 | 4 | 38613 | 43038 | LCS | | ICP-200.8 MS All possible meta |
| 38188 | 41 | 38613 | 43038 | SAMPLE | W08GR03892 | ICP-200.8 MS All possible meta |
| 38188 | 42 | 38613 | 43038 | SAMPLE | W08GR03893 | ICP-200.8 MS All possible meta |
| 38188 | 43 | 38613 | 43038 | SAMPLE | W08GR03895 | ICP-200.8 MS All possible meta |
| 38188 | 44 | 38613 | 43038 | SAMPLE | W08GR03896 | ICP-200.8 MS All possible meta |
| 38188 | 6 | 38613 | 43038 | MS | W08P004399 | ICP-200.8 MS All possible meta |
| 38188 | 7 | 38613 | 43038 | MSD | W08P004399 | ICP-200.8 MS All possible meta |
| 38188 | 7 | 38613 | 43038 | SPK-RPD | W08P004399 | ICP-200.8 MS All possible meta |
| 38188 | 9 | 38613 | 43038 | MS | W08P004401 | ICP-200.8 MS All possible meta |
| 38188 | 10 | 38613 | 43038 | MSD | W08P004401 | ICP-200.8 MS All possible meta |
| 38188 | 10 | 38613 | 43038 | SPK-RPD | W08P004401 | ICP-200.8 MS All possible meta |
| 38204 | 2 | 38630 | 43065 | BLANK | | Anions by Ion Chromatography |
| 38204 | 17 | 38630 | 43065 | BLANK | | Anions by Ion Chromatography |
| 38204 | 29 | 38630 | 43065 | BLANK | | Anions by Ion Chromatography |
| 38204 | 3 | 38630 | 43065 | LCS | | Anions by Ion Chromatography |
| 38204 | 18 | 38630 | 43065 | LCS | | Anions by Ion Chromatography |
| 38204 | 5 | 38630 | 43065 | DUP | W08GR03882 | Anions by Ion Chromatography |
| 38204 | 6 | 38630 | 43065 | MS | W08GR03882 | Anions by Ion Chromatography |
| 38204 | 7 | 38630 | 43065 | MSD | W08GR03882 | Anions by Ion Chromatography |
| 38204 | 7 | 38630 | 43065 | SPK-RPD | W08GR03882 | Anions by Ion Chromatography |
| 38204 | 21 | 38630 | 43065 | DUP | W08GR03883 | Anions by Ion Chromatography |
| 38204 | 22 | 38630 | 43065 | MS | W08GR03883 | Anions by Ion Chromatography |
| 38204 | 23 | 38630 | 43065 | MSD | W08GR03883 | Anions by Ion Chromatography |
| 38204 | 23 | 38630 | 43065 | SPK-RPD | W08GR03883 | Anions by Ion Chromatography |
| 38204 | 9 | 38630 | 43065 | SAMPLE | W08GR03895 | Anions by Ion Chromatography |
| 38204 | 10 | 38630 | 43065 | SAMPLE | W08GR03896 | Anions by Ion Chromatography |
| 38252 | 1 | 38674 | 43150 | BLANK | | ICP Metals Analysis, Grd H20 P |
| 38252 | 2 | 38674 | 43150 | LCS | | ICP Metals Analysis, Grd H20 P |
| 38252 | 4 | 38674 | 43150 | MS | W08GR03859 | ICP Metals Analysis, Grd H20 P |
| 38252 | 5 | 38674 | 43150 | MSD | W08GR03859 | ICP Metals Analysis, Grd H20 P |
| 38252 | 5 | 38674 | 43150 | SPK-RPD | W08GR03859 | ICP Metals Analysis, Grd H20 P |
| 38252 | 6 | 38674 | 43150 | SAMPLE | W08GR03892 | ICP Metals Analysis, Grd H20 P |
| 38252 | 7 | 38674 | 43150 | SAMPLE | W08GR03893 | ICP Metals Analysis, Grd H20 P |
| 38336 | 1 | 38728 | 43253 | BLANK | | ICP Metals Analysis, Grd H20 P |
| 38336 | 2 | 38728 | 43253 | LCS | | ICP Metals Analysis, Grd H20 P |
| 38336 | 4 | 38728 | 43253 | MS | W08GR03895 | ICP Metals Analysis, Grd H20 P |
| 38336 | 5 | 38728 | 43253 | MSD | W08GR03895 | ICP Metals Analysis, Grd H20 P |
| 38336 | 3 | 38728 | 43253 | SAMPLE | W08GR03895 | ICP Metals Analysis, Grd H20 P |
| 38336 | 5 | 38728 | 43253 | SPK-RPD | W08GR03895 | ICP Metals Analysis, Grd H20 P |
| 38336 | 6 | 38728 | 43253 | SAMPLE | W08GR03896 | ICP Metals Analysis, Grd H20 P |

W13q Worklist/Batch/QC Report for Group# WSCF20082068

| WL# | S# | Batch | QC# | Tray Type | Sample# | Test |
|-----|----|-------|-------|-----------|------------|-----------------------------|
| | | | 43157 | BLANK | | VOA Ground Water Protection |
| | | | 43157 | LCS | | VOA Ground Water Protection |
| | | | 43157 | MS | W08GR03856 | VOA Ground Water Protection |
| | | | 43157 | MSD | W08GR03856 | VOA Ground Water Protection |
| | | | 43157 | SPK-RPD | W08GR03856 | VOA Ground Water Protection |
| | | | 43157 | SAMPLE | W08GR03894 | VOA Ground Water Protection |
| | | | 43157 | SURR | W08GR03894 | VOA Ground Water Protection |
| | | | 43157 | SAMPLE | W08GR03895 | VOA Ground Water Protection |
| | | | 43157 | SURR | W08GR03895 | VOA Ground Water Protection |
| | | | 43157 | SAMPLE | W08GR03896 | VOA Ground Water Protection |
| | | | 43157 | SURR | W08GR03896 | VOA Ground Water Protection |

W13q Worklist/Batch/QC Report for Group# WSCF20082068

| WL# | S# | Batch | QC# | Tray Type | Sample# | Test |
|-------|----|-------|-------|-----------|------------|--------------------------------|
| 38346 | 1 | 38767 | 43265 | BLANK | | Strontium 89/90 |
| 38346 | 2 | 38767 | 43265 | LCS | | Strontium 89/90 |
| 38346 | 3 | 38767 | 43265 | DUP | W08GR03856 | Strontium 89/90 |
| 38346 | 8 | 38767 | 43265 | SAMPLE | W08GR03895 | Strontium 89/90 |
| 38346 | 9 | 38767 | 43265 | SURR | W08GR03895 | Strontium 89/90 |
| 38346 | 10 | 38767 | 43265 | SAMPLE | W08GR03896 | Strontium 89/90 |
| 38346 | 11 | 38767 | 43265 | SURR | W08GR03896 | Strontium 89/90 |
| 38390 | 1 | 38812 | 43297 | BLANK | | Neptunium by AEA |
| 38390 | 2 | 38812 | 43297 | LCS | | Neptunium by AEA |
| 38390 | 3 | 38812 | 43297 | DUP | W08GR03580 | Neptunium by AEA |
| 38390 | 12 | 38812 | 43297 | MS | W08GR03580 | Neptunium by AEA |
| 38390 | 6 | 38812 | 43297 | MSD | W08GR03580 | Neptunium by AEA |
| 38390 | 12 | 38812 | 43297 | SPK-RPD | W08GR03580 | Neptunium by AEA |
| 38390 | 5 | 38812 | 43297 | MS | W08GR03858 | Neptunium by AEA |
| 38390 | 8 | 38812 | 43297 | MS | W08GR03895 | Neptunium by AEA |
| 38390 | 7 | 38812 | 43297 | SAMPLE | W08GR03895 | Neptunium by AEA |
| 38390 | 10 | 38812 | 43297 | MS | W08GR03896 | Neptunium by AEA |
| 38390 | 9 | 38812 | 43297 | SAMPLE | W08GR03896 | Neptunium by AEA |
| 38433 | 1 | 38855 | 43335 | BLANK | | Gross Alpha/Gross Beta (AB32) |
| 38433 | 2 | 38855 | 43335 | LCS | | Gross Alpha/Gross Beta (AB32) |
| 38433 | 3 | 38855 | 43335 | DUP | W08GR03830 | Gross Alpha/Gross Beta (AB32) |
| 38433 | 15 | 38855 | 43335 | SAMPLE | W08GR03895 | Gross Alpha/Gross Beta (AB32) |
| 38433 | 16 | 38855 | 43335 | SAMPLE | W08GR03896 | Gross Alpha/Gross Beta (AB32) |
| 38400 | 1 | 38822 | 43336 | BLANK | | TC99 by Liquid Scin. |
| 38400 | 2 | 38822 | 43336 | LCS | | TC99 by Liquid Scin. |
| 38400 | 7 | 38822 | 43336 | SAMPLE | W08GR03895 | TC99 by Liquid Scin. |
| 38400 | 8 | 38822 | 43336 | SAMPLE | W08GR03896 | TC99 by Liquid Scin. |
| 38400 | 4 | 38822 | 43336 | DUP | W08GR03915 | TC99 by Liquid Scin. |
| 38400 | 3 | 38822 | 43336 | MS | W08GR03915 | TC99 by Liquid Scin. |
| 38264 | 1 | 38685 | 43354 | BLANK | | Tritium by Liq Sct column prep |
| 38264 | 2 | 38685 | 43354 | LCS | | Tritium by Liq Sct column prep |
| 38264 | 4 | 38685 | 43354 | DUP | W08GR03864 | Tritium by Liq Sct column prep |
| 38264 | 3 | 38685 | 43354 | MS | W08GR03864 | Tritium by Liq Sct column prep |
| 38264 | 13 | 38685 | 43354 | SAMPLE | W08GR03895 | Tritium by Liq Sct column prep |
| 38264 | 14 | 38685 | 43354 | SAMPLE | W08GR03896 | Tritium by Liq Sct column prep |
| 38439 | 1 | 38861 | 43359 | BLANK | | Gross Alpha on Alpha Plateau |
| 38439 | 2 | 38861 | 43359 | LCS | | Gross Alpha on Alpha Plateau |
| 38439 | 3 | 38861 | 43359 | DUP | W08GR03830 | Gross Alpha on Alpha Plateau |
| 38439 | 15 | 38861 | 43359 | SAMPLE | W08GR03895 | Gross Alpha on Alpha Plateau |
| 38439 | 16 | 38861 | 43359 | SAMPLE | W08GR03896 | Gross Alpha on Alpha Plateau |
| 38505 | 1 | 38926 | 43436 | BLANK | | Uranium Isotopics by AEA |
| 38505 | 2 | 38926 | 43436 | LCS | | Uranium Isotopics by AEA |
| 38505 | 3 | 38926 | 43436 | DUP | W08GR03895 | Uranium Isotopics by AEA |
| 38505 | 4 | 38926 | 43436 | SAMPLE | W08GR03895 | Uranium Isotopics by AEA |
| 38505 | 5 | 38926 | 43436 | SURR | W08GR03895 | Uranium Isotopics by AEA |
| 38505 | 6 | 38926 | 43436 | SAMPLE | W08GR03896 | Uranium Isotopics by AEA |

38505 7 38926 43436 SURR

W08GR03896 Uranium Isotopics by AEA

WSCF

METHOD REFERENCES REPORT

Department: Inorganic

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 or industry 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 the 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 | LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE HEIS 6010_METALS_ICP Inductively Coupled Plasma-Atomic Emmision Spectrometry |
| LA-505-412 | LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY EPA-600/R-94-111 200.8 DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS HEIS 200.8_METALS_ICPMS Inductively Coupled Plasma - Mass Spectrometry HEIS RADISOTOPES_ICPMS Radioisotopes by ICP/MS |
| LA-533-410 | LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY EPA-600/R-94-111 300.0 DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY HEIS 300.0_ANIONS_IC Determination of Inorganic Anions by Ion Chromatography |

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at <http://www2.rl.gov/phmc/as-dol>.

Report Date: 10-nov-2008
Report#: WSCF20082068
Report WGPPM/5.2

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WSCF

METHOD REFERENCES REPORT

Department: Organic

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 or industry 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 the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

| | |
|---------------------------|---|
| LA-523-455 | LA-523-455: VOLATILE SAMPLE ANALYSIS BY SW-846 |
| EPA SW-846 8000B | DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS |
| EPA SW-846 8260B | VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS) |
| HEIS 8260_VOA_GCMS | Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) |

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at <http://www2.rl.gov/phmc/as-dol>.

Report Date: 10-nov-2008

Report#: WSCF20082068

Report WGPPM/5.2

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WSCF

METHOD REFERENCES REPORT

Department: Radiochemistry

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 or industry 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 the 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-508-415 | LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS |
| HEIS ALPHA_GPC | GROSS ALPHA GPC |
| HEIS BETA_GPC | GROSS BETA GPC |
| HEIS SRTOT_SEP_PRECIP_GPC | Polonium 210/214 |
| LA-508-421 | 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 Liquid Scintillation |
| LA-508-471 | LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP |
| HEIS PUIISO_IE_PRECIP_AEA | Plutonium by Alpha Energy Analysis |
| HEIS RAISO_AEA | Radium-226 |

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at <http://www2.rl.gov/phmc/as-dol>.

Report Date: 10-nov-2008

Report#: WSCF20082068

Report WGPPM/5.2

Page 2

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-086
Sample # W08GR03892
Client ID: B1TRJ8

TRENT
 WSCF

Matrix: WATER

Group #: WSCF20082068
Department: Inorganic
Sampled: 09/24/08
Received: 09/24/08

| Test Performed | CAS # | Method | RQ | Result | Unit | TP Err | Unit | DF | MDL | PQL | Analysis Date |
|--|-----------|------------|----|--------|------|--------|------|------|--------|-----|---------------|
| ICP Metals Analysis, Grd H2O P Prep | | | | | | | | | | | |
| ICP Metals Analysis, Grd H2O P | | | | | | | | | | | |
| Manganese | 7439-96-5 | LA-505-411 | | 68.0 | ug/L | | | 1.00 | 4.0 | | 09/30/08 |
| Nickel | 7440-02-0 | LA-505-411 | U | < 4.00 | ug/L | | | 1.00 | 4.0 | | 09/30/08 |
| Antimony | 7440-38-0 | LA-505-411 | U | < 56.0 | ug/L | | | 1.00 | 56 | | 09/30/08 |
| Cadmium | 7440-43-9 | LA-505-411 | U | < 4.00 | ug/L | | | 1.00 | 4.0 | | 09/30/08 |
| Chromium | 7440-47-3 | LA-505-411 | U | < 13.0 | ug/L | | | 1.00 | 13 | | 09/30/08 |
| Vanadium | 7440-62-2 | LA-505-411 | U | < 12.0 | ug/L | | | 1.00 | 12 | | 09/30/08 |
| Zinc | 7440-66-6 | LA-505-411 | B | 36.4 | ug/L | | | 1.00 | 9.0 | | 09/30/08 |
| Lead | 7439-92-1 | LA-505-411 | U | < 45.0 | ug/L | | | 1.00 | 45 | | 09/30/08 |
| Thallium | 7440-28-0 | LA-505-411 | U | < 36.0 | ug/L | | | 1.00 | 36 | | 09/30/08 |
| Arsenic | 7440-38-2 | LA-505-411 | U | < 78.0 | ug/L | | | 1.00 | 78 | | 09/30/08 |
| ICP-200.8 MS All possible meta Prep | | | | | | | | | | | |
| ICP-200.8 MS All possible meta | | | | | | | | | | | |
| Uranium | 7440-61-1 | LA-505-412 | X | 0.762 | ug/L | | | 1.00 | 0.0500 | | 09/25/08 |

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria.

X - Other flags/notes described in the comments/narrative(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-086
Sample # W08GR03893
Client ID: B1TRJ9

**TRENT
WSCF**

Matrix: WATER

Group #: WSCF20082068
Department: Inorganic
Sampled: 09/24/08
Received: 09/24/08

| Test Performed | CAS # | Method | RQ | Result | Unit | TP Err | Unit | DF | MDL | PQL | Analysis Date |
|--|-----------|------------|----|--------|------|--------|------|------|--------|-----|---------------|
| ICP Metals Analysis, Grd H2O P Prep | | | | | | | | | | | |
| ICP Metals Analysis, Grd H2O P | | | | | | | | | | | |
| Manganese | 7439-96-5 | LA-505-411 | | 75.0 | ug/L | | | 1.00 | 4.0 | | 09/30/08 |
| Nickel | 7440-02-0 | LA-505-411 | U | < 4.00 | ug/L | | | 1.00 | 4.0 | | 09/30/08 |
| Antimony | 7440-36-0 | LA-505-411 | U | < 56.0 | ug/L | | | 1.00 | 56 | | 09/30/08 |
| Cadmium | 7440-43-9 | LA-505-411 | U | < 4.00 | ug/L | | | 1.00 | 4.0 | | 09/30/08 |
| Chromium | 7440-47-3 | LA-505-411 | U | < 13.0 | ug/L | | | 1.00 | 13 | | 09/30/08 |
| Vanadium | 7440-62-2 | LA-505-411 | U | < 12.0 | ug/L | | | 1.00 | 12 | | 09/30/08 |
| Zinc | 7440-66-6 | LA-505-411 | | 60.9 | ug/L | | | 1.00 | 9.0 | | 09/30/08 |
| Lead | 7439-92-1 | LA-505-411 | U | < 45.0 | ug/L | | | 1.00 | 45 | | 09/30/08 |
| Thallium | 7440-28-0 | LA-505-411 | U | < 36.0 | ug/L | | | 1.00 | 36 | | 09/30/08 |
| Arsenic | 7440-38-2 | LA-505-411 | U | < 78.0 | ug/L | | | 1.00 | 78 | | 09/30/08 |
| ICP-200.8 MS All possible meta Prep | | | | | | | | | | | |
| ICP-200.8 MS All possible meta | | | | | | | | | | | |
| Uranium | 7440-61-1 | LA-505-412 | X | 0.759 | ug/L | | | 1.00 | 0.0500 | | 09/25/08 |

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria.

X - Other flags/notes described in the comments/narrative(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-086
Sample # W08GR03895
Client ID: B1TRD5

**TRENT
WSCF**

Matrix: WATER

Group #: WSCF20082068
Department: Inorganic
Sampled: 09/24/08
Received: 09/24/08

| Test Performed | CAS # | Method | RQ | Result | Unit | TP Err | Unit | DF | MDL | PQL | Analysis Date |
|--|------------|------------|----|----------|------|--------|------|------|--------|-----|-----------------|
| Anions by Ion Chromatography | | | | | | | | | | | |
| Fluoride | 16984-48-8 | LA-533-410 | B | 0.0598 | mg/L | | | 1.00 | 0.023 | | 09/25/08 |
| Nitrogen in Nitrite | NO2-N | LA-533-410 | U | < 0.0128 | mg/L | | | 1.00 | 0.013 | | 09/25/08 |
| Nitrogen in Nitrate | NO3-N | LA-533-410 | | 2.31 | mg/L | | | 1.00 | 0.012 | | 09/25/08 |
| ICP Metals Analysis, Grd H2O P Prep | | | | | | | | | | | 10/07/08 |
| ICP Metals Analysis, Grd H2O P | | | | | | | | | | | |
| Manganese | 7439-96-5 | LA-505-411 | | 65.0 | ug/L | | | 1.00 | 4.0 | | 10/08/08 |
| Nickel | 7440-02-0 | LA-505-411 | U | < 4.00 | ug/L | | | 1.00 | 4.0 | | 10/08/08 |
| Antimony | 7440-36-0 | LA-505-411 | U | < 56.0 | ug/L | | | 1.00 | 56 | | 10/08/08 |
| Cadmium | 7440-43-9 | LA-505-411 | U | < 4.00 | ug/L | | | 1.00 | 4.0 | | 10/08/08 |
| Chromium | 7440-47-3 | LA-505-411 | U | < 13.0 | ug/L | | | 1.00 | 13 | | 10/08/08 |
| Vanadium | 7440-62-2 | LA-505-411 | U | < 12.0 | ug/L | | | 1.00 | 12 | | 10/08/08 |
| Zinc | 7440-66-6 | LA-505-411 | U | < 9.00 | ug/L | | | 1.00 | 9.0 | | 10/08/08 |
| Lead | 7439-92-1 | LA-505-411 | U | < 45.0 | ug/L | | | 1.00 | 45 | | 10/08/08 |
| Thallium | 7440-28-0 | LA-505-411 | U | < 36.0 | ug/L | | | 1.00 | 36 | | 10/08/08 |
| Arsenic | 7440-38-2 | LA-505-411 | U | < 78.0 | ug/L | | | 1.00 | 78 | | 10/08/08 |
| ICP-200.8 MS All possible meta Prep | | | | | | | | | | | 09/25/08 |
| ICP-200.8 MS All possible meta | | | | | | | | | | | |
| Uranium | 7440-61-1 | LA-505-412 | X | 0.736 | ug/L | | | 1.00 | 0.0500 | | 09/25/08 |

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria.

X - Other flags/notes described in the comments/narrative(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
 SAF Number: F08-086
 Sample # W08GR03896
 Client ID: B1TRN3

TRENT
WSCF

Matrix: WATER

Group #: WSCF20082068
 Department: Inorganic
 Sampled: 09/24/08
 Received: 09/24/08

| Test Performed | CAS # | Method | RQ | Result | Unit | TP Err | Unit | DF | MDL | PQL | Analysis Date |
|--|------------|------------|----|----------|------|--------|------|------|--------|-----|-----------------|
| Anions by Ion Chromatography | | | | | | | | | | | |
| Fluoride | 16984-48-8 | LA-533-410 | B | 0.0508 | mg/L | | | 1.00 | 0.023 | | 09/25/08 |
| Nitrogen in Nitrite | NO2-N | LA-533-410 | U | < 0.0128 | mg/L | | | 1.00 | 0.013 | | 09/25/08 |
| Nitrogen in Nitrate | NO3-N | LA-533-410 | | 2.31 | mg/L | | | 1.00 | 0.012 | | 09/25/08 |
| ICP Metals Analysis, Grd H2O P Prep | | | | | | | | | | | 10/07/08 |
| ICP Metals Analysis, Grd H2O P | | | | | | | | | | | |
| Manganese | 7439-96-5 | LA-505-411 | | 64.0 | ug/L | | | 1.00 | 4.0 | | 10/08/08 |
| Nickel | 7440-02-0 | LA-505-411 | U | < 4.00 | ug/L | | | 1.00 | 4.0 | | 10/08/08 |
| Antimony | 7440-36-0 | LA-505-411 | U | < 56.0 | ug/L | | | 1.00 | 56 | | 10/08/08 |
| Cadmium | 7440-43-9 | LA-505-411 | U | < 4.00 | ug/L | | | 1.00 | 4.0 | | 10/08/08 |
| Chromium | 7440-47-3 | LA-505-411 | U | < 13.0 | ug/L | | | 1.00 | 13 | | 10/08/08 |
| Vanadium | 7440-62-2 | LA-505-411 | U | < 12.0 | ug/L | | | 1.00 | 12 | | 10/08/08 |
| Zinc | 7440-66-6 | LA-505-411 | U | < 9.00 | ug/L | | | 1.00 | 9.0 | | 10/08/08 |
| Lead | 7439-92-1 | LA-505-411 | U | < 45.0 | ug/L | | | 1.00 | 45 | | 10/08/08 |
| Thallium | 7440-28-0 | LA-505-411 | U | < 36.0 | ug/L | | | 1.00 | 36 | | 10/08/08 |
| Arsenic | 7440-38-2 | LA-505-411 | U | < 78.0 | ug/L | | | 1.00 | 78 | | 10/08/08 |
| ICP-200.8 MS All possible meta Prep | | | | | | | | | | | 09/25/08 |
| ICP-200.8 MS All possible meta | | | | | | | | | | | |
| Uranium | 7440-61-1 | LA-505-412 | X | 0.747 | ug/L | | | 1.00 | 0.0500 | | 09/25/08 |

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria.

X - Other flags/notes described in the comments/narrative(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20082068
 Matrix: WATER
 Test: Anions by Ion Chromatography

Sample Date: 09/21/08
 Receive Date: 09/24/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|---------------------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03882 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| DUP | Fluoride | 16984-48-8 | <0.232 | | RPD | | | n/a | 20.000 | U | 09/25/08 |
| DUP | Nitrogen in Nitrite | NO2-N | <0.128 | | RPD | | | n/a | 20.000 | U | 09/25/08 |
| DUP | Nitrogen in Nitrate | NO3-N | <0.121 | | RPD | | | n/a | 20.000 | U | 09/25/08 |
| MS | Fluoride | 16984-48-8 | 0.42531 | 86.270 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MS | Nitrogen in Nitrite | NO2-N | 0.4791 | 97.378 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MS | Nitrogen in Nitrate | NO3-N | 0.43432 | 97.381 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MSD | Fluoride | 16984-48-8 | 0.402 | 81.542 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MSD | Nitrogen in Nitrite | NO2-N | 0.48374 | 98.321 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MSD | Nitrogen in Nitrate | NO3-N | 0.44415 | 99.585 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| SPK-RPD | Fluoride | 16984-48-8 | 81.542 | | RPD | | | 5.835 | 20.000 | | 09/25/08 |
| SPK-RPD | Nitrogen in Nitrite | NO2-N | 98.321 | | RPD | | | 0.964 | 20.000 | | 09/25/08 |
| SPK-RPD | Nitrogen in Nitrate | NO3-N | 99.585 | | RPD | | | 2.238 | 20.000 | | 09/25/08 |
| Lab ID: W08GR03883 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| DUP | Fluoride | 16984-48-8 | <0.232 | | RPD | | | n/a | 20.000 | U | 09/25/08 |
| DUP | Nitrogen in Nitrite | NO2-N | <0.128 | | RPD | | | n/a | 20.000 | U | 09/25/08 |
| DUP | Nitrogen in Nitrate | NO3-N | <0.121 | | RPD | | | n/a | 20.000 | U | 09/25/08 |
| MS | Fluoride | 16984-48-8 | 0.44267 | 89.791 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MS | Nitrogen in Nitrite | NO2-N | 0.51617 | 104.913 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MS | Nitrogen in Nitrate | NO3-N | 0.45984 | 103.103 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MSD | Fluoride | 16984-48-8 | 0.44598 | 90.462 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MSD | Nitrogen in Nitrite | NO2-N | 0.51275 | 104.217 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| MSD | Nitrogen in Nitrate | NO3-N | 0.461 | 103.363 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| SPK-RPD | Fluoride | 16984-48-8 | 90.462 | | RPD | | | 0.745 | 20.000 | | 09/25/08 |
| SPK-RPD | Nitrogen in Nitrite | NO2-N | 104.217 | | RPD | | | 0.666 | 20.000 | | 09/25/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20082068
 Matrix: WATER
 Test: Anions by Ion Chromatography

Sample Date: 09/21/08
 Receive Date: 09/24/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|-----------------|---------------------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| SPK-RPD | Nitrogen in Nitrate | NO3-N | 103.363 | | RPD | | | 0.252 | 20.000 | | 09/25/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | Fluoride | 16984-48-8 | <2.32e-2 | n/a | mg/L | 0.000 | 0.030 | | | U | 09/25/08 |
| BLANK | Fluoride | 16984-48-8 | <2.32e-2 | n/a | mg/L | 0.000 | 0.030 | | | U | 09/25/08 |
| BLANK | Fluoride | 16984-48-8 | <2.32e-2 | n/a | mg/L | 0.000 | 0.030 | | | U | 09/25/08 |
| BLANK | Nitrogen in Nitrite | NO2-N | <1.28e-2 | n/a | mg/L | 0.000 | 0.020 | | | U | 09/25/08 |
| BLANK | Nitrogen in Nitrite | NO2-N | <1.28e-2 | n/a | mg/L | 0.000 | 0.020 | | | U | 09/25/08 |
| BLANK | Nitrogen in Nitrite | NO2-N | <1.28e-2 | n/a | mg/L | 0.000 | 0.020 | | | U | 09/25/08 |
| BLANK | Nitrogen in Nitrate | NO3-N | <1.21e-2 | n/a | mg/L | 0.000 | 0.040 | | | U | 09/25/08 |
| BLANK | Nitrogen in Nitrate | NO3-N | <1.21e-2 | n/a | mg/L | 0.000 | 0.040 | | | U | 09/25/08 |
| BLANK | Nitrogen in Nitrate | NO3-N | <1.21e-2 | n/a | mg/L | 0.000 | 0.040 | | | U | 09/25/08 |
| LCS | Fluoride | 16984-48-8 | 106.5499 | 106.978 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| LCS | Fluoride | 16984-48-8 | 104.7657 | 105.186 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| LCS | Nitrogen in Nitrite | NO2-N | 101.2569 | 101.868 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| LCS | Nitrogen in Nitrite | NO2-N | 101.473 | 102.086 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| LCS | Nitrogen in Nitrate | NO3-N | 93.9783 | 104.304 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |
| LCS | Nitrogen in Nitrate | NO3-N | 94.6755 | 105.078 | % Recov | 80.000 | 120.000 | | | | 09/25/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20082068
 Matrix: WATER
 Test: ICP Metals Analysis, Grd H2O P

Sample Date: 09/23/08
 Receive Date: 09/23/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|-----------|-----------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03859 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| MS | Arsenic | 7440-38-2 | 990 | 99.000 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MS | Cadmium | 7440-43-9 | 1024 | 102.400 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MS | Chromium | 7440-47-3 | 1003 | 100.300 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MS | Manganese | 7439-96-5 | 1019 | 101.900 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MS | Nickel | 7440-02-0 | 998.2 | 99.820 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MS | Lead | 7439-92-1 | 1060 | 106.000 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MS | Antimony | 7440-36-0 | 1028 | 102.800 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MS | Thallium | 7440-28-0 | 1052 | 105.200 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MS | Vanadium | 7440-62-2 | 962 | 96.200 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MS | Zinc | 7440-66-6 | 1043.5 | 104.350 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Arsenic | 7440-38-2 | 993 | 99.300 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Cadmium | 7440-43-9 | 1021 | 102.100 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Chromium | 7440-47-3 | 998.6 | 99.860 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Manganese | 7439-96-5 | 1019 | 101.900 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Nickel | 7440-02-0 | 1002 | 100.200 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Lead | 7439-92-1 | 1070 | 107.000 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Antimony | 7440-36-0 | 1023 | 102.300 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Thallium | 7440-28-0 | 1110 | 111.000 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Vanadium | 7440-62-2 | 958 | 95.800 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| MSD | Zinc | 7440-66-6 | 1023.5 | 102.350 | % Recov | 75.000 | 125.000 | | | | 09/30/08 |
| SPK-RPD | Arsenic | 7440-38-2 | 99.300 | | RPD | | | 0.303 | 20.000 | | 09/30/08 |
| SPK-RPD | Cadmium | 7440-43-9 | 102.100 | | RPD | | | 0.293 | 20.000 | | 09/30/08 |
| SPK-RPD | Chromium | 7440-47-3 | 99.860 | | RPD | | | 0.440 | 20.000 | | 09/30/08 |
| SPK-RPD | Manganese | 7439-96-5 | 101.900 | | RPD | | | 0.000 | 20.000 | | 09/30/08 |
| SPK-RPD | Nickel | 7440-02-0 | 100.200 | | RPD | | | 0.380 | 20.000 | | 09/30/08 |
| SPK-RPD | Lead | 7439-92-1 | 107.000 | | RPD | | | 0.939 | 20.000 | | 09/30/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20082068
 Matrix: WATER
 Test: ICP Metals Analysis, Grd H2O P

Sample Date: 09/23/08
 Receive Date: 09/23/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|---------|----------|-----------|----------|----------|-------|-------------|-------------|--------|-----------|----|---------------|
| SPK-RPD | Antimony | 7440-36-0 | 102.300 | | RPD | | | 0.488 | 20.000 | | 09/30/08 |
| SPK-RPD | Thallium | 7440-28-0 | 111.000 | | RPD | | | 5.365 | 20.000 | | 09/30/08 |
| SPK-RPD | Vanadium | 7440-62-2 | 95.800 | | RPD | | | 0.417 | 20.000 | | 09/30/08 |
| SPK-RPD | Zinc | 7440-66-6 | 102.350 | | RPD | | | 1.935 | 20.000 | | 09/30/08 |

BATCH QC

| | | | | | | | | | | | |
|-------|-----------|-----------|-------|---------|---------|--------|---------|--|--|---|----------|
| BLANK | Arsenic | 7440-38-2 | <78 | n/a | ug/L | | | | | U | 09/30/08 |
| BLANK | Cadmium | 7440-43-9 | <4 | n/a | ug/L | | | | | U | 09/30/08 |
| BLANK | Chromium | 7440-47-3 | <13 | n/a | ug/L | | | | | U | 09/30/08 |
| BLANK | Manganese | 7439-96-5 | <4 | n/a | ug/L | | | | | U | 09/30/08 |
| BLANK | Nickel | 7440-02-0 | <4 | n/a | ug/L | | | | | U | 09/30/08 |
| BLANK | Lead | 7439-92-1 | <45 | n/a | ug/L | | | | | U | 09/30/08 |
| BLANK | Antimony | 7440-36-0 | <56 | n/a | ug/L | | | | | U | 09/30/08 |
| BLANK | Thallium | 7440-28-0 | <36 | n/a | ug/L | | | | | U | 09/30/08 |
| BLANK | Vanadium | 7440-62-2 | <12 | n/a | ug/L | | | | | U | 09/30/08 |
| BLANK | Zinc | 7440-66-6 | <9 | n/a | ug/L | | | | | U | 09/30/08 |
| LCS | Arsenic | 7440-38-2 | 975 | 97.500 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |
| LCS | Cadmium | 7440-43-9 | 1035 | 103.500 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |
| LCS | Chromium | 7440-47-3 | 988.8 | 98.880 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |
| LCS | Manganese | 7439-96-5 | 994 | 99.400 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |
| LCS | Nickel | 7440-02-0 | 1015 | 101.500 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |
| LCS | Lead | 7439-92-1 | 1090 | 109.000 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |
| LCS | Antimony | 7440-36-0 | 1062 | 106.200 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |
| LCS | Thallium | 7440-28-0 | 1099 | 109.900 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |
| LCS | Vanadium | 7440-62-2 | 969 | 96.900 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |
| LCS | Zinc | 7440-66-6 | 1042 | 104.200 | % Recov | 80.000 | 120.000 | | | | 09/30/08 |

Lab ID: W08GR03895
 BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | | | |
|----|---------|-----------|------|---------|---------|--------|---------|--|--|--|----------|
| MS | Arsenic | 7440-38-2 | 1020 | 102.000 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
|----|---------|-----------|------|---------|---------|--------|---------|--|--|--|----------|

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20082068
 Matrix: WATER
 Test: ICP Metals Analysis, Grd H2O P

Sample Date: 09/24/08
 Receive Date: 09/24/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|---------|-----------|-----------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| MS | Cadmium | 7440-43-9 | 1006 | 100.600 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MS | Chromium | 7440-47-3 | 984.4 | 98.440 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MS | Manganese | 7439-96-5 | 1005 | 100.500 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MS | Nickel | 7440-02-0 | 1001 | 100.100 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MS | Lead | 7439-92-1 | 1040 | 104.000 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MS | Antimony | 7440-36-0 | 991.4 | 99.140 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MS | Thallium | 7440-28-0 | 1042 | 104.200 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MS | Vanadium | 7440-62-2 | 978 | 97.800 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MS | Zinc | 7440-66-6 | 1017 | 101.700 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Arsenic | 7440-38-2 | 996 | 99.600 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Cadmium | 7440-43-9 | 1000 | 100.000 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Chromium | 7440-47-3 | 979 | 97.900 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Manganese | 7439-96-5 | 1005 | 100.500 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Nickel | 7440-02-0 | 985.9 | 98.590 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Lead | 7439-92-1 | 1040 | 104.000 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Antimony | 7440-36-0 | 961.6 | 96.160 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Thallium | 7440-28-0 | 1021 | 102.100 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Vanadium | 7440-62-2 | 979 | 97.900 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| MSD | Zinc | 7440-66-6 | 1003 | 100.300 | % Recov | 75.000 | 125.000 | | | | 10/08/08 |
| SPK-RPD | Arsenic | 7440-38-2 | 99.600 | | RPD | | | 2.381 | 20.000 | | 10/08/08 |
| SPK-RPD | Cadmium | 7440-43-9 | 100.000 | | RPD | | | 0.598 | 20.000 | | 10/08/08 |
| SPK-RPD | Chromium | 7440-47-3 | 97.900 | | RPD | | | 0.550 | 20.000 | | 10/08/08 |
| SPK-RPD | Manganese | 7439-96-5 | 100.500 | | RPD | | | 0.000 | 20.000 | | 10/08/08 |
| SPK-RPD | Nickel | 7440-02-0 | 98.590 | | RPD | | | 1.520 | 20.000 | | 10/08/08 |
| SPK-RPD | Lead | 7439-92-1 | 104.000 | | RPD | | | 0.000 | 20.000 | | 10/08/08 |
| SPK-RPD | Antimony | 7440-36-0 | 96.160 | | RPD | | | 3.052 | 20.000 | | 10/08/08 |
| SPK-RPD | Thallium | 7440-28-0 | 102.100 | | RPD | | | 2.036 | 20.000 | | 10/08/08 |
| SPK-RPD | Vanadium | 7440-62-2 | 97.900 | | RPD | | | 0.102 | 20.000 | | 10/08/08 |
| SPK-RPD | Zinc | 7440-66-6 | 100.300 | | RPD | | | 1.386 | 20.000 | | 10/08/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20082068
 Matrix: WATER
 Test: ICP Metals Analysis, Grd H2O P

Sample Date:
 Receive Date:

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|-----------------|-----------|-----------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| BATCH QC | | | | | | | | | | | |
| BLANK | Arsenic | 7440-38-2 | <78 | n/a | ug/L | | | | | U | 10/08/08 |
| BLANK | Cadmium | 7440-43-9 | <4 | n/a | ug/L | | | | | U | 10/08/08 |
| BLANK | Chromium | 7440-47-3 | <13 | n/a | ug/L | | | | | U | 10/08/08 |
| BLANK | Manganese | 7439-96-5 | <4 | n/a | ug/L | | | | | U | 10/08/08 |
| BLANK | Nickel | 7440-02-0 | <4 | n/a | ug/L | | | | | U | 10/08/08 |
| BLANK | Lead | 7439-92-1 | <45 | n/a | ug/L | | | | | U | 10/08/08 |
| BLANK | Antimony | 7440-36-0 | <56 | n/a | ug/L | | | | | U | 10/08/08 |
| BLANK | Thallium | 7440-28-0 | <36 | n/a | ug/L | | | | | U | 10/08/08 |
| BLANK | Vanadium | 7440-62-2 | <12 | n/a | ug/L | | | | | U | 10/08/08 |
| BLANK | Zinc | 7440-66-6 | <9 | n/a | ug/L | | | | | U | 10/08/08 |
| LCS | Arsenic | 7440-38-2 | 1020 | 102.000 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |
| LCS | Cadmium | 7440-43-9 | 1020 | 102.000 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |
| LCS | Chromium | 7440-47-3 | 991.7 | 99.170 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |
| LCS | Manganese | 7439-96-5 | 995 | 99.500 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |
| LCS | Nickel | 7440-02-0 | 1015 | 101.500 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |
| LCS | Lead | 7439-92-1 | 1090 | 109.000 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |
| LCS | Antimony | 7440-36-0 | 1013 | 101.300 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |
| LCS | Thallium | 7440-28-0 | 1079 | 107.900 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |
| LCS | Vanadium | 7440-62-2 | 979 | 97.900 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |
| LCS | Zinc | 7440-66-6 | 1028 | 102.800 | % Recov | 80.000 | 120.000 | | | | 10/08/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20082068
 Matrix: WATER
 Test: ICP-200.8 MS All possible meta

Sample Date: 09/15/08
 Receive Date: 09/15/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|---------|-----------|----------|----------|---------|-------------|-------------|---------|-----------|----|---------------|
| Lab ID: W08P004399 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| MS | Uranium | 7440-61-1 | 21.7 | 54.250 | % Recov | 70.000 | 130.000 | | | • | 09/25/08 |
| MSD | Uranium | 7440-61-1 | 2.4 | 6.000 | % Recov | 70.000 | 130.000 | | | • | 09/25/08 |
| SPK-RPD | Uranium | 7440-61-1 | 6.000 | | RPD | | | 160.166 | 20.000 | • | 09/25/08 |
| Lab ID: W08P004401 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| MS | Uranium | 7440-61-1 | 40.8 | 102.000 | % Recov | 70.000 | 130.000 | | | | 09/25/08 |
| MSD | Uranium | 7440-61-1 | 39.8 | 99.500 | % Recov | 70.000 | 130.000 | | | | 09/25/08 |
| SPK-RPD | Uranium | 7440-61-1 | 99.500 | | RPD | | | 2.481 | 20.000 | | 09/25/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | Uranium | 7440-61-1 | <5e-2 | n/a | ug/L | | | | | U | 09/25/08 |
| BLANK | Uranium | 7440-61-1 | <5e-2 | n/a | ug/L | | | | | U | 09/25/08 |
| LCS | Uranium | 7440-61-1 | 38.49 | 96.225 | % Recov | 85.000 | 115.000 | | | | 09/25/08 |
| LCS | Uranium | 7440-61-1 | 39.72 | 99.300 | % Recov | 85.000 | 115.000 | | | | 09/25/08 |

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-086

Group #: WSCF20082068
Department: Inorganic

| Sample # | Client ID | Lab Area | Test | Comment |
|----------|-----------|----------|------|--|
| | | VALGROUP | | <p>ICP-AES: [Sample W08GR3892-3893] No zirconium present in the LCS standard. Sample results <5X MDL; "B" flag.</p> <p>ICP-MS: Sample result for sample P-4399 more than 10 times the spike amount. Recovery data not valid.</p> <p>ICP-AES: [Sample W08GR3895-3896] No zirconium present in the LCS standard. Sample results <5X MDL; "B" flag. Np-237 LCS and matrix spike recovery is slightly below the limit. Other recoveries are good so the batch is accepted. MS results are flagged, but the MS actually functions as a tracer in this analysis, so the MS criterion does not apply.</p> |

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-086
Sample # W08GR03894
Client ID: B1TRH7

TRENT
WSCF

Matrix: WATER

Group #: WSCF20082068
Department: Organic
Sampled: 09/24/08
Received: 09/24/08

| Test Performed | CAS # | Method | RQ | Result | Unit | TP Err | Unit | DF | MDL | PQL | Analysis Date |
|------------------------------------|----------|------------|----|--------|------|--------|------|------|-----|-----|---------------|
| VOA Ground Water Protection | | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Benzene | 71-43-2 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Toluene | 108-88-3 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| 1,2-Dichloroethane | 107-06-2 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Dibromochloromethane | 124-48-1 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Tetrachloroethene | 127-18-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Vinyl chloride | 75-01-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Methylenechloride | 75-09-2 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Bromodichloromethane | 75-27-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Hexane | 110-54-3 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria.

X - Other flags/notes described in the comments/narrative(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-086
Sample # W08GR03895
Client ID: BITRD5

TRENT
WSCF

Matrix: WATER

Group #: WSCF20082068
Department: Organic
Sampled: 09/24/08
Received: 09/24/08

| Test Performed | CAS # | Method | RQ | Result | Unit | TP Err | Unit | DF | MDL | PQL | Analysis Date |
|------------------------------------|----------|------------|----|--------|------|--------|------|------|-----|-----|---------------|
| VOA Ground Water Protection | | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Benzene | 71-43-2 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Toluene | 108-88-3 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| 1,2-Dichloroethane | 107-06-2 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Dibromochloromethane | 124-48-1 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Tetrachloroethene | 127-18-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| 1,1,1,2-Tetrachloroethane | 79-34-5 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Vinyl chloride | 75-01-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Methylenechloride | 75-09-2 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Bromodichloromethane | 75-27-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Hexane | 110-54-3 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria.

X - Other flags/notes described in the comments/narrative(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-086
Sample # W08GR03896
Client ID: B1TRN3

TRENT
WSCF

Matrix: WATER

Group #: WSCF20082068
Department: Organic
Sampled: 09/24/08
Received: 09/24/08

| Test Performed | CAS # | Method | RQ | Result | Unit | TP Err | Unit | DF | MDL | PQL | Analysis Date |
|------------------------------------|----------|------------|----|--------|------|--------|------|------|-----|-----|---------------|
| VOA Ground Water Protection | | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Trichloroethene | 79-01-6 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Benzene | 71-43-2 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Toluene | 108-88-3 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Chlorobenzene | 108-90-7 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| 1,2-Dichloroethane | 107-06-2 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Dibromochloromethane | 124-48-1 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Tetrachloroethene | 127-18-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Carbon tetrachloride | 56-23-5 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Vinyl chloride | 75-01-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Methylenechloride | 75-09-2 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Bromodichloromethane | 75-27-4 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |
| Hexane | 110-54-3 | LA-523-455 | U | < 1.00 | ug/L | | | 1.00 | 1.0 | | 10/01/08 |

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

B - The analyte < the RDL but >= the IDL/MDL (inorg)

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X - Other flags/notes described in the comments/narrative(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20082068
 Matrix: WATER
 Test: VOA Ground Water Protection

Sample Date: 09/23/08
 Receive Date: 09/23/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|-----------------------------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03856 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| MS | 1,1-Dichloroethene | 75-35-4 | 22.730 | 90.900 | % Recov | 63.000 | 117.000 | | | | 10/01/08 |
| MS | Benzene | 71-43-2 | 22.620 | 90.500 | % Recov | 75.000 | 129.000 | | | | 10/01/08 |
| MS | 4-Bromofluorobenzene(Surr) | 460-00-4 | 48.570 | 97.100 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| MS | Chlorobenzene | 108-90-7 | 23.540 | 94.200 | % Recov | 79.000 | 119.000 | | | | 10/01/08 |
| MS | 1,2-Dichloroethane-d4(Surr) | 17060-07-0 | 52.140 | 104.000 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| MS | Toluene-d8(Surr) | 2037-26-5 | 47.400 | 94.800 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| MS | Toluene | 108-88-3 | 21.232 | 84.900 | % Recov | 76.000 | 120.000 | | | | 10/01/08 |
| MS | Trichloroethene | 79-01-6 | 20.335 | 81.300 | % Recov | 73.000 | 123.000 | | | | 10/01/08 |
| MSD | 1,1-Dichloroethene | 75-35-4 | 21.440 | 85.800 | % Recov | 63.000 | 117.000 | | | | 10/01/08 |
| MSD | Benzene | 71-43-2 | 22.090 | 88.400 | % Recov | 75.000 | 129.000 | | | | 10/01/08 |
| MSD | 4-Bromofluorobenzene(Surr) | 460-00-4 | 48.360 | 96.700 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| MSD | Chlorobenzene | 108-90-7 | 22.970 | 91.900 | % Recov | 79.000 | 119.000 | | | | 10/01/08 |
| MSD | 1,2-Dichloroethane-d4(Surr) | 17060-07-0 | 52.160 | 104.000 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| MSD | Toluene-d8(Surr) | 2037-26-5 | 47.440 | 94.900 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| MSD | Toluene | 108-88-3 | 20.642 | 82.600 | % Recov | 76.000 | 120.000 | | | | 10/01/08 |
| MSD | Trichloroethene | 79-01-6 | 20.215 | 80.900 | % Recov | 73.000 | 123.000 | | | | 10/01/08 |
| SPK-RPD | 1,1-Dichloroethene | 75-35-4 | 85.800 | | RPD | | | 5.772 | 20.000 | | 10/01/08 |
| SPK-RPD | Benzene | 71-43-2 | 88.400 | | RPD | | | 2.348 | 20.000 | | 10/01/08 |
| SPK-RPD | 4-Bromofluorobenzene(Surr) | 460-00-4 | 96.700 | | RPD | | | 0.413 | 20.000 | | 10/01/08 |
| SPK-RPD | Chlorobenzene | 108-90-7 | 91.900 | | RPD | | | 2.472 | 20.000 | | 10/01/08 |
| SPK-RPD | 1,2-Dichloroethane-d4(Surr) | 17060-07-0 | 104.000 | | RPD | | | 0.000 | 20.000 | | 10/01/08 |
| SPK-RPD | Toluene-d8(Surr) | 2037-26-5 | 94.900 | | RPD | | | 0.105 | 20.000 | | 10/01/08 |
| SPK-RPD | Toluene | 108-88-3 | 82.600 | | RPD | | | 2.746 | 20.000 | | 10/01/08 |
| SPK-RPD | Trichloroethene | 79-01-6 | 80.900 | | RPD | | | 0.493 | 20.000 | | 10/01/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20082068
 Matrix: WATER
 Test: VOA Ground Water Protection

Sample Date: 09/24/08
 Receive Date: 09/24/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|-----------------------------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03894 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| SURR | 4-Bromofluorobenzene(Surr) | 460-00-4 | 48.870 | 97.700 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| SURR | 1,2-Dichloroethane-d4(Surr) | 17060-07-0 | 52.040 | 104.000 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| SURR | Toluene-d8(Surr) | 2037-26-5 | 47.870 | 95.700 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| Lab ID: W08GR03895 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| SURR | 4-Bromofluorobenzene(Surr) | 460-00-4 | 48.420 | 96.800 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| SURR | 1,2-Dichloroethane-d4(Surr) | 17060-07-0 | 51.920 | 104.000 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| SURR | Toluene-d8(Surr) | 2037-26-5 | 48.090 | 96.200 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| Lab ID: W08GR03896 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| SURR | 4-Bromofluorobenzene(Surr) | 460-00-4 | 48.440 | 96.900 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| SURR | 1,2-Dichloroethane-d4(Surr) | 17060-07-0 | 52.280 | 105.000 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| SURR | Toluene-d8(Surr) | 2037-26-5 | 47.800 | 95.600 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | 1,1,2,2-Tetrachloroethane | 79-34-5 | < 1.0 | n/a | ug/L | 0.000 | 5.000 | | | U | 10/01/08 |
| BLANK | 1,1-Dichloroethene | 75-35-4 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | 1,2-Dichloroethane | 107-06-2 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | Bromodichloromethane | 75-27-4 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | Benzene | 71-43-2 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | 4-Bromofluorobenzene(Surr) | 460-00-4 | 49.330 | 98.700 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| BLANK | Carbon tetrachloride | 56-23-5 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | Dibromochloromethane | 124-48-1 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | Chlorobenzene | 108-90-7 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | 1,2-Dichloroethane-d4(Surr) | 17060-07-0 | 53.210 | 106.000 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20082068
 Matrix: WATER
 Test: VOA Ground Water Protection

Sample Date:
 Receive Date:

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|---------|-----------------------------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| BLANK | Hexane | 110-54-3 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | Methylenechloride | 75-09-2 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | Tetrachloroethene | 127-18-4 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | Toluene-d8(Surr) | 2037-26-5 | 47.640 | 95.300 | % Recov | 75.000 | 125.000 | | | | 10/01/08 |
| BLANK | Toluene | 108-88-3 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | Trichloroethene | 79-01-6 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| BLANK | Vinyl chloride | 75-01-4 | < 1.0 | n/a | ug/L | | | | | U | 10/01/08 |
| LCS | 1,1-Dichloroethene | 75-35-4 | 21.110 | 84.400 | % Recov | 75.000 | 125.000 | | | | 10/02/08 |
| LCS | Benzene | 71-43-2 | 23.800 | 95.200 | % Recov | 75.000 | 125.000 | | | | 10/02/08 |
| LCS | 4-Bromofluorobenzene(Surr) | 480-00-4 | 47.870 | 95.700 | % Recov | 75.000 | 125.000 | | | | 10/02/08 |
| LCS | Chlorobenzene | 108-90-7 | 24.720 | 98.900 | % Recov | 75.000 | 125.000 | | | | 10/02/08 |
| LCS | 1,2-Dichloroethane-d4(Surr) | 17060-07-0 | 51.880 | 104.000 | % Recov | 75.000 | 125.000 | | | | 10/02/08 |
| LCS | Toluene-d8(Surr) | 2037-26-5 | 47.280 | 94.600 | % Recov | 75.000 | 125.000 | | | | 10/02/08 |
| LCS | Toluene | 108-88-3 | 23.650 | 94.600 | % Recov | 75.000 | 125.000 | | | | 10/02/08 |
| LCS | Trichloroethene | 79-01-6 | 20.520 | 82.100 | % Recov | 75.000 | 125.000 | | | | 10/02/08 |

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-086
Sample # W08GR03895
Client ID: BITRD5

TRENT
WSCF

Matrix: WATER

Group #: WSCF20082068
Department: Radiochemistry
Sampled: 09/24/08
Received: 09/24/08

| Test Performed | CAS # | Method | RQ | Result | Unit | TP Err | Unit | DF | MDL | PQL | Analysis Date |
|---------------------------------------|------------|------------|----|--------|---------|-----------|-------|------|----------|-----|---------------|
| Gross Alpha on Alpha Plateau | | | | | | | | | | | |
| Gross alpha on alpha plateau | 12587-46-1 | LA-508-415 | U | 0.680 | pCi/L | + -0.561 | pCi/L | 1.00 | 0.79 | | 10/20/08 |
| Gross Alpha/Gross Beta (AB32) | | | | | | | | | | | |
| Gross beta | 12587-47-2 | LA-508-415 | | 2.50 | pCi/L | + -1.05 | pCi/L | 1.00 | 1.5 | | 10/16/08 |
| Neptunium by AEA | | | | | | | | | | | |
| Neptunium-237 | 13994-20-2 | LA-508-471 | | 0.530 | pCi/L | + -0.318 | pCi/L | 1.00 | 0.35 | | 10/13/08 |
| Strontium 89/90 | | | | | | | | | | | |
| Strontium-89/90 | SR-RAD | LA-508-415 | U | -0.150 | pCi/L | + -1.50 | pCi/L | 1.00 | 1.0 | | 10/07/08 |
| Sr-85 Tracer by Beta Counting | SR85 | LA-508-415 | | 86.4 | Percent | | | 1.00 | 0.0 | | 10/07/08 |
| TC99 by Liquid Scin. | | | | | | | | | | | |
| Tc-99 by Liquid Scin. | 14133-76-7 | LA-508-421 | U | -0.800 | pCi/L | + -3.62 | pCi/L | 1.00 | 5.9 | | 10/18/08 |
| Tritium by Liq Sct column prep | | | | | | | | | | | |
| Tritium | 10028-17-8 | LA-508-421 | U | 180 | pCi/L | + -130 | pCi/L | 1.00 | 2.0e +02 | | 10/21/08 |
| Uranium Isotopics by AEA | | | | | | | | | | | |
| Uranium-233/234 | U-233/234 | LA-508-471 | | 0.240 | pCi/L | + -0.0912 | pCi/L | 1.00 | 0.035 | | 11/04/08 |
| Uranium-235 | 15117-96-1 | LA-508-471 | | 0.0360 | pCi/L | + -0.0288 | pCi/L | 1.00 | 0.014 | | 11/04/08 |
| Uranium-238 | U-238 | LA-508-471 | | 0.220 | pCi/L | + -0.0858 | pCi/L | 1.00 | 0.013 | | 11/04/08 |
| U-232 tracer by AEA | U232 | LA-508-471 | | 10.0 | pCi/L | | | 1.00 | 0.083 | | 11/04/08 |

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria.

X - Other flags/notes described in the comments/narrative(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-086
Sample # W08GR03896
Client ID: B1TRN3

TRENT
WSCF

Matrix: WATER

Group #: WSCF20082068
Department: Radiochemistry
Sampled: 09/24/08
Received: 09/24/08

| Test Performed | CAS # | Method | RQ | Result | Unit | TP Err | Unit | DF | MDL | PQL | Analysis Date |
|---------------------------------------|------------|------------|----|---------|---------|---------|-------|------|---------|-----|---------------|
| Gross Alpha on Alpha Plateau | | | | | | | | | | | |
| Gross alpha on alpha plateau | 12587-46-1 | LA-508-415 | U | 0.580 | pCi/L | +0.493 | pCi/L | 1.00 | 0.69 | | 10/20/08 |
| Gross Alpha/Gross Beta (AB32) | | | | | | | | | | | |
| Gross beta | 12587-47-2 | LA-508-415 | | 2.70 | pCi/L | +1.03 | pCi/L | 1.00 | 1.4 | | 10/16/08 |
| Neptunium by AEA | | | | | | | | | | | |
| Neptunium-237 | 13994-20-2 | LA-508-471 | U | -0.0500 | pCi/L | +0.100 | pCi/L | 1.00 | 0.20 | | 10/13/08 |
| Strontium 89/90 | | | | | | | | | | | |
| Strontium-89/90 | SR-RAD | LA-508-415 | U | -1.00 | pCi/L | +1.98 | pCi/L | 1.00 | 0.96 | | 10/07/08 |
| Sr-85 Tracer by Beta Counting | SR85 | LA-508-415 | | 90.8 | Percent | | | 1.00 | 0.0 | | 10/07/08 |
| TC99 by Liquid Scin. | | | | | | | | | | | |
| Tc-99 by Liquid Scin. | 14133-76-7 | LA-508-421 | U | -0.0250 | pCi/L | +0.195 | pCi/L | 1.00 | 5.9 | | 10/18/08 |
| Tritium by Liq Sct column prep | | | | | | | | | | | |
| Tritium | 10028-17-8 | LA-508-421 | U | 170 | pCi/L | +134 | pCi/L | 1.00 | 2.0e+02 | | 10/21/08 |
| Uranium Isotopics by AEA | | | | | | | | | | | |
| Uranium-233/234 | U-233/234 | LA-508-471 | | 0.300 | pCi/L | +0.108 | pCi/L | 1.00 | 0.012 | | 11/04/08 |
| Uranium-235 | 15117-96-1 | LA-508-471 | | 0.0440 | pCi/L | +0.0312 | pCi/L | 1.00 | 0.013 | | 11/04/08 |
| Uranium-238 | U-238 | LA-508-471 | | 0.200 | pCi/L | +0.0840 | pCi/L | 1.00 | 0.054 | | 11/04/08 |
| U-232 tracer by AEA | U232 | LA-508-471 | | 10.0 | pCi/L | | | 1.00 | 0.067 | | 11/04/08 |

MDL=Minimum Detection Limit

RQ=Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria.

X - Other flags/notes described in the comments/narrative(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20082068
 Matrix: WATER
 Test: Gross Alpha on Alpha Plateau

Sample Date: 09/22/08
 Receive Date: 09/22/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|------------------------------|---------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03830 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| DUP | Gross alpha on alpha plateau | 12587-46-1 | 2.0 | | RPD | | | 13.953 | 20.000 | | 10/20/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | Gross alpha on alpha plateau | 12587-46-1-ap | U2.7 | n/a | pCi/L | -100.000 | 100.000 | | | | 10/20/08 |
| LCS | Gross alpha on alpha plateau | 12587-46-1-ap | 38.8 | 100.155 | % Recov | 80.000 | 120.000 | | | | 10/20/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20082068
 Matrix: WATER
 Test: Gross Alpha/Gross Beta (AB32)

Sample Date: 09/22/08
 Receive Date: 09/22/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|---------------------------------|------------|------------|-----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03830 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| DUP | Gross beta | 12587-47-2 | 13.4 | | RPD | | | 6.498 | 20.000 | | 10/16/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | Gross beta | 12587-47-2 | U-1.0E-01 | n/a | pCi/L | -10.000 | 10.000 | | | | 10/16/08 |
| LCS | Gross beta | 12587-47-2 | 123 | 109.626 | % Recov | 80.000 | 120.000 | | | | 10/16/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20082068
 Matrix: WATER
 Test: Neptunium by AEA

Sample Date: 09/02/08
 Receive Date: 09/03/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|---------------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03580 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| DUP | Neptunium-237 | 13994-20-2 | U0.18 | | RPD | | | n/a | 20.000 | | 10/13/08 |
| MS | Neptunium-237 | 13994-20-2 | 71 | 71.000 | % Recov | 75.000 | 125.000 | | | | 10/13/08 |
| MSD | Neptunium-237 | 13994-20-2 | 78.0 | 78.000 | % Recov | 75.000 | 125.000 | | | | 10/13/08 |
| SPK-RPD | Neptunium-237 | 13994-20-2 | 77.690 | | % RPD | | | 8.999 | 20.000 | | 10/13/08 |
| Lab ID: W08GR03858 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| MS | Neptunium-237 | 13994-20-2 | 68.6 | 68.600 | % Recov | 75.000 | 125.000 | | | | 10/13/08 |
| Lab ID: W08GR03895 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| MS | Neptunium-237 | 13994-20-2 | 75.2 | 75.200 | % Recov | 75.000 | 125.000 | | | | 10/13/08 |
| Lab ID: W08GR03896 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| MS | Neptunium-237 | 13994-20-2 | 72.4 | 72.400 | % Recov | 75.000 | 125.000 | | | | 10/13/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | Neptunium-237 | 13994-20-2 | U-2.1e-6 | n/a | pCi/L | -10.000 | 1000.000 | | | | 10/13/08 |
| LCS | Neptunium-237 | 13994-20-2 | 72.5 | 72.500 | % Recov | 80.000 | 120.000 | | | | 10/13/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20082068
 Matrix: WATER
 Test: Strontium 89/90

Sample Date: 09/23/08
 Receive Date: 09/23/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|-------------------------------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03856 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| DUP | Sr-85 Tracer by Beta Counting | SR85 | 90.2 | 90.200 | % Recov | 30.000 | 105.000 | | | | 10/07/08 |
| DUP | Strontium-89/90 | SR-RAD | U-2.7 | | RPD | | | n/a | 20.000 | | 10/07/08 |
| Lab ID: W08GR03895 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| SURR | Sr-85 Tracer by Beta Counting | SR85 | 86.4 | 86.400 | % Recov | 30.000 | 105.000 | | | | 10/07/08 |
| Lab ID: W08GR03896 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| SURR | Sr-85 Tracer by Beta Counting | SR85 | 90.8 | 90.800 | % Recov | 30.000 | 105.000 | | | | 10/07/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | Sr-85 Tracer by Beta Counting | SR85 | 96.3 | 96.300 | % Recov | 30.000 | 105.000 | | | | 10/07/08 |
| BLANK | Strontium-89/90 | 10098-97-2 | U-2.4 | n/a | pCi/L | -10.000 | 100.000 | | | | 10/07/08 |
| LCS | Sr-85 Tracer by Beta Counting | SR85 | 78.8 | 78.800 | % Recov | 30.000 | 105.000 | | | | 10/07/08 |
| LCS | Strontium-89/90 | 10098-97-2 | 155.0 | 111.647 | % Recov | 80.000 | 120.000 | | | | 10/07/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20082068
 Matrix: WATER
 Test: TC99 by Liquid Scin.

Sample Date: 09/26/08
 Receive Date: 09/26/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|-----------------------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03915 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| DUP | Tc-99 by Liquid Scin. | 14133-76-7 | U-2.0 | | RPD | | | n/a | 20.000 | | 10/18/08 |
| MS | Tc-99 by Liquid Scin. | 14133-76-7 | 669.2 | 105.121 | % Recov | 75.000 | 125.000 | | | | 10/18/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | Tc-99 by Liquid Scin. | 14133-76-7 | U-3.1 | n/a | pCi/L | -10.000 | 10.000 | | | | 10/18/08 |
| LCS | Tc-99 by Liquid Scin. | 14133-76-7 | 168 | 105.528 | % Recov | 80.000 | 120.000 | | | | 10/18/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20082068
 Matrix: WATER
 Test: Tritium by Liq Sct column prep

Sample Date: 09/24/08
 Receive Date: 09/24/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|---------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03864 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| DUP | Tritium | 10028-17-8 | 2.2E+02 | | RPD | | | 0.000 | 20.000 | | 10/21/08 |
| MS | Tritium | 10028-17-8 | 21984 | 98.098 | % Recov | 75.000 | 125.000 | | | | 10/21/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | Tritium | 10028-17-8 | U9.7E+01 | n/a | pCi/L | -10.000 | 1000.000 | | | | 10/21/08 |
| LCS | Tritium | 10028-17-8 | 3060 | 90.645 | % Recov | 80.000 | 120.000 | | | | 10/21/08 |

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20082068
 Matrix: WATER
 Test: Uranium Isotopics by AEA

Sample Date: 09/24/08
 Receive Date: 09/24/08

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Lower Limit | Upper Limit | RPD(%) | RPD Limit | RQ | Analysis Date |
|--|---------------------|------------|----------|----------|---------|-------------|-------------|--------|-----------|----|---------------|
| Lab ID: W08GR03895 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| DUP | U-232 tracer by AEA | U232 | 10.29 | 100.210 | % Recov | 30.000 | 105.000 | | | | 11/04/08 |
| DUP | Uranium-233/234 | U-233/234 | 0.21 | | RPD | | | 13.333 | 20.000 | | 11/04/08 |
| DUP | Uranium-235 | 15117-98-1 | U9e-3 | | RPD | | | n/a | 20.000 | | 11/04/08 |
| DUP | Uranium-238 | U-238 | 0.22 | | RPD | | | 0.000 | 20.000 | | 11/04/08 |
| SURR | U-232 tracer by AEA | U232 | 10.29 | 85.820 | % Recov | 30.000 | 105.000 | | | | 11/04/08 |
| Lab ID: W08GR03896 | | | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | | | |
| SURR | U-232 tracer by AEA | U232 | 10.29 | 98.190 | % Recov | 30.000 | 105.000 | | | | 11/04/08 |
| BATCH QC | | | | | | | | | | | |
| BLANK | U-232 tracer by AEA | U232 | 10.29 | 84.000 | % Recov | 30.000 | 105.000 | | | | 11/04/08 |
| BLANK | Uranium-233/234 | 13966-29-5 | 3.9e-2 | 0.039 | pCi/L | -10.000 | 1000.000 | | | | 11/04/08 |
| BLANK | Uranium-235 | 15117-98-1 | U2.6e-2 | n/a | pCi/L | -10.000 | 1000.000 | | | | 11/04/08 |
| BLANK | Uranium-238 | 24678-82-8 | 2.9e-2 | 0.029 | pCi/L | -10.000 | 1000.000 | | | | 11/04/08 |
| LCS | U-232 tracer by AEA | U232 | 11.42 | 90.780 | % Recov | 30.000 | 105.000 | | | | 11/04/08 |
| LCS | Uranium-233/234 | 13966-29-5 | 90.78 | 90.780 | % Recov | 75.000 | 125.000 | | | | 11/04/08 |
| LCS | Uranium-238 | 24678-82-8 | 20 | 105.513 | % Recov | 80.000 | 120.000 | | | | 11/04/08 |

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-086

Group #: WSCF20082068
Department: Radiochemistry

| Sample # | Client ID | Lab Area | Test | Comment |
|----------|-----------|----------|------|--|
| | | VALGROUP | | <p>ICP-AES: [Sample W08GR3892-3893] No zirconium present in the LCS standard. Sample results <5X MDL; "B" flag.</p> <p>ICP-MS: Sample result for sample P-4399 more than 10 times the spike amount. Recovery data not valid.</p> <p>ICP-AES: [Sample W08GR3895-3896] No zirconium present in the LCS standard. Sample results <5X MDL; "B" flag. Np-237 LCS and matrix spike recovery is slightly below the limit. Other recoveries are good so the batch is accepted. MS results are flagged, but the MS actually functions as a tracer in this analysis, so the MS criterion does not apply.</p> |

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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M4W41-SLF-08-1238

ATTACHMENT 4

SAMPLE RECEIPT INFORMATION

Consisting of 7 pages
Including cover page

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

File
11/10/08
td

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 122588/ES10
Group#: 20082068
Project#: F08-086
Proj Mgr: Steve Trent E6-35
Phone: 373-5869

The following samples were received from you on 09/24/08. 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 | Tests Scheduled | Matrix | Sample Date |
|------------|-----------|---|--------|-------------|
| W08GR03892 | B1TRJ8 | TRENT @2008 @GPP6010 | Water | 09/24/08 |
| W08GR03893 | B1TRJ9 | TRENT @2008 @GPP6010 | Water | 09/24/08 |
| W08GR03894 | B1TRH7 | TRENT @VOA-GPP | Water | 09/24/08 |
| W08GR03895 | B1TRD5 | TRENT @2008 @AEA-32 @AEA-33 @GPP6010 @H3-33 @IC-30 @SR89_90 @TC99-30 @VOA-GPP | Water | 09/24/08 |
| W08GR03896 | B1TRN3 | TRENT @2008 @AEA-32 @AEA-33 @GPP6010 @H3-33 @IC-30 @SR89_90 @TC99-30 @VOA-GPP | Water | 09/24/08 |

Test Acronym Description

| Test Acronym | Description |
|--------------|--------------------------------|
| @2008 | ICP-200.8 MS All possible meta |
| @AEA-32 | Uranium Isotopics by AEA |
| @AEA-33 | Neptunium by AEA |
| @GPP6010 | ICP Metals Analysis, Grd H2O P |
| @H3-33 | Tritium by Liq Sct column prep |
| @IC-30 | Anions by Ion Chromatography |
| @SR89_90 | Strontium 89/90 |
| @TC99-30 | TC99 by Liquid Scin. |
| @VOA-GPP | VOA Ground Water Protection |

| | | | | | |
|--|--|-----------------------------------|--|---|---|
| COLLECTOR NCO Sampler M. White L. Roscap | COMPANY CONTACT Trent, SJ | TELEPHONE NO. 373-5869 | PROJECT COORDINATOR WIDRIG, DL | PRICE CODE 7N | DATA TURNAROUND 45 Days / 45 Days |
| SAMPLING LOCATION C-C6356-5 | PROJECT DESIGNATION Aquifer Tube Installation Sampling and Analysis in the 200-PO-1 OU (Shore) | | SAF NO. F08-086 | AIR QUALITY <input type="checkbox"/> | |
| ICE CHEST NO. | FIELD LOGBOOK NO. HNF-N-431-3 | ACTUAL SAMPLE DEPTH N/A | COA 122588ES10 | METHOD OF SHIPMENT GOVERNMENT VEHICLE | |

| | | |
|---|------------------------------------|---|
| SHIPPED TO Waste Sampling & Characterization 20082068 | OFFSITE PROPERTY NO. N/A | BILL OF LADING/AIR BILL NO. N/A |
|---|------------------------------------|---|

| | | | |
|---|--|--|--|
| MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other | POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION HNO3 to pH <2 | |
| | | TYPE OF CONTAINER G/P | |
| | | NO. OF CONTAINER(S) 1 | |
| | | VOLUME 500mL | |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS | |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | 03/628 |
|------------|-----------------|-------------|-------------|--------|
| B1TRJB | W08Gw3872 WATER | 9/24/08 | 0855 | X |

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| CHAIN OF POSSESSION | SIGN/ PRINT NAMES | SPECIAL INSTRUCTIONS |
|--|--------------------------------------|--|
| RELINQUISHED BY/REMOVED FROM J. Herrick | RECEIVED BY/STORED IN [Signature] | ** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. (1)ICP Metals - 6010B (TAL) {Antimony, Cadmium, Chromium, Manganese, Nickel, Vanadium, Zinc} ICP Metals - 6010B (Add-On) {Arsenic, Lead, Thallium} ICP/MS - 200.8 (Add-on) {Uranium} |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |

| | | | |
|---------------------------------|------------------------|--------------------|------------------|
| LABORATORY SECTION | RECEIVED BY | TITLE | DATE/TIME |
| FINAL SAMPLE DISPOSITION | DISPOSAL METHOD | DISPOSED BY | DATE/TIME |

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| Fluor Hanford Inc. | | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | | F08-086-013 | PAGE 1 OF 1 |
|--|---|---|---|---|-----------------------------------|--|--------------------------------------|
| COLLECTOR NCO Sampler <i>M. White L. Rosa</i> | | COMPANY CONTACT Trent, SJ | | TELEPHONE NO. 373-5869 | PROJECT COORDINATOR WIDRIG, DL | | PRICE CODE 7N |
| SAMPLING LOCATION C-C6356-S | | PROJECT DESIGNATION Aquifer Tube Installation Sampling and Analysis in the 200-PO-1 OU (Shore) | | | SAF NO. F08-086 | AIR QUALITY <input type="checkbox"/> | DATA TURNAROUND 45 Days / 45 Days |
| ICE CHEST NO. | | FIELD LOGBOOK NO. <i>HNF-N 451-3</i> | ACTUAL SAMPLE DEPTH <i>N/A</i> | | COA 122588ES10 | METHOD OF SHIPMENT GOVERNMENT VEHICLE | |
| SHIPPED TO Waste Sampling & Characterization | | OFFSITE PROPERTY NO. N/A | | BILL OF LADING/AIR BILL NO. N/A | | | |
| MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other | POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | | PRESERVATION HNO3 to pH <2 | | | | |
| | | | TYPE OF CONTAINER G/P | | | | |
| | | | NO. OF CONTAINER(S) 1 | | | | |
| | | | VOLUME 500mL | | | | |
| SPECIAL HANDLING AND/OR STORAGE | | | SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS | | | | |
| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | | | | |
| B1TRJ9 | 3893 WATER | 9/24/08 | 0855 | 031628 | X | | |
| ICED | | | | | | | |
| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | | | SPECIAL INSTRUCTIONS | | |
| RELINQUISHED BY/REMOVED FROM <i>J. Heinrich G. Newell</i> | DATE/TIME <i>9/24/08 1430</i> | RECEIVED BY/STORED IN <i>[Signature]</i> | DATE/TIME <i>9/29/08 1430</i> | ** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. (1) ICP Metals - 6010B (TAL) {Antimony, Cadmium, Chromium, Manganese, Nickel, Vanadium, Zinc} ICP Metals - 6010B (Add-On) {Arsenic, Lead, Thallium} ICP/MS - 200.8 (Add-on) {Uranium} | | | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | | | | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | | | | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | | | | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | | | | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | | | | |
| LABORATORY SECTION | RECEIVED BY | TITLE | | DATE/TIME | | | |
| FINAL SAMPLE DISPOSITION | DISPOSAL METHOD | DISPOSED BY | | DATE/TIME | | | |

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| | | | | | |
|---|--|---|--|---|---|
| COLLECTOR NCO Sampler <i>M. White L. Resane</i> | COMPANY CONTACT Trent, SJ | TELEPHONE NO. 373-5869 | PROJECT COORDINATOR WIDRIG, DL | PRICE CODE 7N | DATA TURNAROUND 45 Days / 45 Days |
| SAMPLING LOCATION C-C6356-5 | PROJECT DESIGNATION Aquifer Tube Installation Sampling and Analysis in the 200-PO-1 OU (Shore) | | SAF NO. F08-086 | AIR QUALITY <input type="checkbox"/> | |
| ICE CHEST NO. | FIELD LOGBOOK NO. <i>HNF-N-457-3</i> | ACTUAL SAMPLE DEPTH <i>N/A</i> | COA 122588ES10 | METHOD OF SHIPMENT GOVERNMENT VEHICLE | |
| SHIPPED TO Waste Sampling & Characterization | OFFSITE PROPERTY NO. N/A | BILL OF LADING/AIR BILL NO. N/A | | | |

| | | | | | | | |
|---|--|--|----------------------------------|---------------------------------|-----------------------|--|--|
| MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other | POSSIBLE SAMPLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | PRESERVATION HCl or H2SO4 to pH <2/Cool~4C | TYPE OF CONTAINER 8Gs* | NO. OF CONTAINER(S) 4 | VOLUME 40mL | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS |
|---|--|--|----------------------------------|---------------------------------|-----------------------|--|--|

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | 807801 |
|-------------|---------|-------------|-------------|--------|
| B1TRH7 3894 | WATER | 9/24/08 | 0855 | X |

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| CHAIN OF POSSESSION | SIGN/ PRINT NAMES | SPECIAL INSTRUCTIONS |
|--|---|---|
| RELINQUISHED BY/REMOVED FROM <i>J. Harrison</i> | RECEIVED BY/STORED IN <i>[Signature]</i> | ** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. (1)VOA - 8260B (TCL) (1,1,2,2-Tetrachloroethane, 1,2-Dichloroethane, Benzene, Bromodichloromethane, Carbon tetrachloride, Dibromochloromethane, Methylene chloride, Tetrachloroethene, Trichloroethene, Vinyl chloride) VOA - 8260B (Add-On) (Hexane) |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |

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| | | | |
|---------------------------------|------------------------|--------------------|------------------|
| LABORATORY SECTION | RECEIVED BY | TITLE | DATE/TIME |
| FINAL SAMPLE DISPOSITION | DISPOSAL METHOD | DISPOSED BY | DATE/TIME |

| | | | | | |
|---|--|---|---|---|---|
| COLLECTOR NCO Sampler <i>M. White L. Roscoe</i> | COMPANY CONTACT Trent, SJ | TELEPHONE NO. 373-5869 | PROJECT COORDINATOR WDRIG, DL | PRICE CODE 7N | DATA TURNAROUND 45 Days / 45 Days |
| SAMPLING LOCATION C-C6356-5 | PROJECT DESIGNATION Aquifer Tube Installation Sampling and Analysis in the 200-PO-1 OU (Shore) | | SAF NO. F08-086 | AIR QUALITY <input type="checkbox"/> | |
| ICE CHEST NO. | FIELD LOGBOOK NO. <i>HUT-10-451-3</i> | ACTUAL SAMPLE DEPTH <i>2/11</i> | COA 122588E510 | METHOD OF SHIPMENT GOVERNMENT VEHICLE | |
| SHIPPED TO Waste Sampling & Characterization | | OFFSITE PROPERTY NO. N/A | BILL OF LADING/AIR BILL NO. N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | HCl or H2SO4 to pH <2/Cool-4C | HNO3 to pH <2 | Cool-4C | HNO3 to pH <2 | HNO3 to pH <2 | HNO3 to pH <2 | HNO3 to pH <2 | HCl to pH <2 | None |
|---|---|---------------------|---|--|--|--|---|----------------|-----------------------------|----------------|-------------------|
| A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | TYPE OF CONTAINER | aGs* | G/P | P | G/P | G/P | G/P | G/P | G/P | G |
| | | NO. OF CONTAINER(S) | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |
| | | VOLUME | 40mL | 500mL | 500mL | 500mL | 1000mL | 1000mL | 1L | 1L | 250mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS VOA | SEE ITEM (2) IN SPECIAL INSTRUCTIONS b 2 | SEE ITEM (3) IN SPECIAL INSTRUCTIONS IC | Gross Alpha (Gross alpha) Gross Beta (Gross beta) | Isotopic Uranium (Uranium-233/234, Uranium-238) | Neptunium-237; | Strontium-89,90 - Total Sr; | Technetium-99; | Tridium - Ion Et; |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | 807801 | 031628 | → | 031851 | → | 029468 |
|-------------|---------|-------------|-------------|--------|--------|---|--------|---|--------|
| B1TRD5 3895 | WATER | 9/24/05 | 0855 | X | X | X | X | X | X |

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| CHAIN OF POSSESSION | SIGN/ PRINT NAMES | SPECIAL INSTRUCTIONS |
|--|---|--|
| RELINQUISHED BY/REMOVED FROM <i>J. Herink L. Herink</i> | RECEIVED BY/STORED IN <i>[Signature]</i> | ** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF. (1)VOA - 8260B (TCL) {1,1,2,2-Tetrachloroethane, 1,2-Dichloroethane, Benzene, Bromodichloromethane, Carbon tetrachloride, Dibromochloromethane, Methylene chloride, Tetrachloroethene, Trichloroethene, Vinyl chloride} VOA - 8260B (Add-On) {Hexane} (2)ICP Metals - 6010B (TAL) {Antimony, Cadmium, Chromium, Manganese, Nickel, Vanadium, Zinc} ICP Metals - 6010B (Add-On) {Arsenic, Lead, Thallium} ICP/MS - 200.8 (Add-on) {Uranium} (3)IC Anions - 300.0 {Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite} |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |
| RELINQUISHED BY/REMOVED FROM | RECEIVED BY/STORED IN | |

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|--------------------------|-----------------|-------------|-----------|
| LABORATORY SECTION | RECEIVED BY | TITLE | DATE/TIME |
| FINAL SAMPLE DISPOSITION | DISPOSAL METHOD | DISPOSED BY | DATE/TIME |

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| | | | | | |
|--|--|---|---|---|---|
| COLLECTOR NCO Sampler <i>(Signature)</i> | COMPANY CONTACT Trent, SJ | TELEPHONE NO. 373-5869 | PROJECT COORDINATOR WIDRIG, DL | PRICE CODE 7N | DATA TURNAROUND 45 Days / 45 Days |
| SAMPLING LOCATION C-C6356-S | PROJECT DESIGNATION Aquifer Tube Installation Sampling and Analysis in the 200-PO-1 OU (Shore) | | SAF NO. F08-086 | AIR QUALITY <input type="checkbox"/> | |
| ICE CHEST NO. | FIELD LOGBOOK NO. <i>HNF-N-491-3</i> | ACTUAL SAMPLE DEPTH <i>2/ft</i> | COA 122588ES10 | METHOD OF SHIPMENT GOVERNMENT VEHICLE | |
| SHIPPED TO Waste Sampling & Characterization | | OFFSITE PROPERTY NO. N/A | BILL OF LADING/AIR BILL NO. N/A | | |

| MATRIX* | POSSIBLE SAMPLE HAZARDS/ REMARKS | PRESERVATION | HCl or H2SO4 to pH <2/Cool~4C | HNO3 to pH <2 | Cool~4C | HNO3 to pH <2 | HNO3 to pH <2 | HNO3 to pH <2 | HNO3 to pH <2 | HCl to pH <2 | None |
|---|---|----------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|---|----------------|-----------------------------|----------------|-------------------|
| A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WI=Wipe X=Other | Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR / IATA Dangerous Goods Regulations but are not releasable per DOE Order 5400.5 (1990/1993) | TYPE OF CONTAINER | aGs* | G/P | P | G/P | G/P | G/P | G/P | G/P | G |
| | | NO. OF CONTAINER(S) | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |
| | | VOLUME | 40mL | 500mL | 500mL | 500mL | 1000mL | 1000mL | 1L | 1L | 250mL |
| | SPECIAL HANDLING AND/OR STORAGE | SAMPLE ANALYSIS | SEE ITEM (1) IN SPECIAL INSTRUCTIONS | SEE ITEM (2) IN SPECIAL INSTRUCTIONS | SEE ITEM (3) IN SPECIAL INSTRUCTIONS | Gross Alpha (Gross alpha) Gross Beta (Gross beta) | Isotopic Uranium (Uranium-233/234, Uranium-238) | Neptunium-237; | Strontium-89,90 - Total Sr; | Technetium-99; | Thorium - Ion Ex; |

| SAMPLE NO. | MATRIX* | SAMPLE DATE | SAMPLE TIME | 867801 | 031628 | → | 031851 | → | 029468 |
|------------|------------|-------------|-------------|--------|--------|---|--------|---|--------|
| B1TRN3 | 3896 WATER | 9/24/08 | 0855 | x | x | x | x | x | x |

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| CHAIN OF POSSESSION | SIGN/ PRINT NAMES | SPECIAL INSTRUCTIONS |
|--|----------------------------|---|
| RELINQUISHED BY/REMOVED FROM <i>(Signature)</i> | DATE/TIME 9/24/08 (133) | RECEIVED BY/STORED IN <i>(Signature)</i> |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN |

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
 (1)VOA - 8260B (TCL) {1,1,2,2-Tetrachloroethane, 1,2-Dichloroethane, Benzene, Bromodichloromethane, Carbon tetrachloride, Dibromochloromethane, Methylene chloride, Tetrachloroethene, Trichloroethene, Vinyl chloride} VOA - 8260B (Add-On) {Hexane}
 (2)ICP Metals - 6010B (TAL) {Antimony, Cadmium, Chromium, Manganese, Nickel, Vanadium, Zinc} ICP Metals - 6010B (Add-On) {Arsenic, Lead, Thallium} ICP/MS - 200.8 (Add-on) {Uranium}
 (3)IC Anions - 300.0 {Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite}

| | | | |
|---------------------------------|-----------------|-------------|-----------|
| LABORATORY SECTION | RECEIVED BY | TITLE | DATE/TIME |
| FINAL SAMPLE DISPOSITION | DISPOSAL METHOD | DISPOSED BY | DATE/TIME |

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