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WSCF Analytical Lab  
P.O. Box 1000  
Richland, WA 99352  
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0077997

**FLUOR**

**Memorandum**

To: H. Hampt E6-35 Date: M4W41-SLF-07-519  
August 6, 2007

From: S. L. Fitzgerald, Manager WSCF Analytical Lab *SLF*

cc: w/Attachments  
T. F. Dale S3-30 S. J. Trent E6-35  
H. K. Meznarich S3-30 D. D. Wright S3-30  
P. D. Mix S3-30 File/LB  
J. E. Trechter S3-30

Subject: FINAL RESULTS FOR SAMPLE DELIVERY GROUP WSCF20071129 – SAF NUMBER F07-050

Reference: (1) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEM-001, October 31, 2002  
(2) HNF-SD-CD-QAPP-017, Rev. 8, Waste Sampling & Characterization Facility Quality Assurance Plan

This letter contains the following information for sample delivery group WSCF20071129:

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

SLF/cmj

Attachments 4



**RECEIVED**  
JUN 26 2008  
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M4W41-SLF-07-519

ATTACHMENT 1

**COVER SHEET**

Consisting of 2 pages  
Including cover page

# WSCF SAF NUMBER CROSS REFERENCE

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Group#: WSCF20071129  
Data Deliverable Date: 16-aug-2007  
Data Deliverable: Cover Sheet

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SAF#	Sample ID	WSCF#	Matrix
F07-050	B1NWF3	W07GR01666	SOIL
	B1NWF4	W07GR01667	SOIL
	B1NWF5	W07GR01668	SOIL
	B1NWF6	W07GR01669	SOIL
	B1NWF7	W07GR01670	SOIL
	B1NWF8	W07GR01671	SOIL
	B1NWF9	W07GR01672	SOIL

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ATTACHMENT 2

**NARRATIVE**

Consisting of 3 pages  
Including cover page

<b>Sample Delivery Group</b>	<b>WSCF20071129</b>
<b>Sample Matrix</b>	<b>Solid</b>
<b>Data Deliverable</b>	<b>Summary Report</b>

**Introduction**

Seven (7) groundwater samples were received at the WSCF Laboratory on July 2, 2007. Samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, 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.

**Analytical Methodology for Requested Analyses**

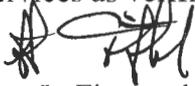
Refer to *WSCF Method References Report*, page 10, for a complete listing of approved analytical methods.

**Rad Chem** – There are no hold times associated with WSCF’s radiochemical methods. A Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See page 18 for QC details. Analytical Note(s):

- Gross Alpha – Duplicate Relative Percent Difference (RPD) exceeded established laboratory limits due to low sample activity.

All other QC controls are within the established limits.

I certify that this data package is in compliance with the LOI, 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



Pauline D. Mix  
WSCF Client Services

Abbreviations

Hg – mercury  
IC – ion chromatography  
ICP – inductively coupled plasma  
ICP/AES – ICP/atomic emission spectroscopy  
ICP/MS – ICP/mass spectrometry  
Total U – total uranium  
AT/TB – total alpha/total beta  
AEA – Alpha Energy Analysis  
WTPH-G – Total Hydrocarbons-Gasoline

Am – americium  
Cm - curium  
Pu – plutonium  
Np – neptunium  
GEA – gamma energy analysis  
H3 – Tritium  
Sr – Strontium 89, 90  
WTPH-D – Total Hydrocarbons-Diesel  
TSS – Total Suspended Solids

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ATTACHMENT 3

**ANALYTICAL RESULTS**

Consisting of 13 pages  
Including cover page

**WSCF**  
**ANALYTICAL RESULTS REPORT**

for

**Groundwater Remediation Program**

**Richland, WA 99354**

**Attention: Steve Trent**

Analytical:

*S. Fitzgerald 8/6/07*

Client Services:

*GDW; P.P. Mix 8/6/2007*

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

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

Report#: WSCF20071129

Report Date: 3-aug-2007

Report WGPP/ver. 5.2

Groundwater Remediation Program

## W13q Worklist/Batch/QC Report for Group# WSCF20071129

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
32598	1	32989	37253	BLANK		Gross Alpha/Gross Beta (AB32)
32598	2	32989	37253	LCS		Gross Alpha/Gross Beta (AB32)
32598	3	32989	37253	DUP	W07GR01666	Gross Alpha/Gross Beta (AB32)
32598	4	32989	37253	SAMPLE	W07GR01666	Gross Alpha/Gross Beta (AB32)
32598	5	32989	37253	SAMPLE	W07GR01667	Gross Alpha/Gross Beta (AB32)
32598	6	32989	37253	SAMPLE	W07GR01668	Gross Alpha/Gross Beta (AB32)
32598	7	32989	37253	SAMPLE	W07GR01669	Gross Alpha/Gross Beta (AB32)
32598	8	32989	37253	SAMPLE	W07GR01670	Gross Alpha/Gross Beta (AB32)
32598	9	32989	37253	SAMPLE	W07GR01671	Gross Alpha/Gross Beta (AB32)
32598	10	32989	37253	SAMPLE	W07GR01672	Gross Alpha/Gross Beta (AB32)

# 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.

<b>LA-508-415</b>	<b>LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS</b>
<b>HEIS ALPHA_GPC</b>	<b>GROSS ALPHA GPC</b>
<b>HEIS BETA_GPC</b>	<b>GROSS BETA GPC</b>
<b>HEIS SRTOT_SEP_PRECIP_GPC</b>	<b>Francium 89/90</b>

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: 3-aug-2007  
Report#: WSCF20071129  
Report WGPPM/5.2

Page 1

# WSCF

## ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F07-050  
**Sample #** W07GR01666  
**Client ID:** B1NWF3

TRENT  
 WSCF

**Matrix:** SOIL

**Group #:** WSCF20071129  
**Department:** Radiochemistry  
**Sampled:** 07/02/07  
**Received:** 07/02/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415		1.40	pCi/g	+0.560	pCi/g	1.00	0.55		07/18/07
Gross beta	12587-47-2	LA-508-415		1.40	pCi/g	+0.630	pCi/g	1.00	0.96		07/18/07

**MDL=Minimum Detection Limit** U - Analyzed for but not detected above limiting criteria(inorg)

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

\* - 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:** F07-050  
**Sample #** W07GR01667  
**Client ID:** B1NWF4

TRENT  
 WSCF

**Matrix:** SOIL

**Group #:** WSCF20071129  
**Department:** Radiochemistry  
**Sampled:** 07/02/07  
**Received:** 07/02/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415		1.10	pCi/g	+ -0.495	pCi/g	1.00	0.55		07/18/07
Gross beta	12587-47-2	LA-508-415		3.10	pCi/g	+ -0.775	pCi/g	1.00	0.96		07/18/07

**MDL = Minimum Detection Limit**      U - Analyzed for but not detected above limiting criteria(inorg)  
**RQ = Result Qualifier**  
**TP Err = Total Propagated Error**  
**DF = Dilution Factor**

\* - 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:** F07-050  
**Sample #** W07GR01668  
**Client ID:** B1NWF5

TRENT  
 WSCF

**Matrix:** SOIL

**Group #:** WSCF20071129  
**Department:** Radiochemistry  
**Sampled:** 07/02/07  
**Received:** 07/02/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415		1.80	pCi/g	+0.576	pCi/g	1.00	0.51		07/18/07
Gross beta	12587-47-2	LA-508-415		1.30	pCi/g	+0.637	pCi/g	1.00	0.94		07/18/07

**MDL=Minimum Detection Limit**    U - Analyzed for but not detected above limiting criteria(inorg)  
**RQ=Result Qualifier**  
**TP Err=Total Propagated Error**  
**DF=Dilution Factor**

\* - 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:** F07-050  
**Sample #** W07GR01669  
**Client ID:** B1NWF6

TRENT  
 WSCF

**Matrix:** SOIL

**Group #:** WSCF20071129  
**Department:** Radiochemistry  
**Sampled:** 07/02/07  
**Received:** 07/02/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415		2.00	pCi/g	+0.580	pCi/g	1.00	0.48		07/18/07
Gross beta	12587-47-2	LA-508-415		1.30	pCi/g	+0.598	pCi/g	1.00	0.90		07/18/07

**MDL=Minimum Detection Limit**      U - Analyzed for but not detected above limiting criteria(inorg)

**RQ=Result Qualifier**

**TP Err=Total Propagated Error**

**DF=Dilution Factor**

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F07-050  
**Sample #** W07GR01670  
**Client ID:** B1NWF7

TRENT  
 WSCF

**Matrix:** SOIL

**Group #:** WSCF20071129  
**Department:** Radiochemistry  
**Sampled:** 07/02/07  
**Received:** 07/02/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415		5.10	pCi/g	+ -1.28	pCi/g	1.00	0.88		07/18/07
Gross beta	12587-47-2	LA-508-415		3.90	pCi/g	+ -1.25	pCi/g	1.00	1.7		07/18/07

**MDL = Minimum Detection Limit**      U - Analyzed for but not detected above limiting criteria(inorg)

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

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Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF ANALYTICAL RESULTS REPORT

**Attention:** Steve Trent  
**SAF Number:** F07-050  
**Sample #** W07GR01671  
**Client ID:** B1NWF8

TRENT  
 WSCF

**Matrix:** SOIL

**Group #:** WSCF20071129  
**Department:** Radiochemistry  
**Sampled:** 07/02/07  
**Received:** 07/02/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415		1.60	pCi/g	+0.544	pCi/g	1.00	0.49		07/18/07
Gross beta	12587-47-2	LA-508-415		1.00	pCi/g	+0.600	pCi/g	1.00	0.93		07/18/07

**MDL = Minimum Detection Limit**

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

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

\* - 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:** F07-050  
**Sample #** W07GR01672  
**Client ID:** B1NWF9

TRENT  
WSCF

**Matrix:** SOIL

**Group #:** WSCF20071129  
**Department:** Radiochemistry  
**Sampled:** 07/02/07  
**Received:** 07/02/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
<b>Gross Alpha/Gross Beta (AB32)</b>											
Gross alpha	12587-46-1	LA-508-415		1.30	pCi/g	+ -0.494	pCi/g	1.00	0.50		07/18/07
Gross beta	12587-47-2	LA-508-415	U	0.580	pCi/g	+ -0.574	pCi/g	1.00	0.94		07/18/07

**MDL = Minimum Detection Limit**    U - Analyzed for but not detected above limiting criteria(inorg)

**RQ = Result Qualifier**

**TP Err = Total Propagated Error**

**DF = Dilution Factor**

\* - Indicates results that have NOT been validated;    + - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

# WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20071129  
 Matrix: SOLID  
 Test: Gross Alpha/Gross Beta (AB32)

Sample Date: 07/02/07  
 Receive Date: 07/02/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
---------	---------	-------	----------	----------	-------	-------------	-------------	--------	-----------	----	---------------

Lab ID: W07GR01666  
**BATCH QC ASSOCIATED WITH SAMPLE**

DUP	Gross alpha	12587-46-1	1.8		RPD			25.000	20.000		07/18/07
DUP	Gross beta	12587-47-2	U8.4E-01		RPD			n/a	20.000		07/18/07

**BATCH QC**

BLANK	Gross alpha	12587-46-1	U1.5E-01	n/a	pCi/g	-10.000	10.000				07/18/07
BLANK	Gross beta	12587-47-2	U-6.2E-01	n/a	pCi/g	-10.000	10.000				07/18/07
LCS	Gross alpha	12587-46-1	7.22	93.282	% Recov	80.000	120.000				07/18/07
LCS	Gross beta	12587-47-2	24.3	108.337	% Recov	80.000	120.000				07/18/07

# WSCF ANALYTICAL COMMENT REPORT

**Attention:** Steve Trent  
**Project Number** F07-050

**Group #:** WSCF20071129  
**Department:** Radiochemistry

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		W07GR01666-1672/Gross alpha duplicate is flagged for poor RPD however, the sample activity is low level. RPD doesn't apply to low level samples. lmh

**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-07-519

ATTACHMENT 4

**SAMPLE RECEIPT INFORMATION**

Consisting of 9 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*  
*08/16/07*  
*taf*

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354  
Attn: Steve Trent

Customer Code: GPP  
PO#: 122510/ES10  
Group#: 20071129  
Project#: F07-050  
Proj Mgr: Steve Trent E6-35  
Phone: 373-5869

The following samples were received from you on 07/02/07. 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
W07GR01666	B1NWF3	TRENT @AB-32	Solid, or handle as if solid	07/02/07
W07GR01667	B1NWF4	TRENT @AB-32	Solid, or handle as if solid	07/02/07
W07GR01668	B1NWF5	TRENT @AB-32	Solid, or handle as if solid	07/02/07
W07GR01669	B1NWF6	TRENT @AB-32	Solid, or handle as if solid	07/02/07
W07GR01670	B1NWF7	TRENT @AB-32	Solid, or handle as if solid	07/02/07
W07GR01671	B1NWF8	TRENT @AB-32	Solid, or handle as if solid	07/02/07
W07GR01672	B1NWF9	TRENT @AB-32	Solid, or handle as if solid	07/02/07

Test Acronym Description

Test Acronym	Description
@AB-32	Gross Alpha/Gross Beta (AB32)

COLLECTOR <i>R Pfister</i> 20071129	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C5390 <i>HR3 07-007</i>	PROJECT DESIGNATION 100-D Area Chromium Plume Source Investigation - Waste Designation		SAF NO. F07-050	AIR QUALITY <input type="checkbox"/>	

ICE CHEST NO.	FIELD LOGBOOK NO.	COA 122510E510	METHOD OF SHIPMENT GOVERNMENT VEHICLE		
---------------	-------------------	-------------------	--	--	--

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

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	<b>PRESERVATION</b>	None												
		<b>TYPE OF CONTAINER</b>	P												
		<b>NO. OF CONTAINER(S)</b>	1												
		<b>VOLUME</b>	120mL												
<b>SPECIAL HANDLING AND/OR STORAGE</b> Depth of interest ~ 86 ft		<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;												

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME											
B1NWF3 <i>WJ 7601666</i>	SOIL	7-2-07	1108	-										

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM <i>R Pfister</i>	DATE/TIME 7/2/07 1330	RECEIVED BY/STORED IN <i>TA PRAZIER</i>	DATE/TIME 7/2/07 1330		
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		
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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<b>COLLECTOR</b> R Pfister		<b>COMPANY CONTACT</b> TRENT, SJ		<b>TELEPHONE NO.</b> 373-5869		<b>PROJECT COORDINATOR</b> TRENT, SJ		<b>PRICE CODE</b> 8N		<b>DATA TURNAROUND</b>	
<b>SAMPLING LOCATION</b> C5391 HR3-07-005		<b>PROJECT DESIGNATION</b> 100-D Area Chromium Plume Source Investigation - Waste Designation				<b>SAF NO.</b> F07-050		<b>AIR QUALITY</b> <input type="checkbox"/>		45 Days / 45 Days	
<b>ICE CHEST NO.</b>		<b>FIELD LOGBOOK NO.</b>		<b>COA</b> 122510ES10		<b>METHOD OF SHIPMENT</b> GOVERNMENT VEHICLE					

<b>SHIPPED TO</b> Waste Sampling & Characterization				<b>OFFSITE PROPERTY NO.</b> N/A				<b>BILL OF LADING/AIR BILL NO.</b> N/A			
--	--	--	--	------------------------------------	--	--	--	---	--	--	--

<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	<b>PRESERVATION</b>	None									
		<b>TYPE OF CONTAINER</b>	P									
		<b>NO. OF CONTAINER(S)</b>	1									
		<b>VOLUME</b>	120mL									
<b>SPECIAL HANDLING AND/OR STORAGE</b> Depth of Interest ~ 86 ft		<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;									

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME								
B1NWF4	1667 SOIL	7-2-7	1112	✓							

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
R. Pfister	7/2/07 1330	TA FROZIER	7/2/07 1330		
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		

<b>LABORATORY SECTION</b>	<b>RECEIVED BY</b>	<b>TITLE</b>	<b>DATE/TIME</b>
<b>FINAL SAMPLE DISPOSITION</b>	<b>DISPOSAL METHOD</b>	<b>DISPOSED BY</b>	<b>DATE/TIME</b>

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COLLECTOR <i>R Pfister</i>	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C5392 <i>HR3-07-011</i>	PROJECT DESIGNATION 100-D Area Chromium Plume Source Investigation - Waste Designation		SAF NO. F07-050	AIR QUALITY <input type="checkbox"/>	

ICE CHEST NO.	FIELD LOGBOOK NO.	COA 122510ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE		
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SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A			
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<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	<b>PRESERVATION</b>	None																	
		<b>TYPE OF CONTAINER</b>	P																	
		<b>NO. OF CONTAINER(S)</b>	1																	
		<b>VOLUME</b>	120mL																	
<b>SPECIAL HANDLING AND/OR STORAGE</b> Depth of Interest ~ 88 ft		<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;																	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																
B1NWF5	<i>1668</i>	SOIL	<i>7-2-7</i>	<i>1118</i>	<i>✓</i>														

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
<i>R. Pfister</i>	<i>7/2/07</i>	<i>TA FRAZIER</i>	<i>7/2/07 1330</i>	
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 <i>R Pfister</i>		COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 8N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C5394 <i>HR3-07-010</i>		PROJECT DESIGNATION 100-D Area Chromium Plume Source Investigation - Waste Designation		SAF NO. F07-050	AIR QUALITY <input type="checkbox"/>	
ICE CHEST NO.		FIELD LOGBOOK NO.	COA 122510ES10	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 WT=Wipe X=Other	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	PRESERVATION None																		
		TYPE OF CONTAINER P																		
		NO. OF CONTAINER(S) 1																		
	VOLUME 120mL																			
<b>SPECIAL HANDLING AND/OR STORAGE</b> Depth of Interest ~ 88 ft		SAMPLE ANALYSIS	Gross Alpha; Gross Beta;																	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																	
B1NWF6	1669 SOIL	7-2-7	1121	✓																

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
<i>R. Pfister</i>	<i>7/2/07 1330</i>	<i>JA FORZIER</i>	<i>7/2/07 1830</i>	
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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<b>COLLECTOR</b> K Pfister	<b>COMPANY CONTACT</b> TRENT, SJ	<b>TELEPHONE NO.</b> 373-5869	<b>PROJECT COORDINATOR</b> TRENT, SJ	<b>PRICE CODE</b> 8N	<b>DATA TURNAROUND</b> 45 Days / 45 Days
<b>SAMPLING LOCATION</b> C5398 H-23-07-026	<b>PROJECT DESIGNATION</b> 100-D Area Chromium Plume Source Investigation - Waste Designation		<b>SAF NO.</b> F07-050	<b>AIR QUALITY</b> <input type="checkbox"/>	

<b>ICE CHEST NO.</b>	<b>FIELD LOGBOOK NO.</b>	<b>COA</b> 122510ES10	<b>METHOD OF SHIPMENT</b> GOVERNMENT VEHICLE		
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<b>SHIPPED TO</b> Waste Sampling & Characterization	<b>OFFSITE PROPERTY NO.</b> N/A	<b>BILL OF LADING/AIR BILL NO.</b> N/A			
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<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	<b>PRESERVATION</b>	None																	
		<b>TYPE OF CONTAINER</b>	P																	
		<b>NO. OF CONTAINER(S)</b>	1																	
		<b>VOLUME</b>	120mL																	
		<b>SPECIAL HANDLING AND/OR STORAGE</b> Depth of Interest ~ 91.5 ft	<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;																

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																
B1NWF7 1670	SOIL	7-2-07	1125	✓															

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	
R. PEISER / 11/20/07	1330	TA FRAZIER James Frazier	7/2/07 1330	
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	

<b>LABORATORY SECTION</b>	<b>RECEIVED BY</b>	<b>TITLE</b>	<b>DATE/TIME</b>
<b>FINAL SAMPLE DISPOSITION</b>	<b>DISPOSAL METHOD</b>	<b>DISPOSED BY</b>	<b>DATE/TIME</b>

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<b>COLLECTOR</b> R Pfister	<b>COMPANY CONTACT</b> TRENT, SJ	<b>TELEPHONE NO.</b> 373-5869	<b>PROJECT COORDINATOR</b> TRENT, SJ	<b>PRICE CODE</b> 8N	<b>DATA TURNAROUND</b> 45 Days / 45 Days
<b>SAMPLING LOCATION</b> CS399 HR3-07-028	<b>PROJECT DESIGNATION</b> 100-D Area Chromium Plume Source Investigation - Waste Designation		<b>SAF NO.</b> F07-050	<b>AIR QUALITY</b> <input type="checkbox"/>	

<b>ICE CHEST NO.</b>	<b>FIELD LOGBOOK NO.</b>	<b>COA</b> 122510ES10	<b>METHOD OF SHIPMENT</b> GOVERNMENT VEHICLE		
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<b>SHIPPED TO</b> Waste Sampling & Characterization	<b>OFFSITE PROPERTY NO.</b> N/A	<b>BILL OF LADING/AIR BILL NO.</b> N/A			
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<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	<b>PRESERVATION</b>	None																	
		<b>TYPE OF CONTAINER</b>	P																	
		<b>NO. OF CONTAINER(S)</b>	1																	
		<b>VOLUME</b>	120mL																	
<b>SPECIAL HANDLING AND/OR STORAGE</b> Depth of Interest ~ 89 ft		<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;																	

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME																
B1NWF8	1671 SOIL	7-2-7	1105	/															

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
R. Pfister / PPM	7/2/07 1330	TA FIAZIER	7/2/07 1330		
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		

<b>LABORATORY SECTION</b>	<b>RECEIVED BY</b>	<b>TITLE</b>	<b>DATE/TIME</b>
<b>FINAL SAMPLE DISPOSITION</b>	<b>DISPOSAL METHOD</b>	<b>DISPOSED BY</b>	<b>DATE/TIME</b>

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<b>COLLECTOR</b> R Pfister		<b>COMPANY CONTACT</b> TRENT, SJ		<b>TELEPHONE NO.</b> 373-5869		<b>PROJECT COORDINATOR</b> TRENT, SJ		<b>PRICE CODE</b> 8N		<b>DATA TURNAROUND</b> 45 Days / 45 Days	
<b>SAMPLING LOCATION</b> CS400 HR3-07-036		<b>PROJECT DESIGNATION</b> 100-D Area Chromium Plume Source Investigation - Waste Designation				<b>SAF NO.</b> F07-050		<b>AIR QUALITY</b> <input type="checkbox"/>			
<b>ICE CHEST NO.</b>		<b>FIELD LOGBOOK NO.</b>		<b>COA</b> 122510ES10		<b>METHOD OF SHIPMENT</b> GOVERNMENT VEHICLE					

<b>SHIPPED TO</b> Waste Sampling & Characterization				<b>OFFSITE PROPERTY NO.</b> N/A				<b>BILL OF LADING/AIR BILL NO.</b> N/A			
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<b>MATRIX*</b> 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	<b>POSSIBLE SAMPLE HAZARDS/ REMARKS</b> Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)	<b>PRESERVATION</b>	None											
		<b>TYPE OF CONTAINER</b>	P											
		<b>NO. OF CONTAINER(S)</b>	1											
		<b>VOLUME</b>	120mL											
<b>SPECIAL HANDLING AND/OR STORAGE</b> Depth of Interest ~ 89 ft		<b>SAMPLE ANALYSIS</b>	Gross Alpha; Gross Beta;											

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1NWF9 1672	SOIL	7-2-7	1115	/									

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
R. PFISTER	7/2/07 1330	J. RAZI	7/2/07 1330		
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		

<b>LABORATORY SECTION</b>	<b>RECEIVED BY</b>	<b>TITLE</b>	<b>DATE/TIME</b>
<b>FINAL SAMPLE DISPOSITION</b>	<b>DISPOSAL METHOD</b>	<b>DISPOSED BY</b>	<b>DATE/TIME</b>

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