

RECEIVED APRIL 22, 2008

Fluor Hanford
WSCF Analytical Lab
P.O. Box 1000
Richland, WA 99352
Telephone 373-7495
Telefax 372-0456

FLUOR

Memorandum

To: H. Hampt E6-35 Date: M4W41-SLF-08-423
April 22, 2008

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

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

Subject: RDRs #R4741 (SDG WSCF 20080118) AND #R4742 (SDG WSCF 20080126) – SAMPLE DELIVERY GROUP WSCF 20080730, SAF NUMBER F07-075

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

On March 25, 2008, RDRs #R4741 and #R4742 were received by the WSCF Laboratory.

This letter contains the following information for sample delivery group WSCF20080730:

- Cover Sheet (Attachment 1)
- Analytical Results (Attachment 2)
- Sample Receipt Acknowledgement (Attachment 3)
- Recheck, Recount or Reanalysis Orders #R4741 and #R4742, dated March 25, 2008 (Attachment 4)

Carbon Tetrachloride was re-analyzed with little or no change from the initial analytical results.

SLF/grf

Attachments 4

RECEIVED
DEC 16 2008
EDMC

M4W41-SLF-08-423

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20080730
Data Deliverable Date: 21-apr-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F07-075	B1PM55	W08GR00935	WATER
	B1PM56	W08GR00934	WATER

M4W41-SLF-08-423

ATTACHMENT 2

ANALYTICAL RESULTS

Consisting of 10 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical:

S. Fitzgerald 4/22/08

Client Services:

John Tredeator 4/21/08

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#: WSCF20080730

Report Date: 21-apr-2008

Report WGPP/ver. 5.2

Groundwater Remediation Program

W13q Worklist/Batch/QC Report for Group# WSCF20080730

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
			40746	BLANK		VOA Ground Water Protection
			40746	LCS		VOA Ground Water Protection
			40746	MS	W08GR00934	VOA Ground Water Protection
			40746	MSD	W08GR00934	VOA Ground Water Protection
			40746	SAMPLE	W08GR00934	VOA Ground Water Protection
			40746	SPK-RPD	W08GR00934	VOA Ground Water Protection
			40746	SURR	W08GR00934	VOA Ground Water Protection
			40746	SAMPLE	W08GR00935	VOA Ground Water Protection
			40746	SURR	W08GR00935	VOA Ground Water Protection

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: 21-apr-2008
Report#: WSCF20080730
Report WGPPM/5.2

Page 1

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F07-075
Sample # W08GR00934
Client ID: B1PM56

VOA RERUN
 WSCF

Matrix: WATER

Group #: WSCF20080730
Department: Organic
Sampled: 01/22/08
Received: 01/22/08

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		04/14/08
Trichloroethene	79-01-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		04/14/08
Benzene	71-43-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		04/14/08
Toluene	108-88-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		04/14/08
Chlorobenzene	108-90-7	LA-523-455	U	< 1.00	ug/L			1.00	1.0		04/14/08
Carbon tetrachloride	56-23-5	LA-523-455		14.0	ug/L			1.00	1.0		04/14/08

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

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: F07-075
Sample # W08GR00935
Client ID: B1PM55

VOA RERUN
 WSCF

Matrix: WATER

Group #: WSCF20080730
Department: Organic
Sampled: 01/18/08
Received: 01/22/08

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		04/14/08
Trichloroethene	79-01-6	LA-523-455	U	< 1.00	ug/L			1.00	1.0		04/14/08
Benzene	71-43-2	LA-523-455	U	< 1.00	ug/L			1.00	1.0		04/14/08
Toluene	108-88-3	LA-523-455	U	< 1.00	ug/L			1.00	1.0		04/14/08
Chlorobenzene	108-90-7	LA-523-455	U	< 1.00	ug/L			1.00	1.0		04/14/08
Carbon tetrachloride	56-23-5	LA-523-455		42.0	ug/L			1.00	1.0		04/14/08

MDL=Minimum Detection Limit

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

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 COMMENT REPORT

Attention: Steve Trent
Project Number F07-075

Group #: WSCF20080730
Department: Organic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		VOA: Samples B1PM55, B1PM56 logged for VOA (re)analysis on 4/4/08, hence the holding time exceedance on these samples. gar

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

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

This report may not be reproduced, except in its entirety without the written approval of the WSCF Laboratory.

WSCF
TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number F07-075 :F07-075

Group #: WSCF20080730
Department: Organic

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GR00935	B1PM55	VOA RERUN	VOA Ground Water Protection	SMP 13.487 Chloroform	67-66-3	13.48726	1.5	ug/L

RQ=Result Qualifier

This report may not be reproduced, except in its entirety without the written approval of the WSCF Laboratory.

Groundwater Remediation Program

WGPE v 5.2 Report #: WSCF20080730 Report Date: 21-apr-2008

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20080730
 Matrix: WATER
 Test: VOA Ground Water Protection

Sample Date: 01/22/08
 Receive Date: 01/22/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR00934											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	1,1-Dichloroethene	75-35-4	26.450	106.000	% Recov	63.000	117.000				04/14/08
MS	Benzene	71-43-2	23.240	93.000	% Recov	75.000	129.000				04/14/08
MS	4-Bromofluorobenzene(Surr)	460-00-4	48.160	96.300	% Recov	75.000	125.000				04/14/08
MS	Chlorobenzene	108-90-7	24.170	96.700	% Recov	79.000	119.000				04/14/08
MS	1,2-Dichloroethane-d4(Surr)	17060-07-0	57.340	115.000	% Recov	75.000	125.000				04/14/08
MS	Toluene-d8(Surr)	2037-26-5	47.620	95.200	% Recov	75.000	125.000				04/14/08
MS	Toluene	108-88-3	23.450	93.800	% Recov	76.000	120.000				04/14/08
MS	Trichloroethene	79-01-6	20.970	83.900	% Recov	73.000	123.000				04/14/08
MSD	1,1-Dichloroethene	75-35-4	24.260	97.000	% Recov	63.000	117.000				04/14/08
MSD	Benzene	71-43-2	23.290	93.200	% Recov	75.000	129.000				04/14/08
MSD	4-Bromofluorobenzene(Surr)	460-00-4	48.510	97.000	% Recov	75.000	125.000				04/14/08
MSD	Chlorobenzene	108-90-7	24.580	98.300	% Recov	79.000	119.000				04/14/08
MSD	1,2-Dichloroethane-d4(Surr)	17060-07-0	55.940	112.000	% Recov	75.000	125.000				04/14/08
MSD	Toluene-d8(Surr)	2037-26-5	47.680	95.400	% Recov	75.000	125.000				04/14/08
MSD	Toluene	108-88-3	23.440	93.800	% Recov	76.000	120.000				04/14/08
MSD	Trichloroethene	79-01-6	20.600	82.400	% Recov	73.000	123.000				04/14/08
SPK-RPD	1,1-Dichloroethene	75-35-4	97.000		RPD			8.867	20.000		04/14/08
SPK-RPD	Benzene	71-43-2	93.200		RPD			0.215	20.000		04/14/08
SPK-RPD	Chlorobenzene	108-90-7	98.300		RPD			1.641	20.000		04/14/08
SPK-RPD	1,2-Dichloroethane-d4(Surr)	17060-07-0	112.000		RPD			2.643	20.000		04/14/08
SPK-RPD	Toluene-d8(Surr)	2037-26-5	95.400		RPD			0.210	20.000		04/14/08
SPK-RPD	Toluene	108-88-3	93.600		RPD			0.000	20.000		04/14/08
SPK-RPD	Trichloroethene	79-01-6	82.400		RPD			1.804	20.000		04/14/08
SURR	4-Bromofluorobenzene(Surr)	460-00-4	48.980	98.000	% Recov	75.000	125.000				04/14/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	56.750	114.000	% Recov	75.000	125.000				04/14/08
SURR	Toluene-d8(Surr)	2037-26-5	47.680	95.400	% Recov	75.000	125.000				04/14/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080730
 Matrix: WATER
 Test: VOA Ground Water Protection

Sample Date: 01/22/08
 Receive Date: 01/22/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR00935											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	4-Bromofluorobenzene(Surr)	460-00-4	48.770	97.500	% Recov	75.000	125.000				04/14/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	55.460	111.000	% Recov	75.000	125.000				04/14/08
SURR	Toluene-d8(Surr)	2037-26-5	48.870	97.700	% Recov	75.000	125.000				04/14/08
BATCH QC											
BLANK	1,1-Dichloroethene	75-35-4	< 1.0	n/a	ug/L					U	04/14/08
BLANK	Benzene	71-43-2	< 1.0	n/a	ug/L					U	04/14/08
BLANK	4-Bromofluorobenzene(Surr)	460-00-4	50.510	101.000	% Recov	75.000	125.000				04/14/08
BLANK	Carbon tetrachloride	56-23-5	< 1.0	n/a	ug/L					U	04/14/08
BLANK	Chlorobenzene	108-90-7	< 1.0	n/a	ug/L					U	04/14/08
BLANK	1,2-Dichloroethane-d4(Surr)	17060-07-0	59.620	119.000	% Recov	75.000	125.000				04/14/08
BLANK	Toluene-d8(Surr)	2037-26-5	48.260	96.500	% Recov	75.000	125.000				04/14/08
BLANK	Toluene	108-88-3	< 1.0	n/a	ug/L					U	04/14/08
BLANK	Trichloroethene	79-01-6	< 1.0	n/a	ug/L					U	04/14/08
LCS	1,1-Dichloroethene	75-35-4	25.610	102.000	% Recov	75.000	125.000				04/14/08
LCS	Benzene	71-43-2	24.640	98.600	% Recov	75.000	125.000				04/14/08
LCS	4-Bromofluorobenzene(Surr)	460-00-4	49.600	99.200	% Recov	75.000	125.000				04/14/08
LCS	Chlorobenzene	108-90-7	24.280	97.100	% Recov	75.000	125.000				04/14/08
LCS	1,2-Dichloroethane-d4(Surr)	17060-07-0	51.380	103.000	% Recov	75.000	125.000				04/14/08
LCS	Toluene-d8(Surr)	2037-26-5	48.470	96.900	% Recov	75.000	125.000				04/14/08
LCS	Toluene	108-88-3	24.140	96.600	% Recov	75.000	125.000				04/14/08
LCS	Trichloroethene	79-01-6	22.020	88.100	% Recov	75.000	125.000				04/14/08

M4W41-SLF-08-423

ATTACHMENT 3

SAMPLE RECEIPT ACKNOWLEDGEMENT

Consisting of 2 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
04/21/08
ted

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 122590/ES10
Group#: 20080730
Project#: F07-075
Proj Mgr: STEVE TRENT E6-35
Phone: 373-5869

The following samples were received from you on 01/22/08. 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
W08GR00934	B1PM56	VOA RERUN @VOA-GPP	Water	01/22/0
W08GR00935	B1PM55	VOA RERUN @VOA-GPP	Water	01/18/0

Test Acronym Description

Test Acronym	Description
@VOA-GPP	VOA Ground Water Protection

M4W41-SLF-08-423

ATTACHMENT 4

RECHECK, RECOUNT OR REANALYSIS ORDERS

Consisting of 3 pages
Including cover page

03/25/2008
RECHECK, RECOUNT, OR REANALYSIS ORDER
CONTRACT NO MW6-SBB-A19981

Waste Sampling &
600 AREA Hanford, MSIN
Richland, WA 99352

*Rerun
20080730
[Signature]*

Battelle PNNL Order Number: 080325WSCF-R4741

Sample Delivery Group: WSCF20080118

Special Instructions None

Samples(s)

Lab Sample ID	PNNL Sample	Action	TAT	METHOD_NAME:
W08GR00126	B1PM56	Recheck Reanalysis	15/15	8260_VOA_GCMS W08GR0093

WSCF Response

- Sample was rechecked and no anomalies identified. Compliant to client request the sample will be scheduled for re-analysis.

Deliver Report Results to: Fluor Hanford, Inc.
1200 Jadwin Ave.
Richland, WA 99352
C/O Mr. Steve Trent

The report results must reference the Battelle PNNL-order number, SDG number, and the Battelle PNNL sample identification number shown above.

03/25/2008
RECHECK, RECOUNT, OR REANALYSIS ORDER
CONTRACT NO MW6-SBB-A19981

**Waste Sampling &
600 AREA Hanford, MSIN
Richland, WA 99352**

Battelle PNNL Order Number: 080325WSCF-R4742

Sample Delivery Group: WSCF20080126

Special Instructions None

Samples(s)

Lab Sample ID	PNNL Sample	Action	TAT	METHOD_NAME:
W08GR00128	B1PM55	Recheck Reanalysis	15/15	8260_VOA_GCMS W08GR0093

WSCF Response

- Sample was rechecked and no anomalies identified. Compliant to client request the sample will be scheduled for re-analysis.

Deliver Report Results to: Fluor Hanford, Inc.
1200 Jadwin Ave.
Richland, WA 99352
C/O Mr. Steve Trent

The report results must reference the Battelle PNNL order number, SDG number, and the Battelle PNNL sample identification number shown above.