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FLUOR[®]

M4W41-SLF-09-099

March 2, 2009

Mr. M. A. Neely, Manager
 Analytical Services
 CH2M HILL Plateau Remediation Contract
 PO Box 1600 MSIN R3-60
 Richland, WA 99352

RECEIVED
 APR 06 2009

EDMC

Dear Mike:

RDRs #R5405 & R5411 RESULTS FOR SAMPLE DELIVERY GROUP WSCF20090092 - SAF
 NUMBER F08-043

References: (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

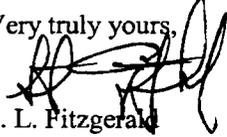
On January 22, 2009, RDRs #R5405 & R5411 were received by the WSCF Laboratory. This letter
 contains the following RDR data for sample delivery group WSCF20090092:

- RDRs #R5405 & R5411 (Attachment 1)
- Analytical Results (Attachment 2)
- Sample Receipt Acknowledgement (Attachment 3)

Reanalysis was requested to improve the detection limits for Pu and Am. The samples were retrieved
 from the archive and new digests were prepared using increased amounts of sample. Results obtained
 for Pu and Am showed a significant improvement in the detection limit. The small quantity of
 sample used in the initial work was due to the significant beta activity present.

Please accept our apology for any inconvenience this may have created. If you have any questions,
 don't hesitate to call on Pauline Mix, telephone 372-1488, for assistance.

Very truly yours,


 S. L. Fitzgerald
 WSCF Analytical Lab

SLF/grf

Attachments 3

cc: w/Attachments

T. F. Dale	S3-30	J. E. Trechter	S3-30
A. J. Kopriva	S3-30	S. J. Trent	B6-06
H. K. Mezmarich	S3-30	File/LB	
P. D. Mix	S3-30		

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ATTACHMENT 1

RDR #R5405 & R5411

Consisting of 3 pages
Including cover page

01/22/2009
RECHECK, RECOUNT, OR REANALYSIS ORDER
CONTRACT NO MW6-SBB-A19981

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

Battelle PNNL Order Number: 090115WSCF-R5405
Sample Delivery Group: WSCF20080801 (**WSCF20090092**)
Special Instructions None

Samples(s)

Lab Sample ID	PNNL Sample	Action	TAT	METHOD_NAME:
W08GR01037	B1TV19	Recheck Reanalysis	15/15	PUISO_IE_PRECIP_A
W08GR01037	B1TV19	Reanalysis	15/15	AMCMISO_IE_PRES_A

WSCF Response

Sample was re-analyzed and report submitted to client.

Deliver Report Results to: CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop - B6-06
Richland, WA 99352
C/O Mr. Mike Neely

01/22/2009
RECHECK, RECOUNT, OR REANALYSIS ORDER
CONTRACT NO MW6-SBB-A19981

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

Battelle PNNL Order Number: 090121WSCF-R5411

Sample Delivery Group: WSCF20080801 (**WSCF20090092**)

Special Instructions Reanalyze with larger sample size if possible.

Samples(s)

Lab Sample ID	PNNL Sample	Action	TAT	METHOD_NAME:
W08GR01036	B1TV15	Reanalysis	15/15	PUISO_IE_PRECIP_A
W08GR01036	B1TV15	Reanalysis	15/15	AMCMISO_IE_PREC_A

WSCF Response

Sample was re-analyzed and report submitted to client.

Deliver Report Results to:CH2M Hill Plateau Remediation Company
P.O. Box 1600
Mail Stop - B6-06
Richland, WA 99352
C/O Mr. Mike Neely

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ATTACHMENT 2

ANALYTICAL RESULTS

Consisting of 6 pages
Including cover page

WSCF ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-043
Sample # W09GR00060
Client ID: BITV15

PU RERUN
 WSCF

Matrix: SOIL

Group #: WSCF20090092
Department: Radiochemistry
Sampled: 03/11/08
Received: 04/15/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Americium by AEA											
Americium-241	14596-10-2	LA-508-471	U	0.0330	pCi/g	+0.0323	pCi/g	1.00	0.050		02/26/09
Am-243 tracer by AEA	AM243	LA-508-471		3.90	pCi/g			1.00	0.016		02/26/09
Plutonium Isotopics by AEA											
Plutonium-238	13981-16-3	LA-508-471	U	0.0180	pCi/g	+0.0367	pCi/g	1.00	0.064		02/13/09
Pu-239/240 by AEA	PU-239/240	LA-508-471		0.130	pCi/g	+0.0468	pCi/g	1.00	5.6e-03		02/13/09
Pu-242	13982-10-0	LA-508-471		6.10	pCi/g			1.00	0.019		02/13/09

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: F08-043
Sample # W09GR00061
Client ID: B1TV19

PU RERUN
 WSCF

Matrix: SOIL

Group #: WSCF20090092
Department: Radiochemistry
Sampled: 03/12/08
Received: 04/15/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Americium by AEA											
Americium-241	14596-10-2	LA 508-471		0.0810	pCi/g	+ -0.0421	pCi/g	1.00	0.050		02/26/09
Am-243 tracer by AEA	AM243	LA-508-471		3.90	pCi/g			1.00	0.026		02/26/09
Plutonium Isotopics by AEA											
Plutonium-238	13981-16-3	LA-508-471	U	0.0140	pCi/g	+ -0.0283	pCi/g	1.00	0.047		02/13/09
Pu-239/240 by AEA	PU-239/240	LA-508-471		0.330	pCi/g	+ -0.0957	pCi/g	1.00	0.013		02/13/09
Pu-242	13982-10-0	LA-508-471		6.00	pCi/g			1.00	0.013		02/13/09

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

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20090092
 Matrix: SOLID
 Test: Americium by AEA

Sample Date: 03/11/08
 Receive Date: 04/15/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W09GR00060 BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Am-243 tracer by AEA	AM243	3.93	88.840	% Recov	30.000	105.000				02/26/09
Lab ID: W09GR00061 BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Am-243 tracer by AEA	AM243	3.876	94.640	% Recov	30.000	105.000				02/26/09
Lab ID: W09GR00065 BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Americium-241	14596-10-2	U6e-2		RPD			n/a	20.000		02/26/09
DUP	Am-243 tracer by AEA	AM243	9.981	96.450	% Recov	30.000	105.000				02/26/09
BATCH QC											
BLANK	Americium-241	14596-10-2	U1.1e-2	n/a	pCi/g	-10.000	1000.000				02/26/09
BLANK	Am-243 tracer by AEA	AM243	4.001	74.550	% Recov	30.000	105.000				02/26/09
LCS	Americium-241	14596-10-2	12.96	100.895	% Recov	80.000	120.000				02/26/09
LCS	Am-243 tracer by AEA	AM243	11.1	84.580	% Recov	30.000	105.000				02/26/09

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20090092
 Matrix: SOLID
 Test: Plutonium Isotopics by AEA

Sample Date: 03/11/08
 Receive Date: 04/15/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W09GR00060											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Pu-242	13982-10-0	6.131	80.960	% Recov	30.000	105.000				02/13/09
Lab ID: W09GR00061											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Pu-242	13982-10-0	6.048	92.660	% Recov	30.000	105.000				02/13/09
Lab ID: W09GR00063											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Plutonium-238	13981-16-3	U5.5e-3		RPD			n/a	20.000		02/13/09
DUP	Pu-239/240 by AEA	PU-239/240	3.8e-2		RPD			37.500	20.000 •		02/13/09
DUP	Pu-242	13982-10-0	6.036	83.130	% Recov	30.000	105.000				02/13/09
BATCH QC											
BLANK	Plutonium-238	13981-16-3	U2.6e-2	n/a	pCi/g	-10.000	1000.000				02/13/09
BLANK	Pu-239/240 by AEA	PU-239/240	U-5.6e-3	n/a	pCi/g	-10.000	1000.000				02/13/09
BLANK	Pu-242	PU242	6.241	89.160	% Recov	30.000	105.000				02/13/09
LCS	Pu-239/240 by AEA	PU-239/240	13.55	105.489	% Recov	80.000	120.000				02/13/09
LCS	Pu-242	PU242	17.32	92.370	% Recov	30.000	105.000				02/13/09

WSCF ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-043

Group #: WSCF20090092
Department: Radiochemistry

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		Pu239 dup is flagged due to inhomogeneity of the sample.lmh

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.

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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

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 123215/ES20
Group#: 20090092
Project#: F08-043
Proj Mgr: Steve Trent E6-35
Phone: 373-5869

02/05/08
TJ
R5405
& R5411

The following samples were received from you on 04/15/08. 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
W09GR00060	B1TV15	PU RERUN @AEA-30 @AEA-31	Solid, or handle as if solid	03/11/08
W09GR00061	B1TV19	PU RERUN @AEA-30 @AEA-31	Solid, or handle as if solid	03/12/08

Test Acronym Description

Test Acronym	Description
@AEA-30	Plutonium Isotopics by AEA
@AEA-31	Americium by AEA