

**FINAL REPORT FOR THE SAMPLES RECEIVED IN
AUGUST, 2011, FOR SAF F11-146**

**Document No.: 20111495 Rev. 1
SDG: 222S20111495**

Julie A. Osborn
Advanced Technologies and Laboratories International, Inc.

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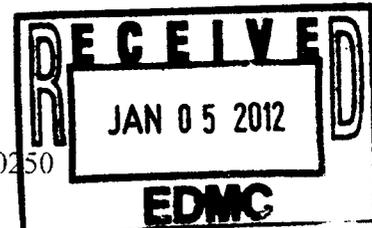
Prepared for:

Prepared by:



CH2M Hill Plateau Remediation Co.
P.O. Box 850
Richland, WA 99352

ATL, Inc.
P.O. Box 250
Richland, WA 99352-0250
509-372-2742




Gerald Ritenour, Project Manager

222-S LABORATORY**FINAL REPORT FOR THE SAMPLES RECEIVED IN SEPTEMBER, 2011,
FOR SAF F11-146****1.0 INTRODUCTION**

This is a reissued final report to correct a log-in error, which resulted in the incorrect reporting of total cyanide instead of gross alpha/beta.

This final report presents the result for the one solid sample taken on August 5, 2011. The sample was analyzed in accordance with Sampling Authorization Form (SAF) F11-146 and ATL-MP-1011; *ATL Quality Assurance Project Plan for 222-S Laboratory (QAPP)*. The following attachments are included in this report.

- Attachment 1 Data Summary Report
- Attachment 2 Holding Time Report
- Attachment 3 Receipt Paperwork
- Attachment 4 Correspondence

2.0 SAMPLE RECEIPT AND HANDLING

The sample was received on September 21, 2011, in good condition and with adequate paperwork.

3.0 ANALYTICAL RESULTS SUMMARY

The Data Summary Report (Attachment 1) present the final analytical results for those analytes requested in the SAF. The "Det Limit" column in Attachment 1 contains the method detection limit (MDL) for non-radionuclide analyses.

In Attachment 1, the column labeled "A#" indicates the aliquot class or the method used for sample preparation before analysis. For analysis without a preparation step, this column is left blank.

Manual calculations using rounded results from the Data Summary Report or result calculation forms may differ slightly from the actual results derived from the raw data.

4.0 TOTAL ALPHA/TOTAL BETA ANALYSIS

The total alpha/total beta analysis was performed on a acid digested subsample . All QC requirement in QAPP were met.

5.0 PROCEDURES

Table 1 lists the analytical procedure used for analysis of this sample.

Table 1. Analytical Procedures.

Analysis	Preparation Method	Analysis Procedure
Total Alpha/Total Beta	LA-508-101, Rev. N-0 LA-554-101, Rev. H-0	LA-508-114, Rev. G-0

6.0 REFERENCES

ATL-MP-1011, 2011, *ATL Quality Assurance Project Plan for 222-S Laboratory*, Rev. 10-A, Applied Technologies and Laboratories International, Inc., Richland, Washington.

Sampling Authorization Form F11-046; September, 2011, CH2M Hill, Plateau Remediation Company, Richland, Washington.

Attachment 1

DATA SUMMARY REPORT

WSCF Diversion 2011-09
 Data Summary of All Results

Sample Group: 20111495
 Customer Group or SDG Number: 222S20111495
 Customer Sample ID: B2FJL9
 Sample Portion: Total

Sample#	R	A#	CAS #	Analyte	Unit	STD %	Blank	Result	Duplicate	Average	RPD %	Spk Rec %	Det Limit	Cnt Err %	Qual Flags
S11M000515	E	12587-46-1		Gross alpha	uCi/g	104	<5.46E-07	<1.11E-06	<8.72E-07	n/a	n/a	105	1.11E-06	n/a	U
S11M000515	E	12587-47-2		Gross beta	uCi/g	105	<3.14E-06	<2.83E-06	<2.83E-06	n/a	n/a	122	2.83E-06	n/a	U

Attachment 2

HOLDING TIME REPORT

OCTOBER 14, 2011 REVISION 1

Sample Group	Sample	Matrix	Method	Prep Method	Sample Date	Received Date	Prep Date	Date	Holding Time Missed	Days Remaining
04/08/12 09:28 20111495	S11M000515	SOLID	ALPHA/BETA	ACID DIGEST	08/05/11 06:30	09/21/11 10:20	10/11/11 09:28	10/11/11 14:45	N	112.66

10/13/2011 13:54

holdtimereport 2.7.29

MissedHoldTime v 2.7.29

Attachment 3

RECEIPT PAPERWORK

ATL	SAMPLE RECEIPT AND CHAIN OF CUSTODY VERIFICATION CHECKLIST	LO-090-101 Rev <u>E.E.U</u>
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Date Samples Received: 9.21.11 Group #: 20111495 1, CN
 Number of Samples: 5, 50 L 1, 14 water SAF F11-146
 Sample Custodian: [Signature]

Sample Custodian to Complete:

Action	Yes	No	N/A	Comments
RSA COC provided?	✓			
RSR provided?	✓			
Verify GKI is complete	✓			<input type="checkbox"/> In Project File
Check that outer custody seal is intact, if present			✓	
Record cooler temperature in centigrade, as appropriate	3°C 3°C			<input type="checkbox"/> Check if no cooler and/or no ice
Samples are intact and in good condition	✓			If No, provide comments on back
Verify that COC or RSA is accurate and complete, containing the following information:				
• Client name and client sample number	✓			
• Date and time of sampling	✓			
• Sampling location or origin	✓			
• Container type, size, and number	✓			
• Preservatives (if used) are noted on the COC/RSA and sample bottle	✓			
• Analysis request is clear	✓			
• Signature of persons relinquishing and receiving samples	✓			
• Date and/or time of sample custody exchange	✓			
Verify that sample numbers on containers match the COC and/or RSA	✓			
Samples stored properly (e.g., refrigeration)	✓			

Notify the PM immediately if any problems are noted. (Any "No" checked requires Project Manager resolution.)

PM to Complete:

Samples acceptable for release? yes PM Initials [Signature] Date 9.21.11
 If No, comment on communication and resolution: G.P.R

Other Comments:

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST
 F11-146-067-~~7~~

PROJECT COORDINATOR
 LUKE, SN

COMPANY CONTACT
 LUKE, SN
 TELEPHONE NO.
 372-1667

PROJECT DESIGNATION
 183 KE/KW Water Treatment Plant - Concrete
 FIELD LOGBOOK NO.
 HNF-N507-23

PRICE CODE
 9C

SAF NO.
 F11-146

ACTUAL SAMPLE DEPTH
 N/A

DATA
 TURNAROUND
 15 Days / 15 Days

METHOD OF SHIPMENT
 GOVERNMENT VEHICLE

COA
 302472ES10

ORIGINAL

BILL OF LADING/AIR BILL NO.
 N/A

OFFSITE PROPERTY NO.
 N/A

222S
 GAP# 20111495
 SAM# S11M000515

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222S
 GAP# 20111495
 SAM# S11M000515

MATRIX*	PRESERVATION	HOLDING TIME	TYPE OF CONTAINER	NO. OF CONTAINER(S)	VOLUME	SAMPLE ANALYSIS	SAMPLE DATE	SAMPLE TIME
32FJL9	None	6 Months	G/P	1	250mL	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	AUG 05 2011	0630
	Cool~4C	28 Days/48 Hours	G/P	1	60mL	IC Anions - Chromium Hex. 7196; (Chloride, Sulfate);		
	None	6 Months	G/P	1	120mL	SEE ITEM (2) IN SPECIAL INSTRUCTIONS		

ELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	AUG 05 2011 0700	MG1109 SSG #1	AUG 05 2011 0700
ELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	8-31-11	FM Hall	8-31-11
ELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
FM Hall	8-31-11	Don Brotherton/CHPRC	8-31-11
ELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Don Brotherton/CHPRC	9-21-11 1000	Don Brotherton/CHPRC	9-21-11 1000
ELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
Don Brotherton/CHPRC	9-21-11 1020	Don Brotherton/CHPRC	9-21-11 1020

SPECIAL HANDLING AND/OR STORAGE
 113060 OTHER SOLID

SPECIAL INSTRUCTIONS
 ** The CACN for all analytical work at WSCF laboratory is 402114ES20. ** The 100 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
 (1) ICP/MS - 200.8 (TAL) {Antimony, Barium, Cadmium, Chromium, Cobalt, Copper, Manganese, Nickel, Silver, Vanadium, Zinc};
 ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Boron, Lead, Molybdenum, Selenium, Strontium, Tin, Uranium}; 200.8_HG - ICPMS {Mercury};
 (2) Gross Alpha {Gross alpha}; Gross Beta {Gross beta};
 306
 11/21/11

Attachment 4

CORRESPONDENCE

1. The data package has the following issues:

- a) Gross alpha and gross beta were requested but cyanide was reported.

Resolution: *Provide appropriate corrections*

Lab Response: *Reissue report with correct analysis*

Please correct the issue and resubmit the hard copy **and** electronic data package.