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Data Validation Report for CH2M Hill Plateau Remediation Company

VSR10-022
Project BP-5

Chemical & Radiochemical Validation - Level C

Validation Performed By: Carl Schlosser **Date:** 8-09-2010

Validation Reviewed By: Cheryl A. Schlosser **Date:** 8-09-2010

TABLE OF CONTENTS

Semivolatile Organics

Memorandum	1
Appendix 1 – Glossary of Data Reporting Qualifiers	5
Appendix 2 – Summary of Data Qualification	7
Appendix 3 – Annotated Laboratory Reports	9
Appendix 4 – Laboratory Narrative and Chain-of-Custody Documentation	20
Appendix 5 – Data Validation Supporting Documentation	40
Appendix 6 – Additional Documentation Requested By Client	45

PCBs and Pesticides

Memorandum	55
Appendix 1 – Glossary of Data Reporting Qualifiers	59
Appendix 2 – Summary of Data Qualification	61
Appendix 3 – Annotated Laboratory Reports	63
Appendix 4 – Laboratory Narrative and Chain-of-Custody Documentation	84
Appendix 5 – Data Validation Supporting Documentation	117
Appendix 6 – Additional Documentation Requested By Client	122

General Chemistry

Memorandum	138
Appendix 1 – Glossary of Data Reporting Qualifiers	145
Appendix 2 – Summary of Data Qualification	147
Appendix 3 – Annotated Laboratory Reports	149
Appendix 4 – Laboratory Narrative and Chain-of-Custody Documentation	244
Appendix 5 – Data Validation Supporting Documentation	338
Appendix 6 – Additional Documentation Requested By Client	344

Radiochemical

Memorandum	388
Appendix 1 – Glossary of Data Reporting Qualifiers	395
Appendix 2 – Summary of Data Qualification	397
Appendix 3 – Annotated Laboratory Reports	399
Appendix 4 – Laboratory Narrative and Chain-of-Custody Documentation	451
Appendix 5 – Data Validation Supporting Documentation	590
Appendix 6 – Additional Documentation Requested By Client	598

Date: 08 August 2010
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: BP-5
Subject: Semivolatile Organics - Sample Data Groups (SDGs) SL762 and WSCF20081478

INTRODUCTION

This memorandum presents the results of data validation for SDG SL762 prepared by TestAmerica and SDG WSCF20081478 prepared by WSCF. A list of samples validated along with the analytical methods is provided in the following table.

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B1X8M5	10/16/2008	Water	C	8040A
B1X8N6	10/16/2008	Water	C	8040A
B1X7V0	10/14/2008	Water	C	8040A
B1X801	10/16/2008	Water	C	8040A
B1X7P8	10/14/2008	Water	C	8040A
B1X7K7	10/14/2008	Water	C	8040A
B1X7V5	10/23/2008	Water	C	8040A
B1X7V6	10/23/2008	Water	C	8040A
B1W1B1	7/16/2008	Water	C	WTPH-D
B1W1B2	7/16/2008	Water	C	WTPH-D

Data validation was conducted in accordance with the CHPRC validation statement of work and the Remedial Investigation/Feasibility Study Work Plan for the 200-BP-5 Groundwater Operable Unit, DOE/RL-2007-18, Rev. 1 (SAP). Appendices 1 through 6 provide the following information as indicated below:

Appendix 1. Glossary of Data Reporting Qualifiers
Appendix 2. Summary of Data Qualification
Appendix 3. Annotated Laboratory Reports
Appendix 4. Laboratory Narrative and Chain-of-Custody Documentation
Appendix 5. Data Validation Supporting Documentation
Appendix 6. Additional Documentation Requested By Client

DATA QUALITY OBJECTIVES

- **Holding Times and Sample Preservation**

Holding times are calculated from Chain-of-Custody forms to determine the validity of the results. The holding time requirements for phenols in water are extraction within 7 days of sample collection and analysis within 40 days of sample extraction. Sample preservation requires addition of sodium thiosulfate and chilling to 4 degrees Celsius. The holding time requirements for WTPH-D are extraction within 14 days of sample collection and analysis within

40 days of sample extraction. Sample preservation requires chilling to 4 degrees Celsius and acid preservation with hydrochloric acid to pH <2.

The samples were extracted and analyzed within the prescribed holding times and properly preserved.

- **Blanks**

The blank data results are reviewed to assess the extent of contamination introduced through sampling, sample preparation, and analysis.

Laboratory Blanks

All laboratory blank results were acceptable.

Trip Blanks

No trip blanks were submitted for analysis.

Field Blanks

No field blanks were submitted for analysis.

Equipment Blanks

No equipment blanks were submitted for analysis.

- **Accuracy**

Accuracy is evaluated by reviewing surrogate results, matrix spike sample results, and laboratory control sample results. Phenol and TPH-D accuracy limits were not provided in the SAP. Therefore, the accuracy limits specified in the DV procedure were used for data validation.

Surrogates

All surrogate recoveries were acceptable.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

All MS/MSD recoveries were acceptable.

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable.

- **Precision**

Precision is evaluated by reviewing MS/MSD results, field duplicate sample results, and field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. Phenol and TPH-D precision limits were not provided in the SAP. Therefore, the precision limits specified in the DV procedure were used for data validation.

MS/MSD Samples

All MS/MSD relative percent difference (RPD) values were acceptable with the following exceptions.

For SDG SL762, batch 8294172, the 4,6-dinitro-2-methylphenol RPD was above the acceptance limit. The associated sample results were all non-detects and should be qualified as estimates and flagged "UJ." See the table in Appendix 2 for a listing of all affected sample results.

For SDG SL762, batch 8302135, the 4,6-dinitro-2-methylphenol, 2-nitrophenol, 4-nitrophenol, phenol and dinoseb RPDs were above the acceptance limits. The associated sample results were all non-detects and should be qualified as estimates and flagged "UJ." See the table in Appendix 2 for a listing of all affected sample results.

Field Duplicate Samples

All field duplicate results were acceptable.

Field Split Samples

No field splits were submitted for analysis.

- **Detection Limits**

Reported MDLs are compared against the contractually required detection limits (CRDLs) to ensure that laboratory detection limits meet the required criteria.

CRDLs for phenols and TPH-D were not provided in the SAP.

- **Completeness**

SDGs SL762 and WSCF20081478 were submitted for validation and verified for completeness. Completeness is based on the percentage of data determined to be valid (i.e., not rejected). The completion percentage was 100%.

MAJOR DEFICIENCIES

None found.

MINOR DEFICIENCIES

Minor deficiencies leading to qualification of sample results as estimates were due to MS/MSD precision infractions. See the table in Appendix 2 for a listing of all affected sample results.

REFERENCES

HNF-20433, Rev. 0, *Data Validation Procedure for Chemical Analyses*, June 2004.

DOE/RL-2007-18, Rev. 1, *Remedial Investigation/Feasibility Study Work Plan for the 200-BP-5 Groundwater Operable Unit*, December 2008.

Appendix 1

Glossary of Data Reporting Qualifiers

Qualifiers that may be applied by data validators in compliance with the CHPRC statement of work are as follows:

- **U** — The constituent was analyzed for and was not detected. The data should be considered usable for decision-making purposes.

- **UJ** — The constituent was analyzed for and was not detected. Due to a quality control deficiency identified during data validation the value reported may not accurately reflect the MDL. The data should be considered usable for decision-making purposes.

- **J** — Indicates the constituent was analyzed for and detected. The associated value is estimated due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **UR** — Indicates the constituent was analyzed for and not detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

- **R** — Indicates the constituent was analyzed for and detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

Appendix 2

Summary of Data Qualification

Semivolatile Organics Data Qualification Summary			
SDGs: SL762, WSCF20081478	Reviewer: AQA	Project: BP-5	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
4,6-Dinitro-2-methylphenol	UJ	B1X8M5, B1X8N6, B1X7V0, B1X801, B1X7P8, B1X7K7	Poor MS/MSD precision
4,6-Dinitro-2-methylphenol 2-Nitrophenol 4-Nitrophenol Phenol Dinoseb	UJ	B1X7V5, B1X7V6	Poor MS/MSD precision

Comments: None

Appendix 3

Annotated Laboratory Reports

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8M5

GC Semivolatiles

Lot-Sample #...: F8J170190-005 Work Order #...: K04A21AC Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08
Prep Date.....: 10/20/08 Analysis Date..: 11/07/08
Prep Batch #...: 8294172
Dilution Factor: 1 Method.....: SW846 8040A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
2-Chlorophenol		ND	5.0	ug/L	2.2
4-Chloro-3-methylphenol		ND	5.0	ug/L	2.4
3-Methylphenol & 4-Methylphenol		ND	5.0	ug/L	2.2
2-Methylphenol		ND	5.0	ug/L	2.2
2,4-Dichlorophenol		ND	5.0	ug/L	2.1
2,6-Dichlorophenol		ND	5.0	ug/L	2.1
2,4-Dimethylphenol		ND	5.0	ug/L	2.1
2,4-Dinitrophenol		ND	5.0	ug/L	2.4
4,6-Dinitro-2-methylphenol	UJ	ND	5.0	ug/L	2.2
Dinoseb		ND	5.0	ug/L	2.4
2-Nitrophenol		ND	5.0	ug/L	2.3
4-Nitrophenol		ND	5.0	ug/L	2.2
Pentachlorophenol		ND	5.0	ug/L	2.4
Phenol		ND	5.0	ug/L	2.3
2,3,4,6-Tetrachlorophenol		ND	5.0	ug/L	2.0
2,4,5-Trichlorophenol		ND	5.0	ug/L	2.2
2,4,6-Trichlorophenol		ND	5.0	ug/L	2.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	61	(44 - 110)
2-Fluorophenol	56	(37 - 96)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8N6

GC Semivolatiles

Lot-Sample #...: F8J170190-010 Work Order #...: K04CK1AC Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08
Prep Date.....: 10/20/08 Analysis Date..: 11/07/08
Prep Batch #...: 8294172
Dilution Factor: 1 Method.....: SW846 8040A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
2-Chlorophenol		ND	5.0	ug/L	2.2
4-Chloro-3-methylphenol		ND	5.0	ug/L	2.4
3-Methylphenol & 4-Methylphenol		ND	5.0	ug/L	2.2
2-Methylphenol		ND	5.0	ug/L	2.2
2,4-Dichlorophenol		ND	5.0	ug/L	2.1
2,6-Dichlorophenol		ND	5.0	ug/L	2.1
2,4-Dimethylphenol		ND	5.0	ug/L	2.1
2,4-Dinitrophenol		ND	5.0	ug/L	2.4
4,6-Dinitro-2-methylphenol	UJ	ND	5.0	ug/L	2.2
Dinoseb		ND	5.0	ug/L	2.4
2-Nitrophenol		ND	5.0	ug/L	2.3
4-Nitrophenol		ND	5.0	ug/L	2.2
Pentachlorophenol		ND	5.0	ug/L	2.4
Phenol		ND	5.0	ug/L	2.3
2,3,4,6-Tetrachlorophenol		ND	5.0	ug/L	2.0
2,4,5-Trichlorophenol		ND	5.0	ug/L	2.2
2,4,6-Trichlorophenol		ND	5.0	ug/L	2.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	61	(44 - 110)
2-Fluorophenol	55	(37 - 96)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7V0

GC Semivolatiles

Lot-Sample #...: F8J170190-015 Work Order #...: K04C81AC Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08
Prep Date.....: 10/20/08 Analysis Date..: 11/07/08
Prep Batch #...: 8294172
Dilution Factor: 1 Method.....: SW846 8040A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
2-Chlorophenol		ND	5.0	ug/L	2.2
4-Chloro-3-methylphenol		ND	5.0	ug/L	2.4
3-Methylphenol & 4-Methylphenol		ND	5.0	ug/L	2.2
2-Methylphenol		ND	5.0	ug/L	2.2
2,4-Dichlorophenol		ND	5.0	ug/L	2.1
2,6-Dichlorophenol		ND	5.0	ug/L	2.1
2,4-Dimethylphenol		ND	5.0	ug/L	2.1
2,4-Dinitrophenol		ND	5.0	ug/L	2.4
4,6-Dinitro-2-methylphenol	UJ	ND	5.0	ug/L	2.2
Dinoseb		ND	5.0	ug/L	2.4
2-Nitrophenol		ND	5.0	ug/L	2.3
4-Nitrophenol		ND	5.0	ug/L	2.2
Pentachlorophenol		ND	5.0	ug/L	2.4
Phenol		ND	5.0	ug/L	2.3
2,3,4,6-Tetrachlorophenol		ND	5.0	ug/L	2.0
2,4,5-Trichlorophenol		ND	5.0	ug/L	2.2
2,4,6-Trichlorophenol		ND	5.0	ug/L	2.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	58	(44 - 110)
2-Fluorophenol	54	(37 - 96)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X801

GC Semivolatiles

Lot-Sample #...: F8J170190-020 Work Order #...: K04DH1AC Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08
Prep Date.....: 10/20/08 Analysis Date..: 11/07/08
Prep Batch #...: 8294172
Dilution Factor: 1 Method.....: SW846 8040A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
2-Chlorophenol		ND	5.0	ug/L	2.2
4-Chloro-3-methylphenol		ND	5.0	ug/L	2.4
3-Methylphenol & 4-Methylphenol		ND	5.0	ug/L	2.2
2-Methylphenol		ND	5.0	ug/L	2.2
2,4-Dichlorophenol		ND	5.0	ug/L	2.1
2,6-Dichlorophenol		ND	5.0	ug/L	2.1
2,4-Dimethylphenol		ND	5.0	ug/L	2.1
2,4-Dinitrophenol		ND	5.0	ug/L	2.4
4,6-Dinitro-2-methylphenol	UJ	ND	5.0	ug/L	2.2
Dinoseb		ND	5.0	ug/L	2.4
2-Nitrophenol		ND	5.0	ug/L	2.3
4-Nitrophenol		ND	5.0	ug/L	2.2
Pentachlorophenol		ND	5.0	ug/L	2.4
Phenol		ND	5.0	ug/L	2.3
2,3,4,6-Tetrachlorophenol		ND	5.0	ug/L	2.0
2,4,5-Trichlorophenol		ND	5.0	ug/L	2.2
2,4,6-Trichlorophenol		ND	5.0	ug/L	2.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	60	(44 - 110)
2-Fluorophenol	52	(37 - 96)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7P8

GC Semivolatiles

Lot-Sample #...: F8J170190-026 Work Order #...: K04D31AC Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08
Prep Date.....: 10/20/08 Analysis Date..: 11/07/08
Prep Batch #...: 8294172
Dilution Factor: 1 Method.....: SW846 8040A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
2-Chlorophenol	ND	5.0	ug/L	2.2
4-Chloro-3-methylphenol	ND	5.0	ug/L	2.4
3-Methylphenol & 4-Methylphenol	ND	5.0	ug/L	2.2
2-Methylphenol	ND	5.0	ug/L	2.2
2,4-Dichlorophenol	ND	5.0	ug/L	2.1
2,6-Dichlorophenol	ND	5.0	ug/L	2.1
2,4-Dimethylphenol	ND	5.0	ug/L	2.1
2,4-Dinitrophenol	ND	5.0	ug/L	2.4
4,6-Dinitro-2-methylphenol UJ	ND	5.0	ug/L	2.2
Dinoseb	ND	5.0	ug/L	2.4
2-Nitrophenol	ND	5.0	ug/L	2.3
4-Nitrophenol	ND	5.0	ug/L	2.2
Pentachlorophenol	ND	5.0	ug/L	2.4
Phenol	ND	5.0	ug/L	2.3
2,3,4,6-Tetrachlorophenol	ND	5.0	ug/L	2.0
2,4,5-Trichlorophenol	ND	5.0	ug/L	2.2
2,4,6-Trichlorophenol	ND	5.0	ug/L	2.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	63	(44 - 110)
2-Fluorophenol	58	(37 - 96)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7K7

GC Semivolatiles

Lot-Sample #...: F8J170190-031 Work Order #...: K04EJ1AC Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08
Prep Date.....: 10/20/08 Analysis Date..: 11/07/08
Prep Batch #...: 8294172
Dilution Factor: 1 Method.....: SW846 8040A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
2-Chlorophenol		ND	5.0	ug/L	2.2
4-Chloro-3-methylphenol		ND	5.0	ug/L	2.4
3-Methylphenol & 4-Methylphenol		ND	5.0	ug/L	2.2
2-Methylphenol		ND	5.0	ug/L	2.2
2,4-Dichlorophenol		ND	5.0	ug/L	2.1
2,6-Dichlorophenol		ND	5.0	ug/L	2.1
2,4-Dimethylphenol		ND	5.0	ug/L	2.1
2,4-Dinitrophenol		ND	5.0	ug/L	2.4
4,6-Dinitro-2-methylphenol	UJ	ND	5.0	ug/L	2.2
Dinoseb		ND	5.0	ug/L	2.4
2-Nitrophenol		ND	5.0	ug/L	2.3
4-Nitrophenol		ND	5.0	ug/L	2.2
Pentachlorophenol		ND	5.0	ug/L	2.4
Phenol		ND	5.0	ug/L	2.3
2,3,4,6-Tetrachlorophenol		ND	5.0	ug/L	2.0
2,4,5-Trichlorophenol		ND	5.0	ug/L	2.2
2,4,6-Trichlorophenol		ND	5.0	ug/L	2.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	67	(44 - 110)
2-Fluorophenol	59	(37 - 96)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7V5

GC Semivolatiles

Lot-Sample #...: F8J250134-001 Work Order #...: K1L7K1AC Matrix.....: WATER
Date Sampled...: 10/23/08 Date Received..: 10/25/08
Prep Date.....: 10/28/08 Analysis Date..: 11/11/08
Prep Batch #...: 8302135
Dilution Factor: 1 Method.....: SW846 8040A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
2-Chlorophenol		ND	5.0	ug/L	2.2
4-Chloro-3-methylphenol		ND	5.0	ug/L	2.4
3-Methylphenol & 4-Methylphenol		ND	5.0	ug/L	2.2
2-Methylphenol		ND	5.0	ug/L	2.2
2,4-Dichlorophenol		ND	5.0	ug/L	2.1
2,6-Dichlorophenol		ND	5.0	ug/L	2.1
2,4-Dimethylphenol		ND	5.0	ug/L	2.1
2,4-Dinitrophenol		ND	5.0	ug/L	2.4
4,6-Dinitro-2-methylphenol	UJ	ND	5.0	ug/L	2.2
Dinoseb	UJ	ND	5.0	ug/L	2.4
2-Nitrophenol	UJ	ND	5.0	ug/L	2.3
4-Nitrophenol	UJ	ND	5.0	ug/L	2.2
Pentachlorophenol		ND	5.0	ug/L	2.4
Phenol	UJ	ND	5.0	ug/L	2.3
2,3,4,6-Tetrachlorophenol		ND	5.0	ug/L	2.0
2,4,5-Trichlorophenol		ND	5.0	ug/L	2.2
2,4,6-Trichlorophenol		ND	5.0	ug/L	2.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	64	(44 - 110)
2-Fluorophenol	53	(37 - 96)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7V6

GC Semivolatiles

Lot-Sample #...: F8J250134-006 Work Order #...: K1L7W1AC Matrix.....: WATER
Date Sampled...: 10/23/08 Date Received..: 10/25/08
Prep Date.....: 10/28/08 Analysis Date..: 11/11/08
Prep Batch #...: 8302135
Dilution Factor: 1 Method.....: SW846 8040A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
2-Chlorophenol		ND	5.0	ug/L	2.2
4-Chloro-3-methylphenol		ND	5.0	ug/L	2.4
3-Methylphenol & 4-Methylphenol		ND	5.0	ug/L	2.2
2-Methylphenol		ND	5.0	ug/L	2.2
2,4-Dichlorophenol		ND	5.0	ug/L	2.1
2,6-Dichlorophenol		ND	5.0	ug/L	2.1
2,4-Dimethylphenol		ND	5.0	ug/L	2.1
2,4-Dinitrophenol		ND	5.0	ug/L	2.4
4,6-Dinitro-2-methylphenol	UJ	ND	5.0	ug/L	2.2
Dinoseb	UJ	ND	5.0	ug/L	2.4
2-Nitrophenol	UJ	ND	5.0	ug/L	2.3
4-Nitrophenol	UJ	ND	5.0	ug/L	2.2
Pentachlorophenol		ND	5.0	ug/L	2.4
Phenol	UJ	ND	5.0	ug/L	2.3
2,3,4,6-Tetrachlorophenol		ND	5.0	ug/L	2.0
2,4,5-Trichloro-phenol		ND	5.0	ug/L	2.2
2,4,6-Trichloro-phenol		ND	5.0	ug/L	2.2

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	46	(44 - 110)
2-Fluorophenol	40	(37 - 96)

LS
8-09-2010

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-133
Sample # W08GR02623
Client ID: B1W1B1 TRENT WSCF

Matrix: WATER

Group #: WSCF20081478
Department: Organic
Sampled: 07/16/08
Received: 07/17/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
NWTPH-D TPH Diesel Range (Wa) Prep											**07/22/08**
NWTPH-D TPH Diesel Range (Wa)											
Total Pet. Hydrocarbons Diesel	TPHDIESEL	LA-523-493	U	< 71.0	ug/L			1.00	71		07/28/08
Kerosene	TPHKEROSENE	LA-523-493	U	< 71.0	ug/L			1.00	71		07/28/08
SW-846 8270C Semi-Vols Prep											**07/23/08**
SW-846 8270C Semi-Vols											
4-Nitrophenol	100-02-7	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/28/08
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	< 1.50	ug/L			1.00	1.5		07/28/08
Phenol	108-95-2	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/28/08
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	< 2.30	ug/L			1.00	2.3		07/28/08
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/28/08
Pyrene	129-00-0	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/28/08
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/28/08
N-Nitrosodi-n-dipropylamine	621-64-7	LA-523-456	U	< 0.640	ug/L			1.00	0.64		07/28/08
Acenaphthene	83-32-9	LA-523-456	U	< 2.80	ug/L			1.00	2.8		07/28/08
Pentachlorophenol	87-86-5	LA-523-456	U	< 1.60	ug/L			1.00	1.6		07/28/08
2-Chlorophenol	95-57-8	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/28/08
4-Nitroaniline	100-01-6	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/28/08
4-Bromophenylphenyl ether	101-55-3	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/28/08
2,4-Dimethylphenol	105-67-9	LA-523-456	U	< 1.00	ug/L			1.00	1.0		07/28/08
4-Chloroaniline	106-47-8	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/28/08
Bis(2-chloro-1-methylethyl)eth	108-60-1	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/28/08
Bis(2-chloroethyl) ether	111-44-4	LA-523-456	U	< 0.960	ug/L			1.00	0.96		07/28/08
Bis(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	< 0.530	ug/L			1.00	0.53		07/28/08
Bis(2-ethylhexyl) phthalate	117-81-7	LA-523-456	U	< 0.850	ug/L			1.00	0.85		07/28/08

Method 8270C not validated per VSR instructions

LS
8-09-2010

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

J - Analyte < lowest calibration but > = MDL.(org)
U - Analyzed for but not detected above limiting criteria.
X - Other flags/notes described in the comments/narrative(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-133
Sample # W08GR02624
Client ID: B1W1B2 TRENT WSCF

Matrix: WATER

Group #: WSCF20081478
Department: Organic
Sampled: 07/16/08
Received: 07/17/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
NWTPH-D TPH Diesel Range (Wa) Prep											**07/22/08**
NWTPH-D TPH Diesel Range (Wa)											
Total Pet. Hydrocarbons Diesel	TPHDIESEL	LA-523-493	U	< 71.0	ug/L			1.00	71		07/28/08
Kerosene	TPHKEROSENE	LA-523-493	U	< 71.0	ug/L			1.00	71		07/28/08
SW-846 8270C Semi-Vols Prep											**07/23/08**
SW-846 8270C Semi-Vols											
4-Nitrophenol	100-02-7	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/28/08
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	< 1.50	ug/L			1.00	1.5		07/28/08
Phenol	108-95-2	LA-523-456	U	< 0.540	ug/L			1.00	0.54		07/28/08
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	< 2.40	ug/L			1.00	2.4		07/28/08
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	< 0.540	ug/L			1.00	0.54		07/28/08
Pyrene	129-00-0	LA-523-456	U	< 0.540	ug/L			1.00	0.54		07/28/08
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	< 0.540	ug/L			1.00	0.54		07/28/08
N-Nitrosodi-n-dipropylamine	621-64-7	LA-523-456	U	< 0.650	ug/L			1.00	0.65		07/28/08
Acenaphthene	83-32-9	LA-523-456	U	< 2.80	ug/L			1.00	2.8		07/28/08
Pentachlorophenol	87-86-5	LA-523-456	U	< 1.60	ug/L			1.00	1.6		07/28/08
2-Chlorophenol	95-57-8	LA-523-456	U	< 0.540	ug/L			1.00	0.54		07/28/08
4-Nitroaniline	100-01-6	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/28/08
4-Bromophenylphenyl ether	101-55-3	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/28/08
2,4-Dimethylphenol	105-67-9	LA-523-456	U	< 1.00	ug/L			1.00	1.0		07/28/08
4-Chloroaniline	106-47-8	LA-523-456	U	< 0.540	ug/L			1.00	0.54		07/28/08
Bis(2-chloro-1-methylethyl)eth	108-60-1	LA-523-456	U	< 1.10	ug/L			1.00	1.1		07/28/08
Bis(2-chloroethyl) ether	111-44-4	LA-523-456	U	< 0.970	ug/L			1.00	0.97		07/28/08
Bis(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	< 0.540	ug/L			1.00	0.54		07/28/08
Bis(2-ethylhexyl) phthalate	117-81-7	LA-523-456	U	< 0.860	ug/L			1.00	0.86		07/28/08

Method 8270C not validated per VSR instructions

LS
8-09-2010

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

J - Analyte < lowest calibration but > = MDL.(org)
U - Analyzed for but not detected above limiting criteria.
X - Other flags/notes described in the comments/narrative(inorg)

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

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MSIN B6-06
Richland, Washington 99352
November 21, 2008
Attention: Mike Neely

SDG	: SL762
Number of Samples	: 37 samples
Sample Matrix	: water
Data Deliverable	: Summary
Date SDG Closed	: October 25, 2008

II. Introduction

Between October 17, 2008 and October 25, 2008, thirty seven (37) water samples were received by TestAmerica - St. Louis for chemical analysis. The samples were received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits. All results are based upon samples as they were received, i.e. wet weight, unless otherwise noted on the data sheets. See the attached Methods Summary Form for the methods used in this SDG.

Deviation from Request: None

IV. Definitions

QCBLK-	Quality Control Blank, Method Blank
QCLCS-	Quality Control Laboratory Control Sample, Blank Spike
DUP-	Laboratory Duplicate
MS-	Matrix Spike
MSD-	Matrix Spike Duplicate

V. Comments

General

The following SAFs are associated with this SDG: W09-010

The term "Detection Limit" used in the analytical data report refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

MS/MSD/Dup analysis was done per the client requirements. Analytical batches that did not contain matrix QC were analyzed with a LCS/LCS duplicate.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CH2MHill Plateau Remediation Company
November 21, 2008
SDG: SL762

Phenols by GC

Batch: 8294172

The LCS surrogate recovery for 2-Fluorophenol is outside acceptance limits. LCS spike recoveries are within QC limits demonstrating acceptable sample extraction and instrument performance.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

The MS/MSD RPD for 4,6-Dinitro-2-methylphenol is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

The closing CCV recoveries for OCAL931 were outside the upper QC limit (greater than 15% RSD) for 2,6-Dichlorophenol, 4-Nitrophenol, Pentachlorophenol, and Dinoseb indicating a potential high bias for those analytes in the samples associated with this CCV. These analytes were not detected above the reporting limit in the associated samples.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

The closing CCV surrogate recovery for OCAL931 was outside the upper QC limits (greater than 15%D) for 2,4,6-Tribromophenol indicating a potential high bias for the surrogate in the associated samples. The surrogate recovery in the samples was within acceptable QC limits.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

Batch: 8302135

The MS/MSD RPD for 4,6-Dinitro-2-methylphenol, Dinoseb, 2-Nitrophenol, 4-Nitrophenol, and Phenol is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.
Affected Samples:
F8J250134 (1): B1X7V5
F8J250134 (6): B1X7V6

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CH2MHill Plateau Remediation Company

November 21, 2008

SDG: SL762

PCBs

Batch: 8295137

The LCS recovery for Aroclor 1260 is outside the upper QC limit, indicating a potential positive bias for these Aroclors associated with 1260. These Aroclors were not observed above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The DCB surrogate recovery was outside the upper QC limits in the LCS, but the samples associated with this LCS had acceptable surrogate gel labrecoveries.

Affected Samples:

F8J170190 (5): B1X8M5

F8J170190 (10): B1X8N6

F8J170190 (21): B1X8H8

The MS/MSD RPD for Aroclor 1016 and Aroclor 1260 is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.

Affected Samples:

F8J170190 (5): B1X8M5

F8J170190 (10): B1X8N6

F8J170190 (21): B1X8H8

There were no observations or nonconformances for the following methods:

Total Organic Carbon

Total Organic Halogens

I certify that this Summary Package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:

Michael Franks

St. Louis Project Manager

SDG# SL762

FLUOR HANFORD

CVR 465 SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-173

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HWF-N-506-17	Ice Chest No.: ERC-1 Temp.: 79 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7993 9545 7930
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X8L9		W	10-16-08	0842	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8L9		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M0		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8M0		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M1		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8M1		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M2		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8M2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M5		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X8M5		W			1x20-mL P	Activity Scan	6 Months	None
B1X8M5		W			3x1000-mL aG	8082_PCB_GC: List-1 (7)	7/40 Days	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			OCT 16 2008 1430	FedEx			
FedEx				B-L			10/17/08 09:5

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

COC# 84

TestAmerica St. Louis

FLUOR HANFORD SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-179

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-17	Ice Chest No.: ERC-02-406 Temp.: 88 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7919 7235 8560
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X8N0		W	10-16-08	1050	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N0		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N1		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N1		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N2		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N3		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N3		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N6		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X8N6		W			1x20-mL P	Activity Scan	6 Months	None
B1X8N6		W			3x1000-mL aG	8082_PCB_GC: List-1 (7)	7/40 Days	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			OCT 16 2008 1430	FedEx			
FedEx				B			10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-107

Page 1 of 1

Collector ~~D.R. Williamson~~ D. Woehle	Contact/Requester Mike Neely	Telephone No. 509-373-0654	MSIN FAX
SAF No. W09-010	Sampling Origin Hanford Site	Purchase Order/Charge Code	
Project Title RCRA OCTOBER 2008	HNF-N-506/6	Ice Chest No. GWS-001	Temp. 5416
Shipped To (Lab) TestAmerica St. Louis	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No. 7927 7118 3446	
Protocol RCRA	Priority: 45 Days	Offsite Property No. N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7T4		W	10/14/08	1353	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T4		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7T5		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7T6		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T6		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7T7		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T7		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7V0		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7V0		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~D.R. Williamson~~ 10/14/08	D. Woehle		10/16/08 0930	K. B. Hulse			10/16/08 0930
K. B. Hulse			10/16/08 1430	FED EX			
FedEx							
							10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

FLUOR HANFORD SL7622

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W09-010-131**

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-17	Ice Chest No.: SML-313 Temp.: 80 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7911 6566 5019
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7Y5		W	10-16-08	0949	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7Y6		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y6		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7Y7		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y7		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7Y8		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y8		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X801		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X801		W			1x20-mL P	Activity Scan	6 Months	None
B1X8H8		W			1x20-mL P	Activity Scan	6 Months	None
B1X8H8		W			3x1000-mL aG	8082_PCB_GC: List-1 (7)	7/40 Days	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle		[signature]	1430 OCT 16 2008	FedEx			
FedEx				[signature]			10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-95

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HWF-N-SD6-16	Ice Chest No.: PNNL-1 Temp.: 55 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7993 9521 8776
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7P2		W	10/14/08	1047	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P3		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P3		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P4		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P4		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P5		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P8		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7P8		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			10/16/08 0930	KB Hulse			10/16/08 0930
K. B. Hulse			10/16/08 1430	FED EX			
FedEx							10/17/08 09[illegible]

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-73

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-W-506-16	Ice Chest No.: SAWS-107 Temp.: 5.7 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7919 7211 7256
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7K2		W	10/14/08	1248	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K3		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K3		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K4		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K4		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K5		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K7		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7K7		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			10/16/08 0930	K. B. Hulse			10/16/08 0930
K. B. Hulse			10/16/08 1430	FED EX			
FED EX							10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

FLUOR HANFORD

SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-195

Page 1 of 1

Collector: Scott E. Hamaker	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-18	Ice Chest No.: GW314 ~~GWSC-055~~ KEH Temp. 10/24/08
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 79061225 2250
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**

FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7V5		W	10/23/08	1100	3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7V5		W			1x20-mL P	Activity Scan	6 Months	None
B1X851		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X852		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X853		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X854		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Scott E. Hamaker	Scott Hamaker	Scott Hamaker	10/24/08 1315	KE Hamilton	Kim E Hamilton	Kim E Hamilton	10/24/08 1315
KE Hamilton	Kim E Hamilton	Kim E Hamilton	10/24/08 1430	FED EX			
FEDEX				B-2			10/25/08 0820

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION

Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

FLUOR HANFORD

SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-196

Page 1 of 1

Collector: Scott E. Hamaker	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-326-18	Ice Chest No.: GW14 ~~GWS-053~~ KEH 11/24/08 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7906 1225 2250
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7V6		W	10/23/08	1100	3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7V6		W	10/23/08	1100	1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Date/Time	Received By	Date/Time
Scott E. Hamaker (Print) Scott Hamaker (Sign)	10/24/08 1315	KE Hamilton (Print) Kim E Hamilton (Sign)	10/24/08 1315
KE Hamilton Kim E Hamilton	10/24/08 1430	FED EX	
FEDEX		B. [illegible]	10/25/08 0800

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

Attachment 2
Narrative
WSCF20081478

Introduction

Two (2) S&GRP samples were received at the WSCF Laboratory on July 17, 2008. These 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 copy of Issue Resolution Form 08-101, documenting missed hold time for pH and Hexavalent Chromium is included as Attachment 3. A Data Summary Report (Attachment 4) 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 5. 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. 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 17 through 20, for a complete listing of approved analytical methods.

Inorganic Comments

Ammonia – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 25 for QC details.

All QC controls are within the established limits.

Anions – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See pages 26 through 28 for QC details. Analytical Result(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1VWR4 (SDG# 20081354, SAF# F06-027) and B1W829 (SDG 20081456, SAF# F06-027).

All QC controls are within the established limits.

Cyanide – The hold time requirement (14 days) for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 29 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TTV3 (SDG# 20081329, SAF# F08-051).

All other QC controls are within the established limits.

Hexavalent Chromium – The hold time requirement (24 hours) for this analysis was not met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 30 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TTV3 (SDG 20081329, SAF# F08-051).

- The hold time requirement was not met for samples B1W1B1 and B1W1B2 on account of sample delivery after the 24 hour hold time.

All other 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 per the GRP Letter of Instruction. See pages 31 through 33 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TTV1 (SDG# 20081283, SAF# F08-051).

- Batch QC (B1W1B5) – Calcium, Sodium, Silicon, and Magnesium sample results exceeded the spiking levels by a factor of four. Spike recoveries are not valid. Check standard was analyzed to ensure Calcium, Sodium, Silicon, and Magnesium linearity because sample results were greater than the calibration standard.

All other 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 per the GRP Letter of Instruction. See pages 34 through 36 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1W1B1 (SDG# 20081478, SAF# F08-133) and B1W1B6 (SDG# 20081508, SAF# F08-134.

All QC controls are within the established limits.

pH – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 38 for QC details. Analytical Result(s):

- Duplicate analysis was performed on sample B1W1B1 of this SDG.
- The hold time requirement was not met for samples B1W1B1 and B1W1B2 on account of sample delivery after the 24 hour hold time.

All QC controls are within the established limits.

Total Alkalinity – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 37 for QC details. Analytical Note(s):

- Duplicate analysis was performed on sample B1W2X7 from SDG 20081470.

All QC controls are within the established limits.

Organic Comments

Semi-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 per the GPP Letter of Instruction. See pages 52 through 57 for QC details. Analytical Result(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1WPJ9, SDG 20081861, SAF# F02-009).
- The surrogate Terphenly-d14 exceeded the laboratory established RPD value for the MS/MSD. The data was accepted since the Terphenly-d14 recovery in the MS/MSD met the laboratory established criteria.

All QC controls are within the established limits.

TPHD-WA – 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 51 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V569 (SDG# 20081468, SAF# F08-100).

All QC controls are within the established limits.

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 per the GRP Letter of Instruction. See pages 58 through 61 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V569 (SDG# 20081468, SAF# F08-100).

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 Spikes apply only to Neptunium, Technetium & Tritium and Matrix Spike Duplicate applies to Neptunium),* Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 66 through 72 for QC details. Analytical Note(s):

- Rad Chem analyses requested to be performed on these samples included: Americium by AEA, Gamma Energy Analysis, Uranium by AEA, Plutonium Isotopics by AEA, Sr-89/90, Tc-99 by ICP-MS, and Tc-99 by LSC.

- Uranium by AEA: Duplicate was analyzed on sample# B1R0V3, (SDG#20081415, SAF# F07-045).

- The RPD value for U-234 and U-238 from the duplicate analysis performed on sample B1W1B1 did not meet the laboratory established limit, but the RPD criterion does not apply due to the low count rate.

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

Andrew Kopriva
WSCF Client Services

Fluor Hanford Inc. 08/29/08

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-133-001 PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
MA White	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, I-004	200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		F08-133		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-488-1	232'	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization 20081478	N/A		N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, 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)

SPECIAL HANDLING AND/OR STORAGE
Radioactive Tie To: B1W193

PRESERVATION	HNO3 to pH <2(ULTREX)	HCl or H2SO4 to pH <2/Cool~4C	Cool~4C	HCl to pH <2/Cool~4C	HNO3 to pH <2	Cool~4C	NaOH to pH >= 12/Cool~4C	Cool~4C	H2SO4 to pH <2	Cool~4C
TYPE OF CONTAINER	Nalgene	aGs*	aG	aG	G/P	aG	G/P	P	G/P	G/P
NO. OF CONTAINER(S)	1	3	4	2	1	1	1	1	1	1
VOLUME	500mL ✓	40mL ✓	1000mL ✓	1000mL ✓	500mL ✓	500mL ✓	250mL ✓	500mL ✓	250mL ✓	500mL ✓
SAMPLE ANALYSIS	Tc-99 by ICPMS (Technetium-99)	SEE ITEM (1) IN SPECIAL INSTRUCTIONS VOA	Semi-VOA - 8270B (TCL);	SEE ITEM (2) IN SPECIAL INSTRUCTIONS TPHD	SEE ITEM (3) IN SPECIAL INSTRUCTIONS 2008 60.7	Chromium Hex - 7196;	Cyanide (Total) - 335.2;	SEE ITEM (4) IN SPECIAL INSTRUCTIONS IC	Cations (IC) - 300.7 (Nitrogen in ammonium)	2320_ALKALINITY (Alkalinity)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B1 W086R02623	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					807801								
	LOT #			029038	~~807801~~ JMS 7-16-8	028541	028541	029796	~~029038~~ ~~029041~~ 029796 031390	029038	031390	003220	

ICED

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	7-16-08 1200	MO 413 Frig 1	7-16-08 1200
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MO 413 Frig	7-17-8 0830	DConnolly DC	7-17-8 0830
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DConnolly DC	7-17-8 0855	CAHudson	7-17-8 0855
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

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene}
(2)TPH-DieselKerosene Range - WTPH-D {Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range}
(3)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium} ICP/MS - 200.8 (Add-on) {Arsenic, Thallium, Uranium} ICP Metals - 6010B (TAL) {Aluminum, Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium} ICP Metals - 6010B (Add-On) {Lithium, Phosphorus, Silicon, Strontium} 200.8_HG - ICPMS;
(4)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}

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

A-6003-618(01/06)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F08-133-001	PAGE 2 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
MA White	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, I-004	200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		F08-133		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-488-1	232'	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
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)

SPECIAL HANDLING AND/OR STORAGE
Radioactive Tie To: B1W193

PRESERVATION	None	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2	HNO3 to pH <2	HNO3 to pH<2	HNO3 to pH <2			
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P	G/P	P	G/P	G/P			
NO. OF CONTAINER(S)	1	1	1	2	1	1	1			
VOLUME	125mL	500mL	1000mL	1000mL	1000mL	1000mL	1000mL			
SAMPLE ANALYSIS	pH - 150.1;	Gamma Spectroscopy (Cesium-137, Cobalt-60)	Strontium-89,90 -- Total Sr;	Technetium-99;	Isotopic Plutonium;	Isotopic Uranium;	Americium-241;			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B1	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓			
	LOT #			027006	629991	031204	031204	031204	~~031204~~ 028655	~~031204~~ 028655 7-4-08			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	7-16-08 1000	MO 413 Frig 1	7-16-08 1000
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MO 413 Frig 1	7-17-08 0830	DCannolly	7-17-08 0830
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DCannolly	7-17-08 0855	LA Hudson	7-17-08 0855
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

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

ICED

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

A-6003-618(01/06)

Fluor Hanford Inc. | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F08-133-005 | PAGE 1 OF 2

COLLECTOR MAWhite	**COMPANY CONTACT** TRENT, SJ	**TELEPHONE NO.** 373-5869	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION C5862, I-004-D	**PROJECT DESIGNATION** 200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		**SAF NO.** F08-133
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-488-1	**ACTUAL SAMPLE DEPTH** 232'	**COA** 123517ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 7N
AIR QUALITY ☐
DATA TURNAROUND 45 Days / 45 Days
METHOD OF SHIPMENT GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, 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)

SPECIAL HANDLING AND/OR STORAGE
Radioactive Tie To: B1W193

PRESERVATION	HNO3 to pH <2(ULTREX)	HCl or H2SO4 to pH <2/Cool~4C	Cool~4C	HCl to pH <2/Cool~4C	HNO3 to pH <2	Cool~4C	NaOH to pH >= 12/Cool~4C	Cool~4C	H2SO4 to pH <2	Cool~4C
TYPE OF CONTAINER	Nalgene	aGs*	aG	aG	G/P	aG	G/P	P	G/P	G/P
NO. OF CONTAINER(S)	1	3	4	2	1	1	1	1	1	1
VOLUME	500mL ✓	40mL ✓	1000mL ✓	1000mL ✓	500mL ✓	500mL ✓	250mL ✓	500mL ✓	250mL ✓	500mL ✓
SAMPLE ANALYSIS	Tc-99 by ICPMS (Technetium-99) ✓	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Semi-VOA - 8270B (TCL);	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196; ✓	Cyanide (Total) - 335.2; ✓	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	Cations (IC) - 300.7 (Nitrogen in ammonium)	2320_ALKALINITY (Alkalinity)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B2 2624	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	LOT#			029038	807801	030441 028541	028541	029038	028946	031390	029796	31390	029038

ICED

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MAWhite MAWhite	7-16-08 1200	MO 413 Frig 1	7-16-08 1200
MO 413 Frig 1	7-17-8 0830	DConnolly	7-17-8 0830
DConnolly	7-17-8 0855	CA Hudson	7-17-8 0855

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene}
(2)TPH-DieselKerosene Range - WTPH-D {Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range}
(3)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium} ICP/MS - 200.8 (Add-on) {Arsenic, Thallium, Uranium} ICP Metals - 6010B (TAL) {Aluminum, Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium} ICP Metals - 6010B (Add-On) {Lithium, Phosphorus, Silicon, Strontium} 200.8_HG - ICPMS;
(4)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}

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

A-6003-618(01/06)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F08-133-005	PAGE 2 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
MA White	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, I-004-D	200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		F08-133		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-488.1	232'	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
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)

SPECIAL HANDLING AND/OR STORAGE
Radioactive Tie To: B1W193

PRESERVATION	None	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2	HNO3 to pH <2	HNO3 to pH<2	HNO3 to pH <2			
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P	G/P	P	G/P	G/P			
NO. OF CONTAINER(S)	1	1	1	2	1	1	1			
VOLUME	125mL	500mL	1000mL	1000mL	1000mL	1000mL	1000mL			
SAMPLE ANALYSIS	pH - 150.1; ✓	Gamma Spectroscopy (Cesium-137, Cobalt-60) ✓	Strontium-89,90 -- Total Sr; ✓	Technetium-99; ✓	Isotopic Plutonium; ✓	Isotopic Uranium; ✓	Americium-241; ✓			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B1W1B2	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓		
	LOT#			027006	629581	031204	031204	031204	031204	031204		

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	7-16-08 1000	MO413 Frig 1	7-16-08 1000
MO413 Frig 1	7-17-8 0830	DCounts DS	7-17-8 0830
DCounts DS	7-17-8 0855	CA Hudson	7-17-8 0855

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

ICED

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

A-6003-618(01/06)

Appendix 5

Data Validation Supporting Documentation

GENERAL ORGANIC ANALYSIS DATA VALIDATION CHECKLIST

VALIDATION LEVEL:	A	B	C	D	E
PROJECT: BP-5			DATA PACKAGE: VSR10-022		
VALIDATOR: Carl Schloesslin		LAB: TestAmerica & WSCF		DATE: 8-09-2010	
			SDG: SL762, WSCF20081478		
ANALYSES PERFORMED					
8015	8021	8141	8151	8315	8310
	8040 Phenols X	WTPH-HCID	WTPH-G	WTPH-D X	

SAMPLES/MATRIX:

SDG SL762 water samples: B1X8M5, B1X8N6, B1X7V0, B1X801, B1X7P8, B1X7K7, B1X7V5, B1X7V6

SDG WSCF20081478 water samples: B1W1B1, B1W1B2

1. DATA PACKAGE COMPLETENESS AND CASE NARRATIVE

Technical verification documentation present? ..... Yes (No) N/A

Comments: None

2. INSTRUMENT TUNING AND CALIBRATION (Levels D and E)

Initial calibrations acceptable? ..... Yes No (N/A)

Continuing calibrations acceptable? ..... Yes No (N/A)

Standards traceable? ..... Yes No (N/A)

Standards expired? ..... Yes No (N/A)

Calculation check acceptable? ..... Yes No (N/A)

Comments:

GENERAL ORGANIC ANALYSIS DATA VALIDATION CHECKLIST

3. BLANKS (Levels B, C, D, and E)

Calibration blanks analyzed? (Levels D, E) ..... Yes No N/A

Calibration blank results acceptable? (Levels D, E) ..... Yes No N/A

Laboratory blanks analyzed? ..... Yes No N/A

Laboratory blank results acceptable? ..... Yes No N/A

Field/trip blanks analyzed? (Levels C, D, E) ..... Yes No N/A

Field/trip blank results acceptable? (Levels C, D, E) ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments: None

4. ACCURACY (Levels C, D, and E)

Surrogates/system monitoring compounds analyzed? ..... Yes No N/A

Surrogate/system monitoring compound recoveries acceptable? ..... Yes No N/A

Surrogates traceable? (Levels D, E) ..... Yes No N/A

Surrogates expired? (Levels D, E) ..... Yes No N/A

MS/MSD samples analyzed? ..... Yes No N/A

MS/MSD results acceptable? ..... Yes No N/A

MS/MSD standards NIST traceable? (Levels D, E) ..... Yes No N/A

MS/MSD standards expired? (Levels D, E) ..... Yes No N/A

LCS/BSS samples analyzed? ..... Yes No N/A

LCS/BSS results acceptable? ..... Yes No N/A

Standards traceable? (Levels D, E) ..... Yes No N/A

Standards expired? (Levels D, E) ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Performance audit sample(s) analyzed? ..... Yes No N/A

Performance audit sample results acceptable? ..... Yes No N/A

Comments:

SL762, batch 8294172: LCS 2-fluorophenol surrogate %R = 42% (does not affect field samples)

GENERAL ORGANIC ANALYSIS DATA VALIDATION CHECKLIST

5. PRECISION (Levels C, D, and E)

Duplicate RPD values acceptable? ..... Yes (No) N/A

Duplicate results acceptable? ..... Yes No (N/A)

MS/MSD standards NIST traceable? (Levels D, E) ..... Yes No (N/A)

MS/MSD standards expired? (Levels D, E) ..... Yes No (N/A)

Field duplicate RPD values acceptable? ..... (Yes) No N/A

Field split RPD values acceptable? ..... Yes No (N/A)

Transcription/calculation errors? (Levels D, E) ..... Yes No (N/A)

Comments:

SL762, batch 8294172: 4,6-dinitro-2-methylphenol MS/MSD RPD = 22%

SL762, batch 8302135: 4,6-dinitro-2-methylphenol MS/MSD RPD = 23%, dinoseb RPD = 26%, 2-nitrophenol RPD = 21%, 4-nitrophenol RPD = 24%, phenol RPD = 21%

6. HOLDING TIMES (all levels)

Samples properly preserved? ..... (Yes) No N/A

Sample holding times acceptable? ..... (Yes) No N/A

Comments: None

GENERAL ORGANIC ANALYSIS DATA VALIDATION CHECKLIST

8. COMPOUND IDENTIFICATION, QUANTITATION, AND DETECTION LIMITS (all levels)

Results reported for all requested analyses? ..... Yes No N/A

Rresults supported in the raw data? (Levels D, E) ..... Yes No N/A

Samples properly prepared? (Levels D, E) ..... Yes No N/A

Detection limits meet RDL? ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments:

Phenol and TPH-D water CRDLs not provided in the SAP

9. SAMPLE CLEANUP (Levels D and E)

Fluoricil ® (or other aborbant) cleanup performed? ..... Yes No N/A

Lot check performed? ..... Yes No N/A

Check recoveries aceptable? ..... Yes No N/A

Check materials traceable? ..... Yes No N/A

Check materials Expired? ..... Yes No N/A

Analytical batch QC given similar cleanup? ..... Yes No N/A

Transcription/Calculation Errors? ..... Yes No N/A

Comments:

Appendix 6

Additional Documentation Requested By Client

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: SL762 **Work Order #...:** K07ED1AA **Matrix.....:** WATER
MB Lot-Sample #: F8J200000-172

Prep Date.....: 10/20/08
Analysis Date..: 10/27/08 **Prep Batch #...:** 8294172
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Chlorophenol	ND	5.0	ug/L	SW846 8040A
4-Chloro-3-methylphenol	ND	5.0	ug/L	SW846 8040A
3-Methylphenol & 4-Methylphenol	ND	5.0	ug/L	SW846 8040A
2-Methylphenol	ND	5.0	ug/L	SW846 8040A
2,4-Dichlorophenol	ND	5.0	ug/L	SW846 8040A
2,6-Dichlorophenol	ND	5.0	ug/L	SW846 8040A
2,4-Dimethylphenol	ND	5.0	ug/L	SW846 8040A
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8040A
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8040A
Dinoseb	ND	5.0	ug/L	SW846 8040A
2-Nitrophenol	ND	5.0	ug/L	SW846 8040A
4-Nitrophenol	ND	5.0	ug/L	SW846 8040A
Pentachlorophenol	ND	5.0	ug/L	SW846 8040A
Phenol	ND	5.0	ug/L	SW846 8040A
2,3,4,6-Tetrachlorophenol	ND	5.0	ug/L	SW846 8040A
2,4,5-Trichlorophenol	ND	5.0	ug/L	SW846 8040A
2,4,6-Trichlorophenol	ND	5.0	ug/L	SW846 8040A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	58	(44 - 110)
2-Fluorophenol	51	(37 - 96)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: SL762
MB Lot-Sample #: F8J280000-135

Work Order #...: K1P231AA
Prep Date.....: 10/28/08
Prep Batch #...: 8302135

Matrix.....: WATER

Analysis Date..: 11/11/08
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
2-Chlorophenol	ND	5.0	ug/L	SW846 8040A
4-Chloro-3-methylphenol	ND	5.0	ug/L	SW846 8040A
3-Methylphenol & 4-Methylphenol	ND	5.0	ug/L	SW846 8040A
2-Methylphenol	ND	5.0	ug/L	SW846 8040A
2,4-Dichlorophenol	ND	5.0	ug/L	SW846 8040A
2,6-Dichlorophenol	ND	5.0	ug/L	SW846 8040A
2,4-Dimethylphenol	ND	5.0	ug/L	SW846 8040A
2,4-Dinitrophenol	ND	5.0	ug/L	SW846 8040A
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	SW846 8040A
Dinoseb	ND	5.0	ug/L	SW846 8040A
2-Nitrophenol	ND	5.0	ug/L	SW846 8040A
4-Nitrophenol	ND	5.0	ug/L	SW846 8040A
Pentachlorophenol	ND	5.0	ug/L	SW846 8040A
Phenol	ND	5.0	ug/L	SW846 8040A
2,3,4,6-Tetrachlorophenol	ND	5.0	ug/L	SW846 8040A
2,4,5-Trichlorophenol	ND	5.0	ug/L	SW846 8040A
2,4,6-Trichlorophenol	ND	5.0	ug/L	SW846 8040A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	61	(44 - 110)
2-Fluorophenol	55	(37 - 96)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL762 Work Order #...: K07ED1AC Matrix.....: WATER
LCS Lot-Sample#: F8J200000-172
Prep Date.....: 10/20/08 Analysis Date..: 10/27/08
Prep Batch #...: 8294172
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2-Chlorophenol	100	55.7	ug/L	56	SW846 8040A
4-Chloro-3-methylphenol	100	60.1	ug/L	60	SW846 8040A
3-Methylphenol & 4-Methylphenol	100	56.2	ug/L	56	SW846 8040A
2-Methylphenol	100	56.3	ug/L	56	SW846 8040A
2,4-Dichlorophenol	100	55.1	ug/L	55	SW846 8040A
2,6-Dichlorophenol	100	51.1	ug/L	51	SW846 8040A
2,4-Dimethylphenol	100	57.9	ug/L	58	SW846 8040A
2,4-Dinitrophenol	100	59.8	ug/L	60	SW846 8040A
4,6-Dinitro-2-methylphenol	100	61.1	ug/L	61	SW846 8040A
Dinoseb	100	63.5	ug/L	64	SW846 8040A
2-Nitrophenol	100	58.5	ug/L	59	SW846 8040A
4-Nitrophenol	100	52.5	ug/L	52	SW846 8040A
Pentachlorophenol	100	61.1	ug/L	61	SW846 8040A
Phenol	100	52.8	ug/L	53	SW846 8040A
2,3,4,6-Tetrachlorophenol	100	63.1	ug/L	63	SW846 8040A
2,4,5-Trichloro-phenol	100	60.2	ug/L	60	SW846 8040A
2,4,6-Trichloro-phenol	100	59.0	ug/L	59	SW846 8040A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	50	(50 - 107)
2-Fluorophenol	42 *	(50 - 91)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL762 Work Order #...: K1P231AC Matrix.....: WATER
LCS Lot-Sample#: F8J280000-135
Prep Date.....: 10/28/08 Analysis Date..: 11/11/08
Prep Batch #...: 8302135
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
2-Chlorophenol	100	69.1	ug/L	69	SW846 8040A
4-Chloro-3-methylphenol	100	74.2	ug/L	74	SW846 8040A
3-Methylphenol & 4-Methylphenol	100	69.7	ug/L	70	SW846 8040A
2-Methylphenol	100	68.3	ug/L	68	SW846 8040A
2,4-Dichlorophenol	100	68.6	ug/L	69	SW846 8040A
2,6-Dichlorophenol	100	70.8	ug/L	71	SW846 8040A
2,4-Dimethylphenol	100	69.8	ug/L	70	SW846 8040A
2,4-Dinitrophenol	100	82.5	ug/L	83	SW846 8040A
4,6-Dinitro-2-methylphenol	100	83.5	ug/L	83	SW846 8040A
Dinoseb	100	94.1	ug/L	94	SW846 8040A
2-Nitrophenol	100	73.8	ug/L	74	SW846 8040A
4-Nitrophenol	100	82.0	ug/L	82	SW846 8040A
Pentachlorophenol	100	87.9	ug/L	88	SW846 8040A
Phenol	100	66.2	ug/L	66	SW846 8040A
2,3,4,6-Tetrachlorophenol	100	69.2	ug/L	69	SW846 8040A
2,4,5-Trichloro-phenol	100	74.8	ug/L	75	SW846 8040A
2,4,6-Trichloro-phenol	100	77.2	ug/L	77	SW846 8040A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	72	(50 - 107)
2-Fluorophenol	54	(50 - 91)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL762 Work Order #...: K0WXK1AD-MS Matrix.....: WATER
MS Lot-Sample #: F8J150228-005 K0WXK1AE-MSD
Date Sampled...: 10/14/08 Date Received..: 10/15/08
Prep Date.....: 10/20/08 Analysis Date..: 10/27/08
Prep Batch #...: 8294172
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2-Chlorophenol	ND	94.8	55.5	ug/L	59		SW846 8040A
	ND	94.9	55.1	ug/L	58	0.72	SW846 8040A
4-Chloro-3-methylphenol	ND	94.8	60.1	ug/L	63		SW846 8040A
	ND	94.9	61.2	ug/L	64	1.8	SW846 8040A
3-Methylphenol & 4-Methylphenol	ND	94.8	57.7	ug/L	61		SW846 8040A
	ND	94.9	56.4	ug/L	59	2.4	SW846 8040A
2-Methylphenol	ND	94.8	56.5	ug/L	60		SW846 8040A
	ND	94.9	56.8	ug/L	60	0.58	SW846 8040A
2,4-Dichlorophenol	ND	94.8	55.4	ug/L	58		SW846 8040A
	ND	94.9	56.6	ug/L	60	2.2	SW846 8040A
2,6-Dichlorophenol	ND	94.8	54.3	ug/L	57		SW846 8040A
	ND	94.9	47.5	ug/L	50	13	SW846 8040A
2,4-Dimethylphenol	ND	94.8	55.9	ug/L	59		SW846 8040A
	ND	94.9	57.6	ug/L	61	3.0	SW846 8040A
2,4-Dinitrophenol	ND	94.8	57.4	ug/L	61		SW846 8040A
	ND	94.9	56.5	ug/L	60	1.6	SW846 8040A
4,6-Dinitro-2-methylphenol	ND	94.8	60.8	ug/L	64		SW846 8040A
	ND	94.9	48.6	ug/L	51 p	22	SW846 8040A
Dinoseb	ND	94.8	61.3	ug/L	65		SW846 8040A
	ND	94.9	50.1	ug/L	53	20	SW846 8040A
2-Nitrophenol	ND	94.8	58.7	ug/L	62		SW846 8040A
	ND	94.9	60.4	ug/L	64	2.8	SW846 8040A
4-Nitrophenol	ND	94.8	46.7	ug/L	49		SW846 8040A
	ND	94.9	44.8	ug/L	47	4.1	SW846 8040A
Pentachlorophenol	ND	94.8	59.3	ug/L	63		SW846 8040A
	ND	94.9	52.1	ug/L	55	13	SW846 8040A
Phenol	ND	94.8	55.0	ug/L	58		SW846 8040A
	ND	94.9	50.3	ug/L	53	8.8	SW846 8040A
2,3,4,6-Tetrachlorophenol	ND	94.8	61.5	ug/L	65		SW846 8040A
	ND	94.9	62.2	ug/L	66	1.2	SW846 8040A
2,4,5-Trichlorophenol	ND	94.8	59.7	ug/L	63		SW846 8040A
	ND	94.9	61.6	ug/L	65	3.1	SW846 8040A

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL762 **Work Order #...:** K0WXK1AD-MS **Matrix.....:** WATER
MS Lot-Sample #: F8J150228-005 K0WXK1AE-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2,4,6-Trichloro-phenol	**ND**	**94.8**	**59.4**	**ug/L**	**63**		**SW846 8040A**
	ND	**94.9**	**59.8**	**ug/L**	**63**	**0.75**	**SW846 8040A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	54	(44 - 110)
	50	(44 - 110)
2-Fluorophenol	46	(37 - 96)
	47	(37 - 96)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL762 Work Order #...: K1L7K1AD-MS Matrix.....: WATER
MS Lot-Sample #: F8J250134-001 K1L7K1AE-MSD
Date Sampled...: 10/23/08 Date Received..: 10/25/08
Prep Date.....: 10/28/08 Analysis Date..: 11/11/08
Prep Batch #...: 8302135
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2-Chlorophenol	ND	95.1	59.7	ug/L	63		SW846 8040A
	ND	95.4	71.9	ug/L	75	19	SW846 8040A
4-Chloro-3-methylphenol	ND	95.1	65.0	ug/L	68		SW846 8040A
	ND	95.4	75.8	ug/L	79	15	SW846 8040A
3-Methylphenol & 4-Methylphenol	ND	95.1	59.9	ug/L	63		SW846 8040A
	ND	95.4	73.2	ug/L	77	20	SW846 8040A
2-Methylphenol	ND	95.1	58.9	ug/L	62		SW846 8040A
	ND	95.4	71.3	ug/L	75	19	SW846 8040A
2,4-Dichlorophenol	ND	95.1	58.8	ug/L	62		SW846 8040A
	ND	95.4	71.6	ug/L	75	20	SW846 8040A
2,6-Dichlorophenol	ND	95.1	61.0	ug/L	64		SW846 8040A
	ND	95.4	73.2	ug/L	77	18	SW846 8040A
2,4-Dimethylphenol	ND	95.1	59.8	ug/L	63		SW846 8040A
	ND	95.4	71.9	ug/L	75	18	SW846 8040A
2,4-Dinitrophenol	ND	95.1	70.0	ug/L	74		SW846 8040A
	ND	95.4	82.4	ug/L	86	16	SW846 8040A
4,6-Dinitro-2-methylphenol	ND	95.1	68.4	ug/L	72		SW846 8040A
	ND	95.4	85.9	ug/L	90 p	23	SW846 8040A
Dinoseb	ND	95.1	71.4	ug/L	75		SW846 8040A
	ND	95.4	92.4	ug/L	97 p	26	SW846 8040A
2-Nitrophenol	ND	95.1	63.2	ug/L	66		SW846 8040A
	ND	95.4	78.0	ug/L	82 p	21	SW846 8040A
4-Nitrophenol	ND	95.1	68.0	ug/L	71		SW846 8040A
	ND	95.4	86.3	ug/L	90 p	24	SW846 8040A
Pentachlorophenol	ND	95.1	65.1	ug/L	68		SW846 8040A
	ND	95.4	79.6	ug/L	83	20	SW846 8040A
Phenol	ND	95.1	57.1	ug/L	60		SW846 8040A
	ND	95.4	70.8	ug/L	74 p	21	SW846 8040A
2,3,4,6-Tetrachlorophenol	ND	95.1	59.5	ug/L	63		SW846 8040A
	ND	95.4	59.5	ug/L	62	0.05	SW846 8040A
2,4,5-Trichlorophenol	ND	95.1	64.9	ug/L	68		SW846 8040A
	ND	95.4	76.0	ug/L	80	16	SW846 8040A

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL762 **Work Order #...:** K1L7K1AD-MS **Matrix.....:** WATER
MS Lot-Sample #: F8J250134-001 K1L7K1AE-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
2,4,6-Trichloro-phenol	**ND**	**95.1**	**66.1**	**ug/L**	**70**		**SW846 8040A**
	ND	**95.4**	**77.9**	**ug/L**	**82**	**16**	**SW846 8040A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4,6-Tribromophenol	61	(44 - 110)
	75	(44 - 110)
2-Fluorophenol	49	(37 - 96)
	58	(37 - 96)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081478
Matrix: WATER
Test: NWTPH-D TPH Diesel Range (Wa)

Sample Date: 07/16/08
Receive Date:07/16/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02619											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	ortho-Terphenyl Surr	84-15-1	390.36	76.500	% Recov	70.000	130.000				07/28/08
MS	Total Pet. Hydrocarbons Diesel	TPHDIESEL	2496.2	97.900	% Recov	75.000	125.000				07/28/08
MSD	ortho-Terphenyl Surr	84-15-1	365.06	71.600	% Recov	70.000	130.000				07/28/08
MSD	Total Pet. Hydrocarbons Diesel	TPHDIESEL	2801.9	110.000	% Recov	75.000	125.000				07/28/08
SPK-RPD	ortho-Terphenyl Surr	84-15-1	71.600		RPD			6.617	20.000		07/28/08
SPK-RPD	Total Pet. Hydrocarbons Diesel	TPHDIESEL	110.000		RPD			11.640	20.000		07/28/08
Lab ID: W08GR02623											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	ortho-Terphenyl Surr	84-15-1	461.99	97.000	% Recov	70.000	130.000				07/28/08
Lab ID: W08GR02624											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	ortho-Terphenyl Surr	84-15-1	468.41	98.400	% Recov	70.000	130.000				07/28/08
BATCH QC											
BLANK	Kerosene	TPHKEROSENE	< 75	n/a	ug/L					U	07/28/08
BLANK	ortho-Terphenyl Surr	84-15-1	533.50	107.000	% Recov	70.000	130.000				07/28/08
BLANK	Total Pet. Hydrocarbons Diesel	TPHDIESEL	< 75	n/a	ug/L					U	07/28/08
LCS	ortho-Terphenyl Surr	84-15-1	436.07	87.200	% Recov	70.000	130.000				07/28/08
LCS	Total Pet. Hydrocarbons Diesel	TPHDIESEL	2428.4	97.100	% Recov	80.000	120.000				07/28/08

Date: 09 August 2010
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: BP-5
Subject: PCBs and Pesticides- Sample Data Groups (SDGs) SL762 and SL766

INTRODUCTION

This memorandum presents the results of data validation for SDGs SL762 and SL766 prepared by TestAmerica. A list of samples validated along with the analytical methods is provided in the following table.

Sample ID	Sample Date	Media	Validation Level	Analytical Method
B1X8M5	10/16/2008	Water	C	8082
B1X8N6	10/16/2008	Water	C	8082
B1X8H8	10/16/2008	Water	C	8082
B1W563	10/31/2008	Water	C	8081A
B1W599	10/31/2008	Water	C	8081A
B1W5B5	10/31/2008	Water	C	8081A
B1W4W3	11/03/2008	Water	C	8081A
B1W593	11/03/2008	Water	C	8081A
B1W5C7	11/03/2008	Water	C	8081A
B1W587	11/03/2008	Water	C	8081A
B1W569	11/03/2008	Water	C	8081A
B1W5D9	11/03/2008	Water	C	8081A
B1W5H7	11/03/2008	Water	C	8081A
B1W539	11/03/2008	Water	C	8081A
B1W503	11/04/2008	Water	C	8081A
B1W5C1	11/04/2008	Water	C	8081A
B1W5D3	11/04/2008	Water	C	8081A
B1W5H1	11/06/2008	Water	C	8081A
B1W575	11/06/2008	Water	C	8081A
B1W5F5	11/06/2008	Water	C	8081A

Data validation was conducted in accordance with the CHPRC validation statement of work and the Remedial Investigation/Feasibility Study Work Plan for the 200-BP-5 Groundwater Operable Unit, DOE/RL-2007-18, Rev. 1 (SAP). Appendices 1 through 6 provide the following information as indicated below:

Appendix 1. Glossary of Data Reporting Qualifiers
Appendix 2. Summary of Data Qualification
Appendix 3. Annotated Laboratory Reports
Appendix 4. Laboratory Narrative and Chain-of-Custody Documentation
Appendix 5. Data Validation Supporting Documentation
Appendix 6. Additional Documentation Requested By Client

DATA QUALITY OBJECTIVES

- **Holding Times and Sample Preservation**

Holding times are calculated from Chain-of-Custody forms to determine the validity of the results. The holding time requirements for PCBs and pesticides in water are extraction within 7 days of sample collection and analysis within 40 days of sample extraction. Sample preservation requires chilling to 4 degrees Celsius.

The samples were extracted and analyzed within the prescribed holding times and properly preserved.

- **Blanks**

The blank data results are reviewed to assess the extent of contamination introduced through sampling, sample preparation, and analysis.

Laboratory Blanks

All laboratory blank results were acceptable.

Trip Blanks

No trip blanks were submitted for analysis.

Field Blanks

No field blanks were submitted for analysis.

Equipment Blanks

No equipment blanks were submitted for analysis.

- **Accuracy**

Accuracy is evaluated by reviewing surrogate results, matrix spike sample results, and laboratory control sample results. PCB and pesticide accuracy limits were not provided in the SAP. Therefore, the accuracy limits specified in the DV procedure were used for data validation.

Surrogates

All surrogate recoveries were acceptable.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

All MS/MSD recoveries were acceptable with the following exception.

For SDG SL766, batch 8311212, the MS recovery for heptachlor was above the upper acceptance limit. The associated sample results were all non-detects and should not be qualified.

It should be noted for all pesticide batches that MS/MSD analyses were not performed for multi-component analytes toxaphene and chlordane (technical). No sample data are qualified as a result.

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable with the following exception.

For SDG SL762, the LCS recovery for Aroclor-1260 was above the upper acceptance limit. The associated sample results were all non-detects and should not be qualified as a result.

It should be noted for all pesticide batches that LCS analyses were not performed for multi-component analytes toxaphene and chlordane (technical). No sample data are qualified as a result.

- **Precision**

Precision is evaluated by reviewing MS/MSD results, field duplicate sample results, and field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. PCB and pesticide precision limits were not provided in the SAP. Therefore, the precision limits specified in the DV procedure were used for data validation.

MS/MSD Samples

All MS/MSD relative percent difference (RPD) values were acceptable with the following exceptions.

For SDG SL762, the aroclor-1016 and aroclor-1260 RPDs were above the acceptance limits. All PCB results for samples B1X8M5, B1X8N6 and B1X8H8 were non-detects and should be qualified as estimates and flagged "UJ."

For SDG SL766, batch 8311212, the 4,4'-DDT and heptachlor RPDs were above the acceptance limits. The associated results for samples B1W4W3, B1W593, B1W5C7, B1W587, B1W569, B1W5D9, B1W5H7 and B1W539 were non-detects and should be qualified as estimates and flagged "UJ."

Field Duplicate Samples

No field duplicates were submitted for analysis.

Field Split Samples

No field splits were submitted for analysis.

- **Detection Limits**

Reported MDLs are compared against the contractually required detection limits (CRDLs) to ensure that laboratory detection limits meet the required criteria.

CRDLs for PCBs and pesticides were not provided in the SAP.

- **Completeness**

SDGs SL762 and SL766 were submitted for validation and verified for completeness. Completeness is based on the percentage of data determined to be valid (i.e., not rejected). The completion percentage was 100%.

MAJOR DEFICIENCIES

None found.

MINOR DEFICIENCIES

Minor deficiencies leading to qualification of sample results as estimates were due to MS/MSD precision infractions. See the table in Appendix 2 for a listing of all affected sample results.

REFERENCES

HNF-20433, Rev. 0, *Data Validation Procedure for Chemical Analyses*, June 2004.

DOE/RL-2007-18, Rev. 1, *Remedial Investigation/Feasibility Study Work Plan for the 200-BP-5 Groundwater Operable Unit*, December 2008.

Appendix 1

Glossary of Data Reporting Qualifiers

Qualifiers that may be applied by data validators in compliance with the CHPRC statement of work are as follows:

- **U** — The constituent was analyzed for and was not detected. The data should be considered usable for decision-making purposes.

- **UJ** — The constituent was analyzed for and was not detected. Due to a quality control deficiency identified during data validation the value reported may not accurately reflect the MDL. The data should be considered usable for decision-making purposes.

- **J** — Indicates the constituent was analyzed for and detected. The associated value is estimated due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **UR** — Indicates the constituent was analyzed for and not detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

- **R** — Indicates the constituent was analyzed for and detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

Appendix 2

Summary of Data Qualification

PCB Data Qualification Summary			
SDG: SL762	Reviewer: AQA	Project: BP-5	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
Aroclor-1016, -1221, -1232, -1242, -1248, -1254 & -1260	UJ	B1X8M5, B1X8N6 & B1X8H8	Poor MS/MSD precision
4,4'-DDT Heptachlor	UJ	B1W4W3, B1W593, B1W5C7, B1W587, B1W569, B1W5D9, B1W5H7, B1W539	Poor MS/MSD precision

Comments: None

Appendix 3

Annotated Laboratory Reports

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8M5

GC Semivolatiles

Lot-Sample #...: F8J170190-005 Work Order #...: K04A21AD Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08
Prep Date.....: 10/21/08 Analysis Date..: 11/07/08
Prep Batch #...: 8295137
Dilution Factor: 1 Method.....: SW846 8082

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	UJ	ND	1.0	ug/L	0.21
Aroclor 1221	UJ	ND	1.0	ug/L	0.21
Aroclor 1232	UJ	ND	1.0	ug/L	0.21
Aroclor 1242	UJ	ND	1.0	ug/L	0.21
Aroclor 1248	UJ	ND	1.0	ug/L	0.21
Aroclor 1254	UJ	ND	1.0	ug/L	0.14
Aroclor 1260	UJ	ND	1.0	ug/L	0.14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	124	(28 - 147)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8N6

GC Semivolatiles

Lot-Sample #...: F8J170190-010 Work Order #...: K04CK1AD Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08
Prep Date.....: 10/21/08 Analysis Date..: 11/07/08
Prep Batch #...: 8295137
Dilution Factor: 1 Method.....: SW846 8082

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	UJ	ND	1.0	ug/L	0.21
Aroclor 1221	UJ	ND	1.0	ug/L	0.21
Aroclor 1232	UJ	ND	1.0	ug/L	0.21
Aroclor 1242	UJ	ND	1.0	ug/L	0.21
Aroclor 1248	UJ	ND	1.0	ug/L	0.21
Aroclor 1254	UJ	ND	1.0	ug/L	0.14
Aroclor 1260	UJ	ND	1.0	ug/L	0.14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	123	(28 - 147)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8H8

GC Semivolatiles

Lot-Sample #...: F8J170190-021 Work Order #...: K04DJ1AC Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08
Prep Date.....: 10/21/08 Analysis Date..: 11/07/08
Prep Batch #...: 8295137
Dilution Factor: 1 Method.....: SW846 8082

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aroclor 1016	UJ	ND	1.0	ug/L	0.21
Aroclor 1221	UJ	ND	1.0	ug/L	0.21
Aroclor 1232	UJ	ND	1.0	ug/L	0.21
Aroclor 1242	UJ	ND	1.0	ug/L	0.21
Aroclor 1248	UJ	ND	1.0	ug/L	0.21
Aroclor 1254	UJ	ND	1.0	ug/L	0.14
Aroclor 1260	UJ	ND	1.0	ug/L	0.14

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	123	(28 - 147)

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W563

GC Semivolatiles

Lot-Sample #...: F8K010181-001 **Work Order #...:** K14AW1AC **Matrix.....:** WATER
Date Sampled...: 10/31/08 **Date Received..:** 11/01/08
Prep Date.....: 11/04/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8323364
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0040
4,4'-DDD	ND	0.050	ug/L	0.0038
4,4'-DDE	ND	0.050	ug/L	0.0027
4,4'-DDT	ND	0.050	ug/L	0.0056
Endosulfan I	ND	0.050	ug/L	0.0025
Endosulfan II	ND	0.050	ug/L	0.010
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0025
alpha-BHC	ND	0.050	ug/L	0.0025
beta-BHC	ND	0.050	ug/L	0.013
Endrin	ND	0.050	ug/L	0.0028
delta-BHC	ND	0.050	ug/L	0.0060
Heptachlor	ND	0.050	ug/L	0.0025
Heptachlor epoxide	ND	0.050	ug/L	0.0032
Methoxychlor	ND	0.10	ug/L	0.0050
Chlordane (technical)	ND	0.50	ug/L	0.18
Dieldrin	ND	0.050	ug/L	0.0023
Endosulfan sulfate	ND	0.050	ug/L	0.017
Endrin aldehyde	ND	0.050	ug/L	0.0032
Toxaphene	ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	98	(72 - 135)
Decachlorobiphenyl	106	(68 - 133)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W599

GC Semivolatiles

Lot-Sample #...: F8K010181-002 **Work Order #...:** K14CA1AC **Matrix.....:** WATER
Date Sampled...: 10/31/08 **Date Received..:** 11/01/08
Prep Date.....: 11/04/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8323364
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0040
4,4'-DDD	ND	0.050	ug/L	0.0038
4,4'-DDE	ND	0.050	ug/L	0.0027
4,4'-DDT	ND	0.050	ug/L	0.0056
Endosulfan I	ND	0.050	ug/L	0.0025
Endosulfan II	ND	0.050	ug/L	0.010
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0025
alpha-BHC	ND	0.050	ug/L	0.0025
beta-BHC	ND	0.050	ug/L	0.013
Endrin	ND	0.050	ug/L	0.0028
delta-BHC	ND	0.050	ug/L	0.0060
Heptachlor	ND	0.050	ug/L	0.0025
Heptachlor epoxide	ND	0.050	ug/L	0.0032
Methoxychlor	ND	0.10	ug/L	0.0050
Chlordane (technical)	ND	0.50	ug/L	0.18
Dieldrin	ND	0.050	ug/L	0.0023
Endosulfan sulfate	ND	0.050	ug/L	0.017
Endrin aldehyde	ND	0.050	ug/L	0.0032
Toxaphene	ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	97	(72 - 135)
Decachlorobiphenyl	101	(68 - 133)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W5B5

GC Semivolatiles

Lot-Sample #...: F8K010181-003 **Work Order #...:** K14CE1AC **Matrix.....:** WATER
Date Sampled...: 10/31/08 **Date Received..:** 11/01/08
Prep Date.....: 11/04/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8323364
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0040
4,4'-DDD	ND	0.050	ug/L	0.0038
4,4'-DDE	ND	0.050	ug/L	0.0027
4,4'-DDT	ND	0.050	ug/L	0.0056
Endosulfan I	ND	0.050	ug/L	0.0025
Endosulfan II	ND	0.050	ug/L	0.010
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0025
alpha-BHC	ND	0.050	ug/L	0.0025
beta-BHC	ND	0.050	ug/L	0.013
Endrin	ND	0.050	ug/L	0.0028
delta-BHC	ND	0.050	ug/L	0.0060
Heptachlor	ND	0.050	ug/L	0.0025
Heptachlor epoxide	ND	0.050	ug/L	0.0032
Methoxychlor	ND	0.10	ug/L	0.0050
Chlordane (technical)	ND	0.50	ug/L	0.18
Dieldrin	ND	0.050	ug/L	0.0023
Endosulfan sulfate	ND	0.050	ug/L	0.017
Endrin aldehyde	ND	0.050	ug/L	0.0032
Toxaphene	ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	106	(72 - 135)
Decachlorobiphenyl	106	(68 - 133)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W4W3

GC Semivolatiles

Lot-Sample #...: F8K050209-001 **Work Order #...:** K19V81AC **Matrix.....:** WATER
Date Sampled...: 11/03/08 **Date Received..:** 11/05/08
Prep Date.....: 11/06/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8311212
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin		ND	0.050	ug/L	0.0040
4,4'-DDD		ND	0.050	ug/L	0.0038
4,4'-DDE		ND	0.050	ug/L	0.0027
4,4'-DDT	UJ	ND	0.050	ug/L	0.0056
Endosulfan I		ND	0.050	ug/L	0.0025
Endosulfan II		ND	0.050	ug/L	0.010
gamma-BHC (Lindane)		ND	0.050	ug/L	0.0025
alpha-BHC		ND	0.050	ug/L	0.0025
beta-BHC		ND	0.050	ug/L	0.013
Endrin		ND	0.050	ug/L	0.0028
delta-BHC		ND	0.050	ug/L	0.0060
Heptachlor	UJ	ND N	0.050	ug/L	0.0025
Heptachlor epoxide		ND	0.050	ug/L	0.0032
Methoxychlor		ND	0.10	ug/L	0.0050
Chlordane (technical)		ND	0.50	ug/L	0.18
Dieldrin		ND	0.050	ug/L	0.0023
Endosulfan sulfate		ND	0.050	ug/L	0.017
Endrin aldehyde		ND	0.050	ug/L	0.0032
Toxaphene		ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	105	(72 - 135)
Decachlorobiphenyl	104	(68 - 133)

NOTE(S):

N Spiked analyte recovery is outside stated control limits.

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W593

GC Semivolatiles

Lot-Sample #...: F8K050209-002 **Work Order #...:** K19WE1AC **Matrix.....:** WATER
Date Sampled...: 11/03/08 **Date Received..:** 11/05/08
Prep Date.....: 11/06/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8311212
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin		ND	0.050	ug/L	0.0040
4,4'-DDD		ND	0.050	ug/L	0.0038
4,4'-DDE		ND	0.050	ug/L	0.0027
4,4'-DDT	UJ	ND	0.050	ug/L	0.0056
Endosulfan I		ND	0.050	ug/L	0.0025
Endosulfan II		ND	0.050	ug/L	0.010
gamma-BHC (Lindane)		ND	0.050	ug/L	0.0025
alpha-BHC		ND	0.050	ug/L	0.0025
beta-BHC		ND	0.050	ug/L	0.013
Endrin		ND	0.050	ug/L	0.0028
delta-BHC		ND	0.050	ug/L	0.0060
Heptachlor	UJ	ND N	0.050	ug/L	0.0025
Heptachlor epoxide		ND	0.050	ug/L	0.0032
Methoxychlor		ND	0.10	ug/L	0.0050
Chlordane (technical)		ND	0.50	ug/L	0.18
Dieldrin		ND	0.050	ug/L	0.0023
Endosulfan sulfate		ND	0.050	ug/L	0.017
Endrin aldehyde		ND	0.050	ug/L	0.0032
Toxaphene		ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	104	(72 - 135)
Decachlorobiphenyl	104	(68 - 133)

NOTE(S):

N Spiked analyte recovery is outside stated control limits.

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W5C7

GC Semivolatiles

Lot-Sample #...: F8K050209-003 **Work Order #...:** K19WG1AC **Matrix.....:** WATER
Date Sampled...: 11/03/08 **Date Received..:** 11/05/08
Prep Date.....: 11/06/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8311212
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin		ND	0.050	ug/L	0.0040
4,4'-DDD		ND	0.050	ug/L	0.0038
4,4'-DDE		ND	0.050	ug/L	0.0027
4,4'-DDT	UJ	ND	0.050	ug/L	0.0056
Endosulfan I		ND	0.050	ug/L	0.0025
Endosulfan II		ND	0.050	ug/L	0.010
gamma-BHC (Lindane)		ND	0.050	ug/L	0.0025
alpha-BHC		ND	0.050	ug/L	0.0025
beta-BHC		ND	0.050	ug/L	0.013
Endrin		ND	0.050	ug/L	0.0028
delta-BHC		ND	0.050	ug/L	0.0060
Heptachlor	UJ	ND N	0.050	ug/L	0.0025
Heptachlor epoxide		ND	0.050	ug/L	0.0032
Methoxychlor		ND	0.10	ug/L	0.0050
Chlordane (technical)		ND	0.50	ug/L	0.18
Dieldrin		ND	0.050	ug/L	0.0023
Endosulfan sulfate		ND	0.050	ug/L	0.017
Endrin aldehyde		ND	0.050	ug/L	0.0032
Toxaphene		ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	102	(72 - 135)
Decachlorobiphenyl	100	(68 - 133)

NOTE(S):

N Spiked analyte recovery is outside stated control limits.

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W587

GC Semivolatiles

Lot-Sample #...: F8K050209-004 Work Order #...: K19WK1AC Matrix.....: WATER
Date Sampled...: 11/03/08 Date Received..: 11/05/08
Prep Date.....: 11/06/08 Analysis Date..: 11/25/08
Prep Batch #...: 8311212
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin		ND	0.050	ug/L	0.0040
4,4'-DDD		ND	0.050	ug/L	0.0038
4,4'-DDE		ND	0.050	ug/L	0.0027
4,4'-DDT	UJ	ND	0.050	ug/L	0.0056
Endosulfan I		ND	0.050	ug/L	0.0025
Endosulfan II		ND	0.050	ug/L	0.010
gamma-BHC (Lindane)		ND	0.050	ug/L	0.0025
alpha-BHC		ND	0.050	ug/L	0.0025
beta-BHC		ND	0.050	ug/L	0.013
Endrin		ND	0.050	ug/L	0.0028
delta-BHC		ND	0.050	ug/L	0.0060
Heptachlor	UJ	ND N	0.050	ug/L	0.0025
Heptachlor epoxide		ND	0.050	ug/L	0.0032
Methoxychlor		ND	0.10	ug/L	0.0050
Chlordane (technical)		ND	0.50	ug/L	0.18
Dieldrin		ND	0.050	ug/L	0.0023
Endosulfan sulfate		ND	0.050	ug/L	0.017
Endrin aldehyde		ND	0.050	ug/L	0.0032
Toxaphene		ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	113	(72 - 135)
Decachlorobiphenyl	110	(68 - 133)

NOTE(S):

N Spiked analyte recovery is outside stated control limits.

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W569

GC Semivolatiles

Lot-Sample #...: F8K050209-005 **Work Order #...:** K19WN1AC **Matrix.....:** WATER
Date Sampled...: 11/03/08 **Date Received..:** 11/05/08
Prep Date.....: 11/06/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8311212
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin		ND	0.050	ug/L	0.0040
4,4'-DDD		ND	0.050	ug/L	0.0038
4,4'-DDE		ND	0.050	ug/L	0.0027
4,4'-DDT	UJ	ND	0.050	ug/L	0.0056
Endosulfan I		ND	0.050	ug/L	0.0025
Endosulfan II		ND	0.050	ug/L	0.010
gamma-BHC (Lindane)		ND	0.050	ug/L	0.0025
alpha-BHC		ND	0.050	ug/L	0.0025
beta-BHC		ND	0.050	ug/L	0.013
Endrin		ND	0.050	ug/L	0.0028
delta-BHC		ND	0.050	ug/L	0.0060
Heptachlor	UJ	ND N	0.050	ug/L	0.0025
Heptachlor epoxide		ND	0.050	ug/L	0.0032
Methoxychlor		ND	0.10	ug/L	0.0050
Chlordane (technical)		ND	0.50	ug/L	0.18
Dieldrin		ND	0.050	ug/L	0.0023
Endosulfan sulfate		ND	0.050	ug/L	0.017
Endrin aldehyde		ND	0.050	ug/L	0.0032
Toxaphene		ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	101	(72 - 135)
Decachlorobiphenyl	102	(68 - 133)

NOTE(S):

N Spiked analyte recovery is outside stated control limits.

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W5D9

GC Semivolatiles

Lot-Sample #...: F8K050209-006 **Work Order #...:** K19WP1AC **Matrix.....:** WATER
Date Sampled...: 11/03/08 **Date Received..:** 11/05/08
Prep Date.....: 11/06/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8311212
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin		ND	0.050	ug/L	0.0040
4,4'-DDD		ND	0.050	ug/L	0.0038
4,4'-DDE		ND	0.050	ug/L	0.0027
4,4'-DDT	UJ	ND	0.050	ug/L	0.0056
Endosulfan I		ND	0.050	ug/L	0.0025
Endosulfan II		ND	0.050	ug/L	0.010
gamma-BHC (Lindane)		ND	0.050	ug/L	0.0025
alpha-BHC		ND	0.050	ug/L	0.0025
beta-BHC		ND	0.050	ug/L	0.013
Endrin		ND	0.050	ug/L	0.0028
delta-BHC		ND	0.050	ug/L	0.0060
Heptachlor	UJ	ND N	0.050	ug/L	0.0025
Heptachlor epoxide		ND	0.050	ug/L	0.0032
Methoxychlor		ND	0.10	ug/L	0.0050
Chlordane (technical)		ND	0.50	ug/L	0.18
Dieldrin		ND	0.050	ug/L	0.0023
Endosulfan sulfate		ND	0.050	ug/L	0.017
Endrin aldehyde		ND	0.050	ug/L	0.0032
Toxaphene		ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	108	(72 - 135)
Decachlorobiphenyl	104	(68 - 133)

NOTE(S):

N Spiked analyte recovery is outside stated control limits.

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W5H7

GC Semivolatiles

Lot-Sample #...: F8K050209-007 **Work Order #...:** K19WQ1AC **Matrix.....:** WATER
Date Sampled...: 11/03/08 **Date Received..:** 11/05/08
Prep Date.....: 11/06/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8311212
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin		ND	0.050	ug/L	0.0040
4,4'-DDD		ND	0.050	ug/L	0.0038
4,4'-DDE		ND	0.050	ug/L	0.0027
4,4'-DDT	UJ	ND	0.050	ug/L	0.0056
Endosulfan I		ND	0.050	ug/L	0.0025
Endosulfan II		ND	0.050	ug/L	0.010
gamma-BHC (Lindane)		ND	0.050	ug/L	0.0025
alpha-BHC		ND	0.050	ug/L	0.0025
beta-BHC		ND	0.050	ug/L	0.013
Endrin		ND	0.050	ug/L	0.0028
delta-BHC		ND	0.050	ug/L	0.0060
Heptachlor	UJ	ND N	0.050	ug/L	0.0025
Heptachlor epoxide		ND	0.050	ug/L	0.0032
Methoxychlor		ND	0.10	ug/L	0.0050
Chlordane (technical)		ND	0.50	ug/L	0.18
Dieldrin		ND	0.050	ug/L	0.0023
Endosulfan sulfate		ND	0.050	ug/L	0.017
Endrin aldehyde		ND	0.050	ug/L	0.0032
Toxaphene		ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	114	(72 - 135)
Decachlorobiphenyl	111	(68 - 133)

NOTE(S):

N Spiked analyte recovery is outside stated control limits.

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W539

GC Semivolatiles

Lot-Sample #...: F8K050209-008 **Work Order #...:** K19WV1AC **Matrix.....:** WATER
Date Sampled...: 11/03/08 **Date Received..:** 11/05/08
Prep Date.....: 11/06/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8311212
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER		RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin		ND	0.050	ug/L	0.0040
4,4'-DDD		ND	0.050	ug/L	0.0038
4,4'-DDE		ND	0.050	ug/L	0.0027
4,4'-DDT	UJ	ND	0.050	ug/L	0.0056
Endosulfan I		ND	0.050	ug/L	0.0025
Endosulfan II		ND	0.050	ug/L	0.010
gamma-BHC (Lindane)		ND	0.050	ug/L	0.0025
alpha-BHC		ND	0.050	ug/L	0.0025
beta-BHC		ND	0.050	ug/L	0.013
Endrin		ND	0.050	ug/L	0.0028
delta-BHC		ND	0.050	ug/L	0.0060
Heptachlor	UJ	ND N	0.050	ug/L	0.0025
Heptachlor epoxide		ND	0.050	ug/L	0.0032
Methoxychlor		ND	0.10	ug/L	0.0050
Chlordane (technical)		ND	0.50	ug/L	0.18
Dieldrin		ND	0.050	ug/L	0.0023
Endosulfan sulfate		ND	0.050	ug/L	0.017
Endrin aldehyde		ND	0.050	ug/L	0.0032
Toxaphene		ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	107	(72 - 135)
Decachlorobiphenyl	109	(68 - 133)

NOTE(S):

N Spiked analyte recovery is outside stated control limits.

LS
8-09-2010

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W503

GC Semivolatiles

Lot-Sample #...: F8K060259-001 **Work Order #...:** K2DMJ1AC **Matrix.....:** WATER
Date Sampled...: 11/04/08 **Date Received..:** 11/06/08
Prep Date.....: 11/09/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8315111
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0040
4,4'-DDD	ND	0.050	ug/L	0.0038
4,4'-DDE	ND	0.050	ug/L	0.0027
4,4'-DDT	ND	0.050	ug/L	0.0056
Endosulfan I	ND	0.050	ug/L	0.0025
Endosulfan II	ND	0.050	ug/L	0.010
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0025
alpha-BHC	ND	0.050	ug/L	0.0025
beta-BHC	ND	0.050	ug/L	0.013
Endrin	ND	0.050	ug/L	0.0028
delta-BHC	ND	0.050	ug/L	0.0060
Heptachlor	ND	0.050	ug/L	0.0025
Heptachlor epoxide	ND	0.050	ug/L	0.0032
Methoxychlor	ND	0.10	ug/L	0.0050
Chlordane (technical)	ND	0.50	ug/L	0.18
Dieldrin	ND	0.050	ug/L	0.0023
Endosulfan sulfate	ND	0.050	ug/L	0.017
Endrin aldehyde	ND	0.050	ug/L	0.0032
Toxaphene	ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	117	(72 - 135)
Decachlorobiphenyl	108	(68 - 133)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W5C1

GC Semivolatiles

Lot-Sample #...: F8K060259-002 **Work Order #...:** K2DNA1AC **Matrix.....:** WATER
Date Sampled...: 11/04/08 **Date Received..:** 11/06/08
Prep Date.....: 11/09/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8315111
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0040
4,4'-DDD	ND	0.050	ug/L	0.0038
4,4'-DDE	ND	0.050	ug/L	0.0027
4,4'-DDT	ND	0.050	ug/L	0.0056
Endosulfan I	ND	0.050	ug/L	0.0025
Endosulfan II	ND	0.050	ug/L	0.010
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0025
alpha-BHC	ND	0.050	ug/L	0.0025
beta-BHC	ND	0.050	ug/L	0.013
Endrin	ND	0.050	ug/L	0.0028
delta-BHC	ND	0.050	ug/L	0.0060
Heptachlor	ND	0.050	ug/L	0.0025
Heptachlor epoxide	ND	0.050	ug/L	0.0032
Methoxychlor	ND	0.10	ug/L	0.0050
Chlordane (technical)	ND	0.50	ug/L	0.18
Dieldrin	ND	0.050	ug/L	0.0023
Endosulfan sulfate	ND	0.050	ug/L	0.017
Endrin aldehyde	ND	0.050	ug/L	0.0032
Toxaphene	ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	122	(72 - 135)
Decachlorobiphenyl	126	(68 - 133)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W5D3

GC Semivolatiles

Lot-Sample #...: F8K060259-003 Work Order #...: K2DND1AC Matrix.....: WATER
Date Sampled...: 11/04/08 Date Received..: 11/06/08
Prep Date.....: 11/09/08 Analysis Date..: 11/25/08
Prep Batch #...: 8315111
Dilution Factor: 1 Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0040
4,4'-DDD	ND	0.050	ug/L	0.0038
4,4'-DDE	ND	0.050	ug/L	0.0027
4,4'-DDT	ND	0.050	ug/L	0.0056
Endosulfan I	ND	0.050	ug/L	0.0025
Endosulfan II	ND	0.050	ug/L	0.010
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0025
alpha-BHC	ND	0.050	ug/L	0.0025
beta-BHC	ND	0.050	ug/L	0.013
Endrin	ND	0.050	ug/L	0.0028
delta-BHC	ND	0.050	ug/L	0.0060
Heptachlor	ND	0.050	ug/L	0.0025
Heptachlor epoxide	ND	0.050	ug/L	0.0032
Methoxychlor	ND	0.10	ug/L	0.0050
Chlordane (technical)	ND	0.50	ug/L	0.18
Dieldrin	ND	0.050	ug/L	0.0023
Endosulfan sulfate	ND	0.050	ug/L	0.017
Endrin aldehyde	ND	0.050	ug/L	0.0032
Toxaphene	ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	115	(72 - 135)
Decachlorobiphenyl	115	(68 - 133)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W5H1

GC Semivolatiles

Lot-Sample #...: F8K070328-001 **Work Order #...:** K2HRX1AC **Matrix.....:** WATER
Date Sampled...: 11/06/08 **Date Received..:** 11/07/08
Prep Date.....: 11/09/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8315111
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0040
4,4'-DDD	ND	0.050	ug/L	0.0038
4,4'-DDE	ND	0.050	ug/L	0.0027
4,4'-DDT	ND	0.050	ug/L	0.0056
Endosulfan I	ND	0.050	ug/L	0.0025
Endosulfan II	ND	0.050	ug/L	0.010
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0025
alpha-BHC	ND	0.050	ug/L	0.0025
beta-BHC	ND	0.050	ug/L	0.013
Endrin	ND	0.050	ug/L	0.0028
delta-BHC	ND	0.050	ug/L	0.0060
Heptachlor	ND	0.050	ug/L	0.0025
Heptachlor epoxide	ND	0.050	ug/L	0.0032
Methoxychlor	ND	0.10	ug/L	0.0050
Chlordane (technical)	ND	0.50	ug/L	0.18
Dieldrin	ND	0.050	ug/L	0.0023
Endosulfan sulfate	ND	0.050	ug/L	0.017
Endrin aldehyde	ND	0.050	ug/L	0.0032
Toxaphene	ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	128	(72 - 135)
Decachlorobiphenyl	123	(68 - 133)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W575

GC Semivolatiles

Lot-Sample #...: F8K070328-002 **Work Order #...:** K2HR21AC **Matrix.....:** WATER
Date Sampled...: 11/06/08 **Date Received..:** 11/07/08
Prep Date.....: 11/09/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8315111
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0040
4,4'-DDD	ND	0.050	ug/L	0.0038
4,4'-DDE	ND	0.050	ug/L	0.0027
4,4'-DDT	ND	0.050	ug/L	0.0056
Endosulfan I	ND	0.050	ug/L	0.0025
Endosulfan II	ND	0.050	ug/L	0.010
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0025
alpha-BHC	ND	0.050	ug/L	0.0025
beta-BHC	ND	0.050	ug/L	0.013
Endrin	ND	0.050	ug/L	0.0028
delta-BHC	ND	0.050	ug/L	0.0060
Heptachlor	ND	0.050	ug/L	0.0025
Heptachlor epoxide	ND	0.050	ug/L	0.0032
Methoxychlor	ND	0.10	ug/L	0.0050
Chlordane (technical)	ND	0.50	ug/L	0.18
Dieldrin	ND	0.050	ug/L	0.0023
Endosulfan sulfate	ND	0.050	ug/L	0.017
Endrin aldehyde	ND	0.050	ug/L	0.0032
Toxaphene	ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	118	(72 - 135)
Decachlorobiphenyl	117	(68 - 133)

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1W5F5

GC Semivolatiles

Lot-Sample #...: F8K070328-003 **Work Order #...:** K2HR41AC **Matrix.....:** WATER
Date Sampled...: 11/06/08 **Date Received..:** 11/07/08
Prep Date.....: 11/09/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8315111
Dilution Factor: 1 **Method.....:** SW846 8081A

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Aldrin	ND	0.050	ug/L	0.0040
4,4'-DDD	ND	0.050	ug/L	0.0038
4,4'-DDE	ND	0.050	ug/L	0.0027
4,4'-DDT	ND	0.050	ug/L	0.0056
Endosulfan I	ND	0.050	ug/L	0.0025
Endosulfan II	ND	0.050	ug/L	0.010
gamma-BHC (Lindane)	ND	0.050	ug/L	0.0025
alpha-BHC	ND	0.050	ug/L	0.0025
beta-BHC	ND	0.050	ug/L	0.013
Endrin	ND	0.050	ug/L	0.0028
delta-BHC	ND	0.050	ug/L	0.0060
Heptachlor	ND	0.050	ug/L	0.0025
Heptachlor epoxide	ND	0.050	ug/L	0.0032
Methoxychlor	ND	0.10	ug/L	0.0050
Chlordane (technical)	ND	0.50	ug/L	0.18
Dieldrin	ND	0.050	ug/L	0.0023
Endosulfan sulfate	ND	0.050	ug/L	0.017
Endrin aldehyde	ND	0.050	ug/L	0.0032
Toxaphene	ND	2.0	ug/L	0.33

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	112	(72 - 135)
Decachlorobiphenyl	115	(68 - 133)

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MSIN B6-06
Richland, Washington 99352
November 21, 2008
Attention: Mike Neely

SDG	: SL762
Number of Samples	: 37 samples
Sample Matrix	: water
Data Deliverable	: Summary
Date SDG Closed	: October 25, 2008

II. Introduction

Between October 17, 2008 and October 25, 2008, thirty seven (37) water samples were received by TestAmerica - St. Louis for chemical analysis. The samples were received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits. All results are based upon samples as they were received, i.e. wet weight, unless otherwise noted on the data sheets. See the attached Methods Summary Form for the methods used in this SDG.

Deviation from Request: None

IV. Definitions

QCBLK-	Quality Control Blank, Method Blank
QCLCS-	Quality Control Laboratory Control Sample, Blank Spike
DUP-	Laboratory Duplicate
MS-	Matrix Spike
MSD-	Matrix Spike Duplicate

V. Comments

General

The following SAFs are associated with this SDG: W09-010

The term "Detection Limit" used in the analytical data report refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

MS/MSD/Dup analysis was done per the client requirements. Analytical batches that did not contain matrix QC were analyzed with a LCS/LCS duplicate.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CH2MHill Plateau Remediation Company
November 21, 2008
SDG: SL762

Phenols by GC

Batch: 8294172

The LCS surrogate recovery for 2-Fluorophenol is outside acceptance limits. LCS spike recoveries are within QC limits demonstrating acceptable sample extraction and instrument performance.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

The MS/MSD RPD for 4,6-Dinitro-2-methylphenol is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

The closing CCV recoveries for OCAL931 were outside the upper QC limit (greater than 15% RSD) for 2,6-Dichlorophenol, 4-Nitrophenol, Pentachlorophenol, and Dinoseb indicating a potential high bias for those analytes in the samples associated with this CCV. These analytes were not detected above the reporting limit in the associated samples.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

The closing CCV surrogate recovery for OCAL931 was outside the upper QC limits (greater than 15%D) for 2,4,6-Tribromophenol indicating a potential high bias for the surrogate in the associated samples. The surrogate recovery in the samples was within acceptable QC limits.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

Batch: 8302135

The MS/MSD RPD for 4,6-Dinitro-2-methylphenol, Dinoseb, 2-Nitrophenol, 4-Nitrophenol, and Phenol is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.
Affected Samples:
F8J250134 (1): B1X7V5
F8J250134 (6): B1X7V6

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CH2MHill Plateau Remediation Company

November 21, 2008

SDG: SL762

PCBs

Batch: 8295137

The LCS recovery for Aroclor 1260 is outside the upper QC limit, indicating a potential positive bias for these Aroclors associated with 1260. These Aroclors were not observed above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The DCB surrogate recovery was outside the upper QC limits in the LCS, but the samples associated with this LCS had acceptable surrogate gel labrecoveries.

Affected Samples:

F8J170190 (5): B1X8M5

F8J170190 (10): B1X8N6

F8J170190 (21): B1X8H8

The MS/MSD RPD for Aroclor 1016 and Aroclor 1260 is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.

Affected Samples:

F8J170190 (5): B1X8M5

F8J170190 (10): B1X8N6

F8J170190 (21): B1X8H8

There were no observations or nonconformances for the following methods:

Total Organic Carbon

Total Organic Halogens

I certify that this Summary Package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:

Michael Franks

St. Louis Project Manager

SDG# SL762

FLUOR HANFORD SL762 CVR 465

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-173

Page 1 of 1

Collector D. Woehle	Contact/Requester Mike Neely	Telephone No. 509-373-0654 MSIN FAX
SAF No. W09-010	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, OCTOBER 2008	HWF-N-506-17	Ice Chest No. ERC-1 Temp. 79 lbs
Shipped To (Lab) TestAmerica St. Louis	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No. 7993 9545 7930
Protocol RCRA	Priority: 45 Days	Offsite Property No. N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X8L9		W	10-16-08	0842	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8L9		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M0		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8M0		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M1		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8M1		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M2		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8M2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M5		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X8M5		W			1x20-mL P	Activity Scan	6 Months	None
B1X8M5		W			3x1000-mL aG	8082_PCB_GC: List-1 (7)	7/40 Days	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			OCT 16 2008 1430	FedEx			
FedEx				B-L			10/17/08 09:5

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

SDG# SL762

FLUOR HANFORD SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-179

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-17	Ice Chest No.: SRC-02-406 Temp.: 88 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7919 7235 8560
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X8N0		W	10-16-08	1050	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N0		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N1		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N1		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N2		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N3		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N3		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N6		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X8N6		W			1x20-mL P	Activity Scan	6 Months	None
B1X8N6		W			3x1000-mL aG	8082_PCB_GC: List-1 (7)	7/40 Days	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			OCT 16 2008 1430	FedEx			
FedEx				B			10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

Relinquished By	Date/Time	Received By	Date/Time

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

FLUOR HANFORD

SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-107

Collector: ~~D.R. Williamson~~ D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506/6	Ice Chest No.: GWS-001 Temp.: 5416
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7927 7118 3446
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7T4		W	10/14/08	1353	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T4		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7T5		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7T6		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T6		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7T7		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T7		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7V0		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7V0		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~D.R. Williamson~~ 10/14/08	D. Woehle		10/16/08 0930	K. B. Hulse			10/16/08 0930
K. B. Hulse			10/16/08 1430	FED EX			
FedEx							10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD SL7622

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W09-010-131**

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-17	Ice Chest No.: SML-313 Temp.: 80 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7911 6566 5019
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7Y5		W	10-16-08	0949	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7Y6		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y6		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7Y7		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y7		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7Y8		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y8		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X801		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X801		W			1x20-mL P	Activity Scan	6 Months	None
B1X8H8		W			1x20-mL P	Activity Scan	6 Months	None
B1X8H8		W			3x1000-mL aG	8082_PCB_GC: List-1 (7)	7/40 Days	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle		[signature]	1430 OCT 16 2008	FedEx			
FedEx				[signature]			10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-95

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HWF-N-SD6-16	Ice Chest No.: PNNL-1 Temp.: 55 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7993 9521 8776
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7P2		W	10/14/08	1047	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P3		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P3		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P4		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P4		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P5		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P8		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7P8		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			10/16/08 0930	KB Hulse			10/16/08 0930
K. B. Hulse			10/16/08 1430	FED EX			
FedEx							10/17/08 09[illegible]

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

FLUOR HANFORD SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-73

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-W-506-16	Ice Chest No.: SAWS-107 Temp.: 5.7 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7919 7211 7256
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7K2		W	10/14/08	1248	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K3		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K3		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K4		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K4		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K5		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K7		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7K7		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			10/16/08 0930	K. B. Hulse			10/16/08 0930
K. B. Hulse			10/16/08 1430	FED EX			
FED EX							10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-195

Page 1 of 1

Collector: Scott E. Hamaker	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-18	Ice Chest No.: GW314 ~~GWSC-055~~ KEH Temp. 10/24/08
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 79061225 2250
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS Hold Time

FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7V5		W	10/23/08	1100	3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7V5		W			1x20-mL P	Activity Scan	6 Months	None
B1X851		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X852		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X853		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X854		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Scott E. Hamaker / Scott Hamaker	10/24/08 1315	KE Hamilton / Kim E Hamilton	10/24/08 1315
KE Hamilton / Kim E Hamilton	10/24/08 1430	FED EX	
FedEx		B-2	10/25/08 0820

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

FLUOR HANFORD

SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-196

Page 1 of 1

Collector: Scott E. Hamaker	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-326-18	Ice Chest No.: GW14 ~~GWS-053~~ KEH 11/24/08 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7906 1225 2250
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7V6		W	10/23/08	1100	3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7V6		W	10/23/08	1100	1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Scott E. Hamaker	Scott Hamaker		10/24/08 1315	KE Hamilton	Kim E Hamilton		10/24/08 1315
KE Hamilton	Kim E Hamilton		10/24/08 1430	FED EX			
FEDEX							
							10/25/08 0800

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MSIN B6-06
Richland, Washington 99352
December 16, 2008
Attention: Mike Neely

TestAmerica Laboratories, Inc.

SDG	: SL766
Number of Samples	: 17 samples
Sample Matrix	: water
Data Deliverable	: Summary
Date SDG Closed	: November 7, 2008

II. Introduction

Between November 1, 2008 and November 7, 2008, seventeen (17) water samples were received by TestAmerica - St. Louis for chemical analysis. The samples were received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits. All results are based upon samples as they were received, i.e. wet weight, unless otherwise noted on the data sheets. See the attached Methods Summary Form for the methods used in this SDG.

Deviation from Request: None

IV. Definitions

QCBLK-	Quality Control Blank, Method Blank
QCLCS-	Quality Control Laboratory Control Sample, Blank Spike
DUP-	Laboratory Duplicate
MS-	Matrix Spike
MSD-	Matrix Spike Duplicate

V. Comments

General

The following SAFs are associated with this SDG: X08-048

The term "Detection Limit" used in the analytical data report refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

MS/MSD/Dup analysis was done per the client requirements. Analytical batches that did not contain matrix QC were analyzed with a LCS/LCS duplicate.

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CH2MHill Plateau Remediation Company
December 16, 2008
SDG: SL766

TestAmerica Laboratories, Inc.

Volatiles

Batch: 8312146

The D% CCV is (higher recovered) outside the Method criteria (greater than 20% D) for Acetone (52.8%), Tetrahydrofuran (23.5%), Propionitrile (50.3%), 1,4-Dioxane (38.9%), and 4-Methyl-2-pentanone (24.4% high), indicating a potential high bias for these analytes in the samples associated with this CCV. These analytes are not detected above the reporting limits in the associated samples.
Affected Samples:
F8K010181 (1): B1W563
F8K010181 (2): B1W599
F8K010181 (3): B1W5B5

The LCS/LCSD RPD for Tetrahydrofuran is not within method acceptance criteria. LCS/LCSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.
Affected Samples:
F8K010181 (1): B1W563
F8K010181 (2): B1W599
F8K010181 (3): B1W5B5

The MS/MSD RPDs for 1,4-Dioxane is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.
Affected Samples:
F8K010181 (1): B1W563
F8K010181 (2): B1W599
F8K010181 (3): B1W5B5

Batch: 8323284

The D% CCV is (higher recovered) outside the Method criteria (greater than 20% D) for Propionitrile (25.9%) and 1,4-Dioxane (33.0%), indicating a potential high bias for these analytes in the samples associated with this CCV. These analytes are not detected above the reporting limits in the associated samples.
Affected Samples:
F8K050209 (1): B1W4W3
F8K050209 (2): B1W593
F8K050209 (3): B1W5C7
F8K050209 (4): B1W587
F8K050209 (5): B1W569
F8K050209 (6): B1W5D9
F8K050209 (7): B1W5H7
F8K050209 (8): B1W539

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CH2MHill Plateau Remediation Company TestAmerica Laboratories, Inc.
December 16, 2008
SDG: SL766

Batch: 8324243

The D% CCV is (higher recovered) outside the Method criteria (greater than 20% D) for 1,4-Dioxane (25.9%), indicating a potential high bias for this analyte in the samples associated with this CCV. This analyte was not detected above the reporting limits in the associated samples.
Affected Samples:
F8K060259 (1): B1W503
F8K060259 (2): B1W5C1
F8K060259 (3): B1W5D3
F8K070328 (1): B1W5H1
F8K070328 (2): B1W575
F8K070328 (3): B1W5F5

Semi-Volatiles

Batch: 8311078/8322113

Sample acid surrogate recovery is outside established QC limits. Samples were re-prepared/re-analyzed outside holding time in Batch 8322112 . The reanalysis yielded acceptable results. Both results are reported for your review.
Affected Samples:
F8K050209 (2): B1W593

Batch: 8312128

The MS/MSD RPD for 1,4-Dichlorobenzene is not within method acceptance criteria. The MS/MSD recoveries are within the established QC limits.
Affected Samples:
F8K060259 (1): B1W503
F8K060259 (2): B1W5C1
F8K060259 (3): B1W5D3

Pesticides

Batch: 8311212

The MS recovery for Heptachlor is outside the upper QC limit, indicating a potential positive bias for that analyte. This analyte was not observed above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The RPD for Heptachlor and 4,4'-DDT is out of QC limits.
Affected Samples:
F8K050209 (1): B1W4W3
F8K050209 (2): B1W593
F8K050209 (3): B1W5C7
F8K050209 (4): B1W587
F8K050209 (5): B1W569
F8K050209 (6): B1W5D9
F8K050209 (7): B1W5H7
F8K050209 (8): B1W539

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CH2MHill Plateau Remediation Company
December 16, 2008
SDG: SL766

TestAmerica Laboratories, Inc.

Batch: 8315111

The closing CCV recovery was outside the upper QC limit (greater than 20% RSD) for 4,4'-DDT and Methoxychlor indicating a potential high bias for those analytes in the samples associated with this CCV. These analytes were not detected above the reporting limit in the associated samples.
Affected Samples:
F8K070328 (2): B1W575
F8K070328 (3): B1W5F5

I certify that this Summary Package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:

Michael Franks
St. Louis Project Manager

13715 Rider Trail North Earth City, MO 63045 **tel** 314.298.8566 **fax** 314.298.8757 **www.testamericainc.com**

FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-69**

Page 1 of 1

Collector: R. Ellingsworth	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: X08-048	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2PO1 CHARACTERIZATION	HNF-N-506-18	Ice Chest No.: GWS-043 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.: 7960 9774 0446

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W503		W	11/4/8	1000	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W503		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W503		W	↓	↓	2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W503		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth	R. Ellingsworth	[signature]	11/5/08 1430	[signature]			
Relinquished By			Date/Time	Received By			Date/Time
AD Ex				[signature]			11.06.08 0930
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X08-048-159

Page 1 of 1

Collector: R. Ellingsworth	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: X08-048	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2PO1 CHARACTERIZATION	HNF - N - 506 - 18	Ice Chest No.: 6W5-043 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.: 7960 9774 6446

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W5C1		W	11/4/8	1210	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W5C1		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W5C1		W	↓	↓	2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W5C1		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth			1430 11/5/08	FedEx			
Relinquished By: FEDEX			Date/Time	Received By			11.06.08 0930
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANHORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-169**

Page 1 of 1

Collector: Roy Sickle	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: X08-048	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2PO1 CHARACTERIZATION	HWF-W-506-K	Ice Chest No.: GWS-043 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.: 7940 9774 0446

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W5D3		W	11/4/08	1316	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W5D3		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W5D3		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W5D3		W			1x20-mL P	Activity Scan	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Roy Sickle	11/5/08 1430	Fedex	
Fedex		11-06-08 0930	

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

Relinquished By	Date/Time	Received By	Date/Time

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

CUR 641

FLUOR HANFORD

SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-54**

Page 1 of 1

Collector R. Ellingsworth	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. X08-048	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2PO1 CHARACTERIZATION	HNF-N-506-18	Ice Chest No. ERC 96-028 Temp.
Shipped To (Lab) TestAmerica St. Louis	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No. 7960 9645 5992
Protocol SURV	Priority: 30 Days **PRIORITY**	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1W4W3		W	11/3/8	1200	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	14 Days	HCl or H2SO4 to pH <2 Cool~4C
B1W4W3		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	7/40 Days	Cool~4C
B1W4W3		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	7/40 Days	Cool~4C
B1W4W3		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth			11/04/08 1000	KE Hamilton			11/04/08 1000
KE Hamilton			11/04/08 1430	FED EX			
FedEx							11/5/08 0830

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

CUL [illegible]

FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-144**

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: X08-048	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2PO1 CHARACTERIZATION	HNE-N-506-19/35	Ice Chest No.: GWS-021 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7970 9306 4662
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W593		W	11/3/08	1134	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W593		W			3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W593		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W593		W			1x20-mL P	Activity Scan	None

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
D. Woehle	[signature]	11/04/08 1000	KE Hamilton	[signature]	11/04/08 1000
KE Hamilton	[signature]	11/04/08 1430	FED EX		
FEDEX			B-Lil		11/5/08 0930

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-164**

Page 1 of 1

Collector R. Ellingsworth	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. X08-048	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2PO1 CHARACTERIZATION	HNF-N-506-18	**Ice Chest No.** ERC96-028 **Temp.** 74
Shipped To (Lab) TestAmerica St. Louis	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** 7960 9645 5992
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W5C7		W	11/3/08	1410	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W5C7		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W5C7		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W5C7		W			1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth	R. Ellingsworth		11/04/08 1000	KE Hamilton			11/04/08 1000
KE Hamilton			11/04/08 1430	FED EX			
FED EX							11/5/08 0930

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

Relinquished By	Date/Time	Received By	Date/Time

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

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FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-139**

Page 1 of 1

Collector D. Woehle	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. X08-048	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2PO1 CHARACTERIZATION	HNF-N-506-12/35	**Ice Chest No.** CWS-021 **Temp.** 80
Shipped To (Lab) TestAmerica St. Louis	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** 7970 9306 4662
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W587		W	11/3/08	1229	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W587		W			3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W587		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W587		W			1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			11/04/08 1000	KE Hamilton			11/04/08 1000
KE Hamilton			11/04/08 1430	FED EX			
FEDEX				B. [illegible]			11/5/08 0930

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-124**

Page 1 of 1

Collector D. Woehle	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. X08-048	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2PO1 CHARACTERIZATION	HNF-N-506-19/35	**Ice Chest No.** CWS-009 **Temp.**
Shipped To (Lab) TestAmerica St. Louis	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** 7970 9306 6702
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W569		W	11/3/08	1021	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W569		W			3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W569		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W569		W			1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle	D. Woehle	D. Woehle	11/04/08 1000	KE Hamilton	KE Hamilton	KE Hamilton	11/04/08 1000
KE Hamilton		KE Hamilton	11/04/08 1430	FED EX			
FED EX							11/5/08 0930

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

Relinquished By	Date/Time	Received By	Date/Time

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-174**

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: X08-048	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2PO1 CHARACTERIZATION	HNF-N-506-19/35	Ice Chest No.: aws-009 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7970 9306 6702
Protocol: SURV	Priority: 45 Days	Offsite Property No.

81

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W5D9		W	11/3/08	1344	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W5D9		W			3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W5D9		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W5D9		W			1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			11/04/08 1000	KE Hamilton			11/04/08 1000
KE Hamilton			11/04/08 1430	FED EX			
FEDEX							11/5/08 0930

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-189**

Page 1 of 1

Collector R. D. Julian	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. X08-048	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2PO1 CHARACTERIZATION	HNF-N-506-20	**Ice Chest No.** &WS-008 **Temp.** 82
Shipped To (Lab) TestAmerica St. Louis	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** 7970 9306 9436
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W5H7		W	11/3/08	1112	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W5H7		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W5H7		W	↓	↓	2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W5H7		W	↓	↓	1x20-mL P	Activity Scan	None

11/3/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	JP Henick		11/04/08 1000		KE Hamilton		11/04/08 1000
Relinquished By	KE Hamilton		11/04/08 1430	Received By	FED EX		Date/Time
Relinquished By	FEDEX		Date/Time	Received By			11/5/08 0930
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-99**

Page 1 of 1

Collector R. D. Julian	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. X08-048	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2PO1 CHARACTERIZATION	HNF-N-506-20	**Ice Chest No.** CWS-008 **Temp.**
Shipped To (Lab) TestAmerica St. Louis	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** 7970 9306 9436
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W539		W	11/3/08	1304	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W539		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W539		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W539		W			1x20-mL P	Activity Scan	None

11/3/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JP Herrick	J. Herrick		11/04/08 1000	KE Hamilton			11/04/08 1000
KE Hamilton			11/04/08 1430	FED EX			
FedEx							11/5/08 0930

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

SDG# SL766

FLUOR HANFORD

SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X08-048-119

Page 1 of 1

Collector: FLUOR HANFORD R.F. CARRIGAN	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: X08-048	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 7
Project Title: 2PO1 CHARACTERIZATION	HNF-N-506-17 Page 66	Ice Chest No.: GWO-07-002 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7921 3792 0280
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W563		W	10/31/08	1237	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W563		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W563		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W563		W			1x20-mL P	Activity Scan	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
FLUOR HANFORD R.F. CARRIGAN / R F Carrigan	10/31/08 1430	FED EX	
FedEx		B	11/1/08 0830

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SDG# SL766

FLUOR HANFORD

SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X08-048-149

Collector: FLUOR HANFORD R.F. CARRIGAN	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: X08-048	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2PO1 CHARACTERIZATION	HNF-N-506-17 Pg 66	Ice Chest No.: GW0-07-002 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7921 3792 0280
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W599		W	10/31/08	1102	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W599		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W599		W	↓	↓	2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W599		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD R.F. CARRIGAN		Ron F Carrigan	10/31/08 1430	FED EX			
Relinquished By: FEDEX			Date/Time	Received By: [illegible]			Date/Time: 11/1/08 0830
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SDG# SL766

FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-154**

Page 1 of 1

Collector: FLUOR HANFORD R.F. CARRIGAN	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: X08-048	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2PO1 CHARACTERIZATION	HNF-N-506-17 Pg 66	Ice Chest No.: GWS-609 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7927 8156 2050
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W5B5		W	10/31/08	0936	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W5B5		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W5B5		W	↓	↓	2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W5B5		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By (Print / Sign / Date/Time)	Received By (Print / Sign / Date/Time)
FLUOR HANFORD R.F. CARRIGAN — R.F. Carrigan — 10/31/08 1430	FEDEX
Relinquished By: FedEx — Date/Time	Received By: B-2 — Date/Time: 11/1/08 0830
Relinquished By — Date/Time	Received By — Date/Time
Relinquished By — Date/Time	Received By — Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

SDG# SL766

FLUOR HANFORD 5L766

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CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

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C.O.C. # **X08-048-184**

Page 1 of 1

Collector H. Ellingsworth	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. X08-048	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2PO1 CHARACTERIZATION	HHF-N-506-18	**Ice Chest No.** SAWS-10 **Temp.**
Shipped To (Lab) TestAmerica St. Louis	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** 7960-9979-4736
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W5H1		W	11/6/8	1246	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W5H1		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W5H1		W	↓	↓	2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W5H1		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
H. Ellingsworth			NOV 06 2008	FED EX			NOV 06 2008
Relinquished By: FedEx			Date/Time	Received By			Date/Time 11/7/08 11/7/08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-129**

Page 1 of 1

Collector: R. Ellingsworth	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: X08-048	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2PO1 CHARACTERIZATION	HNF-N-506-18	Ice Chest No.: SAWS-10 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7960-9979-4736
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W575		W	11/6/8	1105	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W575		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W575		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W575		W			1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth			NOV 06 2008	FED EX			NOV 06 2008
Relinquished By: FedEx			Date/Time	Received By: Angela Boan			Date/Time: 11/7/08 9:30
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD SL766

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X08-048-179**

Page 1 of 1

Collector R. Ellingsworth	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. X08-048	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2PO1 CHARACTERIZATION	HNF-N-506-18	**Ice Chest No.** SAWS-10 **Temp.**
Shipped To (Lab) TestAmerica St. Louis	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** 7960-9979-4736
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1W5F5		W	11/6/8	0946	4x40-mL aGs*	8260_VOA_GCMS: List-2 (55); VOA - 8260 (Add-On)	HCl or H2SO4 to pH <2 Cool~4C
B1W5F5		W	↓	↓	3x1000-mL aG	8270_SVOA_GCMS: List-2 (17)	Cool~4C
B1W5F5		W			2x1000-mL aG	8081_PEST_GC: List-1 (19)	Cool~4C
B1W5F5		W			1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Ellingsworth			NOV 06 2008	FED EX			NOV 06 2008
Relinquished By: FEDEX			Date/Time	Received By: Angela Bson			Date/Time: 11/7/08 9:30
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

Appendix 5

Data Validation Supporting Documentation

PESTICIDE/PCB DATA VALIDATION CHECKLIST

VALIDATION LEVEL:	A	B	C	D	E
PROJECT: BP-5			DATA PACKAGE: VSR10-022		
VALIDATOR: Carl Schloesslin		LAB: TestAmerica		DATE: 8-09-2010	
			SDG: SL762, SL766		
ANALYSES PERFORMED					
SW-846 8081 X	SW-846 8081 (TCLP)	SW-846 8082 X	SW-846 8081 (TCLP)	SW-846 8151	

SAMPLES/MATRIX

SDG SL762 water samples: B1X8M5, B1X8N6, B1X8H8

SDG SL766 water samples: B1W563, B1W599, B1W5B5, B1W4W3, B1W593, B1W5C7, B1W587, B1W569, B1W5D9, B1W5H7, B1W539, B1W503, B1W5C1, B1W5D3, B1W5H1, B1W575, B1W5F5

1. DATA PACKAGE COMPLETENESS AND CASE NARRATIVE

Technical verification documentation present? ..... Yes (No) N/A

Comments: None

2. INSTRUMENT PERFORMANCE AND CALIBRATIONS (Levels D and E)

Initial calibrations acceptable? ..... Yes No (N/A)

Continuing calibrations acceptable? ..... Yes No (N/A)

Standards traceable? ..... Yes No (N/A)

Standards expired? ..... Yes No (N/A)

Calculation check acceptable? ..... Yes No (N/A)

DDT and endrin breakdowns acceptable? ..... Yes No (N/A)

Comments:

PESTICIDE/PCB DATA VALIDATION CHECKLIST

3. BLANKS (Levels B, C, D, and E)

Calibration blanks analyzed? (Levels D, E) ..... Yes No N/A

Calibration blank results acceptable? (Levels D, E) ..... Yes No N/A

Laboratory blanks analyzed? ..... Yes No N/A

Laboratory blank results acceptable? ..... Yes No N/A

Field/trip blanks analyzed? (Levels C, D, E) ..... Yes No N/A

Field/trip blank results acceptable? (Levels C, D, E) ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments: None

4. ACCURACY (Levels C, D, and E)

Surrogates analyzed? ..... Yes No N/A

Surrogate recoveries acceptable? ..... Yes No N/A

Surrogates traceable? (Levels D, E) ..... Yes No N/A

Surrogates expired? (Levels D, E) ..... Yes No N/A

MS/MSD samples analyzed? ..... Yes No N/A

MS/MSD results acceptable? ..... Yes No N/A

MS/MSD standards NIST traceable? (Levels D, E) ..... Yes No N/A

MS/MSD standards expired? (Levels D, E) ..... Yes No N/A

LCS/BSS samples analyzed? ..... Yes No N/A

LCS/BSS results acceptable? ..... Yes No N/A

Standards traceable? (Levels D, E) ..... Yes No N/A

Standards expired? (Levels D, E) ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Performance audit sample(s) analyzed? ..... Yes No N/A

Performance audit sample results acceptable? ..... Yes No N/A

Comments:

SL762, batch 8295137: MB decachlorobiphenyl surrogate %R = 139% (does not affect field samples)
SL762, batch 8295137: LCS aroclor-1260 %R = 123%
SL766, batch 8311212: MS heptachlor %R = 174%

PESTICIDE/PCB DATA VALIDATION CHECKLIST

5. PRECISION (Levels C, D, and E)

Duplicate RPD values acceptable? ..... Yes (No) N/A

Duplicate results acceptable? ..... Yes No (N/A)

MS/MSD standards NIST traceable? (Levels D, E) ..... Yes No (N/A)

MS/MSD standards expired? (Levels D, E) ..... Yes No (N/A)

Field duplicate RPD values acceptable? ..... (Yes) No N/A

Field split RPD values acceptable? ..... Yes No (N/A)

Transcription/calculation errors? (Levels D, E) ..... Yes No (N/A)

Comments:

SL762, batch 8295137: aroclor-1016 MS/MSD RPD = 31%, aroclor-1260 MS/MSD RPD = 34%

SL766, batch 8311212: 4,4'-DDT MS/MSD RPD = 24%, heptachlor MS/MSD RPD = 21%

6. SYSTEM PERFORMANCE (Levels D and E)

Chromatographic performance acceptable? ..... Yes No (N/A)

Positive results resolved acceptably? ..... Yes No (N/A)

Comments:

7. HOLDING TIMES (all levels)

Samples properly preserved? ..... (Yes) No N/A

Sample holding times acceptable? ..... (Yes) No N/A

Comments: None

PESTICIDE/PCB DATA VALIDATION CHECKLIST

8. COMPOUND IDENTIFICATION, QUANTITATION, AND DETECTION LIMITS (all levels)

Compound identification acceptable? (Levels D, E) ..... Yes No N/A

Compound quantitation acceptable? (Levels D, E) ..... Yes No N/A

Results reported for all requested analyses? ..... Yes No N/A

Results supported in the raw data? (Levels D, E) ..... Yes No N/A

Samples properly prepared? (Levels D, E) ..... Yes No N/A

Detection limits meet RDL? ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments:

Pesticide and PCB water CRDLs not provided in the SAP

9. SAMPLE CLEANUP (Levels D and E)

Fluoricil ® (or other absorbent) cleanup performed? ..... Yes No N/A

Lot check performed? ..... Yes No N/A

Check recoveries acceptable? ..... Yes No N/A

GPC cleanup performed? ..... Yes No N/A

GPC check performed? ..... Yes No N/A

GPC check recoveries acceptable? ..... Yes No N/A

GPC calibration performed? ..... Yes No N/A

GPC calibration check performed? ..... Yes No N/A

GPC calibration check retention times acceptable? ..... Yes No N/A

Check/calibration materials traceable? ..... Yes No N/A

Check/calibration materials Expired? ..... Yes No N/A

Analytical batch QC given similar cleanup? ..... Yes No N/A

Transcription/Calculation Errors? ..... Yes No N/A

Comments:

Appendix 6

Additional Documentation Requested By Client

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: SL762 **Work Order #...:** K08C21AA **Matrix.....:** WATER
MB Lot-Sample #: F8J210000-137

Prep Date.....: 10/21/08
Analysis Date..: 11/07/08 **Prep Batch #...:** 8295137
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aroclor 1016	ND	1.0	ug/L	SW846 8082
Aroclor 1221	ND	1.0	ug/L	SW846 8082
Aroclor 1232	ND	1.0	ug/L	SW846 8082
Aroclor 1242	ND	1.0	ug/L	SW846 8082
Aroclor 1248	ND	1.0	ug/L	SW846 8082
Aroclor 1254	ND	1.0	ug/L	SW846 8082
Aroclor 1260	ND	1.0	ug/L	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	117	(28 - 147)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL762 **Work Order #...:** K08C21AC **Matrix.....:** WATER
LCS Lot-Sample#: F8J210000-137
Prep Date.....: 10/21/08 **Analysis Date..:** 11/07/08
Prep Batch #...: 8295137
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Aroclor 1016	**5.00**	**5.27**	**ug/L**	**105**	**SW846 8082**
Aroclor 1260	**5.00**	**6.16 a**	**ug/L**	**123**	**SW846 8082**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	139 *	(56 - 128)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

* Surrogate recovery is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL762 Work Order #...: K04A21AE-MS Matrix.....: WATER
MS Lot-Sample #: F8J170190-005 K04A21AF-MSD
Date Sampled...: 10/16/08 Date Received..: 10/17/08
Prep Date.....: 10/21/08 Analysis Date..: 11/07/08
Prep Batch #...: 8295137
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aroclor 1016	ND	4.76	4.97	ug/L	104		SW846 8082
	ND	4.82	3.63	ug/L	75 p	31	SW846 8082
Aroclor 1260	ND	4.76	5.62	ug/L	118		SW846 8082
	ND	4.82	4.01	ug/L	83 p	34	SW846 8082

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	131	(28 - 147)
	92	(28 - 147)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: SL766 **Work Order #...:** K2D6W1AA **Matrix.....:** WATER
MB Lot-Sample #: F8K060000-212

Prep Date.....: 11/06/08
Analysis Date..: 11/25/08 **Prep Batch #...:** 8311212
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aldrin	ND	0.050	ug/L	SW846 8081A
4,4'-DDD	ND	0.050	ug/L	SW846 8081A
4,4'-DDE	ND	0.050	ug/L	SW846 8081A
4,4'-DDT	ND	0.050	ug/L	SW846 8081A
Endosulfan I	ND	0.050	ug/L	SW846 8081A
Endosulfan II	ND	0.050	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.050	ug/L	SW846 8081A
alpha-BHC	ND	0.050	ug/L	SW846 8081A
beta-BHC	ND	0.050	ug/L	SW846 8081A
Endrin	ND	0.050	ug/L	SW846 8081A
delta-BHC	ND	0.050	ug/L	SW846 8081A
Heptachlor	ND	0.050	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.050	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Chlordane (technical)	ND	0.50	ug/L	SW846 8081A
Dieldrin	ND	0.050	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.050	ug/L	SW846 8081A
Endrin aldehyde	ND	0.050	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	110	(72 - 135)
Decachlorobiphenyl	112	(68 - 133)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: SL766 **Work Order #...:** K2KV01AA **Matrix.....:** WATER
MB Lot-Sample #: F8K100000-111

Prep Date.....: 11/09/08
Analysis Date..: 11/25/08 **Prep Batch #...:** 8315111
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
4,4'-DDD	ND	0.050	ug/L	SW846 8081A
4,4'-DDE	ND	0.050	ug/L	SW846 8081A
4,4'-DDT	ND	0.050	ug/L	SW846 8081A
Endosulfan I	ND	0.050	ug/L	SW846 8081A
Endosulfan II	ND	0.050	ug/L	SW846 8081A
Aldrin	ND	0.050	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.050	ug/L	SW846 8081A
alpha-BHC	ND	0.050	ug/L	SW846 8081A
Endrin	ND	0.050	ug/L	SW846 8081A
beta-BHC	ND	0.050	ug/L	SW846 8081A
Heptachlor	ND	0.050	ug/L	SW846 8081A
delta-BHC	ND	0.050	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.050	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Chlordane (technical)	ND	0.50	ug/L	SW846 8081A
Dieldrin	ND	0.050	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.050	ug/L	SW846 8081A
Endrin aldehyde	ND	0.050	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	119	(72 - 135)
Decachlorobiphenyl	120	(68 - 133)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #...: SL766 **Work Order #...:** K26GQ1AA **Matrix.....:** WATER
MB Lot-Sample #: F8K180000-364

Prep Date.....: 11/04/08
Analysis Date..: 11/25/08 **Prep Batch #...:** 8323364
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Aldrin	ND	0.050	ug/L	SW846 8081A
4,4'-DDD	ND	0.050	ug/L	SW846 8081A
4,4'-DDE	ND	0.050	ug/L	SW846 8081A
4,4'-DDT	ND	0.050	ug/L	SW846 8081A
Endosulfan I	ND	0.050	ug/L	SW846 8081A
Endosulfan II	ND	0.050	ug/L	SW846 8081A
gamma-BHC (Lindane)	ND	0.050	ug/L	SW846 8081A
alpha-BHC	ND	0.050	ug/L	SW846 8081A
beta-BHC	ND	0.050	ug/L	SW846 8081A
Endrin	ND	0.050	ug/L	SW846 8081A
delta-BHC	ND	0.050	ug/L	SW846 8081A
Heptachlor	ND	0.050	ug/L	SW846 8081A
Heptachlor epoxide	ND	0.050	ug/L	SW846 8081A
Methoxychlor	ND	0.10	ug/L	SW846 8081A
Chlordane (technical)	ND	0.50	ug/L	SW846 8081A
Dieldrin	ND	0.050	ug/L	SW846 8081A
Endosulfan sulfate	ND	0.050	ug/L	SW846 8081A
Endrin aldehyde	ND	0.050	ug/L	SW846 8081A
Toxaphene	ND	2.0	ug/L	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(72 - 135)
Decachlorobiphenyl	97	(68 - 133)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL766
LCS Lot-Sample#: F8K060000-212
Prep Date.....: 11/06/08
Prep Batch #...: 8311212
Dilution Factor: 1

Work Order #...: K2D6W1AC
Analysis Date..: 11/25/08

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Aldrin	**0.500**	**0.475**	**ug/L**	**95**	**SW846 8081A**
4,4'-DDT	**0.500**	**0.494**	**ug/L**	**99**	**SW846 8081A**
4,4'-DDD	**0.500**	**0.473**	**ug/L**	**95**	**SW846 8081A**
4,4'-DDE	**0.500**	**0.466**	**ug/L**	**93**	**SW846 8081A**
Endosulfan I	**0.500**	**0.473**	**ug/L**	**95**	**SW846 8081A**
Endosulfan II	**0.500**	**0.470**	**ug/L**	**94**	**SW846 8081A**
gamma-BHC (Lindane)	**0.500**	**0.492**	**ug/L**	**98**	**SW846 8081A**
alpha-BHC	**0.500**	**0.489**	**ug/L**	**98**	**SW846 8081A**
Endrin	**0.500**	**0.464**	**ug/L**	**93**	**SW846 8081A**
beta-BHC	**0.500**	**0.482**	**ug/L**	**96**	**SW846 8081A**
Heptachlor	**0.500**	**0.470**	**ug/L**	**94**	**SW846 8081A**
delta-BHC	**0.500**	**0.501**	**ug/L**	**100**	**SW846 8081A**
Heptachlor epoxide	**0.500**	**0.469**	**ug/L**	**94**	**SW846 8081A**
Methoxychlor	**0.500**	**0.474**	**ug/L**	**95**	**SW846 8081A**
Dieldrin	**0.500**	**0.464**	**ug/L**	**93**	**SW846 8081A**
Endosulfan sulfate	**0.500**	**0.466**	**ug/L**	**93**	**SW846 8081A**
Endrin aldehyde	**0.500**	**0.478**	**ug/L**	**96**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	106	(65 - 140)
Decachlorobiphenyl	106	(66 - 137)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL766 **Work Order #...:** K2KV01AC **Matrix.....:** WATER
LCS Lot-Sample#: F8K100000-111
Prep Date.....: 11/09/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8315111
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
4,4'-DDT	**0.500**	**0.437**	**ug/L**	**87**	**SW846 8081A**
4,4'-DDD	**0.500**	**0.429**	**ug/L**	**86**	**SW846 8081A**
4,4'-DDE	**0.500**	**0.446**	**ug/L**	**89**	**SW846 8081A**
Endosulfan I	**0.500**	**0.439**	**ug/L**	**88**	**SW846 8081A**
Endosulfan II	**0.500**	**0.428**	**ug/L**	**86**	**SW846 8081A**
Aldrin	**0.500**	**0.439**	**ug/L**	**88**	**SW846 8081A**
gamma-BHC (Lindane)	**0.500**	**0.447**	**ug/L**	**89**	**SW846 8081A**
alpha-BHC	**0.500**	**0.455**	**ug/L**	**91**	**SW846 8081A**
beta-BHC	**0.500**	**0.443**	**ug/L**	**89**	**SW846 8081A**
Endrin	**0.500**	**0.445**	**ug/L**	**89**	**SW846 8081A**
delta-BHC	**0.500**	**0.464**	**ug/L**	**93**	**SW846 8081A**
Heptachlor	**0.500**	**0.416**	**ug/L**	**83**	**SW846 8081A**
Heptachlor epoxide	**0.500**	**0.435**	**ug/L**	**87**	**SW846 8081A**
Methoxychlor	**0.500**	**0.442**	**ug/L**	**88**	**SW846 8081A**
Dieldrin	**0.500**	**0.429**	**ug/L**	**86**	**SW846 8081A**
Endosulfan sulfate	**0.500**	**0.437**	**ug/L**	**87**	**SW846 8081A**
Endrin aldehyde	**0.500**	**0.419**	**ug/L**	**84**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	106	(65 - 140)
Decachlorobiphenyl	101	(66 - 137)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL766 **Work Order #...:** K26GQ1AC **Matrix.....:** WATER
LCS Lot-Sample#: F8K180000-364
Prep Date.....: 11/04/08 **Analysis Date..:** 11/25/08
Prep Batch #...: 8323364
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Aldrin	**0.500**	**0.485**	**ug/L**	**97**	**SW846 8081A**
4,4'-DDT	**0.500**	**0.552**	**ug/L**	**110**	**SW846 8081A**
4,4'-DDD	**0.500**	**0.507**	**ug/L**	**101**	**SW846 8081A**
4,4'-DDE	**0.500**	**0.539**	**ug/L**	**108**	**SW846 8081A**
Endosulfan I	**0.500**	**0.504**	**ug/L**	**101**	**SW846 8081A**
Endosulfan II	**0.500**	**0.496**	**ug/L**	**99**	**SW846 8081A**
gamma-BHC (Lindane)	**0.500**	**0.496**	**ug/L**	**99**	**SW846 8081A**
alpha-BHC	**0.500**	**0.500**	**ug/L**	**100**	**SW846 8081A**
Endrin	**0.500**	**0.540**	**ug/L**	**108**	**SW846 8081A**
beta-BHC	**0.500**	**0.489**	**ug/L**	**98**	**SW846 8081A**
Heptachlor	**0.500**	**0.663**	**ug/L**	**133**	**SW846 8081A**
delta-BHC	**0.500**	**0.509**	**ug/L**	**102**	**SW846 8081A**
Heptachlor epoxide	**0.500**	**0.490**	**ug/L**	**98**	**SW846 8081A**
Methoxychlor	**0.500**	**0.519**	**ug/L**	**104**	**SW846 8081A**
Dieldrin	**0.500**	**0.511**	**ug/L**	**102**	**SW846 8081A**
Endosulfan sulfate	**0.500**	**0.500**	**ug/L**	**100**	**SW846 8081A**
Endrin aldehyde	**0.500**	**0.445**	**ug/L**	**89**	**SW846 8081A**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	94	(65 - 140)
Decachlorobiphenyl	98	(66 - 137)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL766 Work Order #...: K19V81AF-MS Matrix.....: WATER
MS Lot-Sample #: F8K050209-001 K19V81AG-MSD
Date Sampled...: 11/03/08 Date Received..: 11/05/08
Prep Date.....: 11/06/08 Analysis Date..: 11/25/08
Prep Batch #...: 8311212
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aldrin	ND	0.473	0.521	ug/L	110		SW846 8081A
	ND	0.473	0.442	ug/L	93	16	SW846 8081A
4,4'-DDT	ND	0.473	0.577	ug/L	122		SW846 8081A
	ND	0.473	0.455	ug/L	96 p	24	SW846 8081A
4,4'-DDD	ND	0.473	0.534	ug/L	113		SW846 8081A
	ND	0.473	0.456	ug/L	96	16	SW846 8081A
4,4'-DDE	ND	0.473	0.430	ug/L	91		SW846 8081A
	ND	0.473	0.383	ug/L	81	12	SW846 8081A
Endosulfan I	ND	0.473	0.463	ug/L	98		SW846 8081A
	ND	0.473	0.410	ug/L	87	12	SW846 8081A
Endosulfan II	ND	0.473	0.494	ug/L	104		SW846 8081A
	ND	0.473	0.439	ug/L	93	12	SW846 8081A
gamma-BHC (Lindane)	ND	0.473	0.551	ug/L	116		SW846 8081A
	ND	0.473	0.465	ug/L	98	17	SW846 8081A
alpha-BHC	ND	0.473	0.515	ug/L	109		SW846 8081A
	ND	0.473	0.435	ug/L	92	17	SW846 8081A
Endrin	ND	0.473	0.551	ug/L	116		SW846 8081A
	ND	0.473	0.477	ug/L	101	14	SW846 8081A
beta-BHC	ND	0.473	0.532	ug/L	112		SW846 8081A
	ND	0.473	0.456	ug/L	96	15	SW846 8081A
Heptachlor	ND	0.473	0.824	ug/L	174		SW846 8081A
	Qualifiers: a,N						
	ND	0.473	0.666	ug/L	141 p	21	SW846 8081A
delta-BHC	ND	0.473	0.567	ug/L	120		SW846 8081A
	ND	0.473	0.479	ug/L	101	17	SW846 8081A
Heptachlor epoxide	ND	0.473	0.549	ug/L	116		SW846 8081A
	ND	0.473	0.481	ug/L	102	13	SW846 8081A
Methoxychlor	ND	0.473	0.539	ug/L	114		SW846 8081A
	ND	0.473	0.446	ug/L	94	19	SW846 8081A
Dieldrin	ND	0.473	0.492	ug/L	104		SW846 8081A
	ND	0.473	0.424	ug/L	90	15	SW846 8081A
Endosulfan sulfate	ND	0.473	0.534	ug/L	113		SW846 8081A
	ND	0.473	0.456	ug/L	96	16	SW846 8081A
Endrin aldehyde	ND	0.473	0.531	ug/L	112		SW846 8081A
	ND	0.473	0.463	ug/L	98	14	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	98	(72 - 135)
	106	(72 - 135)

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL766 **Work Order #...:** K19V81AF-MS **Matrix.....:** WATER
MS Lot-Sample #: F8K050209-001 K19V81AG-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	103	(68 - 133)
	102	(68 - 133)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

p Relative percent difference (RPD) is outside stated control limits.

a Spiked analyte recovery is outside stated control limits.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL766 Work Order #...: K2DMJ1AH-MS Matrix.....: WATER
MS Lot-Sample #: F8K060259-001 K2DMJ1AJ-MSD
Date Sampled...: 11/04/08 Date Received..: 11/06/08
Prep Date.....: 11/09/08 Analysis Date..: 11/25/08
Prep Batch #...: 8315111
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aldrin	ND	0.474	0.471	ug/L	99		SW846 8081A
	ND	0.480	0.463	ug/L	96	1.7	SW846 8081A
4,4'-DDT	ND	0.474	0.498	ug/L	105		SW846 8081A
	ND	0.480	0.516	ug/L	108	3.6	SW846 8081A
4,4'-DDD	ND	0.474	0.479	ug/L	101		SW846 8081A
	ND	0.480	0.478	ug/L	100	0.20	SW846 8081A
4,4'-DDE	ND	0.474	0.465	ug/L	98		SW846 8081A
	ND	0.480	0.457	ug/L	95	1.7	SW846 8081A
Endosulfan I	ND	0.474	0.474	ug/L	100		SW846 8081A
	ND	0.480	0.458	ug/L	95	3.4	SW846 8081A
Endosulfan II	ND	0.474	0.472	ug/L	100		SW846 8081A
	ND	0.480	0.468	ug/L	98	0.85	SW846 8081A
gamma-BHC (Lindane)	ND	0.474	0.498	ug/L	105		SW846 8081A
	ND	0.480	0.495	ug/L	103	0.60	SW846 8081A
alpha-BHC	ND	0.474	0.494	ug/L	104		SW846 8081A
	ND	0.480	0.490	ug/L	102	0.81	SW846 8081A
Endrin	ND	0.474	0.497	ug/L	105		SW846 8081A
	ND	0.480	0.497	ug/L	104	0.0	SW846 8081A
beta-BHC	ND	0.474	0.486	ug/L	103		SW846 8081A
	ND	0.480	0.481	ug/L	100	1.0	SW846 8081A
Heptachlor	ND	0.474	0.488	ug/L	103		SW846 8081A
	ND	0.480	0.514	ug/L	107	5.2	SW846 8081A
delta-BHC	ND	0.474	0.507	ug/L	107		SW846 8081A
	ND	0.480	0.502	ug/L	105	0.99	SW846 8081A
Heptachlor epoxide	ND	0.474	0.479	ug/L	101		SW846 8081A
	ND	0.480	0.471	ug/L	98	1.7	SW846 8081A
Methoxychlor	ND	0.474	0.492	ug/L	104		SW846 8081A
	ND	0.480	0.511	ug/L	106	3.8	SW846 8081A
Dieldrin	ND	0.474	0.467	ug/L	99		SW846 8081A
	ND	0.480	0.457	ug/L	95	2.2	SW846 8081A
Endosulfan sulfate	ND	0.474	0.486	ug/L	103		SW846 8081A
	ND	0.480	0.485	ug/L	101	0.20	SW846 8081A
Endrin aldehyde	ND	0.474	0.472	ug/L	100		SW846 8081A
	ND	0.480	0.474	ug/L	99	0.42	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	124	(72 - 135)
	123	(72 - 135)

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL766 **Work Order #...:** K2DMJ1AH-MS **Matrix.....:** WATER
MS Lot-Sample #: F8K060259-001 K2DMJ1AJ-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	115	(68 - 133)
	117	(68 - 133)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL766 Work Order #...: K14CA1AH-MS Matrix.....: WATER
MS Lot-Sample #: F8K010181-002 K14CA1AJ-MSD
Date Sampled...: 10/31/08 Date Received..: 11/01/08
Prep Date.....: 11/04/08 Analysis Date..: 11/25/08
Prep Batch #...: 8323364
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Aldrin	ND	0.475	0.476	ug/L	100		SW846 8081A
	ND	0.476	0.505	ug/L	106	5.9	SW846 8081A
4,4'-DDT	ND	0.475	0.526	ug/L	111		SW846 8081A
	ND	0.476	0.549	ug/L	115	4.3	SW846 8081A
4,4'-DDD	ND	0.475	0.478	ug/L	101		SW846 8081A
	ND	0.476	0.505	ug/L	106	5.5	SW846 8081A
4,4'-DDE	ND	0.475	0.496	ug/L	104		SW846 8081A
	ND	0.476	0.521	ug/L	109	4.9	SW846 8081A
Endosulfan I	ND	0.475	0.475	ug/L	100		SW846 8081A
	ND	0.476	0.508	ug/L	107	6.7	SW846 8081A
Endosulfan II	ND	0.475	0.471	ug/L	99		SW846 8081A
	ND	0.476	0.495	ug/L	104	5.0	SW846 8081A
gamma-BHC (Lindane)	ND	0.475	0.496	ug/L	104		SW846 8081A
	ND	0.476	0.530	ug/L	111	6.6	SW846 8081A
alpha-BHC	ND	0.475	0.498	ug/L	105		SW846 8081A
	ND	0.476	0.529	ug/L	111	6.0	SW846 8081A
Endrin	ND	0.475	0.514	ug/L	108		SW846 8081A
	ND	0.476	0.535	ug/L	112	4.0	SW846 8081A
beta-BHC	ND	0.475	0.488	ug/L	103		SW846 8081A
	ND	0.476	0.518	ug/L	109	6.0	SW846 8081A
Heptachlor	ND	0.475	0.523	ug/L	110		SW846 8081A
	ND	0.476	0.567	ug/L	119	8.1	SW846 8081A
delta-BHC	ND	0.475	0.506	ug/L	107		SW846 8081A
	ND	0.476	0.537	ug/L	113	5.9	SW846 8081A
Heptachlor epoxide	ND	0.475	0.484	ug/L	102		SW846 8081A
	ND	0.476	0.509	ug/L	107	5.0	SW846 8081A
Methoxychlor	ND	0.475	0.495	ug/L	104		SW846 8081A
	ND	0.476	0.521	ug/L	109	5.1	SW846 8081A
Dieldrin	ND	0.475	0.480	ug/L	101		SW846 8081A
	ND	0.476	0.507	ug/L	107	5.5	SW846 8081A
Endosulfan sulfate	ND	0.475	0.480	ug/L	101		SW846 8081A
	ND	0.476	0.510	ug/L	107	6.1	SW846 8081A
Endrin aldehyde	ND	0.475	0.408	ug/L	86		SW846 8081A
	ND	0.476	0.427	ug/L	90	4.6	SW846 8081A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	97	(72 - 135)
	101	(72 - 135)

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: SL766 **Work Order #...:** K14CA1AH-MS **Matrix.....:** WATER
MS Lot-Sample #: F8K010181-002 K14CA1AJ-MSD

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Decachlorobiphenyl	98	(68 - 133)
	101	(68 - 133)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

Date: 09 August 2010
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: BP-5
Subject: General Chemistry - Sample Data Groups (SDGs) SL762, W05309, WSCF20071460, WSCF20071517, WSCF20081478 and WSCF91417

INTRODUCTION

This memorandum presents the results of data validation for SDGs SL762 and W05309 prepared by TestAmerica, and SDGs WSCF20071460, WSCF20071517, WSCF20081478 and WSCF91417 prepared by WSCF. A list of samples validated along with the analytical methods is provided in the following table.

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B1X8L9	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X8M0	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X8M1	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X8M2	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X8N0	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X8N1	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X8N2	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X8N3	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7T4	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7T5	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7T6	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7T7	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7Y5	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7Y6	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7Y7	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7Y8	10/16/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7P2	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7P3	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7P4	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7P5	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7K2	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7K3	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7K4	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X7K5	10/14/2008	Water	C	9020 (TOX), 9060 (TOC)
B1X851	10/23/2008	Water	C	9060 (TOC)
B1X852	10/23/2008	Water	C	9060 (TOC)
B1X853	10/23/2008	Water	C	9060 (TOC)
B1X854	10/23/2008	Water	C	9060 (TOC)
B1RTF5	1/07/2008	Water	C	7196A (Hexavalent Cr)
B1RRC8	1/07/2008	Water	C	7196A (Hexavalent Cr)

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B1P4J5	8/15/2007	Water	C	7196A (Hexavalent Cr)
B1P861	8/15/2007	Water	C	300.0 (Anions), 2320B (Alkalinity)
B1P8L2	8/15/2007	Water	C	See note 1
B1P8L7	8/15/2007	Water	C	See note 1
B1P8N6	8/15/2007	Water	C	See note 1
B1P8P1	8/15/2007	Water	C	See note 1
B1P8R1	8/15/2007	Water	C	See note 1
B1P8T5	8/15/2007	Water	C	See note 1
B1P9J9	8/15/2007	Water	C	See note 1
B1P9K4	8/15/2007	Water	C	See note 1
B1P666	8/23/2007	Water	C	300.0 (Anions)
B1P697	8/23/2007	Water	C	300.0 (Anions)
B1P6B2	8/23/2007	Water	C	300.0 (Anions)
B1P6B7	8/23/2007	Water	C	300.0 (Anions)
B1P6C9	8/23/2007	Water	C	300.0 (Anions)
B1P6F4	8/23/2007	Water	C	300.0 (Anions)
B1P6F9	8/23/2007	Water	C	300.0 (Anions)
B1P6H4	8/23/2007	Water	C	300.0 (Anions)
B1P6H9	8/23/2007	Water	C	300.0 (Anions)
B1P8P6	8/23/2007	Water	C	See note 1
B1P8W6	8/23/2007	Water	C	2320B (Alkalinity)
B1P9F4	8/23/2007	Water	C	See note 1
B1P9F9	8/23/2007	Water	C	See note 1
B1P9H4	8/23/2007	Water	C	See note 1
B1P9H9	8/23/2007	Water	C	See note 1
B1P9J4	8/23/2007	Water	C	See note 1
B1P9X6	8/23/2007	Water	C	2320B (Alkalinity)
B1PB22	8/23/2007	Water	C	2320B (Alkalinity)
B1W1B1	7/16/2008	Water	C	See note 2
B1W1B1	7/16/2008	Water	C	See note 2
B21YM1	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YM2	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YM3	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YM4	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22007	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22008	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22031	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22032	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YV0	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YV1	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22035	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22036	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YJ9	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YK0	10/22/2009	Water	C	7196A (Hexavalent Cr)

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B21YW7	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YW8	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YW9	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YX0	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21Y05	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22019	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22039	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22040	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22053	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22054	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22029	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22030	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21Y35	10/22/2009	Water	C	7196A (Hexavalent Cr)
B22038	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YK4	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YK5	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YK2	10/22/2009	Water	C	7196A (Hexavalent Cr)
B21YK3	10/22/2009	Water	C	7196A (Hexavalent Cr)

1 – 300.0 (Anions), 335.2 (Cyanide), 2320B (Alkalinity)
2 – 150.1 (pH), 300.0 (Anions), 300.7 (N in ammonium), 335.2 (Cyanide), 2320B (Alkalinity), 7196A (Hexavalent Cr)

Data validation was conducted in accordance with the CHPRC validation statement of work and the Remedial Investigation/Feasibility Study Work Plan for the 200-BP-5 Groundwater Operable Unit, DOE/RL-2007-18, Rev. 1 (SAP). Appendices 1 through 6 provide the following information as indicated below:

Appendix 1. Glossary of Data Reporting Qualifiers
Appendix 2. Summary of Data Qualification
Appendix 3. Annotated Laboratory Reports
Appendix 4. Laboratory Narrative and Chain-of-Custody Documentation
Appendix 5. Data Validation Supporting Documentation
Appendix 6. Additional Documentation Requested By Client

DATA QUALITY OBJECTIVES

- **Holding Times and Sample Preservation**

Holding times are calculated from Chain-of-Custody forms to determine the validity of the results. The holding time requirements are as follows:

- All anions except nitrate, nitrite, and phosphate – analysis within 28 days of sample collection
- Nitrate, nitrite, and phosphate – analysis within 48 hours of sample collection
- Alkalinity – analysis within 14 days of sample collection

- Ammonia – analysis within 28 days of sample collection
- Cyanide – analysis within 14 days of sample collection
- Hexavalent chromium – analysis within 24 hours of sample collection
- pH – analysis as soon as possible (24 hours is a reasonable holding time)
- Total organic carbon (TOC) – analysis within 28 days of sample collection
- Total organic halides (TOX) – analysis within 28 days of sample collection

Sample preservation for the above analyses requires chilling to 4 degrees Celsius. In addition, ammonia, TOC and TOX are brought to pH<2 with sulfuric acid, and cyanide is brought to pH>12 with sodium hydroxide.

The samples were analyzed within the prescribed holding times and properly preserved with the following exceptions.

For SDG WSCF20071460, samples B1P8P1, B1P8L2, B1P9K4, B1P8N6, B1P8L7 and B1P8R1 were analyzed for N in nitrite beyond 2X the holding time. The associated sample results were non-detects and should be qualified as unusable and flagged "UR." Samples B1P8P1, B1P8L2, B1P9K4, B1P8N6 and B1P861 were analyzed for N in nitrate beyond 2X the holding time. The associated sample results were detects and should be qualified as estimates and flagged "J."

For SDG WSCF20081478, samples B1W1B1 and B1W1B2 were analyzed for hexavalent chromium and pH slightly beyond 24 hours from sample collection. The hexavalent chromium results for these two samples were non-detects and should be qualified as estimated and flagged "UJ." The pH results for these two samples should be qualified as an estimate and flagged "J."

- **Blanks**

The blank data results are reviewed to assess the extent of contamination introduced through sampling, sample preparation, and analysis.

Laboratory Blanks

All laboratory blank results were acceptable.

Trip Blanks

No trip blanks were submitted for analysis.

Field Blanks

No field blanks were submitted for analysis.

Equipment Blanks

No equipment blanks were submitted for analysis.

- **Accuracy**

Accuracy is evaluated by reviewing matrix spike sample results and laboratory control sample results. According to the SAP, the matrix spike sample accuracy limits are 70% to 130%. The laboratory control sample accuracy limits are ones specified by the DV procedure. The limits for reported analytes not listed in the SAP are specified by the DV procedure.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

All MS/MSD recoveries were acceptable with the following exception.

For SDG WSCF20081478, the MSD recovery for cyanide was <30%. The cyanide result for sample B1W1B1 was a non-detect and should be qualified as unusable and flagged "UR." The cyanide result for sample B1W1B2 was a detect and should be qualified as an estimate and flagged "J."

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable.

- **Precision**

Precision is evaluated by reviewing MS/MSD results, laboratory duplicate sample results, field duplicate sample results, and field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. According to the SAP, the relative percent difference (RPD) limits are ±30%. The RPD limits for reported analytes not listed in the SAP are specified by the DV procedure. When duplicate RPDs exceed the limits and have associated results <5X the SAP required detection limits (or <5X the laboratory required detection limits for analytes not listed in the SAP) with differences <1X the required detection limits no precision infraction occurred.

MS/MSD Samples

All MS/MSD RPD values were acceptable with the following exception.

For SDG WSCF20081478, the cyanide RPD was above the upper acceptance limit. The cyanide result for sample B1W1B1 was a non-detect and would be qualified as an estimate and flagged "UJ," but was further qualified as unusable and flagged "UR" due to a MSD recovery infraction. The cyanide result for sample B1W1B2 was a detect and should be qualified as an estimate and flagged "J."

Laboratory Duplicate Samples

All laboratory duplicate results were acceptable.

Field Duplicate Samples

All field duplicate results were acceptable with the following exception.

For SDG WSCF20081478, sample B1W1B1 and its associated duplicate B1W1B2 had a cyanide difference > the CRDL.

Field Split Samples

For SDG W05309, the field split samples associated with samples B1RTF5 and B1RRC8 were not chosen for validation and therefore not assessed for precision.

For SDG WSCF20071460, the field split sample associated with sample B1P4J5 was not chosen for validation and therefore not assessed for precision.

- **Detection Limits**

Reported MDLs are compared against the contractually required detection limits (CRDLs) to ensure that laboratory detection limits meet the required criteria.

All reported sample MDLs were below the CRDLs. It should be noted that CRDLs for fluoride, phosphate, TOC and TOX were not provided in the SAP.

- **Completeness**

SDGs SL762, W05309, WSCF20071460, WSCF20071517, WSCF20081478 and WSCF91417 were submitted for validation and verified for completeness. Completeness is based on the percentage of data determined to be valid (i.e., not rejected). The completion percentage for nitrite was 75%. The completion percentage for cyanide was 94%. The completion percentages for all remaining analyses were 100%.

MAJOR DEFICIENCIES

Major deficiencies leading to qualification of N in nitrite and cyanide sample results as unusable were due to holding time infractions and a very low MSD recovery infraction. See the table in Appendix 2 for a listing of all affected sample results.

MINOR DEFICIENCIES

Multiple minor deficiencies leading to qualification of sample results as estimates occurred. See the table in Appendix 2 for a listing of all affected sample results.

REFERENCES

HNF-20433, Rev. 0, *Data Validation Procedure for Chemical Analyses*, June 2004.

DOE/RL-2007-18, Rev. 1, *Remedial Investigation/Feasibility Study Work Plan for the 200-BP-5 Groundwater Operable Unit*, December 2008.

Appendix 1

Glossary of Data Reporting Qualifiers

Qualifiers that may be applied by data validators in compliance with the CHPRC statement of work are as follows:

- **U** — The constituent was analyzed for and was not detected. The data should be considered usable for decision-making purposes.

- **UJ** — The constituent was analyzed for and was not detected. Due to a quality control deficiency identified during data validation the value reported may not accurately reflect the MDL. The data should be considered usable for decision-making purposes.

- **J** — Indicates the constituent was analyzed for and detected. The associated value is estimated due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **UR** — Indicates the constituent was analyzed for and not detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

- **R** — Indicates the constituent was analyzed for and detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

Appendix 2

Summary of Data Qualification

General Chemistry Data Qualification Summary			
SDGs: SL762, W05309, WSCF20071460, WSCF20071517, WSCF20081478, WSCF91417	Reviewer: AQA	Project: BP-5	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
N in nitrite	**UR**	B1P8P1, B1P8L2, B1P9K4, B1P8N6, B1P8L7, B1P8R1	Analysis beyond 2X the holding time
N in nitrate	J	B1P8P1, B1P8L2, B1P9K4, B1P8N6, B1P861	Analysis beyond 2X the holding time
Cyanide	**UR**	B1W1B1	Very low MSD recovery and poor MS/MSD precision
Cyanide	J	B1W1B2	Very low MSD recovery and poor MS/MSD precision
Hexavalent chromium	UJ	B1W1B1, B1W1B2	Analysis beyond the holding time but within 2X the holding time
pH	J	B1W1B1, B1W1B2	Analysis beyond the holding time

Comments: None

Appendix 3

Annotated Laboratory Reports

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8L9

General Chemistry

Lot-Sample #...: F8J170190-001 Work Order #...: K04AQ Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	4.1 B	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8M0

General Chemistry

Lot-Sample #...: F8J170190-002 Work Order #...: K04AW Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
		Dilution Factor: 1		MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
		Dilution Factor: 1		MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8M1

General Chemistry

Lot-Sample #...: F8J170190-003 Work Order #...: K04AX Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8M2

General Chemistry

Lot-Sample #...: F8J170190-004 Work Order #...: K04A0 Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
		Dilution Factor: 1		MDL.....: 0.20		
TOX	4.1 B	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
		Dilution Factor: 1		MDL.....: 3.5		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8N0

General Chemistry

Lot-Sample #...: F8J170190-006 Work Order #...: K04A5 Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8N1

General Chemistry

Lot-Sample #...: F8J170190-007 Work Order #...: K04CC Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8N2

General Chemistry

Lot-Sample #...: F8J170190-008 Work Order #...: K04CE Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X8N3

General Chemistry

Lot-Sample #...: F8J170190-009 Work Order #...: K04CG Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
		Dilution Factor: 1		MDL.....: 0.20		
TOX	**5.5**	**5.0**	**ug/L**	**SW846 9020B**	**11/10-11/11/08**	**8312088**
		Dilution Factor: 1		MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7T4

General Chemistry

Lot-Sample #...: F8J170190-011 Work Order #...: K04CV Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7T5

General Chemistry

Lot-Sample #...: F8J170190-012 Work Order #...: K04C5 Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7T6

General Chemistry

Lot-Sample #...: F8J170190-013 Work Order #...: K04C6 Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	**10.4**	**5.0**	**ug/L**	**SW846 9020B**	**11/10-11/11/08**	**8312088**
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7T7

General Chemistry

Lot-Sample #...: F8J170190-014 Work Order #...: K04C7 Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7Y5

General Chemistry

Lot-Sample #...: F8J170190-016 Work Order #...: K04C9 Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7Y6

General Chemistry

Lot-Sample #...: F8J170190-017 Work Order #...: K04DC Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7Y7

General Chemistry

Lot-Sample #...: F8J170190-018 Work Order #...: K04DE Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7Y8

General Chemistry

Lot-Sample #...: F8J170190-019 Work Order #...: K04DG Matrix.....: WATER
Date Sampled...: 10/16/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7P2

General Chemistry

Lot-Sample #...: F8J170190-022 Work Order #...: K04DN Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	0.24 B	1.0	mg/L	SW846 9060	11/04/08	8310501
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/10-11/11/08	8312088
	Dilution Factor: 1			MDL.....: 3.5		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7P3

General Chemistry

Lot-Sample #...: F8J170190-023 Work Order #...: K04DV Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	0.28 B	1.0	mg/L	SW846 9060	11/04/08	8310501
	Dilution Factor: 1			MDL.....: 0.20		
TOX	3.9 B	5.0	ug/L	SW846 9020B	11/11-11/12/08	8316321
	Dilution Factor: 1			MDL.....: 3.5		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7P4

General Chemistry

Lot-Sample #...: F8J170190-024 Work Order #...: K04DW Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	0.28 B	1.0	mg/L	SW846 9060	11/04/08	8310501
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/11-11/12/08	8316321
	Dilution Factor: 1			MDL.....: 3.5		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7P5

General Chemistry

Lot-Sample #...: F8J170190-025 Work Order #...: K04D1 Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	0.35 B	1.0	mg/L	SW846 9060	11/05/08	8310501
		Dilution Factor: 1		MDL.....: 0.20		
TOX	3.6 B	5.0	ug/L	SW846 9020B	11/11-11/12/08	8316321
		Dilution Factor: 1		MDL.....: 3.5		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7K2

General Chemistry

Lot-Sample #...: F8J170190-027 Work Order #...: K04ED Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/05/08	8310501
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/11-11/12/08	8316321
	Dilution Factor: 1			MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7K3

General Chemistry

Lot-Sample #...: F8J170190-028 Work Order #...: K04EF Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	0.27 B	1.0	mg/L	SW846 9060	11/05/08	8310501
	Dilution Factor: 1			MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/11-11/12/08	8316321
	Dilution Factor: 1			MDL.....: 3.5		

NOTE(S):

RL Reporting Limit

B Estimated result. Result is less than RL.

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7K4

General Chemistry

Lot-Sample #...: F8J170190-029 Work Order #...: K04EG Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/05/08	8310501
		Dilution Factor: 1		MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/11-11/12/08	8316321
		Dilution Factor: 1		MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X7K5

General Chemistry

Lot-Sample #...: F8J170190-030 Work Order #...: K04EH Matrix.....: WATER
Date Sampled...: 10/14/08 Date Received..: 10/17/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/05/08	8310501
		Dilution Factor: 1		MDL.....: 0.20		
TOX	ND	5.0	ug/L	SW846 9020B	11/11-11/12/08	8316321
		Dilution Factor: 1		MDL.....: 3.5		

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X851

General Chemistry

Lot-Sample #...: F8J250134-002 Work Order #...: K1L7L Matrix.....: WATER
Date Sampled...: 10/23/08 Date Received..: 10/25/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/05/08	8310501

Dilution Factor: 1 MDL.....: 0.20

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X852

General Chemistry

Lot-Sample #...: F8J250134-003 Work Order #...: K1L7M Matrix.....: WATER
Date Sampled...: 10/23/08 Date Received..: 10/25/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/05/08	8310501

Dilution Factor: 1 MDL.....: 0.20

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X853

General Chemistry

Lot-Sample #...: F8J250134-004 Work Order #...: K1L7N Matrix.....: WATER
Date Sampled...: 10/23/08 Date Received..: 10/25/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/05/08	8310501

Dilution Factor: 1 MDL.....: 0.20

CH2M Hill Plateau Remediation DOE RL

Client Sample ID: B1X854

General Chemistry

Lot-Sample #...: F8J250134-005 Work Order #...: K1L7P Matrix.....: WATER
Date Sampled...: 10/23/08 Date Received..: 10/25/08

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon	ND	1.0	mg/L	SW846 9060	11/05/08	8310501

Dilution Factor: 1 MDL.....: 0.20

TestAmerica

TA Richland
Hexavalent Chromium - Water

Analyst:	J. Peterson	Calibration Curve Information				SOP Information		BATCH #	8009380
Start Date:	1/7/2008		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05309
Start Time:	16:30	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	1/7/2008	Std. 1	0.100	0.050	0.091				
End Time	17:00	Std. 2	0.500	0.250	0.468			Instrument Information	
		Std. 3	0.750	0.375	0.703	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	1.500	0.750	1.387			Wavelength:	540
		Std 5	2.000	1.000	1.820			R Squared	0.99980
Date:	01/14/08	Standard Volume (mL):			100.000			Slope:	1.82635
		Date of Curve:			1/7/2008			Intercept:	0.00668

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	Cr-08-00007	Cr-08-00008		Cr-08-00007		Cr-08-00007	
Prep Date:	01/07/08	01/07/08		01/07/08		01/07/08	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	01/08/08	01/08/08		01/08/08		01/08/08	
Pipettor(s)	70,190	190		190		190	
Volume Used (Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.26316

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.916	0.000	0.916	1	0.4979	0.498	99.58%
n/a	n/a	ICB	100.000	-0.002	0.000	-0.002	1	<MDL	<MDL	
KFAFX-1AA	n/a	Prep Blank	100.000	0.004		0.004	1	-0.0015	<MDL	
KFAFX-1AC	n/a	LCS	100.000	0.941		0.941	1	0.5116	0.512	102.32%
KE6DE-1AA	BIRTFS		100.000	0.963		0.963	1	0.5236	~~0.524~~ ~~0.254~~ 0.524	
KE6DE-1AC-S	-MS	MS	100.000	1.427		1.427	1	0.7777	~~0.778~~ 0.254	96.54%
KE6DE-1AD-D	-MSD	MSD	100.000	1.438		1.438	1	0.7837	~~0.784~~ 0.266	98.83%
KE6DE-1AE-X	-DUP	Duplicate	100.000	0.965		0.965	1	0.5247	0.525	SKS 3/6/08
SKS			100.000				1			
	SKS 3/6/08		100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.911		0.911	1	0.4951	0.495	99.03%
n/a	n/a	CCB	100.000	-0.002		-0.002	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

TestAmerica

TA Richland
Hexavalent Chromium - Water

Analyst:	J. Peterson	Calibration Curve Information				SOP Information		BATCH #	8009381
Start Date:	1/7/2008		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05309
Start Time:	16:30	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	1/7/2008	Std. 1	0.100	0.050	0.091				
End Time	17:00	Std. 2	0.500	0.250	0.468			Instrument Information	
		Std. 3	0.750	0.375	0.703	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	1.500	0.750	1.387			Wavelength:	540
		Std 5	2.000	1.000	1.820			R Squared	0.99980
Date:	01/14/08	Standard Volume (mL):			100.000			Slope:	1.82635
		Date of Curve:			1/7/2008			Intercept:	0.00668

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	Cr-08-00007	Cr-08-00008		Cr-08-00007		Cr-08-00007	
Prep Date:	01/07/08	01/07/08		01/07/08		01/07/08	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	01/08/08	01/08/08		01/08/08		01/08/08	
Pipettor(s)	70,190	190		190		190	
Volume Used (Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.26316

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.916	0.000	0.916	1	0.4979	0.498	99.58%
n/a	n/a	ICB	100.000	-0.002	0.000	-0.002	1	<MDL	<MDL	
KFAF2-1AA	n/a	Prep Blank	100.000	0.006		0.006	1	-0.0004	<MDL	
KFAF2-1AC	n/a	LCS	100.000	0.948		0.948	1	0.5154	0.515	103.08%
KE6DJ-1AA	B1RRC8		100.000	0.008		0.008	1	0.0007	<MDL	
KE6DJ-1AC-S	-MS	MS	100.000	0.508		0.508	1	0.2745	0.274	104.31%
KE6DJ-1AD-D	-MSD	MSD	100.000	0.503		0.503	1	0.2718	0.272	103.27%
KE6DJ-1AE-X	-DUP	Duplicate	100.000	0.007		0.007	1	0.0002	<MDL	
SS 3/6/08			100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.912		0.912	1	0.4957	0.496	99.14%
n/a	n/a	CCB	100.000	-0.001		-0.001	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-058
Sample # W07P001503
Client ID: B1P4J5 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Hexavalent Chromium											
Hexavalent Chromium	18540-29-9	LA-265-403		0.0521	mg/L			1.00	2.0e-03		08/15/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001504
Client ID: B1P8P1 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

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	D	0.238	mg/L			2.00	0.012		08/23/07
Chloride	16887-00-6	LA-533-410	D	19.1	mg/L			20.00	0.60		08/23/07
Nitrogen in Nitrite	UR NO2-N	LA-533-410	DU	< 0.0200	mg/L			2.00	0.020		08/23/07
Nitrogen in Nitrate	J NO3-N	LA-533-410	D	41.1	mg/L			20.00	0.10		08/23/07
Sulfate	14808-79-8	LA-533-410	D	86.4	mg/L			20.00	1.4		08/23/07
Cyanide											
Cyanide	57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/21/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		120	mg/L			1.00	1.0		08/16/07

LS
8-09-2010

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001505
Client ID: B1P8L2 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

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	BD	0.110	mg/L			5.00	0.030		08/23/07
Chloride		16887-00-6	LA-533-410	D	41.3	mg/L			5.00	0.15		08/23/07
Nitrogen in Nitrite	UR	NO2-N	LA-533-410	DU	< 0.0500	mg/L			5.00	0.050		08/23/07
Nitrogen in Nitrate	J	NO3-N	LA-533-410	D	271	mg/L			1.01e+002	0.50		08/23/07
Sulfate		14808-79-8	LA-533-410	D	196	mg/L			1.01e+002	7.1		08/23/07
Cyanide												
Cyanide		57-12-5	LA-695-402	D	989	ug/L			5.00	20		08/21/07
Total Alkalinity as mg/L CaCO3												
Total Alkalinity as mg/L CaCO3		ALKALINITY	LA-531-411		100	mg/L			1.00	1.0		08/16/07

LS
8-09-2010

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001506
Client ID: B1P9K4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

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	D	0.241	mg/L			2.00	0.012		08/22/07
Chloride		16887-00-6	LA-533-410	D	20.3	mg/L			20.00	0.60		08/22/07
Nitrogen in Nitrite	UR	NO2-N	LA-533-410	DU	< 0.0200	mg/L			2.00	0.020		08/22/07
Nitrogen in Nitrate	J	NO3-N	LA-533-410	D	8.00	mg/L			20.00	0.10		08/22/07
Sulfate		14808-79-8	LA-533-410	D	90.0	mg/L			20.00	1.4		08/22/07
Cyanide												
Cyanide		57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/21/07
Total Alkalinity as mg/L CaCO3												
Total Alkalinity as mg/L CaCO3		ALKALINITY	LA-531-411		130	mg/L			1.00	1.0		08/16/07

LS
8-09-2010

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001507
Client ID: B1P8N6 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

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	D	0.218	mg/L			2.00	0.012		08/22/07
Chloride		16887-00-6	LA-533-410	D	18.0	mg/L			20.00	0.60		08/22/07
Nitrogen in Nitrite	UR	NO2-N	LA-533-410	DU	< 0.0200	mg/L			2.00	0.020		08/22/07
Nitrogen in Nitrate	J	NO3-N	LA-533-410	D	67.8	mg/L			20.00	0.10		08/22/07
Sulfate		14808-79-8	LA-533-410	D	94.3	mg/L			20.00	1.4		08/22/07
Cyanide												
Cyanide		57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/21/07
Total Alkalinity as mg/L CaCO3												
Total Alkalinity as mg/L CaCO3		ALKALINITY	LA-531-411		120	mg/L			1.00	1.0		08/16/07

LS
8-09-2010

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001508
Client ID: B1P8L7 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

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	D	0.563	mg/L			2.00	0.012		08/22/07
Chloride		16887-00-6	LA-533-410	D	23.3	mg/L			20.00	0.60		08/16/07
Nitrogen in Nitrite	UR	NO2-N	LA-533-410	DNU	< 0.0200	mg/L			2.00	0.020		08/22/07
Nitrogen in Nitrate		NO3-N	LA-533-410	D	31.9	mg/L			20.00	0.10		08/16/07
Sulfate		14808-79-8	LA-533-410	D	88.0	mg/L			20.00	1.4		08/16/07
Cyanide												
Cyanide		57-12-5	LA-695-402		57.7	ug/L			1.00	4.0		08/21/07
Total Alkalinity as mg/L CaCO3												
Total Alkalinity as mg/L CaCO3		ALKALINITY	LA-531-411		100	mg/L			1.00	1.0		08/16/07

LS
8-09-2010

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001509
Client ID: B1P9J9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

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		0.273	mg/L			1.00	6.0e-03		08/16/07
Chloride	16887-00-6	LA-533-410	D	10.7	mg/L			10.00	0.30		08/16/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/16/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	3.92	mg/L			10.00	0.050		08/16/07
Sulfate	14808-79-8	LA-533-410	D	46.3	mg/L			10.00	0.70		08/16/07
Cyanide											
Cyanide	57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/21/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		120	mg/L			1.00	1.0		08/16/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001510
Client ID: B1P861 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

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		0.376	mg/L			1.00	6.0e-03		08/16/07
Chloride	16887-00-6	LA-533-410	D	11.6	mg/L			10.00	0.30		08/22/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/16/07
Nitrogen in Nitrate J	NO3-N	LA-533-410	D	9.25	mg/L			10.00	0.050		08/22/07
Sulfate	14808-79-8	LA-533-410	D	51.0	mg/L			10.00	0.70		08/22/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		140	mg/L			1.00	1.0		08/23/07

LS
8-09-2010

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

Report WGPP/ver. 5.2
GPAP

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001511
Client ID: B1P8R1 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

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	D	0.232	mg/L			2.00	0.012		08/22/07
Chloride		16887-00-6	LA-533-410	D	12.2	mg/L			10.00	0.30		08/16/07
Nitrogen in Nitrite	UR	NO2-N	LA-533-410	DNU	< 0.0200	mg/L			2.00	0.020		08/22/07
Nitrogen in Nitrate		NO3-N	LA-533-410	D	19.4	mg/L			10.00	0.050		08/16/07
Sulfate		14808-79-8	LA-533-410	D	68.7	mg/L			10.00	0.70		08/16/07
Cyanide												
Cyanide		57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/21/07
Total Alkalinity as mg/L CaCO3												
Total Alkalinity as mg/L CaCO3		ALKALINITY	LA-531-411		100	mg/L			1.00	1.0		08/23/07

LS
8-09-2010

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001512
Client ID: B1P8T5 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Inorganic
Sampled: 08/15/07
Received: 08/15/07

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	D	0.249	mg/L			2.00	0.012		08/16/07
Chloride	16887-00-6	LA-533-410	D	18.3	mg/L			10.00	0.30		08/16/07
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0200	mg/L			2.00	0.020		08/16/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	8.88	mg/L			10.00	0.050		08/16/07
Sulfate	14808-79-8	LA-533-410	D	86.7	mg/L			10.00	0.70		08/16/07
Cyanide											
Cyanide	57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/21/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		130	mg/L			1.00	1.0		08/23/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001552
Client ID: B1P9F4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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	BDX	0.248	mg/L			3.00	0.018		08/24/07
Chloride	16887-00-6	LA-533-410	D	56.9	mg/L			33.00	0.99		08/24/07
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0300	mg/L			3.00	0.030		08/24/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	96.4	mg/L			33.00	0.16		08/24/07
Sulfate	14808-79-8	LA-533-410	D	189	mg/L			33.00	2.3		08/24/07
Cyanide											
Cyanide	57-12-5	LA-695-402		10.4	ug/L			1.00	4.0		08/30/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		95.0	mg/L			1.00	1.0		08/31/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
X - Other flags/notes described in the comments/narrative(inorg)

C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001553
Client ID: B1P9F9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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	D	0.229	mg/L			2.00	0.012		08/24/07
Chloride	16887-00-6	LA-533-410	D	20.0	mg/L			20.00	0.60		08/24/07
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0200	mg/L			2.00	0.020		08/24/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	52.4	mg/L			20.00	0.10		08/24/07
Sulfate	14808-79-8	LA-533-410	D	91.7	mg/L			20.00	1.4		08/24/07
Cyanide											
Cyanide	57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/30/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		120	mg/L			1.00	1.0		08/31/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001554
Client ID: B1P8P6 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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	BD	0.263	mg/L			3.00	0.018		08/24/07
Chloride	16887-00-6	LA-533-410	D	38.3	mg/L			33.00	0.99		08/24/07
Nitrogen in Nitrite	NO2-N	LA-533-410	BD	0.0880	mg/L			3.00	0.030		08/24/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	127	mg/L			33.00	0.16		08/24/07
Sulfate	14808-79-8	LA-533-410	D	200	mg/L			33.00	2.3		08/24/07
Cyanide											
Cyanide	57-12-5	LA-695-402		20.1	ug/L			1.00	4.0		08/30/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		130	mg/L			1.00	1.0		08/31/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001555
Client ID: B1P9H4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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	D	0.250	mg/L			2.00	0.012		08/24/07
Chloride	16887-00-6	LA-533-410	D	19.7	mg/L			10.00	0.30		08/24/07
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0200	mg/L			2.00	0.020		08/24/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	13.2	mg/L			10.00	0.050		08/24/07
Sulfate	14808-79-8	LA-533-410	D	90.0	mg/L			10.00	0.70		08/24/07
Cyanide											
Cyanide	57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/30/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		130	mg/L			1.00	1.0		08/31/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001556
Client ID: B1P9H9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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	D	0.249	mg/L			2.00	0.012		08/24/07
Chloride	16887-00-6	LA-533-410	D	19.1	mg/L			10.00	0.30		08/24/07
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	< 0.0200	mg/L			2.00	0.020		08/24/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	8.48	mg/L			10.00	0.050		08/24/07
Sulfate	14808-79-8	LA-533-410	D	92.0	mg/L			10.00	0.70		08/24/07
Cyanide											
Cyanide	57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/30/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		130	mg/L			1.00	1.0		08/31/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001557
Client ID: B1P9J4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.268	mg/L			1.00	6.0e-03		08/23/07
Chloride	16887-00-6	LA-533-410	D	17.6	mg/L			10.00	0.30		08/23/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/23/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	6.57	mg/L			10.00	0.050		08/23/07
Sulfate	14808-79-8	LA-533-410	D	80.4	mg/L			10.00	0.70		08/23/07
Cyanide											
Cyanide	57-12-5	LA-695-402	U	< 4.00	ug/L			1.00	4.0		08/30/07
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		130	mg/L			1.00	1.0		08/31/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001559
Client ID: B1P666 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.669	mg/L			1.00	6.0e-03		08/24/07
Chloride	16887-00-6	LA-533-410	D	16.9	mg/L			10.00	0.30		08/24/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/24/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	19.2	mg/L			10.00	0.050		08/24/07
Sulfate	14808-79-8	LA-533-410		41.2	mg/L			1.00	0.070		08/24/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001560
Client ID: B1P9X6 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		130	mg/L			1.00	1.0		08/31/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001562
Client ID: B1P6B7 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.388	mg/L			1.00	6.0e-03		08/24/07
Chloride	16887-00-6	LA-533-410		10.5	mg/L			1.00	0.030		08/24/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/24/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	20.4	mg/L			10.00	0.050		08/24/07
Sulfate	14808-79-8	LA-533-410		23.9	mg/L			1.00	0.070		08/24/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001564
Client ID: B1P697 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.320	mg/L			1.00	6.0e-03		08/25/07
Chloride	16887-00-6	LA-533-410	D	17.4	mg/L			10.00	0.30		08/25/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/25/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	22.5	mg/L			10.00	0.050		08/25/07
Sulfate	14808-79-8	LA-533-410	D	41.3	mg/L			10.00	0.70		08/25/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

Report WGPP/ver. 5.2
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001566
Client ID: B1P6B2 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.379	mg/L			1.00	6.0e-03		08/25/07
Chloride	16887-00-6	LA-533-410	D	20.3	mg/L			10.00	0.30		08/25/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/25/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	22.2	mg/L			10.00	0.050		08/25/07
Sulfate	14808-79-8	LA-533-410		34.3	mg/L			1.00	0.070		08/25/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001568
Client ID: B1P6C9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.262	mg/L			1.00	6.0e-03		08/25/07
Chloride	16887-00-6	LA-533-410	D	19.6	mg/L			10.00	0.30		08/25/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/25/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	35.0	mg/L			10.00	0.050		08/25/07
Sulfate	14808-79-8	LA-533-410	D	49.4	mg/L			10.00	0.70		08/25/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

Report WGPP/ver. 5.2
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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001573
Client ID: B1P6F4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.313	mg/L			1.00	6.0e-03		08/25/07
Chloride	16887-00-6	LA-533-410	D	26.7	mg/L			10.00	0.30		08/25/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/25/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	33.3	mg/L			10.00	0.050		08/25/07
Sulfate	14808-79-8	LA-533-410	D	51.3	mg/L			10.00	0.70		08/25/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001574
Client ID: B1P6F9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.302	mg/L			1.00	6.0e-03		08/25/07
Chloride	16887-00-6	LA-533-410	D	14.0	mg/L			10.00	0.30		08/25/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/25/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	18.1	mg/L			10.00	0.050		08/25/07
Sulfate	14808-79-8	LA-533-410		30.1	mg/L			1.00	0.070		08/25/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001575
Client ID: B1P6H9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.407	mg/L			1.00	6.0e-03		08/25/07
Chloride	16887-00-6	LA-533-410	D	13.4	mg/L			10.00	0.30		08/25/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/25/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	29.7	mg/L			10.00	0.050		08/25/07
Sulfate	14808-79-8	LA-533-410	D	26.7	mg/L			10.00	0.70		08/25/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001576
Client ID: B1P6H4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

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		0.394	mg/L			1.00	6.0e-03		08/25/07
Chloride	16887-00-6	LA-533-410	D	13.4	mg/L			13.00	0.39		08/25/07
Nitrogen in Nitrite	NO2-N	LA-533-410	U	< 0.0100	mg/L			1.00	0.010		08/25/07
Nitrogen in Nitrate	NO3-N	LA-533-410	D	46.8	mg/L			13.00	0.065		08/25/07
Sulfate	14808-79-8	LA-533-410		29.3	mg/L			1.00	0.070		08/25/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001577
Client ID: B1PB22 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		110	mg/L			1.00	1.0		08/31/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001578
Client ID: B1P8W6 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Inorganic
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		110	mg/L			1.00	1.0		08/31/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

LS
8-09-2010

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-133
Sample # W08GR02623
Client ID: B1W1B1 TRENT WSCF

Matrix: WATER

Group #: WSCF20081478
Department: Inorganic
Sampled: 07/16/08
Received: 07/17/08

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		0.132	mg/L			1.00	0.023		07/17/08
Chloride	16887-00-6	LA-533-410	D	27.4	mg/L			5.00	0.23		07/17/08
Nitrogen in Nitrite	NO2-N	LA-533-410		0.426	mg/L			1.00	0.013		07/17/08
Nitrogen in Nitrate	NO3-N	LA-533-410	D	7.50	mg/L			5.00	0.060		07/17/08
Phosphate (P) by IC	PO4-P	LA-533-410	U	< 0.0606	mg/L			1.00	0.061		07/17/08
Sulfate	14808-79-8	LA-533-410	D	77.5	mg/L			5.00	0.66		07/17/08
Cyanide											
Cyanide UR	57-12-5	LA-695-402	UX	< 4.00	ug/L			1.00	4.0		07/18/08
Hexavalent Chromium											
Hexavalent Chromium UJ	18540-29-9	LA-265-403	UX	< 2.00e-03	mg/L			1.00	2.0e-03		07/17/08
ICP Metals Analysis, Grd H20 P Prep											**08/25/08**
ICP Metals Analysis, Grd H20 P											
Aluminum	7429-90-5	LA-505-411	U	< 52.0	ug/L			1.00	52		08/31/08
Iron	7439-89-6	LA-505-411		348	ug/L			1.00	25		08/31/08
Magnesium	7439-95-4	LA-505-411		5.86e+03	ug/L			1.00	50		08/31/08
Manganese	7439-96-5	LA-505-411		181	ug/L			1.00	4.0		08/31/08
Potassium	7440-09-7	LA-505-411		3.88e+03	ug/L	ICP-AES not validated per VSR instructions		1.00	1.7e+02		08/31/08
Sodium	7440-23-5	LA-505-411		8.01e+03	ug/L			1.00	51		08/31/08
Barium	7440-39-3	LA-505-411		25.6	ug/L			1.00	4.0		08/31/08
Calcium	7440-70-2	LA-505-411		2.63e+04	ug/L			1.00	73		08/31/08
Lithium	7439-93-2	LA-505-411	U	< 4.00	ug/L			1.00	4.0		08/31/08
Strontium	7440-24-6	LA-505-411		203	ug/L			1.00	4.0		08/31/08
Silicon	7440-21-3	LA-505-411		1.11e+04	ug/L			1.00	26		09/04/08
Phosphorus	7723-14-0	LA-505-411	U	< 44.0	ug/L			1.00	44		08/31/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

J - Analyte < lowest calibration but >= MDL.(org)
U - Analyzed for but not detected above limiting criteria.
X - Other flags/notes described in the comments/narrative(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-133
Sample # W08GR02623
Client ID: B1W1B1 TRENT WSCF

Matrix: WATER

Group #: WSCF20081478
Department: Inorganic
Sampled: 07/16/08
Received: 07/17/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
ICP-200.8 MS All possible meta Prep											**08/11/08**
ICP-200.8 MS All possible meta											
Antimony	7440-36-0	LA-505-412	U	< 0.300	ug/L			1.00	0.300		08/12/08
Cadmium	7440-43-9	LA-505-412	U	< 0.100	ug/L			1.00	0.100		08/12/08
Chromium	7440-47-3	LA-505-412	U	< 0.500	ug/L			1.00	0.500		08/12/08
Mercury	7439-97-6	LA-505-412	U	< 0.0500	ug/L			1.00	0.0500		08/12/08
Uranium	7440-61-1	LA-505-412		1.00	ug/L			1.00	0.0500		08/12/08
Arsenic	7440-38-2	LA-505-412	U	< 0.400	ug/L			1.00	0.400		08/12/08
Thallium	7440-28-0	LA-505-412		0.130	ug/L			1.00	0.100		08/12/08
Nitrogen in ammonium											
Nitrogen in ammonium	NH4-N	LA-503-401		0.137	mg/L			1.00	9.3e-03		07/22/08
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		92.0	mg/L			1.00	1.0		07/21/08
pH Measurement											
pH Measurement J	PH	LA-212-402		7.42	unitless			1.00	0.010		07/17/08

ICP-MS not validated per VSR instructions

LS
8-09-2010

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor

D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

J - Analyte < lowest calibration but > = MDL.(org)
U - Analyzed for but not detected above limiting criteria.
X - Other flags/notes described in the comments/narrative(inorg)

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

LS
8-09-2010

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-133
Sample # W08GR02624
Client ID: B1W1B2 TRENT WSCF

Matrix: WATER

Group #: WSCF20081478
Department: Inorganic
Sampled: 07/16/08
Received: 07/17/08

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		0.134	mg/L			1.00	0.023		07/17/08
Chloride		16887-00-6	LA-533-410	D	26.9	mg/L			5.00	0.23		07/17/08
Nitrogen in Nitrite		NO2-N	LA-533-410		0.447	mg/L			1.00	0.013		07/17/08
Nitrogen in Nitrate		NO3-N	LA-533-410	D	7.24	mg/L			5.00	0.060		07/17/08
Phosphate (P) by IC		PO4-P	LA-533-410	U	< 0.0606	mg/L			1.00	0.061		07/17/08
Sulfate		14808-79-8	LA-533-410	D	76.9	mg/L			5.00	0.66		07/17/08
Cyanide												
Cyanide	J	57-12-5	LA-695-402	X	9.10	ug/L			1.00	4.0		07/18/08
Hexavalent Chromium												
Hexavalent Chromium	UJ	18540-29-9	LA-265-403	UX	< 2.00e-03	mg/L			1.00	2.0e-03		07/17/08
ICP Metals Analysis, Grd H20 P Prep												**08/25/08**
ICP Metals Analysis, Grd H20 P												
Aluminum		7429-90-5	LA-505-411		58.4	ug/L			1.00	52		08/31/08
Iron		7439-89-6	LA-505-411	U	< 25.0	ug/L			1.00	25		08/31/08
Magnesium		7439-95-4	LA-505-411		1.14e+04	ug/L			1.00	50		08/31/08
Manganese		7439-96-5	LA-505-411		342	ug/L			1.00	4.0		08/31/08
Potassium		7440-09-7	LA-505-411		7.38e+03	ug/L	ICP-AES not validated per VSR instructions		1.00	1.7e+02		08/31/08
Sodium		7440-23-5	LA-505-411		1.68e+04	ug/L			1.00	51		08/31/08
Barium		7440-39-3	LA-505-411		35.6	ug/L			1.00	4.0		08/31/08
Calcium		7440-70-2	LA-505-411		4.01e+04	ug/L			1.00	73		08/31/08
Lithium		7439-93-2	LA-505-411		10.0	ug/L			1.00	4.0		08/31/08
Strontium		7440-24-6	LA-505-411		263	ug/L			1.00	4.0		08/31/08
Silicon		7440-21-3	LA-505-411		2.05e+03	ug/L			1.00	26		08/31/08
Phosphorus		7723-14-0	LA-505-411	U	< 44.0	ug/L			1.00	44		08/31/08

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor

D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

J - Analyte < lowest calibration but > = MDL.(org)
U - Analyzed for but not detected above limiting criteria.
X - Other flags/notes described in the comments/narrative(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-133
Sample # W08GR02624
Client ID: B1W1B2 TRENT WSCF

Matrix: WATER

Group #: WSCF20081478
Department: Inorganic
Sampled: 07/16/08
Received: 07/17/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
ICP-200.8 MS All possible meta Prep											**08/11/08**
ICP-200.8 MS All possible meta											
Antimony	7440-36-0	LA-505-412	U	< 0.300	ug/L			1.00	0.300		08/12/08
Cadmium	7440-43-9	LA-505-412	U	< 0.100	ug/L			1.00	0.100		08/12/08
Chromium	7440-47-3	LA-505-412	U	< 0.500	ug/L			1.00	0.500		08/12/08
Mercury	7439-97-6	LA-505-412	U	< 0.0500	ug/L			1.00	0.0500		08/12/08
Uranium	7440-61-1	LA-505-412		0.960	ug/L			1.00	0.0500		08/12/08
Arsenic	7440-38-2	LA-505-412	U	< 0.400	ug/L			1.00	0.400		08/12/08
Thallium	7440-28-0	LA-505-412	U	< 0.100	ug/L			1.00	0.100		08/12/08
Nitrogen in ammonium											
Nitrogen in ammonium	NH4-N	LA-503-401		0.148	mg/L			1.00	9.3e-03		07/22/08
Total Alkalinity as mg/L CaCO3											
Total Alkalinity as mg/L CaCO3	ALKALINITY	LA-531-411		91.0	mg/L			1.00	1.0		07/21/08
pH Measurement											
pH Measurement J	PH	LA-212-402		7.46	unitless			1.00	0.010		07/17/08

ICP-MS not validated per VSR instructions

LS
8-09-2010

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

J - Analyte < lowest calibration but > = MDL.(org)
U - Analyzed for but not detected above limiting criteria.
X - Other flags/notes described in the comments/narrative(inorg)

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

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417001
SAF# I10-001
Sample ID B21YM1

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.0020		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417002
SAF# I10-001
Sample ID B21YM2

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.0020		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417003
SAF# I10-001
Sample ID B21YM3

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.00200		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417004
SAF# I10-001
Sample ID B21YM4

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.0020		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417005
SAF# I10-001
Sample ID B22007

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.195		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417006
SAF# I10-001
Sample ID B22008

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.192		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417007
SAF# I10-001
Sample ID B22031

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0124		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417008
SAF# I10-001
Sample ID B22032

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0118		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417009
SAF# I10-001
Sample ID B21YV0

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.00390		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417010
SAF# I10-001
Sample ID B21YV1

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.00330		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417011
SAF# I10-001
Sample ID B22035

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0378		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417012
SAF# I10-001
Sample ID B22036

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0368		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417013
SAF# I10-001
Sample ID B21YJ9

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.00260		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417014
SAF# I10-001
Sample ID B21YK0

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.00210		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417015
SAF# I10-001
Sample ID B21YW7

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0251		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417016
SAF# I10-001
Sample ID B21YW8

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0264		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417017
SAF# I10-001
Sample ID B21YW9

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0704		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417018
SAF# I10-001
Sample ID B21YX0

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0699		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417019
SAF# I10-001
Sample ID B21Y05

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.122		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417020
SAF# I10-001
Sample ID B22019

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.120		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417021
SAF# I10-001
Sample ID B22039

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0559		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417022
SAF# I10-001
Sample ID B22040

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/22/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0567		mg/L	1	0.0020	0.0050	10/22/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417023
SAF# I10-001
Sample ID B22053

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.00280		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417024
SAF# I10-001
Sample ID B22054

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	B	0.00260		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417025
SAF# I10-001
Sample ID B22029

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.00580		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417026
SAF# I10-001
Sample ID B22030

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.00560		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417027
SAF# I10-001
Sample ID B21Y35

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0189		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417028
SAF# I10-001
Sample ID B22038

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.0207		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417029
SAF# I10-001
Sample ID B21YK4

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.00550		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417030
SAF# I10-001
Sample ID B21YK5

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403	U	<0.0020		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417031
SAF# I10-001
Sample ID B21YK2

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.00530		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

WSCF Analytical Results Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Sample # 91417032
SAF# I10-001
Sample ID B21YK3

Matrix WATER
Sampled 10/22/09
Received 10/22/09

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Cr(VI)										**10/23/09**
Cr(VI)										
Hexavalent chromium	18540-29-9	LA-265-403		0.00520		mg/L	1	0.0020	0.0050	10/23/09

MDL = Minimum Detection
RQ = Result Qualifier
TP Err = Total Propagated
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL. (Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary diltution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD sample recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

CH2MHill Plateau Remediation Company
P.O. Box 1600
MSIN B6-06
Richland, Washington 99352
November 21, 2008
Attention: Mike Neely

SDG	: SL762
Number of Samples	: 37 samples
Sample Matrix	: water
Data Deliverable	: Summary
Date SDG Closed	: October 25, 2008

II. Introduction

Between October 17, 2008 and October 25, 2008, thirty seven (37) water samples were received by TestAmerica - St. Louis for chemical analysis. The samples were received within temperature criteria. See the COC and CUR forms for documentation of any variations on receipt conditions and temperature. Upon receipt, the samples were given laboratory Ids to correspond with specific client Ids. Please refer to the Sample Summary sheets attached to this case narrative. This report is incomplete without the narrative.

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits. All results are based upon samples as they were received, i.e. wet weight, unless otherwise noted on the data sheets. See the attached Methods Summary Form for the methods used in this SDG.

Deviation from Request: None

IV. Definitions

QCBLK-	Quality Control Blank, Method Blank
QCLCS-	Quality Control Laboratory Control Sample, Blank Spike
DUP-	Laboratory Duplicate
MS-	Matrix Spike
MSD-	Matrix Spike Duplicate

V. Comments

General

The following SAFs are associated with this SDG: W09-010

The term "Detection Limit" used in the analytical data report refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

MS/MSD/Dup analysis was done per the client requirements. Analytical batches that did not contain matrix QC were analyzed with a LCS/LCS duplicate.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CH2MHill Plateau Remediation Company
November 21, 2008
SDG: SL762

Phenols by GC

Batch: 8294172

The LCS surrogate recovery for 2-Fluorophenol is outside acceptance limits. LCS spike recoveries are within QC limits demonstrating acceptable sample extraction and instrument performance.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

The MS/MSD RPD for 4,6-Dinitro-2-methylphenol is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

The closing CCV recoveries for OCAL931 were outside the upper QC limit (greater than 15% RSD) for 2,6-Dichlorophenol, 4-Nitrophenol, Pentachlorophenol, and Dinoseb indicating a potential high bias for those analytes in the samples associated with this CCV. These analytes were not detected above the reporting limit in the associated samples.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

The closing CCV surrogate recovery for OCAL931 was outside the upper QC limits (greater than 15%D) for 2,4,6-Tribromophenol indicating a potential high bias for the surrogate in the associated samples. The surrogate recovery in the samples was within acceptable QC limits.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (15): B1X7V0
F8J170190 (20): B1X801
F8J170190 (26): B1X7P8
F8J170190 (31): B1X7K7

Batch: 8302135

The MS/MSD RPD for 4,6-Dinitro-2-methylphenol, Dinoseb, 2-Nitrophenol, 4-Nitrophenol, and Phenol is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.
Affected Samples:
F8J250134 (1): B1X7V5
F8J250134 (6): B1X7V6

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

CH2MHill Plateau Remediation Company
November 21, 2008
SDG: SL762

PCBs

Batch: 8295137

The LCS recovery for Aroclor 1260 is outside the upper QC limit, indicating a potential positive bias for these Aroclors associated with 1260. These Aroclors were not observed above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The DCB surrogate recovery was outside the upper QC limits in the LCS, but the samples associated with this LCS had acceptable surrogate gel labrecoveries.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (21): B1X8H8

The MS/MSD RPD for Aroclor 1016 and Aroclor 1260 is not within method acceptance criteria. MS/MSD recoveries are within QC limits demonstrating good extraction performance in the sample matrix.
Affected Samples:
F8J170190 (5): B1X8M5
F8J170190 (10): B1X8N6
F8J170190 (21): B1X8H8

There were no observations or nonconformances for the following methods:

Total Organic Carbon
Total Organic Halogens

I certify that this Summary Package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:

Michael Franks
St. Louis Project Manager

SDG# SL762

FLUOR HANFORD

CVR 465 SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-173

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HWF-N-506-17	Ice Chest No.: ERC-1 Temp.: 79 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7993 9545 7930
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X8L9		W	10-16-08	0842	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8L9		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M0		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8M0		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M1		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8M1		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M2		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8M2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8M5		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X8M5		W			1x20-mL P	Activity Scan	6 Months	None
B1X8M5		W			3x1000-mL aG	8082_PCB_GC: List-1 (7)	7/40 Days	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			OCT 16 2008 1430	FedEx			
FedEx				B-L			10/17/08 09:5

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

SDG# 84

TestAmerica St. Louis

SDG# SL762

FLUOR HANFORD SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-179

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-17	Ice Chest No.: ERC-02-406 Temp.: 88 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7919 7235 8560
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X8N0		W	10-16-08	1050	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N0		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N1		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N1		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N2		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N3		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X8N3		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X8N6		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X8N6		W			1x20-mL P	Activity Scan	6 Months	None
B1X8N6		W			3x1000-mL aG	8082_PCB_GC: List-1 (7)	7/40 Days	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			OCT 16 2008 1430	FedEx			
FedEx				B			10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

Relinquished By	Date/Time	Received By	Date/Time

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-107

Page 1 of 1

Collector ~~D.R. Williamson~~ D. Woehle	Contact/Requester Mike Neely	Telephone No. 509-373-0654 MSIN FAX
SAF No. W09-010	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, OCTOBER 2008	HNF-N-506/6	Ice Chest No. GWS-001 Temp. 5416
Shipped To (Lab) TestAmerica St. Louis	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No. 7927 7118 3446
Protocol RCRA	Priority: 45 Days	Offsite Property No. N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7T4		W	10/14/08	1353	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T4		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7T5		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7T6		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T6		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7T7		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7T7		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7V0		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7V0		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~D.R. Williamson~~ 10/14/08	D. Woehle		10/16/08 0930	K. B. Hulse			10/16/08 0930
K. B. Hulse			10/16/08 1430	FED EX			
FedEx							10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

FLUOR HANFORD SL7622

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W09-010-131**

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-17	Ice Chest No.: SML-313 Temp.: 80 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7911 6566 5019
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7Y5		W	10-16-08	0949	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7Y6		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y6		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7Y7		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y7		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7Y8		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7Y8		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X801		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X801		W			1x20-mL P	Activity Scan	6 Months	None
B1X8H8		W			1x20-mL P	Activity Scan	6 Months	None
B1X8H8		W			3x1000-mL aG	8082_PCB_GC: List-1 (7)	7/40 Days	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			1430 OCT 16 2008	FedEx			
FedEx							
							10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-95

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HWF-N-SD6-16	Ice Chest No.: PNNL-1 Temp.: 55 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7993 9521 8776
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7P2		W	10/14/08	1047	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P3		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P3		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P4		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P4		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P5		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7P5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7P8		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7P8		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			10/16/08 0930	KB Hulse			10/16/08 0930
K. B. Hulse			10/16/08 1430	FED EX			
FedEx							10/17/08 09[illegible]

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

FLUOR HANFORD SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-73

Page 1 of 1

Collector: D. Woehle	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-W-506-16	Ice Chest No.: SAWS-107 Temp.: 5.7 lbs
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7919 7211 7256
Protocol: RCRA	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7K2		W	10/14/08	1248	1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K2		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K3		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K3		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K4		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K4		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K5		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X7K5		W			1x1000-mL aGs*	9020_TOX: TOX (1)	28 Days	H2SO4 to pH <2 Cool~4C
B1X7K7		W			3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7K7		W			1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. Woehle			10/16/08 0930	K. B. Hulse			10/16/08 0930
K. B. Hulse			10/16/08 1430	FED EX			
FED EX							10/17/08 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

SDG# SL762

FLUOR HANFORD

SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-195

Page 1 of 1

Collector: Scott E. Hamaker	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-506-18	Ice Chest No.: GW314 ~~GWSC-055~~ KEH Temp. 10/24/08
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 79061225 2250
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7V5		W	10/23/08	1100	3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7V5		W			1x20-mL P	Activity Scan	6 Months	None
B1X851		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X852		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X853		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C
B1X854		W			1x250-mL aGs*	9060_TOC: TOC (1)	28 Days	HCl or H2SO4 to pH <2 Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Scott E. Hamaker		Scott Hamaker	10/24/08 1315	KE Hamilton		Kim E Hamilton	10/24/08 1315
KE Hamilton		Kim E Hamilton	10/24/08 1430	FED EX			
FEDEX				B-2			10/25/08 0820

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica St. Louis

FLUOR HANFORD

SL762

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W09-010-196

Page 1 of 1

Collector: Scott E. Hamaker	Contact/Requester: Mike Neely	Telephone No.: 509-373-0654 MSIN FAX
SAF No.: W09-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2008	HNF-N-326-18	Ice Chest No.: GW14 ~~GWS-053~~ KEH 10/24/08 Temp.
Shipped To (Lab): TestAmerica St. Louis	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: 7906 1225 2250
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY08 and FY09 samples cannot be in the same SDG.
Site-Wide Generator Knowledge Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B1X7V6		W	10/23/08	1100	3x1000-mL aG	8040_PHENOLIC_GC: List-1 (17)	7/40 Days	Residual Chlorine 0.0008% Na2S2O3 Cool~4C
B1X7V6		W	10/23/08	1100	1x20-mL P	Activity Scan	6 Months	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Scott E. Hamaker	Scott Hamaker	10/24/08 1315		KE Hamilton	Kim E Hamilton	10/24/08 1315
KE Hamilton Kim E Hamilton			10/24/08 1430	FED EX			
FEDEX							
							10/25/08 0800

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

March 10, 2008

Attention: Steve Trent

SAF Number	:	W08-012, I08-013, A08-012, G08-012, S08-012, I08-012, I08-019, I08-016
Date SDG Closed	:	January 7, 2008
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05309
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between January 3, 2008 and January 7, 2008 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1RJR6	KE3EV	1/3/08	WATER
B1RHH7	KE3FL	1/3/08	WATER
B1RHK0	KE3FM	1/3/08	WATER
B1RBN0	KE3F3	1/3/08	WATER
B1RBN1	KE3F5	1/3/08	WATER
B1R9C0	KE3GE	1/3/08	WATER
B1R9C1	KE3GF	1/3/08	WATER
B1R9P0	KE3G2	1/3/08	WATER
B1R9N6	KE3G6	1/3/08	WATER
B1R9N9	KE3G7	1/3/08	WATER
B1RHP4	KE4LM	1/4/08	WATER
B1RCM9	KE4LQ	1/4/08	WATER
B1RBH7	KE4LX	1/4/08	WATER

B1R9D1	KE4L3	1/4/08	WATER
B1R9F1	KE4MA	1/4/08	WATER
B1R9C7	KE4MC	1/4/08	WATER
B1RTF5	KE6DE	1/7/08	WATER
B1RRC8	KE6DJ	1/7/08	WATER
B1RRC4	KE6DK	1/7/08	WATER
B1RRC3	KE6DL	1/7/08	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy
Uranium 234, 235 and 238 by method RICH-RC-5039
Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Selenium-79 by method RICH-RC-5043
Carbon-14 by method RICH-RC-5022
Chemical Analysis
Hexavalent Chromium by EPA method 7196A
Total Coliform by method 9223

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

Fluor Hanford
March 10, 2008

V. Comments

Alpha Spectroscopy

Uranium 234, 235 and 238 by method RICH-RC-5039:
The LCS, batch blank, sample and sample duplicate (B1RBH7) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:
Sample B1R9N6 was analyzed with reduced volume based on elevated screen result. Samples B1RJR6, B1RHK0, B1R9N9, B1RCM9 and B1RHK0 (DUP) were analyzed with reduced volumes based on weight screen. Except as noted, the LCS, batch blank, samples and sample duplicate (B1RHK0) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
Samples B1R9N6 and B1R9N9 were analyzed with reduced volumes based on elevated screen results. Samples B1RJR6 and B1RJR6 (DUP) were analyzed with reduced volumes based on weight screen. Samples B1R9N6 and B1R9N9 did not meet the RDL due to the reduced aliquot sizes. The activity detected was greater than the IDC, therefore the data can be accepted. Except as noted, the LCS, batch blank, samples and sample duplicate (B1RJR6) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
Sample B1R9N6 was analyzed with reduced volume based on elevated screen result. Sample B1R9N6 did not meet the RDL due to the reduced aliquot size. The activity detected was greater than the IDC, therefore the data can be accepted. The LCS, batch blank, samples and sample duplicate (B1RHK0) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:
The LCS had a high yield of Eu-152 at 127% on the first count. The LCS was recounted, providing a yield of 99%. The LCS, batch blank, samples and sample duplicate (B1R9N9) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS failed on the original analysis. The samples were reanalyzed. There was insufficient volume for sample B1RBN0 therefore no result will be reported. Except as noted, the LCS, batch blank, samples and sample duplicate (B1RBH7) results are within contractual requirements.

Liquid Scintillation Counting

Selenium-79 by method RICH-RC-5043:
There is no LCS for selenium-79. Except as noted, the batch blank, samples and sample duplicate (B1RBH7) results are within contractual requirements.

Carbon-14 by method RICH-RC-5022:
The LCS, batch blank, samples and sample duplicate (B1RRC4) results are within contractual requirements.

Fluor Hanford
March 10, 2008

Chemical Analysis

Total Coliform by method 9223

The LCS, batch blank, samples and sample duplicate (B1RHH7) results are within contractual requirements.

Hexavalent Chromium by EPA method 7196A

BATCH 8009380

The LCS, batch blank, samples, sample duplicate (B1RTF5), sample matrix spike (B1RTF5), and matrix spike duplicate (B1RTF5) results are within contractual requirements.

BATCH 8009381

The LCS, batch blank, samples, sample duplicate (B1RRC8), sample matrix spike (B1RRC8), and matrix spike duplicate (B1RRC8) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, 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 Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040121 W05309 DUE 021808 KEBEV

C.O.C. # W08-012-11

Page 1 of 1

Collector R. A. Shepard	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. W08-012	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, DECEMBER 2007	14 NF-N-506-13	Ice Chest No. Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RJR6		W	1308	1219	1x20-mL P	Activity Scan	None
B1RJR6		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			1/3/08 1420	Josh Herrick			1/3/08 1420
Josh Herrick			1/3/08 1530	RALJLANE TAL-R			1-3-08 1550

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040124 W05309 DUE 021808 KE3FL

C.O.C. # **W08-012-14**

Page 1 of 1

Collector Dave Williamson, Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA DECEMBER 2007	HNF-N-506-11	**Ice Chest No.** 6C3-03-006 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RHH7		W	1/3/08	1242	1x20-mL P	Activity Scan	None
B1RHH7		W	↓	↓	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool~4C
B1RHH7		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

1/3/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Dave Williamson, Fluor Hanford	Dave Williamson		1/3/08 1550		LVLANE	TAL-N	1-3-08 1550
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040124 W05309 DUE 021808 KE3FM

C.O.C. # **W08-012-18**

Page 1 of 1

Collector ~~Dave Williamson~~ Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2007	HNF-N-506-11	**Ice Chest No.** SAWS 109 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RHK0		W	1/3/08	1125	1x20-mL P	Activity Scan	None
B1RHK0		W			1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool~4C
B1RHK0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1RHK0		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1RHK0		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

1/3/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	~~Dave Williamson~~ ~~Fluor Hanford~~		1/3/08 1530		LWLANE	TALK	1-3-08 1530
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040128 W05309 DUE 021808 KE3F3

C.O.C. # I08-013-13

Page 1 of 1

Collector: R. R. Fox	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1, DECEMBER 2007	HNF-N-506-10	Ice Chest No.: SML-524 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RBN0		W	1-3-08	1016	1x20-mL P	Activity Scan	None
B1RBN0		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. R. Fox			1410 JAN 03 2008	Josh Herrick			1410 JAN 03 2008
Josh Herrick			1530 1/3/08				1530 1-3-08

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040128 W05309 DUE 021808 KE3F5

C.O.C. # I08-013-14

Page 1 of 1

Collector R. R. Fox	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. I08-013	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2ZP1, DECEMBER 2007	HNF-N-506-70	Ice Chest No. SML-524 Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RBN1		W	1-3-08	1006	1x20-mL P	Activity Scan	None
B1RBN1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. R. Fox			JAN 03 2008 1410	Josh Herrick			JAN 03 2008 1410
Josh Herrick			1-3-08 1530	LJLANE TAL-K			1-3-08 1530

Matrix *

S	= Soil		DS	= Drum Solid	
SE	= Sediment		DL	= Drum Liqui	
SO	= Solid		T	= Tissue	
SL	= Sludge		WI	= Wine	
W	= Water		L	= Liquid	
O	= Oil		V	= Vegetation	
A	= Air		X	= Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040132 WO5309 DUE 021808 KE3GE

C.O.C. # A08-012-7

Page 1 of 1

Collector: ~~Dave Williamson~~ Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(1)-PA, DECEMBER 2007	4NI-N-306.1	Ice Chest No.: 22R-08-006 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9C0		W	1/2/08	0938	1x20-mL P	Activity Scan	None
B1R9C0		W	✓		2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

1/3/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Dave Williamson ~~Fluor Hanford~~			1530 JAN 03 2008		LJLANE	THL-L	1-3-08 1530
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040132 W05309 DUE 021808 KE3GF

C.O.C. # A08-012-8

Page 1 of 1

Collector Dave Williamson Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. A08-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title LLWMA(1)-PA, DECEMBER 2007	HNF-N-506-11	**Ice Chest No.** 6.2P.01.006 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol Other	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9C1		W	1/3/08	0938	1x20-mL P	Activity Scan	None
B1R9C1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

1/3/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Dave Williamson Fluor Hanford		1530 JAN 03 2008		K. LILANE		1530 1-3-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040136 W05309 DUE 021808 KE3G2

C.O.C. # G08-012-79

Page 1 of 1

Collector R. A. Shepard	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. G08-012	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title INR2-RB, DECEMBER 2007	HNF-N 506-13	Ice Chest No. Temp.
Shipped To (Lab) TestAmerica Incornorated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9P0		W	1-3-08	0800	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1R9P0		W	↓	↓	1x20-mL P	Activity Scan	None
B1R9P0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1R9P0		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			1/3/08 1420	Josh Herrick			1/3/08 1420
Josh Herrick			1/3/08 1530	LJLANE TAL-IL			1-3-08 1530

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040132 W05309 DUE 021808 KE3G6

C.O.C. # G08-012-72

Page 1 of 1

Collector: R. A. Shepard	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB, DECEMBER 2007	HNF-N-506-03	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9N6		W	1308	1305	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1R9N6		W			1x20-mL P	Activity Scan	None
B1R9N6		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1R9N6		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			1/3/08 1420	Josh Herrick			1/3/08 1420
Josh Herrick			1/3/08 1530	RK LILLANE THL-K			1-3-08 1530

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040132 RR WO5309 DUE 021808 KE367

C.O.C. # G08-012-78

Page 1 of 1

Collector: R. A. Shepard	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: INR2-RB, DECEMBER 2007	HNF-N-506-13	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9N9		W	1308	1114	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1R9N9		W	↓	↓	1x20-mL P	Activity Scan	None
B1R9N9		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1R9N9		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
R. A. Shepard	1308 1420	Josh Herrick	1308 1420
Josh Herrick	1-3-08 1530	K. LILANE TAL-1L	1-3-08 1530

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040285 W05309 DUE 021808 KEHLM

C.O.C. # W08-012-30

Page 1 of 1

Collector: F.M. Hall	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, DECEMBER 2007	HNF-N-506-11	Ice Chest No.: 3ML-232 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RHP4		W	1-4-08	0936	1x20-mL P	Activity Scan	None
B1RHP4		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
F.M. Hall			JAN 04 2008 /415		LJLAVE	TAL-R	JAN 04 2008 /415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040286 W05309 DUE 021808 KE4LQ

C.O.C. # S08-012-41

Page 1 of 1

Collector: F.M. Hall	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, DECEMBER 2007	HNF-N-506-11	Ice Chest No.: SinL-232 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RCM9		W	1-4-08	0934	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1RCM9		W			1x20-mL P	Activity Scan	None
B1RCM9		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1RCM9		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
F.M. Hall			1415 JAN 04 2008		LJLANE	TAL-K	1415 JAN 04 2008
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040287 W05309 DUE 021808 KE4LX

C.O.C. # I08-012-16

Page 1 of 1

Collector Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I08-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UPL DECEMBER 2007	logbook: HNF-N-506-10	**Ice Chest No.** SAWS-107 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RBH7		W	1/4/08	0900	1x20-mL P	Activity Scan	None
B1RBH7		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1RBH7		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1RBH7		W			2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1RBH7		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1RBH7		W			2x1000-mL G/P	Selenium-79	HNO3 to pH <2
B1RBH7		W			1x1000-mL G/P	UISO_PLATE_AEA: List-1 (3)	HNO3 to pH <2

R. Wall 1/4/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D.R. Bringh		D.R. Bringh	JAN 04 2008 1415	LULANE	TAL-R		JAN 04 2008 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040288 W05309 DUE 021808 KE4L3

C.O.C. # A08-012-23

Page 1 of 1

Collector: R. R. Fox	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(1)-PA, DECEMBER 2007	HNF-N-506 13	Ice Chest No.: SML 538 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9D1		W	1-4-08	0925	1x20-mL P	Activity Scan	None
B1R9D1		W	↓	↓	2x~~1000~~-mL G/P 1-10 LITER	I129LL_SEP_LEPS_GS_LL: I-129 (1) NF 1-4-08	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. R. Fox			JAN 04 2008 1415		L.J. LANE	TAL-R	JAN 04 2008 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040289 W05309 DUE 021808 KEHMA

C.O.C. # A08-012-43

Page 1 of 1

Collector: Fluor Hanford R. T. SICKLE	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(1)-PA, DECEMBER 2007	HWF-N-506 13	Ice Chest No. SML 538 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9F1		W	1-4-08	1209	1x20-mL P	Activity Scan	None
B1R9F1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			JAN 04 2008 1415		LULANE	TAL-R	JAN 04 2008 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040289 W05309 DUE 021808 KE4MC

C.O.C. # A08-012-15

Page 1 of 1

Collector: Fluor Hanford R. T. SICKLE	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(1)-PA, DECEMBER 2007	HNF-N-506 13	Ice Chest No.: SML 538 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9C7		W	1-4-08	1051	1x20-mL P	Activity Scan	None
B1R9C7		W	↓	↓	2x~~4000~~-mL G/P 1-10 LITER	I129LL_SEP_LEPS_GS_LL: I-129 (1) AF 1-4-08	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			JAN 04 2008 1415		LJLANE	TAL-R	JAN 04 2008 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A070190 WO5309 DUE 2-21-08 KEGDE

C.O.C. # **I08-019-8**

Page 1 of 1

Collector Fluor Hanford RICHLAND	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I08-019	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title ISRM, JANUARY 2008	HNF-N-506 10	**Ice Chest No.** GW1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RTF5		W	1-7-08	1227	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C
B1RTF5		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford RICHLAND	D.R. Bunger		JAN 07 2008 1515	R.R. LULANE	TAL-R		JAN 07 2008 1515
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A070191 WO5309 DUE 2-21-08 KEGDJ

C.O.C. # **I08-016-20**

Page 1 of 1

Collector: ~~Fluor Hanford~~ R. T. SICKLE	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-016	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2), JANUARY 2008	HNF-N-506-11	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RRC8		W	1/7/08	1222	1x20-mL P	Activity Scan	None
B1RRC8		W	1/7/08	1222	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
~~Fluor Hanford~~ R. T. SICKLE	1400 1-7-08	D.R. Brewington	1400 1-7-08
D.R. Brewington	1515 1-7-08	LWL ANE TAL-K	1515 1-7-08

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A070191 W05309 DUE 2-21-08 KEL DK

C.O.C. # I08-016-11

Page 1 of 1

Collector	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-016 ~~Fluor Hanford~~ R. T. SICKLE	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2), JANUARY 2008	HNF-N-506-11	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RRC4		W	1/7/08	1008	1x20-mL P	Activity Scan	None
B1RRC4		W			2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1RRC4		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Received By
Print: Fluor Hanford R. T. SICKLE; Sign: [signature]; Date/Time: JAN 07 2008	Print: D.R. Brewington; Sign: [signature]; Date/Time: 1-7-08
Print: D.R. Brewington; Sign: [signature]; Date/Time: 1-7-08 1515	Print: LJ LANE TAL-R; Sign: [signature]; Date/Time: 1-7-08 1515
Date/Time	Date/Time
Date/Time	Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JSA070191 WO5309 DUE 2-21-08 KE6DL

C.O.C. # **I08-016-10**

Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I08-016 Fluor Hanford R. T. SICKLE	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100KR4IAM(1/2), JANUARY 2008	HNF-N-506-11	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RRC3		W	1/7/08	1008	1x20-mL P	Activity Scan	None
B1RRC3		W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1RRC3		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Received By
Print: Fluor Hanford R. T. SICKLE Sign: [signature] Date/Time 1400 1-7-08	Print: D.A. Brewer for D.R. Bruff Sign: [signature] Date/Time 1400 1-7-08
Print: D.A. Brewer for D.R. Bruff Sign: [signature] Date/Time 1515 1-7-08	Print: LILANE TAL-K Sign: [signature] Date/Time 1515 1-7-08
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA RICHLAND

Sample Delivery Group	WSCF20071460
Sample Matrix	Water
Data Deliverable	Summary Report

Introduction

Ten (10) groundwater samples were received at the WSCF Laboratory on August 15, 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. Additionally, a draft copy of a proposed Issue Resolution Form is included as Attachment 5 documenting missed 48-hour hold time requirement for anions.

It should be noted that the attached chain of custody was stamped "iced" and initialed 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 13-14, for a complete listing of approved analytical methods.

Inorganic Comments

Anions – 48-hold time requirement for this analysis was not met. See comment below. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See pages 26-31 for QC details. Analytical Note(s):

- 48-hour hold time requirement was not met. Refer to proposed IRF (Attachment 5) for detail.
- Sample results were D flagged if dilution(s) were required.
- Sample results that were less than the reportable limit, however greater than the method detection limit, were B flagged.

- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1P9Y6 (SDG# 20071479); B1P9P5 (SDG# 20071493); and, B1P9J9 and B1P8P1 of this SDG.

- Nitrite-N – Matrix Spike and Matrix Spike Duplicate (B1P9Y6) recoveries exceeded established laboratory limits. Affected sample results were N flagged.

All other QC controls are within the established limits.

Cyanide – 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 per GRP Letter of Instruction. See page 32 for QC details. Analytical Note(s):

- Sample results were D flagged if dilution(s) were required.

All QC controls are within the established limits.

Hexavalent Chromium – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 33 for QC details.

All QC controls are within the established limits.

Total Alkalinity – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 34 for QC details. Analytical Note(s):

- Duplicate was analyzed on samples B1P978 (SDG# 20071364) and B1P9J9 of this SDG.

All QC controls are within the established limits.

Radiochemistry Comments

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 43-44 for QC details. Analytical Note(s):

- Tritium – Duplicate and Matrix Spike were analyzed on sample# B1NXT2 (SDG# 20071384).

- Gross Alpha – Duplicate Relative Percent Difference (RPD) slightly exceeded established laboratory limits. No flags issued.

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

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

09/28/07

I07-058-97

Collector Steve Overdahl Fluor Hanford 20071460	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. 107-058	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 100HR3IAM(1/2)-LOL AUGUST 2007	HNF-N-506-5	Ice Chest No. 6W-1 Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P4J5 (F) wc	P001503	W	81507	0908	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C

ICED
Initial
Date

Relinquished By	Date/Time	Received By	Date/Time
Steve Overdahl Fluor Hanford (Print) Steve Overdahl (Sign)	AUG 15 2007 1232	TA FRAZIER (Print) (Sign)	AUG 15 2007 1232
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

W07-008-189

20071460

Collector Ray Shepard Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SML 101 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8P1	1504	W	8-15-07	1011	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8P1		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8P1		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8P1		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P8P1		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED
Initial
Date

1310

Relinquished By	Received By
Print: Ray Shepard, Fluor Hanford; Sign; Date/Time 1310 AUG 15 2007	Print: TA FRAZIER; Sign; Date/Time 1310 AUG 15 2007
Relinquished By; Date/Time	Received By; Date/Time
Relinquished By; Date/Time	Received By; Date/Time
Relinquished By; Date/Time	Received By; Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

Fluor Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071460

W07-008-149

Collector F. M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	Logbook: HNF-N-506-8	**Ice Chest No.** GW0-06-12 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8L2	1505	W	8/15/07	1212	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8L2	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8L2		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8L2		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P8L2	✓	W	↓	↓	1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

R. Wall 8/15/07

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F.M. HALL			AUG 15 2007 1510	TA Bracia			AUG 15 2007 1510
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

W07-008-141

20071460

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	Logbook: HNF-N-506-8	**Ice Chest No.** 6000-06-12 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9K4	1506	W	8/15/07	1032	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9K4		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9K4		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9K4		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P9K4		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

R. Wall 8/15/07

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 15 2007 1510	TAFMAZIA	Jones, Tazia		AUG 15 2007 1510
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071460

W07-008-181

Page 1 of 1

Collector Roy Shepard Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SML 101 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8N6	1507	W	8-15-07	0917	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8N6		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8N6		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8N6		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P8N6		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED
Initial
Date

Relinquished By Roy Shepard Fluor Hanford Print Sign Date/Time AUG 15 2007 1510	Received By TA FRAZIER Print Sign 1510 Date/Time AUG 15 2007	Matrix *
Relinquished By Date/Time	Received By Date/Time	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solid, DL = Drum Liqui, T = Tissue, WI = Wine, L = Liquid, V = Vegetation, X = Other
Relinquished By Date/Time	Received By Date/Time	
Relinquished By Date/Time	Received By Date/Time	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

W07-008-157

Page 1 of 1

20071460

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	Logbook: HNF-N-506-8	Ice Chest No. 600-06-12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8L7	1508	W	8/15/07	1129	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8L7		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8L7		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8L7		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

L. Wall 8/15/07

ICED Initial Date

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford F. M. HALL (Print) (Sign)	8/15/07 1310 AUG 15 2007 1510	TA Frazier (Print) (Sign)	8/15/07 1310 AUG 15 2007 1510

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wire	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071460

W07-008-133

Collector Fluor Hanford F.M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	Logbook: HNF-N-506-8	**Ice Chest No.** 600-06-12 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9J9	1509	W	8/15/07	0942	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9J9	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9J9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9J9		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

J. Wall 8/15/07

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F.M. HALL			AUG 15 2007 1510	TA GRAZIER			AUG 15 2007 1510
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

W07-008-3

Page 1 of 1

20071460

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	Logbook: HNF-N-506-8	Ice Chest No.: 6000-0612 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P861	1510	W	8/15/07	0843	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P861	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C

R. Wall 8/15/07

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 1 5 2007 1510 1310	TA FRAZIER			AUG 1 5 2007 1510 1310
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2007 1460

W07-008-205

Collector Roy Shepard Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SMK 101 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8R1	1511	W	8-15-07	1159	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8R1		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8R1		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8R1		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

ICED
Initial
Date

1310

Relinquished By	Date/Time	Received By	Date/Time
Roy Shepard Fluor Hanford (Print) (Sign) AUG 15 2007	1310	TA Erazian	AUG 15 2007 1510

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071460

W07-008-221

Collector Roy Shepard Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SML101 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8T5	1512	W	8-15-07	1118	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8T5		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8T5		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8T5		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

ICED
Initial
Date

Relinquished By Roy Shepard Fluor Hanford Print Sign	Date/Time 1510 AUG 15 2007	Received By JA FRAZIER Print Sign	Date/Time 1510 AUG 15 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

57 of 59

Sample Delivery Group	WSCF20071517
Sample Matrix	Water
Data Deliverable	Summary Report

Introduction

Twenty-seven (27) groundwater samples were received at the WSCF Laboratory on August 23, 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.

It should be noted that the attached chain of custody was stamped "iced" and initialed 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 13 through 14, for a complete listing of approved analytical methods.

Inorganic Comments

Anions – Hold time requirements for this analysis were met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See pages 42 through 48 for QC details. Analytical Note(s):

- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1P8P1 (SDG# 20071460); and, B1P9F9, B1P697 and B1P6H9 of this SDG.
- Sample results were D flagged if dilution(s) were required.
- Sample results that were less than the reportable limit, however less than the method detection limit were B flagged.

All QC controls are within the established limits.

Cyanide – 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 per GRP Letter of Instruction. See page 49 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1P9C4 (SDG# 20071493).
- Insufficient spike concentrations. Sample concentration was significantly greater than spike concentrations.

All other QC controls are within the established limits.

ICP-MS Metals – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See pages 50 through 53 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1P615 (SDG# 20071479).
- Chromium, Magnesium, Silver, Vanadium and Zinc contamination detected in the blank was evaluated and affect sample results were C flagged.
- Calcium, Magnesium and Sodium – insufficient spike concentrations. Sample concentrations were greater than four times the spike concentration. For results higher than the highest calibration standard, a high-level standard and an ICP interference check sample were analyzed to ensure acceptable sample results.

All other QC controls are within the established limits.

Total Alkalinity – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 54 for QC details.

All QC controls are within the established limits.

Radiochemistry Comments

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 70 through 71 for QC details. Analytical Note(s):

- Tritium – Duplicates and Matrix Spikes were analyzed on samples B1P6J9 (SDG# 20071521) and B1P6B7 of this SDG.
- Gross Alpha/Gross Beta – Duplicate Relative Percent Difference (RPD) slightly exceeded established laboratory limits.

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

03/19/2008
RECHECK, RECOUNT, OR REANALYSIS ORDER
CONTRACT NO MW6-SBB-A19981

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

Battelle PNNL Order Number: 080319WSCF-R4720

Sample Delivery Group: WSCF20071517

Special Instructions Please recheck the fluoride and rerun if no problems are found.

Samples(s)

Lab Sample ID	PNNL Sample	Action	TAT	METHOD_NAME:
W07P001552	B1P9F4	Reanalysis	15/15	300.0_ANIONS_IC

IC405 08/24/07 WL 33095

F^- Original Result: 0.1809 ppm

After Manual Integration: 0.2481 ppm

Updated In LIMS

[illegible] 03/20/08

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.

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

10/04/07 20071517

C.O.C. # W07-008-93

Page 1 of 1

Collector: Fluor Hanford L. D. WALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No.: 12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9F4	W07 W1552	W	8-23-07	1055	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9F4		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9F4		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9F4		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P9F4		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL	L. D. Wall		AUG 2 3 2007 1125	TA Brazier			AUG 2 3 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-101

Collector: Fluor Hanford L. D. WALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No.: 12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9F9	1553	W	8-27-07	1016	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9F9	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9F9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9F9		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P9F9		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL		L. D. Wall	AUG 23 2007 1125	TA Frazier		Teresita Jimenez	AUG 23 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

77 of 93

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2107517

C.O.C. # W07-008-197

Page 1 of 1

Collector: Fluor Hanford L. D. WALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No.: 12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8P6	1554	W	8-23-07	0754	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8P6		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8P6		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8P6		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P8P6		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL		L. D. Wall	AUG 2 3 2007 11:25		JA Pinazian		AUG 2 3 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-109

Collector ~~Fluor Hanford~~ L. D. WALL	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No. 12 Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9H4	1555	W	8-23-07	0941	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9H4	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9H4	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9H4	↓	W	↓	↓	1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~Fluor Hanford~~ L. D. WALL		L. D. Wall	AUG 2 3 2007 1125	TA FRAZIER		Teresa Frazier	AUG 2 3 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-117

Collector Fluor Hanford L. D. WALL	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No. 12 Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9H9	1556	W	8-23-07	0907	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9H9		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9H9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9H9		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

ICED Initial Date

Relinquished By	Received By
Fluor Hanford L. D. WALL Print Sign AUG 23 2007 Date/Time 1125	TA FRAZIER Print Sign AUG 23 2007 Date/Time 1125
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-125

Page 1 of 1

Collector: Fluor Hanford L. D. WALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506.8	Ice Chest No.: 12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9J4	1557	W	8-23-07	0830	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9J4		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9J4		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9J4		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P9J4		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL	L. D. Wall		AUG 23 2007 1125	TA FRAZIER	Teresa Frazier		AUG 23 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SF = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # 107-062-88

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. 107-062	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOL AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SML 595 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P665 (F)	1558	W	8-23-07	1225	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P666	1559	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P666	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 23 2007 1325	TA FUAZIA			AUG 23 2007 1305
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2007/517

C.O.C. # W07-008-379

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506 9	Ice Chest No.: SML 595 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9X6	1560	W	8-23-07	1225	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C

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Initial
Date

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Fluor Hanford F. M. HALL		AUG 23 2007 1325	TA FRAZIER		AUG 23 2007 1325

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-158

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I07-062	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, AUGUST 2007	HNF-N-50 G 9	**Ice Chest No** SML 595 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6B6 (F)	1561	W	8-23-07	1025	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6B7	1562	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6B7	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 23 2007 1325	TARRAZIN			AUG 23 2007 1325
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-142

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I07-062	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SWIL 595 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P696 (F)	1563	W	8-23-07	0917	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P697	1564	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P697	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 23 2007 1325	TAPMAZIN			AUG 23 2007 1325
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

Fluor Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-150

Page 1 of 1

Collector: D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOL AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No. Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No. (dW-1)
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6B1 (F)	1565	W	8/23/07	1207	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6B2	1566	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6B2	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED Initial Date

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford Print D. R. BREWINGTON Sign D.R. Brewington	AUG 23 2007 1350	Print TA FORAZIR Sign Teresa Forazir	AUG 23 2007 8/23/07 1350
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-178

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOL AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No.: GW Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6C8 (F)	1567	W	8/23/07	0857	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6C9	1568	W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6C9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED Initial Date

Relinquished By: Fluor Hanford D. R. BREWINGTON (Print) D R Brewington (Sign)	Date/Time: AUG 23 2007 1350	Received By: TA FMAZ1.22 (Print) Teresa Fry (Sign)	Date/Time: AUG 23 2007 1350
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-062-202

Page 1 of 1

20071517

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOL AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No.: eW-1 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6F3 (F)	1569	W	8/23/07	0938	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6F4	1573	W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6F4		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON			AUG 23 2007 1350	TA Ramzia Jones			AUG 23 2007 1350
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-210

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. I07-062	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2ZP1-LOL AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No. Cold-1 Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6F8 (F)	1570	W	8/23/07	1030	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6F9	1574	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6F9	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED Initial Date

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford D. R. BREWINGTON Print Sign	AUG 23 2007 1350	TAIEMRAZIER Print Sign	AUG 23 2007 1350
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2007 1517

I07-062-218

Collector: Fluor Hanford R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOI, AUGUST 2007	HNF-N-506-5 pg 13	Ice Chest No.: 6W-1 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6H3 (F)	1571	W	8/23/07	1259	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6H4	1576	W	8/23/07	1259	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. BREWINGTON	D.R.		1350 AUG 23 2007	TA Rumzier	Teresa Rumzier		1350 AUG 23 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2007/517

C.O.C. # I07-062-226

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOI, AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6H8 (F)	1572	W	8/23/07	1130	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6H9	1575	W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6H9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED Initial Date

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Fluor Hanford D. R. BREWINGTON	AUG 23 2007 1310	TA Frazier	AUG 23 2007 1350
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-431

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506-5 pg. 12	Ice Chest No.: Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PB22	1577	W	8/23/07	0857	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C

ICFD Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		AUG 23 2007 1350	TARRAZION	Jesus Tarrazion		AUG 23 2007 1350
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-439

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	HNF-N-506-5 pg 12	**Ice Chest No.** **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** Gw-1
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8W6	1578	W	8/23/07	0938	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington		AUG 23 2007 1350	TA Ezazi			AUG 23 2007 1350
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

Attachment 2
Narrative
WSCF20081478

Introduction

Two (2) S&GRP samples were received at the WSCF Laboratory on July 17, 2008. These 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 copy of Issue Resolution Form 08-101, documenting missed hold time for pH and Hexavalent Chromium is included as Attachment 3. A Data Summary Report (Attachment 4) 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 5. 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. 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 17 through 20, for a complete listing of approved analytical methods.

Inorganic Comments

Ammonia – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 25 for QC details.

All QC controls are within the established limits.

Anions – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See pages 26 through 28 for QC details. Analytical Result(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1VWR4 (SDG# 20081354, SAF# F06-027) and B1W829 (SDG 20081456, SAF# F06-027).

All QC controls are within the established limits.

Cyanide – The hold time requirement (14 days) for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 29 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TTV3 (SDG# 20081329, SAF# F08-051).

All other QC controls are within the established limits.

Hexavalent Chromium – The hold time requirement (24 hours) for this analysis was not met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 30 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TTV3 (SDG 20081329, SAF# F08-051).

- The hold time requirement was not met for samples B1W1B1 and B1W1B2 on account of sample delivery after the 24 hour hold time.

All other 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 per the GRP Letter of Instruction. See pages 31 through 33 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TTV1 (SDG# 20081283, SAF# F08-051).

- Batch QC (B1W1B5) – Calcium, Sodium, Silicon, and Magnesium sample results exceeded the spiking levels by a factor of four. Spike recoveries are not valid. Check standard was analyzed to ensure Calcium, Sodium, Silicon, and Magnesium linearity because sample results were greater than the calibration standard.

All other 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 per the GRP Letter of Instruction. See pages 34 through 36 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1W1B1 (SDG# 20081478, SAF# F08-133) and B1W1B6 (SDG# 20081508, SAF# F08-134.

All QC controls are within the established limits.

pH – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 38 for QC details. Analytical Result(s):

- Duplicate analysis was performed on sample B1W1B1 of this SDG.
- The hold time requirement was not met for samples B1W1B1 and B1W1B2 on account of sample delivery after the 24 hour hold time.

All QC controls are within the established limits.

Total Alkalinity – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 37 for QC details. Analytical Note(s):

- Duplicate analysis was performed on sample B1W2X7 from SDG 20081470.

All QC controls are within the established limits.

Organic Comments

Semi-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 per the GPP Letter of Instruction. See pages 52 through 57 for QC details. Analytical Result(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1WPJ9, SDG 20081861, SAF# F02-009).
- The surrogate Terphenly-d14 exceeded the laboratory established RPD value for the MS/MSD. The data was accepted since the Terphenly-d14 recovery in the MS/MSD met the laboratory established criteria.

All QC controls are within the established limits.

TPHD-WA – 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 51 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V569 (SDG# 20081468, SAF# F08-100).

All QC controls are within the established limits.

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 per the GRP Letter of Instruction. See pages 58 through 61 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V569 (SDG# 20081468, SAF# F08-100).

All QC controls are within the established limits.

Attachment 2
Narrative
WSCF20081478

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike *(Matrix Spikes apply only to Neptunium, Technetium & Tritium and Matrix Spike Duplicate applies to Neptunium),* Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 66 through 72 for QC details. Analytical Note(s):

- Rad Chem analyses requested to be performed on these samples included: Americium by AEA, Gamma Energy Analysis, Uranium by AEA, Plutonium Isotopics by AEA, Sr-89/90, Tc-99 by ICP-MS, and Tc-99 by LSC.

- Uranium by AEA: Duplicate was analyzed on sample# B1R0V3, (SDG#20081415, SAF# F07-045).

- The RPD value for U-234 and U-238 from the duplicate analysis performed on sample B1W1B1 did not meet the laboratory established limit, but the RPD criterion does not apply due to the low count rate.

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

Andrew Kopriva
WSCF Client Services

Fluor Hanford Inc. 08/29/08

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-133-001 PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
MA White	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, I-004	200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		F08-133		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-488-1	232'	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization 20081478	N/A		N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, 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)

SPECIAL HANDLING AND/OR STORAGE: Radioactive Tie To: B1W193

PRESERVATION	HNO3 to pH <2(ULTREX)	HCl or H2SO4 to pH <2/Cool~4C	Cool~4C	HCl to pH <2/Cool~4C	HNO3 to pH <2	Cool~4C	NaOH to pH >= 12/Cool~4C	Cool~4C	H2SO4 to pH <2	Cool~4C
TYPE OF CONTAINER	Nalgene	aGs*	aG	aG	G/P	aG	G/P	P	G/P	G/P
NO. OF CONTAINER(S)	1	3	4	2	1	1	1	1	1	1
VOLUME	500mL	40mL	1000mL	1000mL	500mL	500mL	250mL	500mL	250mL	500mL
SAMPLE ANALYSIS	Tc-99 by ICPMS (Technetium-99)	SEE ITEM (1) IN SPECIAL INSTRUCTIONS VOA	Semi-VOA - 8270B (TCL);	SEE ITEM (2) IN SPECIAL INSTRUCTIONS TPHD	SEE ITEM (3) IN SPECIAL INSTRUCTIONS 2008 60.7	Chromium Hex - 7196;	Cyanide (Total) - 335.2;	SEE ITEM (4) IN SPECIAL INSTRUCTIONS IC	Cations (IC) - 300.7 (Nitrogen in ammonium)	2320_ALKALINITY (Alkalinity)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B1 W086R02623	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					807801								
	LOT #			029038	~~807801~~	028541	028541	029796	~~029038~~	~~029041~~	029038	031390	003220

ICED

029796 031390 7-16-08

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	7-16-08 1200	MO 413 Frig 1	7-16-08 1200
MO 413 Frig	7-17-8 0830	DConnolly	7-17-8 0830
DConnolly	7-17-8 0855	CAHudson	7-17-8 0855

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene}
(2)TPH-DieselKerosene Range - WTPH-D {Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range}
(3)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium} ICP/MS - 200.8 (Add-on) {Arsenic, Thallium, Uranium} ICP Metals - 6010B (TAL) {Aluminum, Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium} ICP Metals - 6010B (Add-On) {Lithium, Phosphorus, Silicon, Strontium} 200.8_HG - ICPMS;
(4)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}

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

A-6003-618(01/06)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F08-133-001	PAGE 2 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
MA White	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, I-004	200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		F08-133		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-488-1	232'	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
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)

SPECIAL HANDLING AND/OR STORAGE
Radioactive Tie To: B1W193

PRESERVATION	None	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2	HNO3 to pH <2	HNO3 to pH<2	HNO3 to pH <2			
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P	G/P	P	G/P	G/P			
NO. OF CONTAINER(S)	1	1	1	2	1	1	1			
VOLUME	125mL	500mL	1000mL	1000mL	1000mL	1000mL	1000mL			
SAMPLE ANALYSIS	pH - 150.1;	Gamma Spectroscopy (Cesium-137, Cobalt-60)	Strontium-89,90 -- Total Sr;	Technetium-99;	Isotopic Plutonium;	Isotopic Uranium;	Americium-241;			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B1	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓			
	LOT #			027006	629991	031204	031204	031204	~~031204~~ 028655	~~031204~~ 028655 7-4-08			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	7-16-08 1000	MO 413 Frig 1	7-16-08 1000
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MO 413 Frig 1	7-17-08 0830	DCannolly	7-17-08 0830
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DCannolly	7-17-08 0855	LA Hudson	7-17-08 0855
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

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

ICED

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

A-6003-618(01/06)

Fluor Hanford Inc. | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F08-133-005 | PAGE 1 OF 2

COLLECTOR MAWhite	**COMPANY CONTACT** TRENT, SJ	**TELEPHONE NO.** 373-5869	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION C5862, I-004-D	**PROJECT DESIGNATION** 200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		**SAF NO.** F08-133
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-488-1	**ACTUAL SAMPLE DEPTH** 232'	**COA** 123517ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 7N | **AIR QUALITY** ☐ | **DATA TURNAROUND** 45 Days / 45 Days | **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, 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)

SPECIAL HANDLING AND/OR STORAGE: Radioactive Tie To: B1W193

PRESERVATION	HNO3 to pH <2(ULTREX)	HCl or H2SO4 to pH <2/Cool~4C	Cool~4C	HCl to pH <2/Cool~4C	HNO3 to pH <2	Cool~4C	NaOH to pH >= 12/Cool~4C	Cool~4C	H2SO4 to pH <2	Cool~4C
TYPE OF CONTAINER	Nalgene	aGs*	aG	aG	G/P	aG	G/P	P	G/P	G/P
NO. OF CONTAINER(S)	1	3	4	2	1	1	1	1	1	1
VOLUME	500mL ✓	40mL ✓	1000mL ✓	1000mL ✓	500mL ✓	500mL ✓	250mL ✓	500mL ✓	250mL ✓	500mL ✓
SAMPLE ANALYSIS	Tc-99 by ICPMS (Technetium-99) ✓	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Semi-VOA - 8270B (TCL);	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196; ✓	Cyanide (Total) - 335.2; ✓	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	Cations (IC) - 300.7 (Nitrogen in ammonium)	2320_ALKALINITY (Alkalinity)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B2 2624	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	LOT#			029038	807801	030441 028541	028541	029038	028946	031390	029796	31390	029038

ICED

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MAWhite MAWhite	7-16-08 1200	MO 413 Frig 1	7-16-08 1200
MO 413 Frig 1	7-17-8 0830	DConnolly	7-17-8 0830
DConnolly	7-17-8 0855	CA Hudson	7-17-8 0855

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene}
(2)TPH-DieselKerosene Range - WTPH-D {Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range}
(3)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium} ICP/MS - 200.8 (Add-on) {Arsenic, Thallium, Uranium} ICP Metals - 6010B (TAL) {Aluminum, Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium} ICP Metals - 6010B (Add-On) {Lithium, Phosphorus, Silicon, Strontium} 200.8_HG - ICPMS;
(4)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}

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

A-6003-618(01/06)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F08-133-005	PAGE 2 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
MA White	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, I-004-D	200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		F08-133		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-488.1	232'	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
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)

SPECIAL HANDLING AND/OR STORAGE
Radioactive Tie To: B1W193

PRESERVATION	None	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2	HNO3 to pH <2	HNO3 to pH<2	HNO3 to pH <2			
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P	G/P	P	G/P	G/P			
NO. OF CONTAINER(S)	1	1	1	2	1	1	1			
VOLUME	125mL	500mL	1000mL	1000mL	1000mL	1000mL	1000mL			
SAMPLE ANALYSIS	pH - 150.1;	Gamma Spectroscopy (Cesium-137, Cobalt-60)	Strontium-89,90 -- Total Sr;	Technetium-99;	Isotopic Plutonium;	Isotopic Uranium;	Americium-241;			
	✓	✓	✓	✓	✓	✓	✓			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B1W1B2	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓		
	LOT#			027006	629581	031204	031204	031204	031204	031204		

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	7-16-08 1000	MO413 Frig 1	7-16-08 1000
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MO413 Frig 1	7-17-8 0830	DCounts DS	7-17-8 0830
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DCounts DS	7-17-8 0855	CA Hudson	7-17-8 0855
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

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

ICED

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

A-6003-618(01/06)

Attachment 2
Narrative
WSCF91417

Introduction

Thirty two (32) groundwater samples were received at the WSCF Laboratory on October 22, 2009. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Modification No. 2 to Agreement 36587, Release 3, "FH WSCF ANALYTICAL SERVICES FOR GROUNDWATER."*

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.

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 transport container.

The following generic data qualifiers (i.e., B, D, and J) may be applicable to this report, as appropriate

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wetchem analyses), as appropriate.
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.

Analytical Methodology for Requested Analyses

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

Inorganic Comments

Hexavalent Chromium – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

All QC controls are within the established limits.

We certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package has been authorized by the Analytical Laboratory Manager (or designee) and the Client Services representative as verified by electronic signatures shown on the WSCF ANALYTICAL RESULTS REPORT.

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-475 Page 1 of 1

Collector: JP Herrick	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: I10-001 CHPRC	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM(12), OCTOBER 2009	Logbook No.: HNF-N-506 24/21	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (10/01/1993)

91417

SPECIAL INSTRUCTIONS Hold Time
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B21YM1	Y (01)	W	10/22/09	1057	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B21YM2	N (02)	W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

10/22/09

ICED

Relinquished By	Prnt/Sign	Date/Time	Received By	Prnt/Sign	Date/Time
JP Herrick CHPRC		OCT 22 2009 1305	T A Frazier		OCT 22 2009 1305
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liquid		
SO = Solid	T = Tissue		
SL = Sludge	WI = Wipe		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:24 AM
Page 4 of 19

ChemWare

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-476 Page 1 of 1

Collector: JP Herrick	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: CHPRC I10-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM(1/2) OCTOBER 2009	Logbook No: HNF-N-506 24/21	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies

Sample No	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B21YM3	Y 003	W	10/22/09	1057	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B21YM4	N 004	W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

10/22/09

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
JP Herrick CHPRC			OCT 2 2 2009 1305	T A Frazier			OCT 2 2 2009 1305
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liquid		
SO = Solid	T = Tissue		
SL = Sludge	WI = Wipe		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Sample Receipt

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # 110-001-523
		Page 1 of 1

Collector: JP Herrick, CHPRC	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: 110-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM(1/2) OCTOBER 2009	Logbook No.: HNF-N-506 26 / 21	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B22007	Y 005	W	10/22/09	1203	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B22008	N 006	W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

10/22/09

ICED

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
JP Herrick, CHPRC	J. Herrick	OCT 22 2009 1305	T A Frazier	Frazier	OCT 22 2009 1305
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil	DS = Drum Solid		
SF = Sediment	DL = Drum Liquid		
SG = Solid	T = Tissue		
SL = Sludge	WI = Wipe		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

ChemWare

Sample Receipt

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-535 Page 1 of 1

Collector: AR McIntyre	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: I10-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM(1/2), OCTOBER 2009	Logbook No.: HNF-N-506 23179	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B22031	Y N	W	10/22/09	1121	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B22032	Y N	W	10/22/09	1121	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

N/A 10/22/09

ICED

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
AR McIntyre		OCT 22 2009 1315	T A Frazier		OCT 22 2009 1315
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *: S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air; DS = Drum Solid; DL = Drum Liquid; T = Tissue; WI = Wipe; L = Liquid; V = Vegetation; X = Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:24 AM
Page 7 of 19

ChemWare

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-500 Page 1 of 1

Collector: AR McIntyre	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: I10-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4USM(1/2) OCTOBER 2009	Logbook No: HNF-N-506 23/79	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B21YV0	Y 009	W	10/22/09	1040	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B21YV1	N 010	W	10/22/09	1040	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

N/A 10/22/09 AM

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
AR McIntyre			OCT 22 2009 1315	T A Frazier			OCT 22 2009 1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *
S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solid, DL = Drum Liquid, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:25 AM
Page 8 of 19

ChemWare

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-537 Page 1 of 1

Collector AR McIntyre	Contact/Requester Dana Widtfie	Telephone No. 509-376-2858
SAF No. I10-001	Sampling Origin Hanford Site	Purchase Order/Charge Code 300071USZ0
Project Title 100KR4IAM(1/2): OCTOBER 2009	Logbook No: HNF-N-506 23179	Ice Chest No. N/A
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Government Vehicle	Bill of Lading/Air Bill No. N/A
Protocol CERCLA	Priority: 24 Hours PRIORITY	Offsite Property No. N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B22035	Y 011	W	10/22/09	0935	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B22036	N 012	W	10/22/09	0735	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

N/A 10/22/09 ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
AR McIntyre			1315 OCT 22 2009	T A Frazier			1315 OCT 22 2009
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SF = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:25 AM
Page 9 of 19

ChemWare

Sample Receipt

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-464 Page 1 of 1

Collector: AR McIntyre	Contact/Requester: Dana Widog	Telephone No.: 509-376-2858
SAF No.: I10-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4JAM(1/2) OCTOBER 2009	Logbook No: HNF-N-506 23,79	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transporation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time**
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ✓ No

Sample No	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B21YJ9	Y 013	W	10/22/09	0846	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B21YK0	N 014	W	10/22/09	0846	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

N/A 10/22/09 OK

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
AR McIntyre			OCT 22 2009 1215	T A Frazier			OCT 22 2009 1215
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:25 AM
Page 10 of 19

ChemWare

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-508 Page 1 of 1

Collector: RT Sickle, CHPRC	Contact/Requester: Dana Widrig	Telephone No.: 509-375-2858
SAF No.: 110-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR1IAM(1/2) OCTOBER 2009	Logbook No: HNF-N-506 28 / 4	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B21YW7	Y 015	W	10/22/09	0907	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B21YW8	N 016	W	10/22/09	0907	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

DAW 10/22/09

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
RT Sickle CHPRC			OCT 22 2009 1600	Victor Bins			OCT 22 2009 1400
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:25 AM
Page 11 of 19

ChemWare

Sample Receipt

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-509 Page 1 of 1

Collector: RT Sickle CHPRC	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: I10-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM(1/2), OCTOBER 2009	Logbook No.: HNF-N-506 28 / 4	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B21YW9	Y 017	W	10/22/09	1037	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B21YX0	N 018	W	10/22/09	1037	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

DW
10/22/09

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
RT Sickle CHPRC			OCT 2 2 2009				OCT 2 2 2009
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SF = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:26 AM
Page 12 of 19

ChemWare

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-530 Page 1 of 1

Collector: RT Sickle CHPRC	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: I10-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM(1/2) OCTOBER 2009	Logbook No: HNF-N-506 28 / 4	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies

Total Activity Exemption: Yes ☑ No ☐

Sample No	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B21Y05	Y 019	W	10/22/09	1247	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B22019	N 020	W	10/22/09	1247	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

10/22/09

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
RT Sickle CHPRC			OCT 22 2009		Victor Bins		OCT 22 2009
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SF = Sediment		DF = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:26 AM
Page 13 of 19

ChemWare

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # 110-001-539 Page 1 of 1

Collector: RT Sickle CHPRC	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: 110-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM(1/2), OCTOBER 2009	Logbook No: HNF-N-506 28 14	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B22039	Y 0.31	W	10/22/09	1117	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B22040	N 0.02	W	10/22/09	1117	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

ICED

DMW 10/22/09

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
RT Sickle CHPRC			OCT 22 2009 1400		Victor J Sing		OCT 22 2009 1400
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liquid		
SO = Solid	T = Tissue		
SL = Sludge	WI = Wipe		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:27 AM
Page 14 of 19

ChemWare

Chain of Custody

Friday, October 23, 2009 1:21:27 AM
Page 15 of 19

CHPRC

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I10-001-545

Page 1 of 1

Collector: S. Overdahl, CHPRC	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: I10-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM(1/2) OCTOBER 2009	Logbook No.: HNF-N-506 27-13	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies.

Total Activity Exemption: Yes ✓ No

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B22053	Y023	W	10-22-09	0858	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B22054	N824	W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

OCT 22 2009

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
S. Overdahl, CHPRC			OCT 22 2009 1440	MD Kessler			OCT 22 2009 1440
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liquid		
SO = Solid	T = Tissue		
SL = Sludge	WI = Wipe		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

ChemWare

Chain of Custody

Friday, October 23, 2009 1:21:27 AM

Page 16 of 19

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-534 Page 1 of 1

Collector: S. Overdahl CHPRC	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: I10-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20
Project Title: 100KR4IAM(1/2), OCTOBER 2009	Logbook No.: HNF-N-506 27713	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours PRIORITY	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B22029	Y 025	W	10-22-09	1208	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B22030	N 026	W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

OCT 22 2009

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
S. Overdahl CHPRC			OCT 22 2009 1440	MD Kessler			OCT 22 2009 1440
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liquid		
SO = Solid	T = Tissue		
SL = Sludge	WI = Wipe		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

ChemWare

Chain of Custody

CHPRC	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I10-001-538 Page 1 of 1

Collector: ~~S. Overdahl~~ CHPRC	Contact/Requester: Dana Widrig	Telephone No.: 509-376-2858
SAF No.: I10-001	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 3000711S20
Project Title: 100KR4IAM(1/2), OCTOBER 2009	Logbook No.: HNF-N-506 27/13	Ice Chest No.: N/A
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Government Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: CERCLA	Priority: 24 Hours **PRIORITY**	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time**
FY09 and FY10 samples cannot be in the same SDG
100 Area Generator Knowledge Information Form applies

Total Activity Exemption: Yes ☑ No ☐

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B21Y35	Y027	W	10-22-09	1052	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C
B22038	N025	W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	24 Hours	Cool~4C

OCT 22 2009

ICED

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~S. Overdahl~~ CHPRC			OCT 22 2009 1440	MW Kessler		MW	OCT 22 2009 1440
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g. Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Friday, October 23, 2009 1:21:27 AM
Page 17 of 19

ChemWare

Appendix 5

Data Validation Supporting Documentation

GENERAL CHEMISTRY DATA VALIDATION CHECKLISTS

VALIDATION LEVEL:	A	B	(C)	D	E
PROJECT: BP-5			DATA PACKAGE: VSR10-022		
VALIDATOR: Carl Schloesslin		LAB: TestAmerica, WSCF		DATE: 8-09-2010	
			SDG: SL762, W05309, WSCF20071460,		
ANALYSES PERFORMED WSCF20081478, WSCF91417					
Anions/IC X	TOC X	TOX X	TPH-418.1	Oil and Grease	Alkalinity X
Ammonia X	BOD/COD	Chloride	Chromium-VI X	pH X	NO_3/NO_2
Sulfate	TDS	TKN	Phosphate	Total CN X	Sulfide

SAMPLES/MATRIX

SDG SL762 water samples: B1X8L9, B1X8M0, B1X8M1, B1X8M2, B1X8N0, B1X8N1, B1X8N2, B1X8N3, B1X7T4, B1X7T5, B1X7T6, B1X7T7, B1X7Y5, B1X7Y6, B1X7Y7, B1X7Y8, B1X7P2, B1X7P3, B1X7P4, B1X7P5, B1X7K2, B1X7K3, B1X7K4, B1X7K5, B1X851, B1X852, B1X853, B1X854

SDG W05309 water samples: B1RTF5, B1RRC8

SDG WSCF20071460 water samples: B1P4J5, B1P861, B1P8L2, B1P8L7, B1P8N6, B1P8P1, B1P8R1, B1P8T5, B1P9J9, B1P9K4

See comments page for additional samples.

1. DATA PACKAGE COMPLETENESS AND CASE NARRATIVE

Technical verification documentation present? ..... Yes (No) N/A

Comments: None

2. INSTRUMENT PERFORMANCE AND CALIBRATIONS (Levels D and E)

Initial calibrations performed on all instruments? ..... Yes No (N/A)

Initial calibrations acceptable? ..... Yes No (N/A)

ICV and CCV checks performed on all instruments? ..... Yes No (N/A)

ICV and CCV checks acceptable? ..... Yes No (N/A)

Standards traceable? ..... Yes No (N/A)

Standards expired? ..... Yes No (N/A)

Calculation check acceptable? ..... Yes No (N/A)

Comments:

GENERAL CHEMISTRY DATA VALIDATION CHECKLISTS

3. BLANKS (Levels B, C, D, and E)

ICB and CCB checks performed for all applicable analyses? (Levels D, E) ..... Yes No N/A

ICB and CCB results acceptable? (Levels D, E) ..... Yes No N/A

Laboratory blanks analyzed? ..... Yes No N/A

Laboratory blank results acceptable? ..... Yes No N/A

Field blanks analyzed? (Levels C, D, E) ..... Yes No N/A

Field blank results acceptable? (Levels C, D, E) ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments: None

4. ACCURACY (Levels C, D, and E)

Spike samples analyzed? ..... Yes No N/A

Spike recoveries acceptable? ..... Yes No N/A

Sike standards NIST traceable? (Levels D, E) ..... Yes No N/A

Spike standards expired? (Levels D, E) ..... Yes No N/A

LCS/BSS samples analyzed? ..... Yes No N/A

LCS/BSS results acceptable? ..... Yes No N/A

Standards traceable? (Levels D, E) ..... Yes No N/A

Standards expired? (Levels D, E) ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Performance audit sample(s) analyzed? ..... Yes No N/A

Performance audit sample results acceptable? ..... Yes No N/A

Comments:

WSCF20081478: Cyanide MSD %R = 15%

GENERAL CHEMISTRY DATA VALIDATION CHECKLISTS

5. PRECISION (Levels C, D, and E)

Duplicate RPD values acceptable? ..... Yes No N/A

Duplicate results acceptable? ..... Yes No N/A

MS/MSD standards NIST traceable? (Levels D, E) ..... Yes No N/A

MS/MSD standards expired? (Levels D, E) ..... Yes No N/A

Field duplicate RPD values acceptable? ..... Yes No N/A

Field split RPD values acceptable? ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments:

W05309: The split samples associated with samples B1RTF5 and B1RRC8 were not chosen for validation and therefore not assessed for precision.
WSCF20071460: The split sample associated with sample B1P4J5 was not chosen for validation and therefore not assessed for precision.
WSCF20081478: Cyanide MS/MSD RPD = 142%. Sample B1W1B1 cyanide result non-detect. Field duplicate B1W1B2 cyanide result = 9.10 ug/L. MDL = 4 ug/L, CRDL = 5 ug/L.

6. HOLDING TIMES (all levels)

Samples properly preserved? ..... Yes No N/A

Sample holding times acceptable? ..... Yes No N/A

Comments:

WSCF20071460: Samples B1P8P1, B1P8L2, B1P9K4 & B1P8N6 nitrate and nitrite collection to analysis times range from 7 to 8 days (HT = 2 days). Sample B1P8L7 nitrite coll. to analysis time = 7 days. Sample B1P861 nitrate coll. to analysis time = 7 days. Sample B1P8R1 nitrite coll. to analysis time = 7 days.

WSCF20081478: Samples B1W1B1 & B1W1B2 collected on 7-16-08 at 10:00 AM. The samples were analyzed for hexavalent chromium & pH on 7-17-08 (analysis times not provided). According to the lab, >24 hours had passed from collection to analyses.

GENERAL CHEMISTRY DATA VALIDATION CHECKLISTS

7. RESULT QUANTITATION AND DETECTION LIMITS (all levels)

Results reported for all requested analyses? ..... Yes No N/A

Results supported in the raw data? (Levels D, E) ..... Yes No N/A

Samples properly prepared? (Levels D, E) ..... Yes No N/A

Detection limits meet RDL? ..... Yes No N/A

Transcription/calculation errors? (Levels D, E) ..... Yes No N/A

Comments:

Fluoride, phosphate, TOC and TOX CRDLs not provided in the SAP.

GENERAL CHEMISTRY DATA VALIDATION CHECKLISTS

Comments (attach additional sheets as necessary):

Samples continued:

SDG WSCF20071517 water samples: B1P666, B1P697, B1P6B2, B1P6B7, B1P6C9, B1P6F4, B1P6F9, B1P6H4, B1P6H9, B1P8P6, B1P8W6, B1P9F4, B1P9F9, B1P9H4, B1P9H9, B1P9J4, B1P9X6, B1PB22

SDG WSCF20081478 water samples: B1W1B1, B1W1B2

SDG WSCF91417 water samples: B21YM1, B21YM2, B21YM3, B21YM4, B22007, B22008, B22031, B22032, B21YV0, B21YV1, B22035, B22036, B21YJ9, B21YK0, B21YW7, B21YW8, B21YW9, B21YX0, B21Y05, B22019, B22039, B22040, B22053, B22054, B22029, B22030, B21Y35, B22038, B21YK4, B21YK5, B21YK2, B21YK3

Appendix 6

Additional Documentation Requested By Client

METHOD BLANK REPORT

General Chemistry

Client Lot #...: SL762 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon		Work Order #: K18QC1AA		MB Lot-Sample #:	F8K040000-534	
	ND	1.0	mg/L	SW846 9060	11/04/08	8309534
		Dilution Factor: 1				
Total Organic Carbon		Work Order #: K19861AA		MB Lot-Sample #:	F8K050000-501	
	ND	1.0	mg/L	SW846 9060	11/04/08	8310501
		Dilution Factor: 1				
TOX		Work Order #: K2P4W1AA		MB Lot-Sample #:	F8K070000-088	
	ND	5.0	ug/L	SW846 9020B	11/11/08	8312088
		Dilution Factor: 1				
TOX		Work Order #: K2TW51AA		MB Lot-Sample #:	F8K110000-321	
	ND	5.0	ug/L	SW846 9020B	11/12/08	8316321
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: SL762 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon			WO#:K18QC1AC-LCS/K18QC1AD-LCSD			LCS Lot-Sample#: F8K040000-534		
	8.00	8.11	mg/L	101		SW846 9060	11/04/08	8309534
	8.00	8.11	mg/L	101	0.06	SW846 9060	11/04/08	8309534
			Dilution Factor: 1					
Total Organic Carbon			WO#:K19861AC-LCS/K19861AD-LCSD			LCS Lot-Sample#: F8K050000-501		
	8.00	8.13	mg/L	102		SW846 9060	11/04/08	8310501
	8.00	8.10	mg/L	101	0.44	SW846 9060	11/04/08	8310501
			Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: SL762 Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
TOX			Work Order #: K2P4W1AC		LCS Lot-Sample#:	F8K070000-088	
	100	101	ug/L	101	SW846 9020B	11/11/08	8312088
			Dilution Factor: 1				
TOX			Work Order #: K2TW51AC		LCS Lot-Sample#:	F8K110000-321	
	100	98.5	ug/L	98	SW846 9020B	11/12/08	8316321
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: SL762 **Matrix.....:** WATER
Date Sampled...: 10/14/08 **Date Received..:** 10/15/08

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon			Work Order #...: K0W5A1AD			MS Lot-Sample #: F8J150228-048		
	ND	5.00	5.87	mg/L	117	SW846 9060	11/04/08	8309534
			Dilution Factor: 1					
Total Organic Carbon			Work Order #...: K04AQ1AD			MS Lot-Sample #: F8J170190-001		
	ND	5.00	5.91	mg/L	118	SW846 9060	11/04/08	8309534
			Dilution Factor: 1					
Total Organic Carbon			Work Order #...: K1FEN1CF			MS Lot-Sample #: F8J230174-002		
	ND	5.00	6.00	mg/L	120	SW846 9060	11/05/08	8310501
			Dilution Factor: 1					
Total Organic Carbon			Work Order #...: K11PV1AH			MS Lot-Sample #: F8J310139-001		
	2.1	5.00	7.47	mg/L	107	SW846 9060	11/04/08	8310501
			Dilution Factor: 1					
TOX			Work Order #...: K04AQ1AE			MS Lot-Sample #: F8J170190-001		
	4.1	100	105	ug/L	101	SW846 9020B	11/10-11/11/08	8312088
			Dilution Factor: 1					
TOX			Work Order #...: K04C61AD			MS Lot-Sample #: F8J170190-013		
	10.4	100	108	ug/L	97	SW846 9020B	11/10-11/11/08	8312088
			Dilution Factor: 1					
TOX			Work Order #...: K1FEN1CG			MS Lot-Sample #: F8J230174-002		
	36.0	100	134	ug/L	98	SW846 9020B	11/11-11/12/08	8316321
			Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F8J170190 **Work Order #...:** K04AQ-SMP K04AQ-DUP **Matrix.....:** WATER

Date Sampled...: 10/16/08 **Date Received..:** 10/17/08

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon						SD Lot-Sample #:	F8J170190-001	
	ND	ND	mg/L	0	(0-20)	SW846 9060	11/04/08	8309534
			Dilution Factor: 1					
TOX						SD Lot-Sample #:	F8J170190-001	
	4.1 B	ND	ug/L	200	(0-20)	SW846 9020B	11/10-11/11/08	8312088
			Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F8J170190 **Work Order #...:** K11PV-SMP K11PV-DUP **Matrix.....:** WATER

Date Sampled...: 10/29/08 **Date Received..:** 10/31/08

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon						SD Lot-Sample #:	F8J310139-001	
	2.1	2.0	mg/L	5.8	(0-20)	SW846 9060	11/04/08	8310501

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F8J170190 **Work Order #...:** K1FEN-SMP K1FEN-DUP **Matrix.....:** WATER

Date Sampled...: 10/21/08 **Date Received..:** 10/23/08

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
TOX						SD Lot-Sample #:	F8J230174-002	
	36.0	38.2	ug/L	5.9	(0-20)	SW846 9020B	11/11-11/12/08	8316321

Dilution Factor: 1

TestAmerica

TA Richland
Hexavalent Chromium - Water

Analyst:	J. Peterson	Calibration Curve Information				SOP Information		BATCH #	8009380
Start Date:	1/7/2008		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05309
Start Time:	16:30	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	1/7/2008	Std. 1	0.100	0.050	0.091				
End Time	17:00	Std. 2	0.500	0.250	0.468			Instrument Information	
		Std. 3	0.750	0.375	0.703	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	1.500	0.750	1.387			Wavelength:	540
		Std 5	2.000	1.000	1.820			R Squared	0.99980
Date:	01/14/08	Standard Volume (mL):			100.000			Slope:	1.82635
		Date of Curve:			1/7/2008			Intercept:	0.00668

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	Cr-08-00007	Cr-08-00008		Cr-08-00007		Cr-08-00007	
Prep Date:	01/07/08	01/07/08		01/07/08		01/07/08	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	01/08/08	01/08/08		01/08/08		01/08/08	
Pipettor(s)	70,190	190		190		190	
Volume Used (Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.26316

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.916	0.000	0.916	1	0.4979	0.498	99.58%
n/a	n/a	ICB	100.000	-0.002	0.000	-0.002	1	<MDL	<MDL	
KFAFX-1AA	n/a	Prep Blank	100.000	0.004		0.004	1	-0.0015	<MDL	
KFAFX-1AC	n/a	LCS	100.000	0.941		0.941	1	0.5116	0.512	102.32%
KE6DE-1AA	BIRTFS		100.000	0.963		0.963	1	0.5236	~~0.524~~ ~~0.254~~ 0.524	
KE6DE-1AC-S	-MS	MS	100.000	1.427		1.427	1	0.7777	~~0.778~~ 0.254	96.54%
KE6DE-1AD-D	-MSD	MSD	100.000	1.438		1.438	1	0.7837	~~0.784~~ 0.266	98.83%
KE6DE-1AE-X	-DUP	Duplicate	100.000	0.965		0.965	1	0.5247	0.525	SKS 3/6/08
SKS			100.000				1			
	SKS 3/6/08		100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.911		0.911	1	0.4951	0.495	99.03%
n/a	n/a	CCB	100.000	-0.002		-0.002	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

TestAmerica

TA Richland
Hexavalent Chromium - Water

Analyst:	J. Peterson	Calibration Curve Information				SOP Information		BATCH #	8009381
Start Date:	1/7/2008		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05309
Start Time:	16:30	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	1/7/2008	Std. 1	0.100	0.050	0.091				
End Time	17:00	Std. 2	0.500	0.250	0.468			Instrument Information	
		Std. 3	0.750	0.375	0.703	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:		Std. 4	1.500	0.750	1.387			Wavelength:	540
		Std 5	2.000	1.000	1.820			R Squared	0.99980
Date:	01/14/08	Standard Volume (mL):			100.000			Slope:	1.82635
		Date of Curve:			1/7/2008			Intercept:	0.00668

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	Cr-08-00007	Cr-08-00008		Cr-08-00007		Cr-08-00007	
Prep Date:	01/07/08	01/07/08		01/07/08		01/07/08	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	01/08/08	01/08/08		01/08/08		01/08/08	
Pipettor(s)	70,190	190		190		190	
Volume Used (Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.26316

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.916	0.000	0.916	1	0.4979	0.498	99.58%
n/a	n/a	ICB	100.000	-0.002	0.000	-0.002	1	<MDL	<MDL	
KFAF2-1AA	n/a	Prep Blank	100.000	0.006		0.006	1	-0.0004	<MDL	
KFAF2-1AC	n/a	LCS	100.000	0.948		0.948	1	0.5154	0.515	103.08%
KE6DJ-1AA	B1RRC8		100.000	0.008		0.008	1	0.0007	<MDL	
KE6DJ-1AC-S	-MS	MS	100.000	0.508		0.508	1	0.2745	0.274	104.31%
KE6DJ-1AD-D	-MSD	MSD	100.000	0.503		0.503	1	0.2718	0.272	103.27%
KE6DJ-1AE-X	-DUP	Duplicate	100.000	0.007		0.007	1	0.0002	<MDL	
SS 3/6/08			100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.912		0.912	1	0.4957	0.496	99.14%
n/a	n/a	CCB	100.000	-0.001		-0.001	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

w13qlog v4.2 26-sep-2007 12:20:54

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20071460

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
33016	2	33417	37502	BLANK		Anions by Ion Chromatography
33016	12	33417	37502	BLANK		Anions by Ion Chromatography
33016	3	33417	37502	LCS		Anions by Ion Chromatography
33016	8	33417	37502	SAMPLE	W07P001508	Anions by Ion Chromatography
33016	5	33417	37502	DUP	W07P001509	Anions by Ion Chromatography
33016	6	33417	37502	MS	W07P001509	Anions by Ion Chromatography
33016	7	33417	37502	MSD	W07P001509	Anions by Ion Chromatography
33016	4	33417	37502	SAMPLE	W07P001509	Anions by Ion Chromatography
33016	7	33417	37502	SPK-RPD	W07P001509	Anions by Ion Chromatography
33016	9	33417	37502	SAMPLE	W07P001510	Anions by Ion Chromatography
33016	10	33417	37502	SAMPLE	W07P001511	Anions by Ion Chromatography
33016	11	33417	37502	SAMPLE	W07P001512	Anions by Ion Chromatography
33023	2	33424	37505	BLANK		Hexavalent chromium
33023	3	33424	37505	LCS		Hexavalent chromium
33023	5	33424	37505	DUP	W07P001503	Hexavalent chromium
33023	6	33424	37505	MS	W07P001503	Hexavalent chromium
33023	7	33424	37505	MSD	W07P001503	Hexavalent chromium
33023	4	33424	37505	SAMPLE	W07P001503	Hexavalent chromium
33023	7	33424	37505	SPK-RPD	W07P001503	Hexavalent chromium
33037	1	33437	37522	BLANK		Cyanide by Midi/Spectrophotom
33037	2	33437	37522	LCS		Cyanide by Midi/Spectrophotom
33037	6	33437	37522	MS	W07P001504	Cyanide by Midi/Spectrophotom
33037	7	33437	37522	MSD	W07P001504	Cyanide by Midi/Spectrophotom
33037	5	33437	37522	SAMPLE	W07P001504	Cyanide by Midi/Spectrophotom
33037	7	33437	37522	SPK-RPD	W07P001504	Cyanide by Midi/Spectrophotom
33037	8	33437	37522	SAMPLE	W07P001505	Cyanide by Midi/Spectrophotom
33037	9	33437	37522	SAMPLE	W07P001506	Cyanide by Midi/Spectrophotom
33037	10	33437	37522	SAMPLE	W07P001507	Cyanide by Midi/Spectrophotom
33037	11	33437	37522	SAMPLE	W07P001508	Cyanide by Midi/Spectrophotom
33037	12	33437	37522	SAMPLE	W07P001509	Cyanide by Midi/Spectrophotom
33037	13	33437	37522	SAMPLE	W07P001511	Cyanide by Midi/Spectrophotom
33037	14	33437	37522	SAMPLE	W07P001512	Cyanide by Midi/Spectrophotom
33038	2	33440	37534	BLANK		Anions by Ion Chromatography
33038	12	33440	37534	BLANK		Anions by Ion Chromatography
33038	3	33440	37534	LCS		Anions by Ion Chromatography
33016	8	33440	37534	SAMPLE	W07P001508	Anions by Ion Chromatography
33016	9	33440	37534	SAMPLE	W07P001510	Anions by Ion Chromatography
33016	10	33440	37534	SAMPLE	W07P001511	Anions by Ion Chromatography
33038	5	33440	37534	DUP	W07P001545	Anions by Ion Chromatography
33038	6	33440	37534	MS	W07P001545	Anions by Ion Chromatography
33038	7	33440	37534	MSD	W07P001545	Anions by Ion Chromatography
33038	7	33440	37534	SPK-RPD	W07P001545	Anions by Ion Chromatography
33067	1	33471	37541	LCS		Total Alkalinity as mg/L CaCO3
33067	13	33471	37541	LCS		Total Alkalinity as mg/L CaCO3
33067	24	33471	37541	LCS		Total Alkalinity as mg/L CaCO3
33067	3	33471	37541	DUP	W07P001463	Total Alkalinity as mg/L CaCO3
33067	18	33471	37541	SAMPLE	W07P001504	Total Alkalinity as mg/L CaCO3
33067	19	33471	37541	SAMPLE	W07P001505	Total Alkalinity as mg/L CaCO3

33067	20	33471	37541	SAMPLE	W07P001506	Total Alkalinity as mg/L CaCO3
33067	21	33471	37541	SAMPLE	W07P001507	Total Alkalinity as mg/L CaCO3
33067	22	33471	37541	SAMPLE	W07P001508	Total Alkalinity as mg/L CaCO3
33067	23	33471	37541	SAMPLE	W07P001509	Total Alkalinity as mg/L CaCO3
33071	2	33475	37545	BLANK		Anions by Ion Chromatography
33071	10	33475	37545	BLANK		Anions by Ion Chromatography
33071	3	33475	37545	LCS		Anions by Ion Chromatography
33071	8	33475	37545	SAMPLE	W07P001506	Anions by Ion Chromatography
33071	9	33475	37545	SAMPLE	W07P001507	Anions by Ion Chromatography
33071	5	33475	37545	DUP	W07P001550	Anions by Ion Chromatography
33071	6	33475	37545	MS	W07P001550	Anions by Ion Chromatography
33071	7	33475	37545	MSD	W07P001550	Anions by Ion Chromatography
33071	7	33475	37545	SPK-RPD	W07P001550	Anions by Ion Chromatography
33072	2	33476	37546	BLANK		Anions by Ion Chromatography
33072	12	33476	37546	BLANK		Anions by Ion Chromatography
33072	3	33476	37546	LCS		Anions by Ion Chromatography
33072	5	33476	37546	DUP	W07P001504	Anions by Ion Chromatography
33072	6	33476	37546	MS	W07P001504	Anions by Ion Chromatography
33072	7	33476	37546	MSD	W07P001504	Anions by Ion Chromatography
33072	4	33476	37546	SAMPLE	W07P001504	Anions by Ion Chromatography
33072	7	33476	37546	SPK-RPD	W07P001504	Anions by Ion Chromatography
33072	8	33476	37546	SAMPLE	W07P001505	Anions by Ion Chromatography
33102	1	33507	37571	LCS		Total Alkalinity as mg/L CaCO3
33102	13	33507	37571	LCS		Total Alkalinity as mg/L CaCO3
33102	24	33507	37571	LCS		Total Alkalinity as mg/L CaCO3
33102	3	33507	37571	DUP	W07P001510	Total Alkalinity as mg/L CaCO3
33102	2	33507	37571	SAMPLE	W07P001510	Total Alkalinity as mg/L CaCO3
33102	4	33507	37571	SAMPLE	W07P001511	Total Alkalinity as mg/L CaCO3
33102	5	33507	37571	SAMPLE	W07P001512	Total Alkalinity as mg/L CaCO3

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071460
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 08/15/07
Receive Date:08/15/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W07P001509											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Chloride	16887-00-6	11.0617		RPD			3.085	20.000		08/16/07
DUP	Fluoride	16984-48-8	0.2702		RPD			0.884	20.000		08/16/07
DUP	Nitrogen in Nitrite	NO2-N	<1e-2		RPD			n/a	20.000	U	08/16/07
DUP	Nitrogen in Nitrate	NO3-N	3.9321		RPD			0.405	20.000		08/16/07
DUP	Sulfate	14808-79-8	47.1241		RPD			1.807	20.000		08/16/07
MS	Chloride	16887-00-6	0.99987	100.997	% Recov	75.000	125.000				08/16/07
MS	Fluoride	16984-48-8	0.5181	103.207	% Recov	75.000	125.000				08/16/07
MS	Nitrogen in Nitrite	NO2-N	0.5298	106.386	% Recov	75.000	125.000				08/16/07
MS	Nitrogen in Nitrate	NO3-N	0.45748	101.437	% Recov	75.000	125.000				08/16/07
MS	Sulfate	14808-79-8	1.98898	100.454	% Recov	75.000	125.000				08/16/07
MSD	Chloride	16887-00-6	0.99856	100.865	% Recov	75.000	125.000				08/16/07
MSD	Fluoride	16984-48-8	0.5064	100.876	% Recov	75.000	125.000				08/16/07
MSD	Nitrogen in Nitrite	NO2-N	0.4942	99.237	% Recov	75.000	125.000				08/16/07
MSD	Nitrogen in Nitrate	NO3-N	0.45575	101.053	% Recov	75.000	125.000				08/16/07
MSD	Sulfate	14808-79-8	2.00117	101.069	% Recov	75.000	125.000				08/16/07
SPK-RPD	Chloride	16887-00-6	100.865		RPD			0.131	20.000		08/16/07
SPK-RPD	Fluoride	16984-48-8	100.876		RPD			2.284	20.000		08/16/07
SPK-RPD	Nitrogen in Nitrite	NO2-N	99.237		RPD			6.954	20.000		08/16/07
SPK-RPD	Nitrogen in Nitrate	NO3-N	101.053		RPD			0.379	20.000		08/16/07
SPK-RPD	Sulfate	14808-79-8	101.069		RPD			0.610	20.000		08/16/07
BATCH QC											
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/16/07
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/16/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/16/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/16/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071460
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/16/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/16/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/16/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/16/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/16/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/16/07
LCS	Chloride	16887-00-6	207.561	103.781	% Recov	80.000	120.000				08/16/07
LCS	Fluoride	16984-48-8	108.5366	107.462	% Recov	80.000	120.000				08/16/07
LCS	Nitrogen in Nitrite	NO2-N	103.248	103.248	% Recov	80.000	120.000				08/16/07
LCS	Nitrogen in Nitrate	NO3-N	95.3472	104.547	% Recov	80.000	120.000				08/16/07
LCS	Sulfate	14808-79-8	401.5685	100.392	% Recov	80.000	120.000				08/16/07

Lab ID: W07P001545
BATCH QC ASSOCIATED WITH SAMPLE

DUP	Chloride	16887-00-6	57.0108		RPD			0.406	20.000		08/22/07
DUP	Fluoride	16984-48-8	0.4146		RPD			2.147	20.000		08/22/07
DUP	Nitrogen in Nitrite	NO2-N	<1e-2		RPD			n/a	20.000	U	08/22/07
DUP	Nitrogen in Nitrate	NO3-N	14.5184		RPD			0.260	20.000		08/22/07
DUP	Sulfate	14808-79-8	33.2958		RPD			4.668	20.000		08/22/07
MS	Chloride	16887-00-6	0.92174	93.105	% Recov	75.000	125.000				08/22/07
MS	Fluoride	16984-48-8	0.5158	102.749	% Recov	75.000	125.000				08/22/07
MS	Nitrogen in Nitrite	NO2-N	0.6555	131.627	% Recov	75.000	125.000				08/22/07
MS	Nitrogen in Nitrate	NO3-N	0.45491	100.867	% Recov	75.000	125.000				08/22/07
MS	Sulfate	14808-79-8	2.03755	102.907	% Recov	75.000	125.000				08/22/07
MSD	Chloride	16887-00-6	0.96862	97.840	% Recov	75.000	125.000				08/22/07
MSD	Fluoride	16984-48-8	0.5108	101.753	% Recov	75.000	125.000				08/22/07
MSD	Nitrogen in Nitrite	NO2-N	0.6518	130.884	% Recov	75.000	125.000				08/22/07
MSD	Nitrogen in Nitrate	NO3-N	0.46307	102.676	% Recov	75.000	125.000				08/22/07
MSD	Sulfate	14808-79-8	1.96756	99.372	% Recov	75.000	125.000				08/22/07
SPK-RPD	Chloride	16887-00-6	97.840		RPD			4.960	20.000		08/22/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071460
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 08/20/07
Receive Date:08/20/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
SPK-RPD	Fluoride	16984-48-8	101.753		RPD			0.974	20.000		08/22/07
SPK-RPD	Nitrogen in Nitrite	NO2-N	130.884		RPD			0.566	20.000		08/22/07
SPK-RPD	Nitrogen in Nitrate	NO3-N	102.676		RPD			1.778	20.000		08/22/07
SPK-RPD	Sulfate	14808-79-8	99.372		RPD			3.495	20.000		08/22/07
BATCH QC											
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/22/07
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/22/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/22/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/22/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/22/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/22/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/22/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/22/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/22/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/22/07
LCS	Chloride	16887-00-6	201.4824	100.741	% Recov	80.000	120.000				08/22/07
LCS	Fluoride	16984-48-8	100.8493	99.851	% Recov	80.000	120.000				08/22/07
LCS	Nitrogen in Nitrite	NO2-N	100.7208	100.721	% Recov	80.000	120.000				08/22/07
LCS	Nitrogen in Nitrate	NO3-N	94.7594	103.903	% Recov	80.000	120.000				08/22/07
LCS	Sulfate	14808-79-8	383.7592	95.940	% Recov	80.000	120.000				08/22/07
Lab ID: W07P001550											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Chloride	16887-00-6	55.547		RPD			0.379	20.000		08/22/07
DUP	Fluoride	16984-48-8	0.3278		RPD			11.798	20.000		08/22/07
DUP	Nitrogen in Nitrite	NO2-N	0.2734		RPD			2.294	20.000		08/22/07
DUP	Nitrogen in Nitrate	NO3-N	16.9854		RPD			0.816	20.000		08/22/07
DUP	Sulfate	14808-79-8	108.6949		RPD			0.005	20.000		08/22/07
MS	Chloride	16887-00-6	0.95751	96.718	% Recov	75.000	125.000				08/22/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071460
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 08/21/07
Receive Date:08/21/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Fluoride	16984-48-8	0.5021	100.020	% Recov	75.000	125.000				08/22/07
MS	Nitrogen in Nitrite	NO2-N	0.46475	93.323	% Recov	75.000	125.000				08/22/07
MS	Nitrogen in Nitrate	NO3-N	0.44776	99.282	% Recov	75.000	125.000				08/22/07
MS	Sulfate	14808-79-8	1.98426	100.215	% Recov	75.000	125.000				08/22/07
MSD	Chloride	16887-00-6	0.98311	99.304	% Recov	75.000	125.000				08/22/07
MSD	Fluoride	16984-48-8	0.5045	100.498	% Recov	75.000	125.000				08/22/07
MSD	Nitrogen in Nitrite	NO2-N	0.4632	93.012	% Recov	75.000	125.000				08/22/07
MSD	Nitrogen in Nitrate	NO3-N	0.45391	100.645	% Recov	75.000	125.000				08/22/07
MSD	Sulfate	14808-79-8	2.03729	102.893	% Recov	75.000	125.000				08/22/07
SPK-RPD	Chloride	16887-00-6	99.304		RPD			2.638	20.000		08/22/07
SPK-RPD	Fluoride	16984-48-8	100.498		RPD			0.477	20.000		08/22/07
SPK-RPD	Nitrogen in Nitrite	NO2-N	93.012		RPD			0.334	20.000		08/22/07
SPK-RPD	Nitrogen in Nitrate	NO3-N	100.645		RPD			1.363	20.000		08/22/07
SPK-RPD	Sulfate	14808-79-8	102.893		RPD			2.637	20.000		08/22/07

BATCH QC

BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/22/07
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/22/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/22/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/22/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/22/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/22/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/22/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/22/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/22/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/22/07
LCS	Chloride	16887-00-6	204.6221	102.311	% Recov	80.000	120.000				08/22/07
LCS	Fluoride	16984-48-8	107.1179	106.057	% Recov	80.000	120.000				08/22/07
LCS	Nitrogen in Nitrite	NO2-N	100.0459	100.046	% Recov	80.000	120.000				08/22/07
LCS	Nitrogen in Nitrate	NO3-N	94.556	103.680	% Recov	80.000	120.000				08/22/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071460
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Sulfate	14808-79-8	397.7913	99.448	% Recov	80.000	120.000				08/22/07

Lab ID: W07P001504
BATCH QC ASSOCIATED WITH SAMPLE

DUP	Chloride	16887-00-6	19.0778		RPD			0.101	20.000		08/23/07
DUP	Fluoride	16984-48-8	0.24		RPD			0.627	20.000		08/23/07
DUP	Nitrogen in Nitrite	NO2-N	<2e-2		RPD			n/a	20.000	U	08/23/07
DUP	Nitrogen in Nitrate	NO3-N	41.182		RPD			0.201	20.000		08/23/07
DUP	Sulfate	14808-79-8	86.6716		RPD			0.306	20.000		08/23/07
MS	Chloride	16887-00-6	0.99447	100.452	% Recov	75.000	125.000				08/23/07
MS	Fluoride	16984-48-8	0.47915	95.448	% Recov	75.000	125.000				08/23/07
MS	Nitrogen in Nitrite	NO2-N	0.4848	97.349	% Recov	75.000	125.000				08/23/07
MS	Nitrogen in Nitrate	NO3-N	0.448295	99.400	% Recov	75.000	125.000				08/23/07
MS	Sulfate	14808-79-8	2.009335	101.482	% Recov	75.000	125.000				08/23/07
MSD	Chloride	16887-00-6	0.987225	99.720	% Recov	75.000	125.000				08/23/07
MSD	Fluoride	16984-48-8	0.5096	101.514	% Recov	75.000	125.000				08/23/07
MSD	Nitrogen in Nitrite	NO2-N	0.48955	98.303	% Recov	75.000	125.000				08/23/07
MSD	Nitrogen in Nitrate	NO3-N	0.441035	97.790	% Recov	75.000	125.000				08/23/07
MSD	Sulfate	14808-79-8	1.989035	100.456	% Recov	75.000	125.000				08/23/07
SPK-RPD	Chloride	16887-00-6	99.720		RPD			0.731	20.000		08/24/07
SPK-RPD	Fluoride	16984-48-8	101.514		RPD			6.160	20.000		08/24/07
SPK-RPD	Nitrogen in Nitrite	NO2-N	98.303		RPD			0.975	20.000		08/24/07
SPK-RPD	Nitrogen in Nitrate	NO3-N	97.790		RPD			1.633	20.000		08/24/07
SPK-RPD	Sulfate	14808-79-8	100.456		RPD			1.016	20.000		08/24/07

BATCH QC

BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/23/07
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/24/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/23/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/24/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20071460
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/24/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/23/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/23/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/24/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/24/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/23/07
LCS	Chloride	16887-00-6	204.4609	102.230	% Recov	80.000	120.000				08/23/07
LCS	Fluoride	16984-48-8	106.8547	105.797	% Recov	80.000	120.000				08/23/07
LCS	Nitrogen in Nitrite	NO2-N	100.4127	100.413	% Recov	80.000	120.000				08/23/07
LCS	Nitrogen in Nitrate	NO3-N	93.979	103.047	% Recov	80.000	120.000				08/23/07
LCS	Sulfate	14808-79-8	391.5365	97.884	% Recov	80.000	120.000				08/23/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071460
Matrix: WATER
Test: Cyanide by Midi/Spectrophotom

Sample Date: 08/15/07
Receive Date:08/15/07

Lab ID: W07P001504

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Cyanide by Midi/Spectrophotom	57-12-5	39	99.744	% Recov	75.000	125.000				08/21/07
MSD	Cyanide by Midi/Spectrophotom	57-12-5	37.8	96.675	% Recov	75.000	125.000				08/21/07
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5	96.675		RPD			3.125	20.000		08/21/07

BATCH QC

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Cyanide by Midi/Spectrophotom	57-12-5	< 4	n/a	ug/L	-4.000	4.000			U	08/21/07
LCS	Cyanide by Midi/Spectrophotom	57-12-5	48.3	98.773	% Recov	85.000	115.000				08/21/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071460
Matrix: WATER
Test: Hexavalent chromium

Sample Date: 08/15/07
Receive Date:08/15/07

Lab ID: W07P001503

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
DUP	Hexavalent chromium	18540-29-9	0.0521		RPD			0.000	15.000		08/15/07
MS	Hexavalent chromium	18540-29-9	0.0511	96.780	% Recov	85.000	115.000				08/15/07
MSD	Hexavalent chromium	18540-29-9	0.0498	94.318	% Recov	85.000	115.000				08/15/07
SPK-RPD	Hexavalent chromium	18540-29-9	94.318		RPD			2.577	20.000		08/15/07

BATCH QC

BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	08/15/07
LCS	Hexavalent chromium	18540-29-9	0.0534	107.445	% Recov	80.000	120.000				08/15/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071460
Matrix: WATER
Test: Total Alkalinity as mg/L CaCO3

Sample Date: 08/03/07
Receive Date:08/03/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W07P001463											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Total Alkalinity as mg/L CaCO3	ALKALINITY	121		RPD			0.830	20.000		08/16/07
BATCH QC											
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	121.0	105.217	%Recove	80.000	120.000				08/16/07
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	125.2	108.870	%Recove	80.000	120.000				08/16/07
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	121.1	105.304	%Recove	80.000	120.000				08/16/07
Lab ID: W07P001510											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Total Alkalinity as mg/L CaCO3	ALKALINITY	143.4		RPD			0.070	20.000		08/23/07
BATCH QC											
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	117.3	102.000	%Recove	80.000	120.000				08/23/07
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	123.8	107.652	%Recove	80.000	120.000				08/23/07
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	122.8	106.783	%Recove	80.000	120.000				08/23/07

w13qlog v4.2 01-oct-2007 10:46:58

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20071517

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
33072	2	33476	37546	BLANK		Anions by Ion Chromatography
33072	12	33476	37546	BLANK		Anions by Ion Chromatography
33072	3	33476	37546	LCS		Anions by Ion Chromatography
33072	5	33476	37546	DUP	W07P001504	Anions by Ion Chromatography
33072	6	33476	37546	MS	W07P001504	Anions by Ion Chromatography
33072	7	33476	37546	MSD	W07P001504	Anions by Ion Chromatography
33072	7	33476	37546	SPK-RPD	W07P001504	Anions by Ion Chromatography
33072	9	33476	37546	SAMPLE	W07P001555	Anions by Ion Chromatography
33072	10	33476	37546	SAMPLE	W07P001556	Anions by Ion Chromatography
33072	11	33476	37546	SAMPLE	W07P001557	Anions by Ion Chromatography
33095	2	33499	37562	BLANK		Anions by Ion Chromatography
33095	12	33499	37562	BLANK		Anions by Ion Chromatography
33095	3	33499	37562	LCS		Anions by Ion Chromatography
33095	8	33499	37562	SAMPLE	W07P001552	Anions by Ion Chromatography
33095	5	33499	37562	DUP	W07P001553	Anions by Ion Chromatography
33095	6	33499	37562	MS	W07P001553	Anions by Ion Chromatography
33095	7	33499	37562	MSD	W07P001553	Anions by Ion Chromatography
33095	4	33499	37562	SAMPLE	W07P001553	Anions by Ion Chromatography
33095	7	33499	37562	SPK-RPD	W07P001553	Anions by Ion Chromatography
33095	9	33499	37562	SAMPLE	W07P001554	Anions by Ion Chromatography
33095	11	33499	37562	SAMPLE	W07P001559	Anions by Ion Chromatography
33095	10	33499	37562	SAMPLE	W07P001562	Anions by Ion Chromatography
33112	3	33512	37586	BLANK		Anions by Ion Chromatography
33112	12	33512	37586	BLANK		Anions by Ion Chromatography
33112	21	33512	37586	BLANK		Anions by Ion Chromatography
33112	4	33512	37586	LCS		Anions by Ion Chromatography
33112	13	33512	37586	LCS		Anions by Ion Chromatography
33112	15	33512	37586	DUP	W07P001564	Anions by Ion Chromatography
33112	16	33512	37586	MS	W07P001564	Anions by Ion Chromatography
33112	17	33512	37586	MSD	W07P001564	Anions by Ion Chromatography
33112	14	33512	37586	SAMPLE	W07P001564	Anions by Ion Chromatography
33112	17	33512	37586	SPK-RPD	W07P001564	Anions by Ion Chromatography
33112	18	33512	37586	SAMPLE	W07P001566	Anions by Ion Chromatography
33112	19	33512	37586	SAMPLE	W07P001568	Anions by Ion Chromatography
33112	20	33512	37586	SAMPLE	W07P001573	Anions by Ion Chromatography
33112	22	33512	37586	SAMPLE	W07P001574	Anions by Ion Chromatography
33112	6	33512	37586	DUP	W07P001595	Anions by Ion Chromatography
33112	7	33512	37586	MS	W07P001595	Anions by Ion Chromatography
33112	8	33512	37586	MSD	W07P001595	Anions by Ion Chromatography
33112	8	33512	37586	SPK-RPD	W07P001595	Anions by Ion Chromatography
33148	2	33553	37640	BLANK		Anions by Ion Chromatography
33148	9	33553	37640	BLANK		Anions by Ion Chromatography
33148	3	33553	37640	LCS		Anions by Ion Chromatography
33148	5	33553	37640	DUP	W07P001575	Anions by Ion Chromatography
33148	6	33553	37640	MS	W07P001575	Anions by Ion Chromatography
33148	7	33553	37640	MSD	W07P001575	Anions by Ion Chromatography
33148	4	33553	37640	SAMPLE	W07P001575	Anions by Ion Chromatography
33148	7	33553	37640	SPK-RPD	W07P001575	Anions by Ion Chromatography
33148	8	33553	37640	SAMPLE	W07P001576	Anions by Ion Chromatography

33156	1	33561	37648	BLANK		Cyanide by Midi/Spectrophotom
33156	2	33561	37648	LCS		Cyanide by Midi/Spectrophotom
33156	4	33561	37648	MS	W07P001546	Cyanide by Midi/Spectrophotom
33156	5	33561	37648	MSD	W07P001546	Cyanide by Midi/Spectrophotom
33156	5	33561	37648	SPK-RPD	W07P001546	Cyanide by Midi/Spectrophotom
33156	8	33561	37648	SAMPLE	W07P001552	Cyanide by Midi/Spectrophotom
33156	9	33561	37648	SAMPLE	W07P001553	Cyanide by Midi/Spectrophotom
33156	10	33561	37648	SAMPLE	W07P001554	Cyanide by Midi/Spectrophotom
33156	11	33561	37648	SAMPLE	W07P001555	Cyanide by Midi/Spectrophotom
33156	12	33561	37648	SAMPLE	W07P001556	Cyanide by Midi/Spectrophotom
33156	13	33561	37648	SAMPLE	W07P001557	Cyanide by Midi/Spectrophotom
33194	1	33599	37684	LCS		Total Alkalinity as mg/L CaCO3
33194	14	33599	37684	LCS		Total Alkalinity as mg/L CaCO3
33194	25	33599	37684	LCS		Total Alkalinity as mg/L CaCO3
33194	3	33599	37684	DUP	W07GR02251	Total Alkalinity as mg/L CaCO3
33194	6	33599	37684	DUP	W07P001552	Total Alkalinity as mg/L CaCO3
33194	5	33599	37684	SAMPLE	W07P001552	Total Alkalinity as mg/L CaCO3
33194	7	33599	37684	SAMPLE	W07P001553	Total Alkalinity as mg/L CaCO3
33194	8	33599	37684	SAMPLE	W07P001554	Total Alkalinity as mg/L CaCO3
33194	9	33599	37684	SAMPLE	W07P001555	Total Alkalinity as mg/L CaCO3
33194	10	33599	37684	SAMPLE	W07P001556	Total Alkalinity as mg/L CaCO3
33194	11	33599	37684	SAMPLE	W07P001557	Total Alkalinity as mg/L CaCO3
33194	12	33599	37684	SAMPLE	W07P001560	Total Alkalinity as mg/L CaCO3
33194	13	33599	37684	SAMPLE	W07P001577	Total Alkalinity as mg/L CaCO3
33194	15	33599	37684	SAMPLE	W07P001578	Total Alkalinity as mg/L CaCO3
33282	1	33685	37868	BLANK		ICP Metals Analysis, Grd H20 P
33282	2	33685	37868	LCS		ICP Metals Analysis, Grd H20 P
33282	4	33685	37868	MS	W07P001529	ICP Metals Analysis, Grd H20 P
33282	5	33685	37868	MSD	W07P001529	ICP Metals Analysis, Grd H20 P
33282	5	33685	37868	SPK-RPD	W07P001529	ICP Metals Analysis, Grd H20 P
33282	8	33685	37868	SAMPLE	W07P001558	ICP Metals Analysis, Grd H20 P
33282	9	33685	37868	SAMPLE	W07P001561	ICP Metals Analysis, Grd H20 P
33282	10	33685	37868	SAMPLE	W07P001563	ICP Metals Analysis, Grd H20 P
33282	11	33685	37868	SAMPLE	W07P001565	ICP Metals Analysis, Grd H20 P
33282	12	33685	37868	SAMPLE	W07P001567	ICP Metals Analysis, Grd H20 P
33282	13	33685	37868	SAMPLE	W07P001569	ICP Metals Analysis, Grd H20 P
33282	14	33685	37868	SAMPLE	W07P001570	ICP Metals Analysis, Grd H20 P
33282	15	33685	37868	SAMPLE	W07P001571	ICP Metals Analysis, Grd H20 P
33282	16	33685	37868	SAMPLE	W07P001572	ICP Metals Analysis, Grd H20 P

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071517
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 08/15/07
Receive Date:08/15/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W07P001504											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Chloride	16887-00-6	19.0778		RPD			0.101	20.000		08/23/07
DUP	Fluoride	16984-48-8	0.24		RPD			0.627	20.000		08/23/07
DUP	Nitrogen in Nitrite	NO2-N	<2e-2		RPD			n/a	20.000	U	08/23/07
DUP	Nitrogen in Nitrate	NO3-N	41.182		RPD			0.201	20.000		08/23/07
DUP	Sulfate	14808-79-8	86.6716		RPD			0.306	20.000		08/23/07
MS	Chloride	16887-00-6	0.99447	100.452	% Recov	75.000	125.000				08/23/07
MS	Fluoride	16984-48-8	0.47915	95.448	% Recov	75.000	125.000				08/23/07
MS	Nitrogen in Nitrite	NO2-N	0.4848	97.349	% Recov	75.000	125.000				08/23/07
MS	Nitrogen in Nitrate	NO3-N	0.448295	99.400	% Recov	75.000	125.000				08/23/07
MS	Sulfate	14808-79-8	2.009335	101.482	% Recov	75.000	125.000				08/23/07
MSD	Chloride	16887-00-6	0.987225	99.720	% Recov	75.000	125.000				08/23/07
MSD	Fluoride	16984-48-8	0.5096	101.514	% Recov	75.000	125.000				08/23/07
MSD	Nitrogen in Nitrite	NO2-N	0.48955	98.303	% Recov	75.000	125.000				08/23/07
MSD	Nitrogen in Nitrate	NO3-N	0.441035	97.790	% Recov	75.000	125.000				08/23/07
MSD	Sulfate	14808-79-8	1.989035	100.456	% Recov	75.000	125.000				08/23/07
SPK-RPD	Chloride	16887-00-6	99.720		RPD			0.731	20.000		08/24/07
SPK-RPD	Fluoride	16984-48-8	101.514		RPD			6.160	20.000		08/24/07
SPK-RPD	Nitrogen in Nitrite	NO2-N	98.303		RPD			0.975	20.000		08/24/07
SPK-RPD	Nitrogen in Nitrate	NO3-N	97.790		RPD			1.633	20.000		08/24/07
SPK-RPD	Sulfate	14808-79-8	100.456		RPD			1.016	20.000		08/24/07
BATCH QC											
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/23/07
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/24/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/24/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/23/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071517
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/23/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/24/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/24/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/23/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/24/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/23/07
LCS	Chloride	16887-00-6	204.4609	102.230	% Recov	80.000	120.000				08/23/07
LCS	Fluoride	16984-48-8	106.8547	105.797	% Recov	80.000	120.000				08/23/07
LCS	Nitrogen in Nitrite	NO2-N	100.4127	100.413	% Recov	80.000	120.000				08/23/07
LCS	Nitrogen in Nitrate	NO3-N	93.979	103.047	% Recov	80.000	120.000				08/23/07
LCS	Sulfate	14808-79-8	391.5365	97.884	% Recov	80.000	120.000				08/23/07

Lab ID: W07P001553
BATCH QC ASSOCIATED WITH SAMPLE

DUP	Chloride	16887-00-6	20.0661		RPD			0.452	20.000		08/24/07
DUP	Fluoride	16984-48-8	0.2297		RPD			0.436	20.000		08/24/07
DUP	Nitrogen in Nitrite	NO2-N	<2e-2		RPD			n/a	20.000	U	08/24/07
DUP	Nitrogen in Nitrate	NO3-N	52.4135		RPD			0.042	20.000		08/24/07
DUP	Sulfate	14808-79-8	91.3488		RPD			0.392	20.000		08/24/07
MS	Chloride	16887-00-6	0.991765	100.178	% Recov	75.000	125.000				08/24/07
MS	Fluoride	16984-48-8	0.50535	100.667	% Recov	75.000	125.000				08/24/07
MS	Nitrogen in Nitrite	NO2-N	0.4875	97.892	% Recov	75.000	125.000				08/24/07
MS	Nitrogen in Nitrate	NO3-N	0.41628	92.302	% Recov	75.000	125.000				08/24/07
MS	Sulfate	14808-79-8	1.928715	97.410	% Recov	75.000	125.000				08/24/07
MSD	Chloride	16887-00-6	0.99154	100.156	% Recov	75.000	125.000				08/24/07
MSD	Fluoride	16984-48-8	0.4956	98.725	% Recov	75.000	125.000				08/24/07
MSD	Nitrogen in Nitrite	NO2-N	0.4914	98.675	% Recov	75.000	125.000				08/24/07
MSD	Nitrogen in Nitrate	NO3-N	0.43226	95.845	% Recov	75.000	125.000				08/24/07
MSD	Sulfate	14808-79-8	1.916425	96.789	% Recov	75.000	125.000				08/24/07
SPK-RPD	Chloride	16887-00-6	100.156		RPD			0.022	20.000		08/24/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071517
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 08/23/07
Receive Date:08/23/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
SPK-RPD	Fluoride	16984-48-8	98.725		RPD			1.948	20.000		08/24/07
SPK-RPD	Nitrogen in Nitrite	NO2-N	98.675		RPD			0.797	20.000		08/24/07
SPK-RPD	Nitrogen in Nitrate	NO3-N	95.845		RPD			3.766	20.000		08/24/07
SPK-RPD	Sulfate	14808-79-8	96.789		RPD			0.640	20.000		08/24/07
BATCH QC											
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/24/07
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/24/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/24/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/24/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/24/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/24/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/24/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/24/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/24/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/24/07
LCS	Chloride	16887-00-6	201.6487	100.824	% Recov	80.000	120.000				08/24/07
LCS	Fluoride	16984-48-8	105.5907	104.545	% Recov	80.000	120.000				08/24/07
LCS	Nitrogen in Nitrite	NO2-N	98.8833	98.883	% Recov	80.000	120.000				08/24/07
LCS	Nitrogen in Nitrate	NO3-N	92.8723	101.834	% Recov	80.000	120.000				08/24/07
LCS	Sulfate	14808-79-8	390.9132	97.728	% Recov	80.000	120.000				08/24/07
Lab ID: W07P001564											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Chloride	16887-00-6	17.3891		RPD			0.109	20.000		08/25/07
DUP	Fluoride	16984-48-8	0.3112		RPD			2.882	20.000		08/25/07
DUP	Nitrogen in Nitrite	NO2-N	<1e-2		RPD			n/a	20.000	U	08/25/07
DUP	Nitrogen in Nitrate	NO3-N	22.3872		RPD			0.616	20.000		08/25/07
DUP	Sulfate	14808-79-8	40.748		RPD			1.294	20.000		08/25/07
MS	Chloride	16887-00-6	1.00732	101.749	% Recov	75.000	125.000				08/25/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071517
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 08/23/07
Receive Date:08/23/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Fluoride	16984-48-8	0.5074	101.076	% Recov	75.000	125.000				08/25/07
MS	Nitrogen in Nitrite	NO2-N	0.5181	104.036	% Recov	75.000	125.000				08/25/07
MS	Nitrogen in Nitrate	NO3-N	0.42329	93.856	% Recov	75.000	125.000				08/25/07
MS	Sulfate	14808-79-8	1.93856	97.907	% Recov	75.000	125.000				08/25/07
MSD	Chloride	16887-00-6	1.00634	101.651	% Recov	75.000	125.000				08/25/07
MSD	Fluoride	16984-48-8	0.5113	101.853	% Recov	75.000	125.000				08/25/07
MSD	Nitrogen in Nitrite	NO2-N	0.5083	102.068	% Recov	75.000	125.000				08/25/07
MSD	Nitrogen in Nitrate	NO3-N	0.42169	93.501	% Recov	75.000	125.000				08/25/07
MSD	Sulfate	14808-79-8	1.94142	98.052	% Recov	75.000	125.000				08/25/07
SPK-RPD	Chloride	16887-00-6	101.651		RPD			0.096	20.000		08/25/07
SPK-RPD	Fluoride	16984-48-8	101.853		RPD			0.766	20.000		08/25/07
SPK-RPD	Nitrogen in Nitrite	NO2-N	102.068		RPD			1.910	20.000		08/25/07
SPK-RPD	Nitrogen in Nitrate	NO3-N	93.501		RPD			0.379	20.000		08/25/07
SPK-RPD	Sulfate	14808-79-8	98.052		RPD			0.148	20.000		08/25/07

Lab ID: W07P001595
BATCH QC ASSOCIATED WITH SAMPLE

DUP	Chloride	16887-00-6	36.8253		RPD			0.058	20.000		08/24/07
DUP	Fluoride	16984-48-8	0.3764		RPD			2.051	20.000		08/24/07
DUP	Nitrogen in Nitrite	NO2-N	<1e-2		RPD			n/a	20.000	U	08/24/07
DUP	Nitrogen in Nitrate	NO3-N	12.9153		RPD			0.002	20.000		08/24/07
DUP	Sulfate	14808-79-8	48.0836		RPD			0.503	20.000		08/24/07
MS	Chloride	16887-00-6	1.01848	102.877	% Recov	75.000	125.000				08/24/07
MS	Fluoride	16984-48-8	0.4971	99.024	% Recov	75.000	125.000				08/24/07
MS	Nitrogen in Nitrite	NO2-N	0.5665	113.755	% Recov	75.000	125.000				08/24/07
MS	Nitrogen in Nitrate	NO3-N	0.44066	97.707	% Recov	75.000	125.000				08/24/07
MS	Sulfate	14808-79-8	2.03199	102.626	% Recov	75.000	125.000				08/24/07
MSD	Chloride	16887-00-6	1.04626	105.683	% Recov	75.000	125.000				08/24/07
MSD	Fluoride	16984-48-8	0.5261	104.801	% Recov	75.000	125.000				08/24/07
MSD	Nitrogen in Nitrite	NO2-N	0.5478	110.000	% Recov	75.000	125.000				08/24/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071517
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 08/24/07
Receive Date:08/24/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MSD	Nitrogen in Nitrate	NO3-N	0.45013	99.807	% Recov	75.000	125.000				08/24/07
MSD	Sulfate	14808-79-8	1.9869	100.348	% Recov	75.000	125.000				08/24/07
SPK-RPD	Chloride	16887-00-6	105.683		RPD			2.691	20.000		08/25/07
SPK-RPD	Fluoride	16984-48-8	104.801		RPD			5.669	20.000		08/25/07
SPK-RPD	Nitrogen in Nitrite	NO2-N	110.000		RPD			3.356	20.000		08/25/07
SPK-RPD	Nitrogen in Nitrate	NO3-N	99.807		RPD			2.126	20.000		08/25/07
SPK-RPD	Sulfate	14808-79-8	100.348		RPD			2.245	20.000		08/25/07

BATCH QC

BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/25/07
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/24/07
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/25/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/24/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/25/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/25/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/24/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/25/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/25/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/24/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/25/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/25/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/25/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/25/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/24/07
LCS	Chloride	16887-00-6	202.3265	101.163	% Recov	80.000	120.000				08/25/07
LCS	Chloride	16887-00-6	200.5184	100.259	% Recov	80.000	120.000				08/24/07
LCS	Fluoride	16984-48-8	104.9594	103.920	% Recov	80.000	120.000				08/25/07
LCS	Fluoride	16984-48-8	104.1926	103.161	% Recov	80.000	120.000				08/24/07
LCS	Nitrogen in Nitrite	NO2-N	98.3595	98.359	% Recov	80.000	120.000				08/25/07
LCS	Nitrogen in Nitrite	NO2-N	98.0791	98.079	% Recov	80.000	120.000				08/24/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071517
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Nitrogen in Nitrate	NO3-N	92.6052	101.541	% Recov	80.000	120.000				08/25/07
LCS	Nitrogen in Nitrate	NO3-N	92.9252	101.892	% Recov	80.000	120.000				08/24/07
LCS	Sulfate	14808-79-8	388.9637	97.241	% Recov	80.000	120.000				08/24/07
LCS	Sulfate	14808-79-8	388.179	97.045	% Recov	80.000	120.000				08/25/07

Lab ID: W07P001575
BATCH QC ASSOCIATED WITH SAMPLE

DUP	Chloride	16887-00-6	13.3083		RPD			0.406	20.000		08/25/07
DUP	Fluoride	16984-48-8	0.3976		RPD			2.337	20.000		08/25/07
DUP	Nitrogen in Nitrite	NO2-N	<1e-2		RPD			n/a	20.000	U	08/25/07
DUP	Nitrogen in Nitrate	NO3-N	29.7088		RPD			0.141	20.000		08/25/07
DUP	Sulfate	14808-79-8	26.7524		RPD			0.379	20.000		08/25/07
MS	Chloride	16887-00-6	1.02289	103.322	% Recov	75.000	125.000				08/25/07
MS	Fluoride	16984-48-8	0.494	98.406	% Recov	75.000	125.000				08/25/07
MS	Nitrogen in Nitrite	NO2-N	0.5056	101.526	% Recov	75.000	125.000				08/25/07
MS	Nitrogen in Nitrate	NO3-N	0.43054	95.463	% Recov	75.000	125.000				08/25/07
MS	Sulfate	14808-79-8	1.9573	98.854	% Recov	75.000	125.000				08/25/07
MSD	Chloride	16887-00-6	1.02246	103.279	% Recov	75.000	125.000				08/25/07
MSD	Fluoride	16984-48-8	0.5063	100.857	% Recov	75.000	125.000				08/25/07
MSD	Nitrogen in Nitrite	NO2-N	0.4836	97.108	% Recov	75.000	125.000				08/25/07
MSD	Nitrogen in Nitrate	NO3-N	0.4193	92.971	% Recov	75.000	125.000				08/25/07
MSD	Sulfate	14808-79-8	1.98446	100.225	% Recov	75.000	125.000				08/25/07
SPK-RPD	Chloride	16887-00-6	103.279		RPD			0.042	20.000		08/25/07
SPK-RPD	Fluoride	16984-48-8	100.857		RPD			2.460	20.000		08/25/07
SPK-RPD	Nitrogen in Nitrite	NO2-N	97.108		RPD			4.448	20.000		08/25/07
SPK-RPD	Nitrogen in Nitrate	NO3-N	92.971		RPD			2.645	20.000		08/25/07
SPK-RPD	Sulfate	14808-79-8	100.225		RPD			1.377	20.000		08/25/07

BATCH QC

BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/25/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071517
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Chloride	16887-00-6	<3e-2	n/a	mg/L	0.000	0.030			U	08/25/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/25/07
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	08/25/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/25/07
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020			U	08/25/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/25/07
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	08/25/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/25/07
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	08/25/07
LCS	Chloride	16887-00-6	202.1554	101.078	% Recov	80.000	120.000				08/25/07
LCS	Fluoride	16984-48-8	104.9754	103.936	% Recov	80.000	120.000				08/25/07
LCS	Nitrogen in Nitrite	NO2-N	98.5391	98.539	% Recov	80.000	120.000				08/25/07
LCS	Nitrogen in Nitrate	NO3-N	92.432	101.351	% Recov	80.000	120.000				08/25/07
LCS	Sulfate	14808-79-8	389.5776	97.394	% Recov	80.000	120.000				08/25/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071517
Matrix: WATER
Test: Cyanide by Midi/Spectrophotom

Sample Date: 08/21/07
Receive Date:08/21/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W07P001546											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Cyanide by Midi/Spectrophotom	57-12-5	n/a	n/a	% Recov	75.000	125.000				08/30/07
MSD	Cyanide by Midi/Spectrophotom	57-12-5	n/a	n/a	% Recov	75.000	125.000				08/30/07
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5			RPD			n/a	20.000		08/30/07
BATCH QC											
BLANK	Cyanide by Midi/Spectrophotom	57-12-5	-3.0	-3.000	ug/L	-4.000	4.000				08/30/07
LCS	Cyanide by Midi/Spectrophotom	57-12-5	45.7	93.456	% Recov	85.000	115.000				08/30/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20071517
Matrix: WATER
Test: Total Alkalinity as mg/L CaCO3

Sample Date: 08/23/07
Receive Date:08/23/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W07GR02251											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Total Alkalinity as mg/L CaCO3	ALKALINITY	121.0		RPD			0.412	20.000		08/31/07
Lab ID: W07P001552											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Total Alkalinity as mg/L CaCO3	ALKALINITY	94.84		RPD			0.306	20.000		08/31/07
BATCH QC											
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	121.9	106.000	%Recove	80.000	120.000				08/31/07
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	123.5	107.391	%Recove	80.000	120.000				08/31/07
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	125.4	109.043	%Recove	80.000	120.000				08/31/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081478
Matrix: WATER
Test: Ammonia (N) by IC

Sample Date: 07/16/08
Receive Date:07/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02623											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Ammonia (N) by IC	7664-41-7	0.1331		RPD			2.669	20.000		07/22/08
MS	Ammonia (N) by IC	7664-41-7	0.5042	101.245	% Recov	80.000	120.000				07/22/08
MSD	Ammonia (N) by IC	7664-41-7	0.5084	102.088	% Recov	80.000	120.000				07/22/08
SPK-RPD	Ammonia (N) by IC	7664-41-7	102.088		RPD			0.829	20.000		07/22/08
BATCH QC											
BLANK	Ammonia (N) by IC	7664-41-7	<9.32e-3	n/a	mg/L	0.000	0.002			U	07/22/08
BLANK	Ammonia (N) by IC	7664-41-7	<9.32e-3	n/a	mg/L	0.000	0.002			U	07/22/08
LCS	Ammonia (N) by IC	7664-41-7	109.1115	109.112	% Recov	80.000	120.000				07/22/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081478
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 07/04/08
Receive Date:07/07/08

Lab ID: W08GR02217
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
DUP	Chloride	16887-00-6	50.6731		RPD			0.969	20.000		07/17/08
DUP	Fluoride	16984-48-8	<0.232		RPD			n/a	20.000	U	07/17/08
DUP	Nitrogen in Nitrite	NO2-N	<0.128		RPD			n/a	20.000	U	07/17/08
DUP	Nitrogen in Nitrate	NO3-N	<0.121		RPD			n/a	20.000	U	07/17/08
DUP	Phosphate (P) by IC	PO4-P	29.257		RPD			1.620	20.000		07/17/08
DUP	Sulfate	14808-79-8	14.6575		RPD			1.625	20.000		07/17/08
MS	Chloride	16887-00-6	0.78806	79.202	% Recov	80.000	120.000				07/17/08
MS	Fluoride	16984-48-8	0.43155	87.535	% Recov	80.000	120.000				07/17/08
MS	Nitrogen in Nitrite	NO2-N	0.43991	89.413	% Recov	80.000	120.000				07/17/08
MS	Nitrogen in Nitrate	NO3-N	0.40652	91.148	% Recov	80.000	120.000				07/17/08
MS	Phosphate (P) by IC	PO4-P	0.90423	94.486	% Recov	80.000	120.000				07/17/08
MS	Sulfate	14808-79-8	1.90509	97.198	% Recov	80.000	120.000				07/17/08
MSD	Chloride	16887-00-6	0.81203	81.611	% Recov	80.000	120.000				07/17/08
MSD	Fluoride	16984-48-8	0.43051	87.325	% Recov	80.000	120.000				07/17/08
MSD	Nitrogen in Nitrite	NO2-N	0.45665	92.815	% Recov	80.000	120.000				07/17/08
MSD	Nitrogen in Nitrate	NO3-N	0.44729	100.289	% Recov	80.000	120.000				07/17/08
MSD	Phosphate (P) by IC	PO4-P	0.8945	93.469	% Recov	80.000	120.000				07/17/08
MSD	Sulfate	14808-79-8	1.90617	97.254	% Recov	80.000	120.000				07/17/08
SPK-RPD	Chloride	16887-00-6	81.611		RPD			2.996	20.000		07/17/08
SPK-RPD	Fluoride	16984-48-8	87.325		RPD			0.240	20.000		07/17/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	92.815		RPD			3.734	20.000		07/17/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	100.289		RPD			9.550	20.000		07/17/08
SPK-RPD	Phosphate (P) by IC	PO4-P	93.469		RPD			1.082	20.000		07/17/08
SPK-RPD	Sulfate	14808-79-8	97.254		RPD			0.058	20.000		07/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081478
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date: 07/15/08
Receive Date:07/15/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02613											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Chloride	16887-00-6	1.299		RPD			5.302	20.000		07/17/08
DUP	Fluoride	16984-48-8	<0.232		RPD			n/a	20.000	U	07/17/08
DUP	Nitrogen in Nitrite	NO2-N	<0.128		RPD			n/a	20.000	U	07/17/08
DUP	Nitrogen in Nitrate	NO3-N	0.2255		RPD			3.742	20.000		07/17/08
DUP	Phosphate (P) by IC	PO4-P	<0.606		RPD			n/a	20.000	U	07/17/08
DUP	Sulfate	14808-79-8	8.197		RPD			0.629	20.000		07/17/08
MS	Chloride	16887-00-6	0.95842	96.324	% Recov	80.000	120.000				07/17/08
MS	Fluoride	16984-48-8	0.43175	87.576	% Recov	80.000	120.000				07/17/08
MS	Nitrogen in Nitrite	NO2-N	0.48678	98.939	% Recov	80.000	120.000				07/17/08
MS	Nitrogen in Nitrate	NO3-N	0.44705	100.235	% Recov	80.000	120.000				07/17/08
MS	Phosphate (P) by IC	PO4-P	0.94204	98.437	% Recov	80.000	120.000				07/17/08
MS	Sulfate	14808-79-8	1.9301	98.474	% Recov	80.000	120.000				07/17/08
MSD	Chloride	16887-00-6	0.95561	96.041	% Recov	80.000	120.000				07/17/08
MSD	Fluoride	16984-48-8	0.47686	96.726	% Recov	80.000	120.000				07/17/08
MSD	Nitrogen in Nitrite	NO2-N	0.48156	97.878	% Recov	80.000	120.000				07/17/08
MSD	Nitrogen in Nitrate	NO3-N	0.43933	98.504	% Recov	80.000	120.000				07/17/08
MSD	Phosphate (P) by IC	PO4-P	0.94915	99.180	% Recov	80.000	120.000				07/17/08
MSD	Sulfate	14808-79-8	1.96422	100.215	% Recov	80.000	120.000				07/17/08
SPK-RPD	Chloride	16887-00-6	96.041		RPD			0.294	20.000		07/17/08
SPK-RPD	Fluoride	16984-48-8	96.726		RPD			9.929	20.000		07/17/08
SPK-RPD	Nitrogen in Nitrite	NO2-N	97.878		RPD			1.078	20.000		07/17/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	98.504		RPD			1.742	20.000		07/17/08
SPK-RPD	Phosphate (P) by IC	PO4-P	99.180		RPD			0.752	20.000		07/17/08
SPK-RPD	Sulfate	14808-79-8	100.215		RPD			1.752	20.000		07/17/08
BATCH QC											
BLANK	Chloride	16887-00-6	<4.69e-2	n/a	mg/L	0.000	0.030			U	07/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081478
Matrix: WATER
Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Chloride	16887-00-6	<4.69e-2	n/a	mg/L	0.000	0.030			U	07/17/08
BLANK	Chloride	16887-00-6	<4.69e-2	n/a	mg/L	0.000	0.030			U	07/17/08
BLANK	Fluoride	16984-48-8	<2.32e-2	n/a	mg/L	0.000	0.030			U	07/17/08
BLANK	Fluoride	16984-48-8	<2.32e-2	n/a	mg/L	0.000	0.030			U	07/17/08
BLANK	Fluoride	16984-48-8	<2.32e-2	n/a	mg/L	0.000	0.030			U	07/17/08
BLANK	Nitrogen in Nitrite	NO2-N	<1.28e-2	n/a	mg/L	0.000	0.020			U	07/17/08
BLANK	Nitrogen in Nitrite	NO2-N	<1.28e-2	n/a	mg/L	0.000	0.020			U	07/17/08
BLANK	Nitrogen in Nitrite	NO2-N	<1.28e-2	n/a	mg/L	0.000	0.020			U	07/17/08
BLANK	Nitrogen in Nitrate	NO3-N	<1.21e-2	n/a	mg/L	0.000	0.040			U	07/17/08
BLANK	Nitrogen in Nitrate	NO3-N	<1.21e-2	n/a	mg/L	0.000	0.040			U	07/17/08
BLANK	Nitrogen in Nitrate	NO3-N	<1.21e-2	n/a	mg/L	0.000	0.040			U	07/17/08
BLANK	Phosphate (P) by IC	PO4-P	<6.06e-2	n/a	mg/L	0.000	0.200			U	07/17/08
BLANK	Phosphate (P) by IC	PO4-P	<6.06e-2	n/a	mg/L	0.000	0.200			U	07/17/08
BLANK	Phosphate (P) by IC	PO4-P	<6.06e-2	n/a	mg/L	0.000	0.200			U	07/17/08
BLANK	Sulfate	14808-79-8	<0.132	n/a	mg/L	0.000	0.200			U	07/17/08
BLANK	Sulfate	14808-79-8	<0.132	n/a	mg/L	0.000	0.200			U	07/17/08
BLANK	Sulfate	14808-79-8	<0.132	n/a	mg/L	0.000	0.200			U	07/17/08
LCS	Chloride	16887-00-6	192.5769	95.809	% Recov	80.000	120.000				07/17/08
LCS	Chloride	16887-00-6	193.1032	96.071	% Recov	80.000	120.000				07/17/08
LCS	Fluoride	16984-48-8	105.9738	106.399	% Recov	80.000	120.000				07/17/08
LCS	Fluoride	16984-48-8	106.3091	106.736	% Recov	80.000	120.000				07/17/08
LCS	Nitrogen in Nitrite	NO2-N	97.7218	98.312	% Recov	80.000	120.000				07/17/08
LCS	Nitrogen in Nitrite	NO2-N	97.7523	98.342	% Recov	80.000	120.000				07/17/08
LCS	Nitrogen in Nitrate	NO3-N	90.3196	100.244	% Recov	80.000	120.000				07/17/08
LCS	Nitrogen in Nitrate	NO3-N	90.3588	100.287	% Recov	80.000	120.000				07/17/08
LCS	Phosphate (P) by IC	PO4-P	187.8721	97.142	% Recov	80.000	120.000				07/17/08
LCS	Phosphate (P) by IC	PO4-P	190.4586	98.479	% Recov	80.000	120.000				07/17/08
LCS	Sulfate	14808-79-8	386.984	97.723	% Recov	80.000	120.000				07/17/08
LCS	Sulfate	14808-79-8	387.634	97.887	% Recov	80.000	120.000				07/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081478
Matrix: WATER
Test: Cyanide by Midi/Spectrophotom

Sample Date: 07/02/08
Receive Date:07/02/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02042											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Cyanide by Midi/Spectrophotom	57-12-5	34.9	87.250	% Recov	75.000	125.000				07/18/08
MSD	Cyanide by Midi/Spectrophotom	57-12-5	5.9	14.750	% Recov	75.000	125.000		•		07/18/08
SPK-RPD	Cyanide by Midi/Spectrophotom	57-12-5	14.750		RPD			142.157	20.000 •		07/18/08
BATCH QC											
BLANK	Cyanide by Midi/Spectrophotom	57-12-5	< 4	n/a	ug/L	-4.000	4.000			U	07/18/08
LCS	Cyanide by Midi/Spectrophotom	57-12-5	52.1	104.200	% Recov	85.000	115.000				07/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081478
Matrix: WATER
Test: Hexavalent chromium

Sample Date: 07/16/08
Receive Date:07/17/08

Lab ID: W08GR02623

BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
DUP	Hexavalent chromium	18540-29-9	<0.002		RPD			n/a	15.000	U	07/17/08
MS	Hexavalent chromium	18540-29-9	0.0553	103.172	% Recov	85.000	115.000				07/17/08
MSD	Hexavalent chromium	18540-29-9	0.0553	103.172	% Recov	85.000	115.000				07/17/08
SPK-RPD	Hexavalent chromium	18540-29-9	103.172		RPD			0.000	20.000		07/17/08

BATCH QC

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	07/17/08
BLANK	Hexavalent chromium	18540-29-9	<0.002	n/a	mg/L	0.000	2.000			U	07/17/08
LCS	Hexavalent chromium	18540-29-9	0.0513	101.786	% Recov	80.000	120.000				07/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081478
Matrix: WATER
Test: Total Alkalinity as mg/L CaCO3

Sample Date: 07/16/08
Receive Date:07/16/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02619											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Total Alkalinity as mg/L CaCO3	ALKALINITY	86.00		RPD			0.116	20.000		07/21/08
Lab ID: W08P003537											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Total Alkalinity as mg/L CaCO3	ALKALINITY	30.40		RPD			2.437	20.000		07/21/08
Lab ID: W08Q000086											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Total Alkalinity as mg/L CaCO3	ALKALINITY	32.70		RPD			0.122	20.000		07/21/08
BATCH QC											
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	30.27	101.577	%Recove	80.000	120.000				07/21/08
LCS	Total Alkalinity as mg/L CaCO3	ALKALINITY	30.17	101.242	%Recove	80.000	120.000				07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081478
Matrix: WATER
Test: pH Direct Measurement

Sample Date: 07/16/08
Receive Date:07/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02623											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	pH Direct Measurement	PH	7.47		RPD			0.672	20.000		07/17/08
BATCH QC											
LCS	pH Direct Measurement	PH	8.06	1.008	Ratio	0.900	1.100				07/17/08

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

QC Batch 67865 **Test** Hexavalent chromium Discrete Analyzer
Associated Samples 91417001, 91417002, 91417003, 91417004, 91417005, 91417006

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #17847**							
Hexavalent chromium	18540-29-9		<0.0020	mg/L					U	10/22/09
LCS			**QC Sample #17849**							
Hexavalent chromium	18540-29-9		0.0502	mg/L	100	90 - 110				10/22/09
DUP			**QC Sample #17850**							
			Original 91417001							
Hexavalent chromium	18540-29-9	<0.0020	<0.0020	mg/L			11.80	20	U	10/22/09
MS			**QC Sample #17851**							
			Original 91417001							
Hexavalent chromium	18540-29-9	<0.0020	0.0433	mg/L	108.2	85 - 115				10/22/09

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

QC Batch 67870 **Test** Hexavalent chromium Discrete Analyzer
Associated Samples 91417007, 91417008, 91417009, 91417010, 91417011, 91417012, 91417013, 91417014, 91417015, 91417016, 91417017, 91417018, 91417019, 91417020, 91417021, 91417022

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #17854**							
Hexavalent chromium	18540-29-9		<0.0020	mg/L					U	10/22/09
LCS			**QC Sample #17856**							
Hexavalent chromium	18540-29-9		0.0516	mg/L	102.8	90 - 110				10/22/09
DUP			**QC Sample #17857**							
			Original 91417007							
Hexavalent chromium	18540-29-9	0.0124	0.0126	mg/L			1.60	20		10/22/09
MS			**QC Sample #17858**							
			Original 91417007							
Hexavalent chromium	18540-29-9	0.0124	0.0397	mg/L	99.2	85 - 115				10/22/09
LCS			**QC Sample #17860**							
Hexavalent chromium	18540-29-9		0.0511	mg/L	101.8	90 - 110				10/22/09
BLANK			**QC Sample #17861**							
Hexavalent chromium	18540-29-9		<0.0020	mg/L					U	10/22/09
DUP			**QC Sample #17862**							
			Original 91417017							
Hexavalent chromium	18540-29-9	0.0704	0.0702	mg/L			0.30	20		10/22/09
MS			**QC Sample #17863**							
			Original 91417017							

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Hexavalent chromium	18540-29-9	0.0704	0.0403	mg/L	100.8	85 - 115				10/22/09

Quality Control Report

Attention Michael Neely
Department Inorganic

Group # WSCF91417

QC Batch 67872 **Test** Hexavalent chromium Discrete Analyzer
Associated Samples 91417023, 91417024, 91417025, 91417026, 91417027, 91417028, 91417029, 91417030, 91417031, 91417032

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #17878**							
Hexavalent chromium	18540-29-9		<0.0020	mg/L					U	10/23/09
LCS			**QC Sample #17880**							
Hexavalent chromium	18540-29-9		0.0509	mg/L	101.4	90 - 110				10/23/09
DUP			**QC Sample #17881**							
			Original 91417023							
Hexavalent chromium	18540-29-9	0.00280	0.00310	mg/L			10.20	20	B	10/23/09
MS			**QC Sample #17882**							
			Original 91417023							
Hexavalent chromium	18540-29-9	0.00280	0.0432	mg/L	108	85 - 115				10/23/09

Date: 09 August 2010
To: CH2M Hill (technical representative)
From: Analytical Quality Associates, Inc.
Project: BP-5
Subject: Radiochemical - Sample Data Groups (SDGs) W05177, W05246, W05309, W05335/ W05335I, WSCF20071460, WSCF20071517 and WSCF20081478

INTRODUCTION

This memorandum presents the results of data validation for SDGs W05177, W05246, W05309 and W05335/W05335I prepared by TestAmerica, and SDGs WSCF20071460, WSCF20071517 and WSCF20081478 prepared by WSCF. A list of samples validated along with the analytical methods is provided in the following table.

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B1N5V1	5/14/2007	Water	C	KPA-U, Tc-99, Tritium
B1N5V6	5/14/2007	Water	C	KPA-U, Tc-99, Tritium
B1N5T8	5/14/2007	Water	C	KPA-U, Tc-99, Tritium
B1N5W1	5/14/2007	Water	C	KPA-U, Tc-99, Tritium
B1N4V0	5/14/2007	Water	C	KPA-U, Tc-99, Tritium
B1N4V1	5/14/2007	Water	C	KPA-U, Tc-99, Tritium
B1N3Y6	5/14/2007	Water	C	KPA-U, Tc-99, I-129
B1MDR1	5/14/2007	Water	C	Gross αβ, Tritium
B1N593	5/15/2007	Water	C	Gross αβ , Ni-63, Tc-99, Tritium, I-129
B1N5B3	5/15/2007	Water	C	Tc-99, Tritium, I-129
B1N598	5/15/2007	Water	C	Tc-99, Tritium
B1N5F3	5/15/2007	Water	C	Tc-99, Tritium, I-129
B1N5D5	5/15/2007	Water	C	Tc-99, Tritium
B1N5L4	5/15/2007	Water	C	Tc-99
B1N5J9	5/15/2007	Water	C	Tc-99
B1N5K9	5/15/2007	Water	C	Tc-99
B1N5M4	5/15/2007	Water	C	Tc-99
B1N5K4	5/21/2007	Water	C	Tc-99
B1MN47	5/24/2007	Water	C	I-129
B1N2L4	5/30/2007	Water	C	Gross αβ, Sr-89/90
B1PVX1	10/08/2007	Water	C	Sr-89/90
B1PVX3	10/08/2007	Water	C	Sr-89/90
B1PTW7	10/08/2007	Water	C	Gross αβ, C-14
B1PTP4	10/08/2007	Water	C	Sr-89/90, Gross αβ, C-14
B1PTX1	10/08/2007	Water	C	Gross αβ, C-14
B1PPN8	10/09/2007	Water	C	Gross β
B1PPP0	10/09/2007	Water	C	Gross β
B1PVK0	10/09/2007	Water	C	Gross αβ
B1PVK4	10/09/2007	Water	C	Gross αβ

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B1PVL2	10/09/2007	Water	C	Gross αβ
B1PVC9	10/09/2007	Water	C	Gross αβ
B1PVH5	10/09/2007	Water	C	Sr-89/90, Gross αβ
B1PVW2	10/09/2007	Water	C	Gross αβ
B1PPK8	10/10/2007	Water	C	I-129
B1PPK2	10/10/2007	Water	C	I-129
B1PPJ6	10/10/2007	Water	C	I-129
B1PPJ8	10/10/2007	Water	C	I-129
B1PPJ4	10/10/2007	Water	C	I-129
B1PWK4	10/11/2007	Water	C	Gross αβ
B1PWL6	10/11/2007	Water	C	Gross αβ, I-129
B1RJR6	1/03/2008	Water	C	Gross αβ
B1RHK0	1/03/2008	Water	C	Sr-89/90, Gross αβ
B1RBN0	1/03/2008	Water	C	I-129
B1RBN1	1/03/2008	Water	C	I-129
B1R9C0	1/03/2008	Water	C	I-129
B1R9C1	1/03/2008	Water	C	I-129
B1R9P0	1/03/2008	Water	C	Sr-89/90, Gross αβ
B1R9N6	1/03/2008	Water	C	Sr-89/90, Gross αβ
B1R9N9	1/03/2008	Water	C	Sr-89/90, Gross αβ
B1RCM9	1/04/2008	Water	C	Sr-89/90, I-129
B1RBH7	1/04/2008	Water	C	Sr-89/90, I-129, C-14, Se-79, Isotopic-U
B1R9D1	1/04/2008	Water	C	I-129
B1R9F1	1/04/2008	Water	C	I-129
B1R9C7	1/04/2008	Water	C	I-129
B1RRC4	1/07/2008	Water	C	C-14, Sr-89/90
B1RRC3	1/07/2008	Water	C	C-14, Sr-89/90
B1T5R7	2/10/2008	Water	C	I-129
B1T5P9	2/10/2008	Water	C	I-129
B1T5R3	2/10/2008	Water	C	I-129
B1T5W8	2/10/2008	Water	C	Gross αβ
B1RDM2	2/11/2008	Water	C	Tritium
B1RDN3	2/11/2008	Water	C	Tritium
B1RDK9	2/11/2008	Water	C	Tritium
B1RJ21	2/11/2008	Water	C	Gross β
B1RJ84	2/11/2008	Water	C	Gross β
B1T504	2/11/2008	Water	C	Tc-99, Gross αβ
B1T508	2/11/2008	Water	C	Tc-99, Gross αβ
B1T500	2/11/2008	Water	C	Tc-99, Gross αβ
B1T4Y3	2/11/2008	Water	C	Tc-99
B1T4Y2	2/11/2008	Water	C	Tc-99
B1T529	2/13/2008	Water	C	Gross αβ
B1T512	2/13/2008	Water	C	Gross αβ

Sample ID	Sample Date	Media	Validation Level	Analytical Methods
B1T537	2/13/2008	Water	C	Gross αβ
B1T530	2/13/2008	Water	C	Gross αβ
B1T511	2/13/2008	Water	C	Gross αβ
B1T519	2/13/2008	Water	C	Tc-99, Gross αβ
B1P8L2	8/15/2007	Water	C	Tritium, Gross αβ
B1P8L7	8/15/2007	Water	C	Tritium
B1P8N6	8/15/2007	Water	C	Tritium, Gross αβ
B1P8P1	8/15/2007	Water	C	Tritium, Gross αβ
B1P8R1	8/15/2007	Water	C	Tritium
B1P8T5	8/15/2007	Water	C	Tritium
B1P9J9	8/15/2007	Water	C	Tritium
B1P9K4	8/15/2007	Water	C	Tritium, Gross αβ
B1P666	8/23/2007	Water	C	Tritium
B1P697	8/23/2007	Water	C	Tritium
B1P6B2	8/23/2007	Water	C	Tritium
B1P6B7	8/23/2007	Water	C	Tritium
B1P6C9	8/23/2007	Water	C	Tritium
B1P6F4	8/23/2007	Water	C	Tritium
B1P6F9	8/23/2007	Water	C	Tritium
B1P6H9	8/23/2007	Water	C	Tritium
B1P8P6	8/23/2007	Water	C	Tritium, Gross αβ
B1P9F4	8/23/2007	Water	C	Tritium, Gross αβ
B1P9F9	8/23/2007	Water	C	Tritium, Gross αβ
B1P9H4	8/23/2007	Water	C	Tritium
B1P9H9	8/23/2007	Water	C	Tritium
B1P9J4	8/23/2007	Water	C	Tritium, Gross αβ
B1W1B1	7/16/2008	Water	C	See note 1
B1W1B2	7/16/2008	Water	C	See note 1

1 – Am-241, Isotopic-Pu, Isotopic-U, Sr-89/90, Tc-99

Data validation was conducted in accordance with the CHPRC validation statement of work and the Remedial Investigation/Feasibility Study Work Plan for the 200-BP-5 Groundwater Operable Unit, DOE/RL-2007-18, Rev. 1 (SAP). Appendices 1 through 6 provide the following information as indicated below:

Appendix 1. Glossary of Data Reporting Qualifiers
Appendix 2. Summary of Data Qualification
Appendix 3. Annotated Laboratory Reports
Appendix 4. Laboratory Narrative and Chain-of-Custody Documentation
Appendix 5. Data Validation Supporting Documentation
Appendix 6. Additional Documentation Requested By Client

DATA QUALITY OBJECTIVES

- **Holding Times and Sample Preservation**

Holding times are calculated from Chain-of-Custody forms to determine the validity of the results. The maximum holding time for radiochemical analysis is 180 days. Sample preservation for water samples for all analyses except tritium, C-14 and I-129 requires acid preservation with nitric acid to pH <2.

The samples were analyzed within the prescribed holding times with the following exceptions.

For SDG W05335I, tritium analysis was performed outside the holding time, but within 2X the holding time. Tritium results for samples B1RDM2, B1RDN3 and B1RDK9 were non-detects and should be qualified as estimates and flagged "UJ."

- **Blanks**

The blank data results are reviewed to assess the extent of contamination introduced through sampling, sample preparation, and analysis.

Laboratory Blanks

All laboratory blank results were acceptable with the following exceptions.

For SDG WSCF20081478, the U-233/234, U-235 and U-238 laboratory blank results were > the minimum detectable concentrations (MDCs). The U-235 result for sample B1W1B1 was a detect <5X the blank result and should be qualified as an estimate and flagged "J." The U-235 result for sample B1W1B2 was a non-detect and should not be qualified. The U-233/234 and U-238 results for samples B1W1B1 and B1W1B2 were detects >5X the blank results and should not be qualified.

Trip Blanks

All trip blank results were acceptable.

Field Blanks

No field blanks were submitted for analysis.

Equipment Blanks

No equipment blanks were submitted for analysis.

- **Accuracy**

Accuracy is evaluated by reviewing matrix spike sample results, laboratory control sample results, and chemical recovery factors. Chemical recovery factors are determined through use of a carrier or tracer and provide assessment of the chemical separation process that is affected by the laboratory procedure, sample matrix, and/or interference. Chemical recovery factors are used to correct sample concentration, uncertainty, and MDC results. According to the SAP, the laboratory control sample accuracy limits are 70% to 130%. The matrix spike sample accuracy limits are ones specified by the DV procedure. The limits for reported analytes not listed in the SAP are specified by the DV procedure.

Matrix Spike (MS) Samples

All MS recoveries were acceptable with the following exceptions.

For SDG W05177, MS analysis was not performed for tritium. The tritium results for associated samples should be qualified as estimates and flagged "UJ" for non-detects and "J" for detects. See the table in Appendix 2 for a listing of all affected sample results.

For SDG W05246, MS analysis was not performed for C-14. The C-14 results for samples B1PTW7, B1PTP4 and B1PTX1 were detects and should be qualified as estimates and flagged "J."

For SDG W05309, MS analysis was not performed for C-14. The C-14 result for sample B1RBH7 was a non-detect and should be qualified as an estimate and flagged "UJ." The C-14 results for samples B1RRC3 and B1RRC4 were detects and should be qualified as estimates and flagged "J."

For SDG W05335I, MS analysis was not performed for tritium. The tritium results for samples B1RDM2, B1RDN3 and B1RDK9 were non-detects and should be qualified as estimates and flagged "UJ."

Laboratory Control Samples (LCSs)

All LCS recoveries were acceptable with the following exception.

For SDG W05309, LCS analysis was not performed for Se-79. The Se-79 result for sample B1RBH7 was a non-detect and should be qualified as an estimate and flagged "UJ."

Carrier/Tracer Recovery Factors

All carrier/tracer recovery factors were acceptable.

- **Precision**

Precision is evaluated by reviewing laboratory duplicate, field duplicate, and field split sample results. These QC results provide information on the laboratory reproducibility and whether sampling activities are adequate to acquire consistent sample results. According to the SAP, the

relative percent difference (RPD) limits are ±30%. The RPD limits for reported analytes not listed in the SAP are specified by the DV procedure. When duplicate RPDs exceed the limits and have associated results <5X the SAP required detection limits (or <5X the laboratory required detection limits for analytes not listed in the SAP) with differences <1X the required detection limits no precision infraction occurred. When no required detection limits are provided and the sample and duplicate results are statistically equal (Duplicate Error Ratio <3) no precision infraction occurred.

Laboratory Duplicate Samples

All laboratory duplicate results were acceptable.

Field Duplicate Samples

All field duplicate results were acceptable.

Field Split Samples

No field splits were submitted for analysis.

- **Detection Limits**

Reported MDCs are compared against the contractually required detection limits (CRDLs) to ensure that laboratory detection limits meet the required criteria.

All reported sample MDCs with associated non-detected sample results were below the CRDLs with the following exceptions.

The tritium MDCs for samples B1N4V1 and B1P6H9 were > the CRDL.

It should be noted that gross alpha, gross beta, Ni-63 and Se-79 CRDLs were not provided in the SAP.

- **Completeness**

SDGs W05177, W05246, W05309, W05335/W05335I, WSCF20071460, WSCF20071517 and WSCF20081478 were submitted for validation and verified for completeness. Completeness is based on the percentage of data determined to be valid (i.e., not rejected). The completion percentage was 100%.

MAJOR DEFICIENCIES

None found.

MINOR DEFICIENCIES

Multiple minor deficiencies leading to qualification of sample results as estimates occurred. See the table in Appendix 2 for a listing of all affected sample results.

For SDG W05246, COC S08-010-130 lists a collection date of 10-08-06 for sample B1PVX3. The actual collection date was 10-08-07.

For SDG W05309, no I-129 result was reported for sample B1RBN0. The original batch failed LCS criteria, and there was insufficient sample for reanalysis.

For SDG W05335, COCs W08-002-310, W08-002-298 and W08-002-304 list sample collection dates of 1-10-08 for samples B1T5R7, B1T5P9 and B1T5R3, respectively. The actual collection dates are 2-10-08.

REFERENCES

HNF-20434, Rev. 0, *Data Validation Procedure for Radiochemical Analyses*, June 2004.

DOE/RL-2007-18, Rev. 1, *Remedial Investigation/Feasibility Study Work Plan for the 200-BP-5 Groundwater Operable Unit*, December 2008.

Appendix 1

Glossary of Data Reporting Qualifiers

Qualifiers that may be applied by data validators in compliance with the CHPRC statement of work are as follows:

- **U** — The constituent was analyzed for and was not detected. The data should be considered usable for decision-making purposes.

- **UJ** — The constituent was analyzed for and was not detected. Due to a quality control deficiency identified during data validation the value reported may not accurately reflect the MDC. The data should be considered usable for decision-making purposes.

- **J** — Indicates the constituent was analyzed for and detected. The associated value is estimated due to a quality control deficiency identified during data validation. The data should be considered usable for decision-making purposes.

- **UR** — Indicates the constituent was analyzed for and not detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

- **R** — Indicates the constituent was analyzed for and detected; however, due to an identified quality control deficiency the data should be considered unusable for decision-making purposes.

Appendix 2

Summary of Data Qualification

Radiochemical Data Qualification Summary			
SDGs: W05177, W05246, W05309, W05335, W05335I, WSCF20071460, WSCF20071517, WSCF20081478	Reviewer: AQA	Project: BP-5	Page 1 of 1
Analyte(s)	**Qualifier**	**Samples Affected**	**Reason**
Tritium	UJ	B1N4V1	Lack of MS data
Tritium	J	B1N5V1, B1N5V6, B1N5T8, B1N5W1, B1N4V0, B1MDR1, B1N593, B1N5B3, B1N598, B1N5F3, B1N5D5	Lack of MS data
C-14	UJ	B1RBH7	Lack of MS data
C-14	J	B1PTW7, B1PTP4, B1PTX1, B1RRC3, B1RRC4	Lack of MS data
Se-79	UJ	B1RBH7	Lack of LCS data
Tritium	UJ	B1RDM2, B1RDN3, B1RDK9	Analysis beyond the holding time but within 2X the holding time & lack of MS data
U-235	J	B1W1B1	Laboratory blank contamination

Comments: None

Appendix 3

Annotated Laboratory Reports

10/8/2007 1:54:22 PM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW50C10	B1N4V1		MW6-SBB-A1	W07-005	W05177					05/14/2007 08:00

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	UJ	10028-17-8	4.33E+01	pCi/L	1.2E+02	1.3E+02	U	2.94E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 14:00	I
7152452	Uranium		7440-61-1	-7.16E-03	ug/L	7.9E-04	7.9E-04	U	8.03E-02		UTOT_KPA	2.61E-02	ML	07/11/2007 14:27	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW50C20	B1N4V1		MW6-SBB-A1	W07-005	W05177					05/14/2007 08:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	-9.36E-01	pCi/L	4.0E+00	5.4E+00	U	9.79E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW50V10	B1N3Y6		MW6-SBB-A1	S07-005	W05177					05/14/2007 12:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152451	I-129L	15046-84-1	2.82E+00	pCi/L	4.8E-01	4.8E-01		2.90E-01	94.3	I129LL_SEP_LEPS	3.9318E+00	L	07/12/2007 12:56	I
7152452	Uranium	7440-61-1	1.13E+01	ug/L	1.3E+00	1.3E+00		7.82E-02		UTOT_KPA	2.68E-02	ML	07/11/2007 14:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW50V20	B1N3Y6		MW6-SBB-A1	S07-005	W05177					05/14/2007 12:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	-6.12E+00	pCi/L	2.4E+01	2.4E+01	U	4.29E+01		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	CO-60	10198-40-0	2.03E+00	pCi/L	2.4E+00	2.4E+00	U	4.94E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	CS-134	13967-70-9	7.81E-01	pCi/L	1.6E+00	1.6E+00	U	3.24E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	CS-137	10045-97-3	2.99E-01	pCi/L	1.5E+00	1.5E+00	U	2.93E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	EU-152	14683-23-9	-9.39E-01	pCi/L	4.3E+00	4.3E+00	U	7.50E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	EU-154	15585-10-1	-1.04E+00	pCi/L	4.5E+00	4.5E+00	U	8.52E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	EU-155	14391-16-3	1.35E+00	pCi/L	3.1E+00	3.1E+00	U	5.90E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	K-40	13966-00-2	-2.50E+01	pCi/L	3.3E+01	3.3E+01	U	6.99E+01		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	RU-106	13967-48-1	6.02E+00	pCi/L	1.4E+01	1.4E+01	U	2.80E+01		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7183190	SB-125	14234-35-6	9.46E-01	pCi/L	3.4E+00	3.4E+00	U	6.60E+00		GAMMALL_GS	1.9656E+00	L	07/06/2007 12:54	I
7184182	TC-99	14133-76-7	1.13E+03	pCi/L	1.8E+01	7.3E+01		9.81E+00	100.0	TC99_ETVDSK_LS	1.25E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

1

Note: Gamma spectrometry results not validated per VSR instructions.

REVISED RL Myers 3/26/08

10

L5

8-09-2010

10/8/2007 1:54:22 PM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

9JW51710 B1MDR1 MW6-SBB-A1 S07-003 W05177 05/14/2007 10:00

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	1.06E+06	pCi/L	3.3E+03	4.0E+04		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 15:22	I
7152448	BETA		12587-47-2	1.87E+01	pCi/L	2.4E+00	4.2E+00		2.93E+00	100.0	9310_ALPHABETA	1.962E-01	L	07/02/2007 18:06	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW51720	B1MDR1		MW6-SBB-A1	S07-003	W05177					05/14/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152447	ALPHA	12587-46-1	2.41E+00	pCi/L	1.5E+00	1.6E+00		1.55E+00	100.0	9310_ALPHABETA	1.856E-01	L	07/03/2007 18:54	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW55110	B1N593		MW6-SBB-A1	W07-005	W05177					05/15/2007 08:27

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	1.36E+06	pCi/L	3.7E+03	5.0E+04		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 16:45	I
7152447	ALPHA		12587-46-1	1.90E+00	pCi/L	1.6E+00	1.7E+00	U	2.47E+00	100.0	9310_ALPHABETA	8.43E-02	L	07/03/2007 07:45	I
7152448	BETA		12587-47-2	1.26E+03	pCi/L	1.9E+01	1.6E+02		5.08E+00	100.0	9310_ALPHABETA	7.78E-02	L	07/02/2007 18:51	I
7152451	I-129L		15046-84-1	3.51E+01	pCi/L	3.8E+00	3.8E+00		4.94E-01	99.5	I129LL_SEP_LEPS	3.9543E+00	L	07/12/2007 12:59	I
7152465	NI-63		13981-37-8	3.63E+02	pCi/L	5.5E+00	2.6E+01		3.47E+00	98.6	NI63_LSC	4.001E-01	L	06/26/2007 20:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW55120	B1N593		MW6-SBB-A1	W07-005	W05177					05/15/2007 08:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	-2.12E+01	pCi/L	3.3E+01	3.3E+01	U	5.40E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	CO-60	10198-40-0	3.27E+00	pCi/L	3.0E+00	3.0E+00	U	6.25E+00		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	CS-134	13967-70-9	-9.58E-02	pCi/L	2.8E+00	2.8E+00	U	4.99E+00		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	CS-137	10045-97-3	-2.23E-01	pCi/L	2.1E+00	2.1E+00	U	3.69E+00		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	EU-152	14683-23-9	4.50E-01	pCi/L	6.1E+00	6.1E+00	U	1.06E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	EU-154	15585-10-1	-1.20E+00	pCi/L	8.3E+00	8.3E+00	U	1.48E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	EU-155	14391-16-3	4.83E+00	pCi/L	6.7E+00	6.7E+00	U	1.20E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	K-40	13966-00-2	-5.65E+01	pCi/L	6.8E+01	6.8E+01	U	1.49E+02		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	RU-106	13967-48-1	-5.14E+00	pCi/L	2.2E+01	2.2E+01	U	3.87E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7183190	SB-125	14234-35-6	2.00E+00	pCi/L	5.6E+00	5.6E+00	U	1.03E+01		GAMMALL_GS	1.9358E+00	L	07/06/2007 12:55	I
7184182	TC-99	14133-76-7	6.28E+03	pCi/L	4.2E+01	3.8E+02		9.71E+00	100.0	TC99_ETVDSK_LS	1.259E-01	L	07/04/2007 15:45	I

REVISED RL Ayres 3/26/08

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

11

LS

8-09-2010

Note: Gamma spectrometry results not validated per VSR instructions.

7/25/2007 10:24:51 AM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	5.43E+03	pCi/L	2.6E+02	3.5E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/25/2007 00:56	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW58620	B1N598		MW6-SBB-A1	W07-005	W05177					05/15/2007 10:10

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99		14133-76-7	1.11E+02	pCi/L	6.9E+00	1.2E+01		9.79E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW58N10	B1N5B3		MW6-SBB-A1	W07-005	W05177					05/15/2007 09:19

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	9.58E+04	pCi/L	1.0E+03	3.7E+03		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 22:13	I
7152451	I-129L		15046-84-1	3.65E+00	pCi/L	5.8E-01	5.8E-01		2.89E-01	91.9	I129LL_SEP_LEPS	3.959E+00	L	07/12/2007 13:00	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW58N20	B1N5B3		MW6-SBB-A1	W07-005	W05177					05/15/2007 09:19

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99		14133-76-7	1.80E+03	pCi/L	2.3E+01	1.1E+02		9.76E+00	100.0	TC99_ETVDSK_LS	1.256E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW59510	B1N5D5		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:51

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	1.17E+03	pCi/L	1.6E+02	1.8E+02		2.90E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/25/2007 03:40	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW59520	B1N5D5		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:51

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99		14133-76-7	2.31E+02	pCi/L	9.1E+00	1.9E+01		9.80E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW59C10	B1N5F3		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:02

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	6.43E+03	pCi/L	2.8E+02	3.9E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/25/2007 02:18	I
7152451	I-129L		15046-84-1	-1.38E-01	pCi/L	1.2E-01	1.2E-01	U	1.94E-01	93.8	I129LL_SEP_LEPS	3.8935E+00	L	07/12/2007 14:41	I

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

LS
8-09-2010

10/8/2007 1:54:22 PM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	6.43E+03	pCi/L	2.8E+02	3.9E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/25/2007 02:18	I
7152451	I-129L		15046-84-1	-1.38E-01	pCi/L	1.2E-01	1.2E-01	U	1.94E-01	93.8	I129LL_SEP_LEPS	3.8935E+00	L	07/12/2007 14:41	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW59C20	B1N5F3		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:02

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99		14133-76-7	1.64E+03	pCi/L	2.2E+01	1.0E+02		9.79E+00	100.0	TC99_ETVDSK_LS	1.249E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5X010	B1N5T8		MW6-SBB-A1	W07-005	W05177					05/14/2007 10:27

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	4.64E+03	pCi/L	2.5E+02	3.2E+02		2.92E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 09:55	I
7152452	Uranium		7440-61-1	3.72E+02	ug/L	4.4E+01	4.4E+01		8.22E-02		UTOT_KPA	2.55E-02	ML	07/11/2007 14:13	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5X020	B1N5T8		MW6-SBB-A1	W07-005	W05177					05/14/2007 10:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	5.49E-02	pCi/L	3.1E+01	3.1E+01	U	5.68E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	CO-60	10198-40-0	2.09E+00	pCi/L	2.8E+00	2.8E+00	U	6.13E+00		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	CS-134	13967-70-9	-2.15E+00	pCi/L	2.6E+00	2.6E+00	U	4.10E+00		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	CS-137	10045-97-3	-2.31E+00	pCi/L	2.3E+00	2.3E+00	U	3.57E+00		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	EU-152	14683-23-9	-2.12E+00	pCi/L	6.4E+00	6.4E+00	U	1.09E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	EU-154	15585-10-1	-8.68E-01	pCi/L	5.9E+00	5.9E+00	U	1.16E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	EU-155	14391-16-3	-3.65E+00	pCi/L	5.0E+00	5.0E+00	U	8.08E+00		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	K-40	13966-00-2	3.04E+01	pCi/L	4.9E+01	4.9E+01	U	1.12E+02		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	RU-106	13967-48-1	9.86E+00	pCi/L	2.2E+01	2.2E+01	U	4.21E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7183190	SB-125	14234-35-6	1.53E+00	pCi/L	5.7E+00	5.7E+00	U	1.08E+01		GAMMALL_GS	1.9887E+00	L	07/06/2007 12:47	I
7184182	TC-99	14133-76-7	5.85E+03	pCi/L	4.1E+01	3.5E+02		9.74E+00	100.0	TC99_ETVDSK_LS	1.261E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5X610	B1N5W1		MW6-SBB-A1	W07-005	W05177					05/14/2007 11:20

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	1.08E+04	pCi/L	3.5E+02	5.6E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 11:16	I

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

REVISED R. Nunes 3/26/08

13

LS

8-09-2010

Note: Gamma spectrometry results not validated per VSR instructions.

10/8/2007 1:54:22 PM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

7152452	Uranium	7440-61-1	2.31E+02	ug/L	2.7E+01	2.7E+01		8.06E-02		UTOT_KPA	2.60E-02	ML	07/11/2007 14:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5X620	B1N5W1		MW6-SBB-A1	W07-005	W05177					05/14/2007 11:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	2.58E+01	pCi/L	3.2E+01	3.2E+01	U	6.43E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	CO-60	10198-40-0	3.26E+01	pCi/L	7.8E+00	7.8E+00		2.58E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	CS-134	13967-70-9	-1.68E+00	pCi/L	3.0E+00	3.0E+00	U	5.08E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	CS-137	10045-97-3	3.87E-01	pCi/L	2.3E+00	2.3E+00	U	4.25E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	EU-152	14683-23-9	-1.76E+00	pCi/L	5.4E+00	5.4E+00	U	9.23E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	EU-154	15585-10-1	-6.93E-01	pCi/L	6.3E+00	6.3E+00	U	1.22E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	EU-155	14391-16-3	3.02E+00	pCi/L	4.5E+00	4.5E+00	U	8.30E+00		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	K-40	13966-00-2	-2.63E+01	pCi/L	3.0E+01	3.0E+01	U	6.09E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	RU-106	13967-48-1	8.88E+00	pCi/L	2.3E+01	2.3E+01	U	4.31E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7183190	SB-125	14234-35-6	-1.83E+00	pCi/L	6.2E+00	6.2E+00	U	1.09E+01		GAMMALL_GS	1.9749E+00	L	07/06/2007 12:52	I
7184182	TC-99	14133-76-7	1.08E+04	pCi/L	5.6E+01	6.5E+02		9.80E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5X710	B1N4V0		MW6-SBB-A1	W07-005	W05177					05/14/2007 09:36

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	7.31E+02	pCi/L	1.5E+02	1.6E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 12:38	I
7152452	Uranium		7440-61-1	3.80E+00	ug/L	3.9E-01	3.9E-01		8.12E-02		UTOT_KPA	2.58E-02	ML	07/11/2007 14:25	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5X720	B1N4V0		MW6-SBB-A1	W07-005	W05177					05/14/2007 09:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	7.27E+02	pCi/L	1.5E+01	4.9E+01		9.81E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5XJ10	B1N5V1		MW6-SBB-A1	W07-005	W05177					05/14/2007 12:13

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	5.02E+03	pCi/L	2.6E+02	3.4E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 07:11	I
7152452	Uranium		7440-61-1	4.83E+01	ug/L	5.7E+00	5.7E+00		8.45E-02		UTOT_KPA	2.48E-02	ML	07/11/2007 14:02	I

REVISED Myles 2/26/08

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

LS

8-09-2010

Note: Gamma spectrometry results not validated per VSR instructions.

10/8/2007 1:54:22 PM

TAL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 36067 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5XJ20	B1N5V1		MW6-SBB-A1	W07-005	W05177					05/14/2007 12:13

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7183190	BE-7	13966-02-4	2.33E+00	pCi/L	3.7E+01	3.7E+01	U	6.83E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	CO-60	10198-40-0	4.14E+00	pCi/L	3.3E+00	3.3E+00	U	7.42E+00		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	CS-134	13967-70-9	5.48E-01	pCi/L	2.6E+00	2.6E+00	U	5.20E+00		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	CS-137	10045-97-3	1.43E+00	pCi/L	2.5E+00	2.5E+00	U	5.02E+00		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	EU-152	14683-23-9	-1.31E+00	pCi/L	6.5E+00	6.5E+00	U	1.14E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	EU-154	15585-10-1	-5.97E+00	pCi/L	8.3E+00	8.3E+00	U	1.38E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	EU-155	14391-16-3	-1.13E+00	pCi/L	5.2E+00	5.2E+00	U	9.39E+00		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	K-40	13966-00-2	-4.46E+01	pCi/L	5.9E+01	5.9E+01	U	1.30E+02		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	RU-106	13967-48-1	1.23E+01	pCi/L	2.4E+01	2.4E+01	U	4.74E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7183190	SB-125	14234-35-6	-2.61E+00	pCi/L	5.9E+00	5.9E+00	U	1.03E+01		GAMMALL_GS	1.8374E+00	L	07/06/2007 12:48	I
7184182	TC-99	14133-76-7	3.14E+03	pCi/L	3.0E+01	1.9E+02		9.86E+00	100.0	TC99_ETVDSK_LS	1.244E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW5XV10	B1N5V6		MW6-SBB-A1	W07-005	W05177					05/14/2007 12:57

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152466	H-3	J	10028-17-8	1.22E+04	pCi/L	3.7E+02	6.1E+02		2.92E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/24/2007 08:33	I
7152461	TC-99		14133-76-7	6.66E+02	pCi/L	1.5E+01	4.5E+01		1.03E+01	100.0	TC99_SEP_LSC	1.246E-01	L	06/27/2007 10:47	I
7152452	Uranium		7440-61-1	6.25E+00	ug/L	7.4E-01	7.4E-01		8.22E-02		UTOT_KPA	2.55E-02	ML	07/11/2007 14:06	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW6C020	B1N5K9		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	1.24E+03	pCi/L	1.9E+01	7.9E+01		9.77E+00	100.0	TC99_ETVDSK_LS	1.256E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JW6C420	B1N5M4		MW6-SBB-A1	W07-005	W05177					05/15/2007 11:53

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	1.50E+03	pCi/L	2.1E+01	9.5E+01		9.80E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:

REVISED RI Values 2/28/08

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

8-09-2010

Note: Gamma spectrometry results not validated per VSR instructions.

7/25/2007 10:24:51 AM

TAL Richland Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 36067 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	3.64E+02	pCi/L	1.1E+01	2.7E+01		9.78E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JX1CV10	B1N2L4		MW6-SBB-A1	I07-042	W05177					05/30/2007 11:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152448	BETA	12587-47-2	1.03E+03	pCi/L	1.5E+01	1.3E+02		2.69E+00	100.0	9310_ALPHABETA	1.984E-01	L	07/02/2007 18:06	I
7152449	SR-90	10098-97-2	5.18E+02	pCi/L	4.2E+00	7.4E+01		4.54E-01	81.3	SRISO_SEP_PRE	1.0048E+00	L	07/07/2007 10:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JXH6020	B1N5K4		MW6-SBB-A1	W07-005	W05177					05/21/2007 10:28

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7184182	TC-99	14133-76-7	4.26E+01	pCi/L	5.3E+00	7.9E+00		9.76E+00	100.0	TC99_ETVDSK_LS	1.26E-01	L	07/04/2007 15:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JXWPF10	B1MN47		MW6-SBB-A1	I07-038	W05177					05/24/2007 08:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7152451	I-129L	15046-84-1	7.52E-02	pCi/L	1.8E-01	1.8E-01	U	2.71E-01	96.5	I129LL_SEP_LEPS	3.8929E+00	L	07/12/2007 14:45	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

12/10/2007 11:26:41 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37692 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8H4210	B1PVX1		MW6-SBB-A1	S08-010	W05246					10/08/2007 12:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289528	SR-90	10098-97-2	1.11E-02	pCi/L	2.3E-01	2.3E-01	U	5.17E-01	82.5	SRISO_SEP_PRE	1.0009E+00	L	11/25/2007 06:56	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8H5210	B1PTW7		MW6-SBB-A1	I08-002	W05246					10/08/2007 12:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	1.06E+01	pCi/L	2.5E+00	2.9E+00		4.00E+00	100.0	9310_ALPHABETA	1.506E-01	L	11/21/2007 13:16	I
7289524	C-14 J	14762-75-5	8.07E+01	pCi/L	5.6E+00	1.5E+01		8.29E+00	100.0	C14_LSC	2.00E-01	L	11/09/2007 02:58	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8H5230	B1PTW7		MW6-SBB-A1	I08-002	W05246					10/08/2007 12:57

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	5.20E+00	pCi/L	1.7E+00	2.1E+00		1.56E+00	100.0	9310_ALPHABETA	1.436E-01	L	12/04/2007 19:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8H5610	B1PTP4		MW6-SBB-A1	I08-002	W05246					10/08/2007 10:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	1.26E+01	pCi/L	2.1E+00	2.9E+00		2.80E+00	100.0	9310_ALPHABETA	1.996E-01	L	11/21/2007 13:16	I
7289524	C-14 J	14762-75-5	5.30E+02	pCi/L	1.2E+01	6.3E+01		8.29E+00	100.0	C14_LSC	2.00E-01	L	11/09/2007 04:23	I
7289528	SR-90	10098-97-2	-8.64E-02	pCi/L	2.0E-01	2.1E-01	U	4.82E-01	76.3	SRISO_SEP_PRE	1.0004E+00	L	11/25/2007 06:56	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8H5640	B1PTP4		MW6-SBB-A1	I08-002	W05246					10/08/2007 10:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	1.44E+00	pCi/L	1.1E+00	1.2E+00		1.30E+00	100.0	9310_ALPHABETA	1.873E-01	L	12/04/2007 20:49	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8H5D10	B1PVX3		MW6-SBB-A1	S08-010	W05246					10/08/2007 11:40

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289528	SR-90	10098-97-2	-7.42E-02	pCi/L	1.9E-01	2.1E-01	U	4.79E-01	82.4	SRISO_SEP_PRE	1.00E+00	L	11/25/2007 06:56	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

LS
8-09-2010

12/10/2007 11:26:41 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37692 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

9J8H6M10 B1PTX1 MW6-SBB-A1 I08-002 W05246 10/08/2007 11:40

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA		12587-47-2	4.14E+00	pCi/L	1.6E+00	1.7E+00		2.89E+00	100.0	9310_ALPHABETA	1.979E-01	L	11/21/2007 13:16	I
7289524	C-14	J	14762-75-5	3.04E+02	pCi/L	9.3E+00	3.9E+01		8.29E+00	100.0	C14_LSC	2.00E-01	L	11/09/2007 05:05	I

Lab Sample Id: 9J8H6M30 | Client Id: B1PTX1 | Test User | Contract Nbr: MW6-SBB-A1 | SAF Nbr | Sdg Nbr: I08-002 | QC Type: W05246 | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 10/08/2007 11:40

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	1.47E+00	pCi/L	1.0E+00	1.1E+00		1.36E+00	100.0	9310_ALPHABETA	1.982E-01	L	12/04/2007 20:49	I

Lab Sample Id: 9J8L6010 | Client Id: B1PPN8 | Test User | Contract Nbr: MW6-SBB-A1 | SAF Nbr | Sdg Nbr: G08-010 | QC Type: W05246 | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 10/09/2007 11:02

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	1.26E+01	pCi/L	2.9E+00	3.3E+00		4.53E+00	100.0	9310_ALPHABETA	1.277E-01	L	11/21/2007 13:16	I

Lab Sample Id: 9J8L6510 | Client Id: B1PPP0 | Test User | Contract Nbr: MW6-SBB-A1 | SAF Nbr | Sdg Nbr: G08-010 | QC Type: W05246 | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 10/09/2007 11:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	1.96E+03	pCi/L	2.0E+01	2.5E+02		2.86E+00	100.0	9310_ALPHABETA	2.002E-01	L	11/21/2007 13:16	I

Lab Sample Id: 9J8L9610 | Client Id: B1PVK4 | Test User | Contract Nbr: MW6-SBB-A1 | SAF Nbr | Sdg Nbr: S08-010 | QC Type: W05246 | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 10/09/2007 11:13

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	1.11E+01	pCi/L	2.8E+00	3.1E+00		4.38E+00	100.0	9310_ALPHABETA	1.28E-01	L	11/21/2007 13:16	I

Lab Sample Id: 9J8L9630 | Client Id: B1PVK4 | Test User | Contract Nbr: MW6-SBB-A1 | SAF Nbr | Sdg Nbr: S08-010 | QC Type: W05246 | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 10/09/2007 11:13

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	6.22E+00	pCi/L	2.3E+00	2.7E+00		2.26E+00	100.0	9310_ALPHABETA	1.111E-01	L	12/04/2007 19:15	I

Lab Sample Id: 9J8L9910 | Client Id: B1PVL2 | Test User | Contract Nbr: MW6-SBB-A1 | SAF Nbr | Sdg Nbr: S08-010 | QC Type: W05246 | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 10/09/2007 12:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	1.26E+01	pCi/L	2.5E+00	3.0E+00		3.74E+00	100.0	9310_ALPHABETA	1.532E-01	L	11/21/2007 13:16	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

LS
8-09-2010

12/10/2007 11:26:41 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37692 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8L9930	B1PVL2		MW6-SBB-A1	S08-010	W05246					10/09/2007 12:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	1.20E+01	pCi/L	2.8E+00	4.0E+00		1.61E+00	100.0	9310_ALPHABETA	1.419E-01	L	12/04/2007 19:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8L9W10	B1PVK0		MW6-SBB-A1	S08-010	W05246					10/09/2007 09:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	9.49E+00	pCi/L	2.4E+00	2.9E+00		3.83E+00	100.0	9310_ALPHABETA	1.532E-01	L	11/21/2007 13:16	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8L9W30	B1PVK0		MW6-SBB-A1	S08-010	W05246					10/09/2007 09:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	5.97E+00	pCi/L	2.1E+00	2.5E+00		1.50E+00	100.0	9310_ALPHABETA	1.142E-01	L	12/04/2007 19:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8MAA10	B1PVC9		MW6-SBB-A1	S08-010	W05246					10/09/2007 08:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	7.58E+00	pCi/L	1.8E+00	2.0E+00		2.81E+00	100.0	9310_ALPHABETA	1.987E-01	L	11/21/2007 13:16	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8MAA30	B1PVC9		MW6-SBB-A1	S08-010	W05246					10/09/2007 08:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	5.13E-01	pCi/L	4.6E-01	4.7E-01	U	6.30E-01	100.0	9310_ALPHABETA	1.981E-01	L	12/04/2007 19:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8MAD10	B1PVH5		MW6-SBB-A1	S08-010	W05246					10/09/2007 10:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	2.38E+01	pCi/L	3.2E+00	4.5E+00		3.85E+00	100.0	9310_ALPHABETA	1.435E-01	L	11/21/2007 13:16	I
7289528	SR-90	10098-97-2	8.25E+00	pCi/L	6.0E-01	1.3E+00		4.13E-01	83.3	SRISO_SEP_PRE	1.0024E+00	L	11/25/2007 06:57	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8MAD30	B1PVH5		MW6-SBB-A1	S08-010	W05246					10/09/2007 10:10

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

12/10/2007 11:26:41 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37692 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	5.43E+00	pCi/L	1.9E+00	2.3E+00		1.77E+00	100.0	9310_ALPHABETA	1.236E-01	L	12/05/2007 07:34	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8MAF10	B1PVW2		MW6-SBB-A1	S08-010	W05246					10/09/2007 09:05

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	4.12E+00	pCi/L	1.5E+00	1.7E+00		2.79E+00	100.0	9310_ALPHABETA	1.991E-01	L	11/21/2007 13:16	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8MAF30	B1PVW2		MW6-SBB-A1	S08-010	W05246					10/09/2007 09:05

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	4.67E-01	pCi/L	7.0E-01	7.1E-01	U	1.38E+00	100.0	9310_ALPHABETA	2.001E-01	L	12/04/2007 20:49	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8NL910	B1PPK8		MW6-SBB-A1	A08-010	W05246					10/10/2007 12:34

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289530	I-129L	15046-84-1	1.86E-01	pCi/L	1.5E-01	1.5E-01	U	3.00E-01	98.4	I129LL_SEP_LEPS	3.9125E+00	L	11/21/2007 15:40	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8NM010	B1PPJ8		MW6-SBB-A1	A08-010	W05246					10/10/2007 09:28

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289530	I-129L	15046-84-1	2.00E+00	pCi/L	3.9E-01	3.9E-01		2.97E-01	100.8	I129LL_SEP_LEPS	3.9138E+00	L	11/21/2007 17:26	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8NMF10	B1PPK2		MW6-SBB-A1	A08-010	W05246					10/10/2007 11:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289530	I-129L	15046-84-1	6.89E-01	pCi/L	2.7E-01	2.7E-01	U	4.33E-01	98.9	I129LL_SEP_LEPS	3.8705E+00	L	11/21/2007 15:40	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8NMN10	B1PPJ6		MW6-SBB-A1	A08-010	W05246					10/10/2007 11:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289530	I-129L	15046-84-1	1.05E+00	pCi/L	2.9E-01	2.9E-01	U	5.24E-01	98.4	I129LL_SEP_LEPS	3.8967E+00	L	11/21/2007 15:42	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

12/10/2007 11:26:41 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 37692 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8T3210	B1PWL6		MW6-SBB-A1	W08-010	W05246					10/11/2007 10:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	7.57E+00	pCi/L	1.8E+00	2.0E+00		2.75E+00	100.0	9310_ALPHABETA	1.997E-01	L	11/21/2007 14:30	I
7289530	I-129L	15046-84-1	2.86E+00	pCi/L	5.8E-01	5.8E-01		2.94E-01	98.6	I129LL_SEP_LEPS	3.9159E+00	L	11/21/2007 19:21	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8T3230	B1PWL6		MW6-SBB-A1	W08-010	W05246					10/11/2007 10:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	2.30E+00	pCi/L	9.9E-01	1.1E+00		1.05E+00	100.0	9310_ALPHABETA	2.019E-01	L	12/05/2007 09:33	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8T3G10	B1PPJ4		MW6-SBB-A1	A08-010	W05246					10/11/2007 11:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289530	I-129L	15046-84-1	7.01E-01	pCi/L	3.2E-01	3.2E-01	U	4.75E-01	95.1	I129LL_SEP_LEPS	3.9315E+00	L	11/21/2007 17:26	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8T3T10	B1PWK4		MW6-SBB-A1	W08-010	W05246					10/11/2007 11:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7289526	BETA	12587-47-2	9.77E+00	pCi/L	2.0E+00	2.4E+00		3.06E+00	100.0	9310_ALPHABETA	2.00E-01	L	11/21/2007 14:30	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9J8T3T30	B1PWK4		MW6-SBB-A1	W08-010	W05246					10/11/2007 11:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7333585	ALPHA	12587-46-1	1.55E+00	pCi/L	1.2E+00	1.2E+00		1.24E+00	100.0	9310_ALPHABETA	2.004E-01	L	12/04/2007 20:49	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/10/2008 11:29:04 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38518 File Name: h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE3EV10	B1RJR6		MW6-SBB-A1	W08-012	W05309					01/03/2008 12:19

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009376	ALPHA	12587-46-1	3.88E-01	pCi/L	8.4E-01	8.4E-01	U	1.86E+00	100.0	9310_ALPHABETA	9.81E-02	L	02/05/2008 18:20	I
8009378	BETA	12587-47-2	4.47E+00	pCi/L	1.7E+00	1.8E+00		3.06E+00	100.0	9310_ALPHABETA	1.922E-01	L	02/05/2008 14:59	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE3F520	B1RBN1		MW6-SBB-A1	I08-013	W05309					01/03/2008 10:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8051374	I-129L	15046-84-1	3.40E-01	pCi/L	1.5E-01	1.5E-01	U	3.30E-01	104.6	I129LL_SEP_LEPS	3.7446E+00	L	02/26/2008 12:28	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE3FL10	B1RHH7		MW6-SBB-A1	W08-012	W05309					01/03/2008 12:42

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009375	BE-7	13966-02-4	1.53E+01	pCi/L	1.4E+01	1.4E+01	U	2.70E+01		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I
8009375	CO-60	10198-40-0	8.83E-01	pCi/L	1.3E+00	1.3E+00	U	2.54E+00		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I
8009375	CS-134	13967-70-9	1.44E-01	pCi/L	1.3E+00	1.3E+00	U	2.31E+00		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I
8009375	CS-137	10045-97-3	7.44E-01	pCi/L	1.3E+00	1.3E+00	U	2.43E+00		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I
8009375	EU-152	14683-23-9	5.16E-01	pCi/L	3.4E+00	3.4E+00	U	5.98E+00		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I
8009375	EU-154	15585-10-1	1.04E+00	pCi/L	3.4E+00	3.4E+00	U	6.59E+00		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I
8009375	EU-155	14391-16-3	-1.61E+00	pCi/L	2.9E+00	2.9E+00	U	4.88E+00		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I
8009375	K-40	13966-00-2	-7.12E+00	pCi/L	2.1E+01	2.1E+01	U	4.06E+01		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I
8009375	RU-106	13967-48-1	-1.00E+00	pCi/L	1.2E+01	1.2E+01	U	2.10E+01		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I
8009375	SB-125	14234-35-6	-8.30E-01	pCi/L	3.0E+00	3.0E+00	U	5.23E+00		GAMMALL_GS	1.9998E+00	L	02/06/2008 14:35	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE3FM10	B1RHK0		MW6-SBB-A1	W08-012	W05309					01/03/2008 11:25

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009376	ALPHA	12587-46-1	1.28E+00	pCi/L	9.1E-01	9.4E-01	U	1.30E+00	100.0	9310_ALPHABETA	1.19E-01	L	02/05/2008 18:20	I
8009378	BETA	12587-47-2	3.34E+01	pCi/L	2.9E+00	5.1E+00		2.79E+00	100.0	9310_ALPHABETA	2.003E-01	L	02/05/2008 14:59	I
8009375	BE-7	13966-02-4	1.93E+00	pCi/L	1.1E+01	1.1E+01	U	2.05E+01		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	CO-60	10198-40-0	4.56E-01	pCi/L	1.2E+00	1.2E+00	U	2.29E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	CS-134	13967-70-9	4.92E-01	pCi/L	1.1E+00	1.1E+00	U	2.05E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

1

Note: Gamma spectrometry results not validated per VSR instructions.

3/10/2008 11:29:04 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38518 File Name: h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

8009375	CS-137	10045-97-3	1.56E+00	pCi/L	1.1E+00	1.1E+00	U	2.16E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008	14:36	I
8009375	EU-152	14683-23-9	1.93E+00	pCi/L	2.3E+00	2.3E+00	U	4.39E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008	14:36	I
8009375	EU-154	15585-10-1	-2.23E+00	pCi/L	3.1E+00	3.1E+00	U	5.16E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008	14:36	I
8009375	EU-155	14391-16-3	-1.05E-01	pCi/L	2.1E+00	2.1E+00	U	3.69E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008	14:36	I
8009375	K-40	13966-00-2	1.10E+01	pCi/L	2.5E+01	2.5E+01	U	1.89E+01		GAMMALL_GS	2.0001E+00	L	02/06/2008	14:36	I
8009375	RU-106	13967-48-1	7.73E-01	pCi/L	9.5E+00	9.5E+00	U	1.73E+01		GAMMALL_GS	2.0001E+00	L	02/06/2008	14:36	I
8009375	SB-125	14234-35-6	8.04E-01	pCi/L	2.5E+00	2.5E+00	U	4.59E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008	14:36	I
8009370	SR-90	10098-97-2	5.47E-02	pCi/L	2.1E-01	2.1E-01	U	4.63E-01	75.3	SRISO_SEP_PRE	1.0037E+00	L	02/01/2008	06:50	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE3G210	B1R9P0		MW6-SBB-A1	G08-012	W05309					01/03/2008 08:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009376	ALPHA	12587-46-1	2.25E-01	pCi/L	4.2E-01	4.2E-01	U	9.16E-01	100.0	9310_ALPHABETA	2.00E-01	L	02/05/2008 21:44	I
8009378	BETA	12587-47-2	1.04E+00	pCi/L	1.2E+00	1.2E+00	U	2.57E+00	100.0	9310_ALPHABETA	2.001E-01	L	02/05/2008 14:59	I
8009375	BE-7	13966-02-4	1.24E+00	pCi/L	2.0E+01	2.0E+01	U	3.42E+01		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	CO-60	10198-40-0	3.61E+00	pCi/L	2.0E+00	2.0E+00	U	4.10E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	CS-134	13967-70-9	-4.01E-01	pCi/L	1.8E+00	1.8E+00	U	3.09E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	CS-137	10045-97-3	5.54E-01	pCi/L	1.8E+00	1.8E+00	U	3.08E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	EU-152	14683-23-9	3.98E+00	pCi/L	4.6E+00	4.6E+00	U	8.09E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	EU-154	15585-10-1	-2.81E+00	pCi/L	5.0E+00	5.0E+00	U	8.46E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	EU-155	14391-16-3	-8.61E+00	pCi/L	6.7E+00	6.7E+00	U	1.06E+01		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	K-40	13966-00-2	-2.68E+01	pCi/L	5.1E+01	5.1E+01	U	1.03E+02		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	RU-106	13967-48-1	-8.05E+00	pCi/L	1.5E+01	1.5E+01	U	2.55E+01		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009375	SB-125	14234-35-6	-3.45E+00	pCi/L	4.3E+00	4.3E+00	U	7.11E+00		GAMMALL_GS	2.0001E+00	L	02/06/2008 14:36	I
8009370	SR-90	10098-97-2	2.33E-01	pCi/L	2.2E-01	2.2E-01	U	4.32E-01	77.2	SRISO_SEP_PRE	1.0008E+00	L	02/01/2008 06:50	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE3G610	B1R9N6		MW6-SBB-A1	G08-012	W05309					01/03/2008 13:05

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009376	ALPHA	12587-46-1	4.65E+00	pCi/L	2.0E+00	2.3E+00		2.20E+00	100.0	9310_ALPHABETA	8.50E-02	L	02/05/2008 18:20	I
8009378	BETA	12587-47-2	1.39E+04	pCi/L	1.2E+02	1.7E+03		1.33E+01	100.0	9310_ALPHABETA	4.20E-02	L	02/05/2008 14:59	I
8009375	BE-7	13966-02-4	6.50E-03	pCi/L	2.4E+01	2.4E+01	U	4.11E+01		GAMMALL_GS	2.0002E+00	L	02/06/2008 14:37	I
8009375	CO-60	10198-40-0	3.32E-01	pCi/L	1.9E+00	1.9E+00	U	3.64E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008 14:37	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Note: Gamma spectrometry results not validated per VSR instructions.

3/10/2008 11:29:04 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38518 File Name: h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

8009375	CS-134	13967-70-9	-1.26E+00	pCi/L	2.4E+00	2.4E+00	U	3.94E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	14:37	I
8009375	CS-137	10045-97-3	-1.08E+00	pCi/L	2.0E+00	2.0E+00	U	3.35E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	14:37	I
8009375	EU-152	14683-23-9	2.28E+00	pCi/L	5.5E+00	5.5E+00	U	9.84E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	14:37	I
8009375	EU-154	15585-10-1	9.87E-01	pCi/L	5.4E+00	5.4E+00	U	1.02E+01		GAMMALL_GS	2.0002E+00	L	02/06/2008	14:37	I
8009375	EU-155	14391-16-3	-2.39E+00	pCi/L	4.1E+00	4.1E+00	U	6.79E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	14:37	I
8009375	K-40	13966-00-2	-2.02E+01	pCi/L	5.0E+01	5.0E+01	U	1.03E+02		GAMMALL_GS	2.0002E+00	L	02/06/2008	14:37	I
8009375	RU-106	13967-48-1	8.40E+00	pCi/L	1.8E+01	1.8E+01	U	3.34E+01		GAMMALL_GS	2.0002E+00	L	02/06/2008	14:37	I
8009375	SB-125	14234-35-6	-2.35E+00	pCi/L	5.3E+00	5.3E+00	U	8.89E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	14:37	I
8009370	SR-90	10098-97-2	6.99E+03	pCi/L	4.8E+01	1.0E+03		2.56E+00	76.7	SRISO_SEP_PRE	3.0092E-01	L	02/01/2008	05:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE3G710	B1R9N9		MW6-SBB-A1	G08-012	W05309					01/03/2008 11:14

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
8009376	ALPHA	12587-46-1	3.22E-01	pCi/L	6.4E-01	6.4E-01	U	1.40E+00	100.0	9310_ALPHABETA	1.249E-01	L	02/05/2008	18:20	I
8009378	BETA	12587-47-2	4.93E+03	pCi/L	5.2E+01	6.1E+02		7.04E+00	100.0	9310_ALPHABETA	7.79E-02	L	02/05/2008	14:59	I
8009375	BE-7	13966-02-4	1.93E+01	pCi/L	2.5E+01	2.5E+01	U	4.50E+01		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009375	CO-60	10198-40-0	1.04E+00	pCi/L	2.2E+00	2.2E+00	U	4.18E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009375	CS-134	13967-70-9	-1.19E+00	pCi/L	2.5E+00	2.5E+00	U	4.13E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009375	CS-137	10045-97-3	1.28E+00	pCi/L	2.1E+00	2.1E+00	U	3.88E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009375	EU-152	14683-23-9	-4.65E+00	pCi/L	5.5E+00	5.5E+00	U	9.10E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009375	EU-154	15585-10-1	2.61E+00	pCi/L	5.7E+00	5.7E+00	U	1.12E+01		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009375	EU-155	14391-16-3	1.94E+00	pCi/L	5.4E+00	5.4E+00	U	9.22E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009375	K-40	13966-00-2	-3.09E+01	pCi/L	4.9E+01	4.9E+01	U	1.01E+02		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009375	RU-106	13967-48-1	1.63E+00	pCi/L	1.8E+01	1.8E+01	U	3.27E+01		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009375	SB-125	14234-35-6	-3.22E+00	pCi/L	5.4E+00	5.4E+00	U	9.01E+00		GAMMALL_GS	2.0002E+00	L	02/06/2008	18:13	I
8009370	SR-90	10098-97-2	2.96E+03	pCi/L	1.9E+01	4.3E+02		9.73E-01	74.5	SRISO_SEP_PRE	8.3004E-01	L	02/01/2008	05:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE3GE20	B1R9C0		MW6-SBB-A1	A08-012	W05309					01/03/2008 09:38

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
8051374	I-129L	15046-84-1	3.43E+00	pCi/L	6.4E-01	6.4E-01		3.20E-01	96.8	I129LL_SEP_LEPS	3.8963E+00	L	02/26/2008	12:29	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Note: Gamma spectrometry results not validated per VSR instructions.

3/10/2008 11:29:04 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38518 File Name: h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

9KE3GF20 B1R9C1 MW6-SBB-A1 A08-012 W05309 01/03/2008 09:38

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8051374	I-129L	15046-84-1	3.59E+00	pCi/L	5.7E-01	5.7E-01		3.13E-01	94.9	I129LL_SEP_LEPS	3.905E+00	L	02/26/2008 12:30	I

Lab Sample Id: 9KE4L320 | Client Id: B1R9D1 | Test User | Contract Nbr MW6-SBB-A1 | SAF Nbr A08-012 | Sdg Nbr: W05309 | QC Type: | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 01/04/2008 09:25

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8051374	I-129L	15046-84-1	3.11E-01	pCi/L	1.7E-01	1.7E-01	U	3.44E-01	97.8	I129LL_SEP_LEPS	3.9622E+00	L	02/26/2008 16:26	I

Lab Sample Id: 9KE4LM10 | Client Id: B1RHP4 | Test User | Contract Nbr MW6-SBB-A1 | SAF Nbr W08-012 | Sdg Nbr: W05309 | QC Type: | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 01/04/2008 09:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009375	BE-7	13966-02-4	9.12E+00	pCi/L	1.4E+01	1.4E+01	U	2.60E+01		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I
8009375	CO-60	10198-40-0	-4.74E-01	pCi/L	1.3E+00	1.3E+00	U	2.25E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I
8009375	CS-134	13967-70-9	6.53E-01	pCi/L	1.3E+00	1.3E+00	U	2.42E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I
8009375	CS-137	10045-97-3	1.51E-01	pCi/L	1.5E+00	1.5E+00	U	2.61E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I
8009375	EU-152	14683-23-9	-1.15E+00	pCi/L	3.4E+00	3.4E+00	U	5.78E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I
8009375	EU-154	15585-10-1	1.72E+00	pCi/L	3.5E+00	3.5E+00	U	6.90E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I
8009375	EU-155	14391-16-3	-1.68E+00	pCi/L	2.9E+00	2.9E+00	U	4.92E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I
8009375	K-40	13966-00-2	-1.72E+00	pCi/L	2.1E+01	2.1E+01	U	4.17E+01		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I
8009375	RU-106	13967-48-1	-7.74E-03	pCi/L	1.2E+01	1.2E+01	U	2.14E+01		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I
8009375	SB-125	14234-35-6	-7.41E-01	pCi/L	3.2E+00	3.2E+00	U	5.57E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 18:14	I

Lab Sample Id: 9KE4LQ10 | Client Id: B1RCM9 | Test User | Contract Nbr MW6-SBB-A1 | SAF Nbr S08-012 | Sdg Nbr: W05309 | QC Type: | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 01/04/2008 09:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009376	ALPHA	12587-46-1	1.11E+00	pCi/L	8.5E-01	8.8E-01	U	1.26E+00	100.0	9310_ALPHABETA	1.35E-01	L	02/05/2008 18:20	I
8009378	BETA	12587-47-2	8.41E+01	pCi/L	4.4E+00	1.2E+01		2.68E+00	100.0	9310_ALPHABETA	2.003E-01	L	02/05/2008 14:59	I
8009370	SR-90	10098-97-2	1.91E-01	pCi/L	2.3E-01	2.3E-01	U	4.78E-01	74.3	SRISO_SEP_PRE	1.0034E+00	L	02/01/2008 06:50	I

Lab Sample Id: 9KE4LQ20 | Client Id: B1RCM9 | Test User | Contract Nbr MW6-SBB-A1 | SAF Nbr S08-012 | Sdg Nbr: W05309 | QC Type: | Moisture/ Solids%*: | Distilled Volume | Sample On Date: | Collection Date: 01/04/2008 09:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8051374	I-129L	15046-84-1	5.07E+00	pCi/L	7.3E-01	7.3E-01		3.46E-01	98.9	I129LL_SEP_LEPS	3.8897E+00	L	02/26/2008 14:16	I

TAL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

4

Note: Gamma spectrometry results not validated per VSR instructions.

3/10/2008 11:29:04 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38518 File Name: h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE4LX10	B1RBH7		MW6-SBB-A1	I08-012	W05309					01/04/2008 09:00

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009369	C-14	UJ	14762-75-5	5.53E-01	pCi/L	3.4E+00	4.1E+00	U	8.26E+00	100.0	C14_LSC	2.00E-01	L	01/17/2008 09:12	I
8009375	BE-7		13966-02-4	-1.14E+00	pCi/L	1.1E+01	1.1E+01	U	2.00E+01		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009375	CO-60		10198-40-0	1.52E+00	pCi/L	1.3E+00	1.3E+00	U	2.74E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009375	CS-134		13967-70-9	4.87E-01	pCi/L	1.1E+00	1.1E+00	U	2.10E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009375	CS-137		10045-97-3	8.46E-01	pCi/L	1.1E+00	1.1E+00	U	2.11E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009375	EU-152		14683-23-9	2.48E+00	pCi/L	2.6E+00	2.6E+00	U	4.87E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009375	EU-154		15585-10-1	1.34E+00	pCi/L	3.3E+00	3.3E+00	U	6.43E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009375	EU-155		14391-16-3	4.39E-01	pCi/L	2.4E+00	2.4E+00	U	4.21E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009375	K-40		13966-00-2	-2.43E+01	pCi/L	2.3E+01	2.3E+01	U	4.70E+01		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009375	RU-106		13967-48-1	1.07E+01	pCi/L	9.7E+00	9.7E+00	U	1.90E+01		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009375	SB-125		14234-35-6	4.67E-01	pCi/L	2.7E+00	2.7E+00	U	4.82E+00		GAMMALL_GS	2.0003E+00	L	02/06/2008 22:34	I
8009370	SR-90		10098-97-2	2.90E-01	pCi/L	2.3E-01	2.4E-01	U	4.82E-01	74.0	SRISO_SEP_PRE	1.0003E+00	L	02/01/2008 06:50	I
8009374	U-234		13966-29-5	4.30E-01	pCi/L	2.3E-01	2.4E-01		1.47E-01	95.7	UISO_PLATE_AEA	2.0003E-01	L	01/17/2008 12:09	I
8009374	U-235		15117-96-1	0.00E+00	pCi/L	6.3E-02	6.3E-02	U	1.47E-01	95.7	UISO_PLATE_AEA	2.0003E-01	L	01/17/2008 12:09	I
8009374	U-238		U-238	3.68E-01	pCi/L	2.1E-01	2.2E-01		1.47E-01	95.7	UISO_PLATE_AEA	2.0003E-01	L	01/17/2008 12:09	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE4LX20	B1RBH7		MW6-SBB-A1	I08-012	W05309					01/04/2008 09:00

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8051374	I-129L		15046-84-1	3.80E-02	pCi/L	1.2E-01	1.2E-01	U	2.28E-01	98.9	I129LL_SEP_LEPS	4.0009E+00	L	02/26/2008 14:17	I
8031494	Se-79	UJ	15758-45-9	6.57E+00	pCi/L	4.9E+00	9.5E+00	U	1.13E+01	77.3	SE79_SEP_IE_LS	2.002E-01	L	02/06/2008 20:36	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE4MA20	B1R9F1		MW6-SBB-A1	A08-012	W05309					01/04/2008 12:09

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8051374	I-129L	15046-84-1	3.35E+00	pCi/L	6.0E-01	6.0E-01		3.02E-01	98.9	I129LL_SEP_LEPS	3.9854E+00	L	02/26/2008 16:26	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE4MC20	B1R9C7		MW6-SBB-A1	A08-012	W05309					01/04/2008 10:51

TAL Richland

rptFeadRadSummaryEdd v3.48

LS

8-09-2010

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

5

Note: Gamma spectrometry results not validated per VSR instructions.

3/10/2008 11:29:04 AM

TAL Richland Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38518 File Name: h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8051374	I-129L	15046-84-1	6.42E-01	pCi/L	2.4E-01	2.4E-01	U	4.07E-01		I129LL_SEP_LEPS	4.003E+00	L	02/26/2008 16:27	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE6DK10	B1RRC4		MW6-SBB-A1	I08-016	W05309					01/07/2008 10:08

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009369	C-14	J	14762-75-5	1.43E+03	pCi/L	1.9E+01	5.6E+01		8.26E+00	100.0	C14_LSC	2.00E-01	L	01/17/2008 09:54	I
8009370	SR-90		10098-97-2	-4.71E-02	pCi/L	1.8E-01	1.8E-01	U	3.90E-01	81.3	SRISO_SEP_PRE	1.0028E+00	L	02/01/2008 06:50	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE6DL10	B1RRC3		MW6-SBB-A1	I08-016	W05309					01/07/2008 10:08

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8009369	C-14	J	14762-75-5	1.69E+03	pCi/L	2.1E+01	6.6E+01		8.26E+00	100.0	C14_LSC	2.00E-01	L	01/17/2008 11:19	I
8009370	SR-90		10098-97-2	4.10E-02	pCi/L	2.1E-01	2.1E-01	U	4.55E-01	71.3	SRISO_SEP_PRE	1.0018E+00	L	02/01/2008 06:50	I

LS
8-09-2010

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 44392 File Name: h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\44392.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KE4MC20	B1R9C7		MW6-SBB-A1	A08-012	W05309					01/04/2008 10:51

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8051374	I-129L	15046-84-1	6.42E-01	pCi/L	2.4E-01	2.4E-01	U	4.07E-01	101.4	I129LL_SEP_LEPS	4.003E+00	L	02/26/2008 16:27	R

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/31/2008 12:45:09 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38653 File Name: h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG0EW10	B1RJ21		MW6-SBB-A1	W08-012	W05335					02/11/2008 09:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050343	BETA	12587-47-2	7.91E+02	pCi/L	1.3E+01	1.3E+02		2.81E+00	100.0	9310_ALPHABETA	2.004E-01	L	03/11/2008 13:32	I
8050344	BE-7	13966-02-4	-1.14E+01	pCi/L	1.6E+01	1.6E+01	U	2.52E+01		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I
8050344	CO-60	10198-40-0	1.74E+00	pCi/L	2.0E+00	2.0E+00	U	4.11E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I
8050344	CS-134	13967-70-9	-8.89E-02	pCi/L	1.8E+00	1.8E+00	U	3.25E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I
8050344	CS-137	10045-97-3	-6.07E-01	pCi/L	1.5E+00	1.5E+00	U	2.53E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I
8050344	EU-152	14683-23-9	6.64E-01	pCi/L	4.0E+00	4.0E+00	U	7.20E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I
8050344	EU-154	15585-10-1	2.20E+00	pCi/L	4.4E+00	4.4E+00	U	8.93E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I
8050344	EU-155	14391-16-3	-4.86E-01	pCi/L	3.0E+00	3.0E+00	U	5.04E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I
8050344	K-40	13966-00-2	-5.76E+01	pCi/L	3.6E+01	3.6E+01	U	6.71E+01		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I
8050344	RU-106	13967-48-1	-7.04E+00	pCi/L	1.5E+01	1.5E+01	U	2.59E+01		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I
8050344	SB-125	14234-35-6	1.32E+00	pCi/L	3.8E+00	3.8E+00	U	6.99E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG0FJ10	B1RJ84		MW6-SBB-A1	W08-012	W05335					02/11/2008 10:31

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050343	BETA	12587-47-2	1.74E+03	pCi/L	2.0E+01	2.1E+02		2.93E+00	100.0	9310_ALPHABETA	2.004E-01	L	03/11/2008 13:32	I
8050344	BE-7	13966-02-4	7.69E+00	pCi/L	1.7E+01	1.7E+01	U	3.04E+01		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I
8050344	CO-60	10198-40-0	9.52E-01	pCi/L	1.9E+00	1.9E+00	U	3.74E+00		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I
8050344	CS-134	13967-70-9	9.93E-01	pCi/L	1.6E+00	1.6E+00	U	3.21E+00		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I
8050344	CS-137	10045-97-3	-1.78E+00	pCi/L	1.6E+00	1.6E+00	U	2.43E+00		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I
8050344	EU-152	14683-23-9	3.16E+00	pCi/L	3.7E+00	3.7E+00	U	6.94E+00		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I
8050344	EU-154	15585-10-1	-3.98E+00	pCi/L	5.3E+00	5.3E+00	U	8.71E+00		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I
8050344	EU-155	14391-16-3	-1.23E+00	pCi/L	3.6E+00	3.6E+00	U	6.18E+00		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I
8050344	K-40	13966-00-2	-2.59E+01	pCi/L	4.1E+01	4.1E+01	U	8.56E+01		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I
8050344	RU-106	13967-48-1	2.16E+00	pCi/L	1.5E+01	1.5E+01	U	2.71E+01		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I
8050344	SB-125	14234-35-6	2.99E-01	pCi/L	4.3E+00	4.3E+00	U	7.75E+00		GAMMALL_GS	2.00E+00	L	03/06/2008 07:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG0G710	B1T508		MW6-SBB-A1	W08-002	W05335					02/11/2008 13:29

TestAmerica

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Note: Gamma spectrometry results not validated per VSR instructions.

3/31/2008 12:45:09 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38653 File Name: h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050338	ALPHA	12587-46-1	2.65E+00	pCi/L	1.7E+00	1.8E+00		2.38E+00	100.0	9310_ALPHABETA	5.25E-02	L	03/12/2008 10:57	I
8050343	BETA	12587-47-2	4.78E+02	pCi/L	1.1E+01	6.1E+01		4.45E+00	100.0	9310_ALPHABETA	8.69E-02	L	03/11/2008 14:22	I
8050344	BE-7	13966-02-4	4.16E+00	pCi/L	1.1E+01	1.1E+01	U	1.95E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050344	CO-60	10198-40-0	4.18E+00	pCi/L	2.6E+00	2.6E+00		2.25E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050344	CS-134	13967-70-9	-8.59E-01	pCi/L	1.3E+00	1.3E+00	U	2.15E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050344	CS-137	10045-97-3	1.67E+00	pCi/L	1.1E+00	1.1E+00	U	2.25E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050344	EU-152	14683-23-9	1.98E+00	pCi/L	2.5E+00	2.5E+00	U	4.61E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050344	EU-154	15585-10-1	2.51E-01	pCi/L	3.1E+00	3.1E+00	U	5.85E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050344	EU-155	14391-16-3	-8.99E-01	pCi/L	2.4E+00	2.4E+00	U	3.96E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050344	K-40	13966-00-2	1.75E+00	pCi/L	2.4E+01	2.4E+01	U	5.02E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050344	RU-106	13967-48-1	2.61E+00	pCi/L	9.7E+00	9.7E+00	U	1.78E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050344	SB-125	14234-35-6	1.07E-01	pCi/L	2.5E+00	2.5E+00	U	4.55E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:46	I
8050337	TC-99	14133-76-7	2.23E+03	pCi/L	2.6E+01	1.4E+02		1.04E+01	100.0	TC99_SEP_LSC	1.25E-01	L	03/10/2008 17:46	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG0GW10	B1T504		MW6-SBB-A1	W08-002	W05335					02/11/2008 14:24

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050338	ALPHA	12587-46-1	1.51E+00	pCi/L	9.6E-01	1.0E+00		1.30E+00	100.0	9310_ALPHABETA	1.429E-01	L	03/11/2008 16:50	I
8050343	BETA	12587-47-2	4.27E+01	pCi/L	3.3E+00	6.3E+00		2.79E+00	100.0	9310_ALPHABETA	2.001E-01	L	03/11/2008 13:32	I
8050344	BE-7	13966-02-4	1.65E-01	pCi/L	2.0E+01	2.0E+01	U	3.45E+01		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050344	CO-60	10198-40-0	9.88E-03	pCi/L	2.0E+00	2.0E+00	U	3.67E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050344	CS-134	13967-70-9	-2.15E+00	pCi/L	2.0E+00	2.0E+00	U	3.07E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050344	CS-137	10045-97-3	1.65E+00	pCi/L	2.0E+00	2.0E+00	U	3.86E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050344	EU-152	14683-23-9	5.60E+00	pCi/L	5.5E+00	5.5E+00	U	1.02E+01		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050344	EU-154	15585-10-1	-2.73E-01	pCi/L	6.0E+00	6.0E+00	U	1.09E+01		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050344	EU-155	14391-16-3	3.99E+00	pCi/L	4.2E+00	4.2E+00	U	7.39E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050344	K-40	13966-00-2	8.21E+00	pCi/L	4.9E+01	4.9E+01	U	1.04E+02		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050344	RU-106	13967-48-1	7.87E+00	pCi/L	1.8E+01	1.8E+01	U	3.33E+01		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050344	SB-125	14234-35-6	4.04E+00	pCi/L	5.1E+00	5.1E+00	U	9.34E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:45	I
8050337	TC-99	14133-76-7	1.62E+02	pCi/L	8.2E+00	1.6E+01		1.03E+01	100.0	TC99_SEP_LSC	1.251E-01	L	03/10/2008 15:42	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:

TestAmerica

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

2

Note: Gamma spectrometry results not validated per VSR instructions.

3/31/2008 12:45:09 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38653 File Name: h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

9KG0HD10 B1T500 MW6-SBB-A1 W08-002 W05335 02/11/2008 12:42

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050338	ALPHA	12587-46-1	6.33E+01	pCi/L	7.2E+00	1.5E+01		2.66E+00	100.0	9310_ALPHABETA	4.67E-02	L	03/12/2008 10:57	I
8050343	BETA	12587-47-2	2.08E+03	pCi/L	2.4E+01	3.0E+02		5.09E+00	100.0	9310_ALPHABETA	7.74E-02	L	03/11/2008 14:22	I
8050344	BE-7	13966-02-4	2.01E+00	pCi/L	1.7E+01	1.7E+01	U	3.00E+01		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050344	CO-60	10198-40-0	2.55E+01	pCi/L	5.8E+00	5.8E+00		3.05E+00		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050344	CS-134	13967-70-9	-7.49E-02	pCi/L	2.0E+00	2.0E+00	U	3.59E+00		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050344	CS-137	10045-97-3	5.50E-01	pCi/L	1.8E+00	1.8E+00	U	3.30E+00		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050344	EU-152	14683-23-9	2.34E+00	pCi/L	4.5E+00	4.5E+00	U	8.16E+00		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050344	EU-154	15585-10-1	-1.91E+00	pCi/L	4.8E+00	4.8E+00	U	8.42E+00		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050344	EU-155	14391-16-3	9.60E-01	pCi/L	3.1E+00	3.1E+00	U	5.45E+00		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050344	K-40	13966-00-2	1.25E+01	pCi/L	4.7E+01	4.7E+01	U	3.14E+01		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050344	RU-106	13967-48-1	2.81E+00	pCi/L	1.6E+01	1.6E+01	U	2.93E+01		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050344	SB-125	14234-35-6	6.97E-01	pCi/L	4.3E+00	4.3E+00	U	7.73E+00		GAMMALL_GS	2.0001E+00	L	03/06/2008 07:47	I
8050337	TC-99	14133-76-7	8.51E+03	pCi/L	5.0E+01	5.1E+02		1.03E+01	100.0	TC99_SEP_LSC	1.249E-01	L	03/10/2008 19:51	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG0HF10	B1T4Y3		MW6-SBB-A1	W08-002	W05335					02/11/2008 08:25

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050337	TC-99	14133-76-7	6.46E-01	pCi/L	4.3E+00	6.2E+00	U	1.03E+01	100.0	TC99_SEP_LSC	1.25E-01	L	03/10/2008 20:53	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG0HN10	B1T4Y2		MW6-SBB-A1	W08-002	W05335					02/11/2008 11:28

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050337	TC-99	14133-76-7	4.66E+01	pCi/L	5.7E+00	8.8E+00		1.03E+01	100.0	TC99_SEP_LSC	1.25E-01	L	03/10/2008 21:56	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG3R010	B1T530		MW6-SBB-A1	W08-002	W05335					02/13/2008 08:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050338	ALPHA	12587-46-1	0.00E+00	pCi/L	3.0E-01	3.0E-01	U	9.28E-01	100.0	9310_ALPHABETA	1.999E-01	L	03/12/2008 08:26	I
8050343	BETA	12587-47-2	1.41E+00	pCi/L	1.2E+00	1.2E+00	U	2.39E+00	100.0	9310_ALPHABETA	2.002E-01	L	03/11/2008 15:53	I
8050344	BE-7	13966-02-4	4.04E+00	pCi/L	1.4E+01	1.4E+01	U	2.52E+01		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:50	I
8050344	CO-60	10198-40-0	-5.87E-01	pCi/L	1.6E+00	1.6E+00	U	2.69E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:50	I
8050344	CS-134	13967-70-9	5.51E-01	pCi/L	1.7E+00	1.7E+00	U	3.08E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008 07:50	I

TestAmerica

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Note: Gamma spectrometry results not validated per VSR instructions.

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38653 File Name: h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

8050344	CS-137	10045-97-3	7.64E-01	pCi/L	1.5E+00	1.5E+00	U	2.74E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008	07:50	I
8050344	EU-152	14683-23-9	-1.01E+00	pCi/L	4.2E+00	4.2E+00	U	7.06E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008	07:50	I
8050344	EU-154	15585-10-1	-4.06E+00	pCi/L	4.4E+00	4.4E+00	U	7.07E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008	07:50	I
8050344	EU-155	14391-16-3	-3.10E+00	pCi/L	4.3E+00	4.3E+00	U	7.24E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008	07:50	I
8050344	K-40	13966-00-2	-2.52E+01	pCi/L	4.9E+01	4.9E+01	U	1.02E+02		GAMMALL_GS	2.0003E+00	L	03/06/2008	07:50	I
8050344	RU-106	13967-48-1	2.08E+00	pCi/L	1.4E+01	1.4E+01	U	2.44E+01		GAMMALL_GS	2.0003E+00	L	03/06/2008	07:50	I
8050344	SB-125	14234-35-6	-3.63E+00	pCi/L	4.0E+00	4.0E+00	U	6.60E+00		GAMMALL_GS	2.0003E+00	L	03/06/2008	07:50	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG3R210	B1T511		MW6-SBB-A1	W08-002	W05335					02/13/2008 12:16

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
8050338	ALPHA	12587-46-1	9.02E+01	pCi/L	9.1E+00	2.0E+01		2.98E+00	100.0	9310_ALPHABETA	4.00E-02	L	03/12/2008	14:35	I
8050343	BETA	12587-47-2	2.93E+03	pCi/L	3.2E+01	3.7E+02		6.31E+00	100.0	9310_ALPHABETA	6.67E-02	L	03/11/2008	14:22	I
8050344	BE-7	13966-02-4	4.92E+00	pCi/L	1.7E+01	1.7E+01	U	3.08E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	CO-60	10198-40-0	4.84E+01	pCi/L	8.7E+00	8.7E+00		3.36E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	CS-134	13967-70-9	-6.13E-03	pCi/L	2.0E+00	2.0E+00	U	3.55E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	CS-137	10045-97-3	2.10E+00	pCi/L	1.9E+00	1.9E+00	U	3.69E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	EU-152	14683-23-9	-2.97E+00	pCi/L	4.3E+00	4.3E+00	U	7.18E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	EU-154	15585-10-1	3.18E+00	pCi/L	5.4E+00	5.4E+00	U	1.07E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	EU-155	14391-16-3	-2.05E+00	pCi/L	3.4E+00	3.4E+00	U	5.54E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	K-40	13966-00-2	-7.61E+01	pCi/L	3.5E+01	3.5E+01	U	6.20E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	RU-106	13967-48-1	-3.45E+00	pCi/L	1.6E+01	1.6E+01	U	2.86E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	SB-125	14234-35-6	-1.25E+00	pCi/L	4.5E+00	4.5E+00	U	7.66E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG3R310	B1T519		MW6-SBB-A1	W08-002	W05335					02/13/2008 12:46

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
8050338	ALPHA	12587-46-1	1.89E+00	pCi/L	1.4E+00	1.5E+00	U	2.06E+00	100.0	9310_ALPHABETA	8.47E-02	L	03/11/2008	16:50	I
8050343	BETA	12587-47-2	9.42E+01	pCi/L	5.4E+00	1.3E+01		3.57E+00	100.0	9310_ALPHABETA	1.667E-01	L	03/11/2008	15:53	I
8050344	BE-7	13966-02-4	-7.03E-01	pCi/L	1.6E+01	1.6E+01	U	2.81E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	CO-60	10198-40-0	-9.91E-01	pCi/L	2.0E+00	2.0E+00	U	3.45E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	CS-134	13967-70-9	-1.94E-02	pCi/L	1.9E+00	1.9E+00	U	3.36E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	CS-137	10045-97-3	7.59E-01	pCi/L	1.7E+00	1.7E+00	U	3.20E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Note: Gamma spectrometry results not validated per VSR instructions.

8050344	EU-152	14683-23-9	6.32E-02	pCi/L	4.1E+00	4.1E+00	U	7.21E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	EU-154	15585-10-1	-2.94E+00	pCi/L	5.2E+00	5.2E+00	U	8.84E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	EU-155	14391-16-3	4.27E-01	pCi/L	3.4E+00	3.4E+00	U	6.19E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	K-40	13966-00-2	2.53E+01	pCi/L	4.5E+01	4.5E+01	U	9.64E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	RU-106	13967-48-1	-3.19E+00	pCi/L	1.5E+01	1.5E+01	U	2.60E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050344	SB-125	14234-35-6	-3.04E+00	pCi/L	3.7E+00	3.7E+00	U	6.11E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	11:19	I
8050337	TC-99	14133-76-7	4.39E+02	pCi/L	1.2E+01	3.2E+01		1.03E+01	100.0	TC99_SEP_LSC	1.251E-01	L	03/10/2008	22:58	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG3RN10	B1T529		MW6-SBB-A1	W08-002	W05335					02/13/2008 10:35

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
8050338	ALPHA	12587-46-1	9.32E+01	pCi/L	9.3E+00	2.1E+01		3.59E+00	100.0	9310_ALPHABETA	4.23E-02	L	03/12/2008	10:57	I
8050343	BETA	12587-47-2	3.64E+03	pCi/L	3.6E+01	4.6E+02		6.65E+00	100.0	9310_ALPHABETA	6.32E-02	L	03/11/2008	14:22	I
8050344	BE-7	13966-02-4	-1.06E+01	pCi/L	1.6E+01	1.6E+01	U	2.61E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I
8050344	CO-60	10198-40-0	3.83E+01	pCi/L	6.9E+00	6.9E+00		3.16E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I
8050344	CS-134	13967-70-9	1.57E+00	pCi/L	2.0E+00	2.0E+00	U	3.89E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I
8050344	CS-137	10045-97-3	-7.69E-01	pCi/L	1.8E+00	1.8E+00	U	3.04E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I
8050344	EU-152	14683-23-9	-1.37E+00	pCi/L	4.1E+00	4.1E+00	U	7.14E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I
8050344	EU-154	15585-10-1	3.07E+00	pCi/L	4.5E+00	4.5E+00	U	9.32E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I
8050344	EU-155	14391-16-3	-6.41E-01	pCi/L	3.4E+00	3.4E+00	U	5.69E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I
8050344	K-40	13966-00-2	-2.25E+01	pCi/L	3.3E+01	3.3E+01	U	6.71E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I
8050344	RU-106	13967-48-1	-3.75E+00	pCi/L	1.5E+01	1.5E+01	U	2.62E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I
8050344	SB-125	14234-35-6	4.83E-01	pCi/L	4.2E+00	4.2E+00	U	7.45E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:48	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG3RT10	B1T512		MW6-SBB-A1	W08-002	W05335					02/13/2008 12:16

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
8050338	ALPHA	12587-46-1	9.01E+01	pCi/L	9.8E+00	2.1E+01		3.45E+00	100.0	9310_ALPHABETA	3.18E-02	L	03/12/2008	10:57	I
8050344	BE-7	13966-02-4	9.44E+00	pCi/L	1.5E+01	1.5E+01	U	2.74E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I
8050344	CO-60	10198-40-0	5.03E+01	pCi/L	8.0E+00	8.0E+00		2.83E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I
8050344	CS-134	13967-70-9	1.14E+00	pCi/L	1.9E+00	1.9E+00	U	3.59E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I
8050344	CS-137	10045-97-3	-1.74E-01	pCi/L	1.7E+00	1.7E+00	U	2.99E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I
8050344	EU-152	14683-23-9	-1.31E+00	pCi/L	4.1E+00	4.1E+00	U	6.96E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Note: Gamma spectrometry results not validated per VSR instructions.

3/31/2008 12:45:09 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38653 File Name: h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

8050344	EU-154	15585-10-1	-5.77E-01	pCi/L	3.7E+00	3.7E+00	U	6.97E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I
8050344	EU-155	14391-16-3	-1.81E+00	pCi/L	3.0E+00	3.0E+00	U	5.02E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I
8050344	K-40	13966-00-2	8.13E-01	pCi/L	2.6E+01	2.6E+01	U	2.41E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I
8050344	RU-106	13967-48-1	1.23E+01	pCi/L	1.3E+01	1.3E+01	U	2.51E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I
8050344	SB-125	14234-35-6	-1.57E+00	pCi/L	3.7E+00	3.7E+00	U	6.30E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008	07:49	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG3RT20	B1T512		MW6-SBB-A1	W08-002	W05335					02/13/2008 12:16

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050343	BETA	12587-47-2	2.86E+03	pCi/L	3.2E+01	3.8E+02		6.22E+00	100.0	9310_ALPHABETA	6.50E-02	L	03/12/2008 17:02	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KG3RW10	B1T537		MW6-SBB-A1	W08-002	W05335					02/13/2008 09:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050338	ALPHA	12587-46-1	5.76E+01	pCi/L	7.4E+00	1.4E+01		2.87E+00	100.0	9310_ALPHABETA	4.54E-02	L	03/12/2008 10:57	I
8050343	BETA	12587-47-2	4.41E+03	pCi/L	4.4E+01	5.6E+02		8.19E+00	100.0	9310_ALPHABETA	5.02E-02	L	03/11/2008 14:22	I
8050344	BE-7	13966-02-4	-1.58E+01	pCi/L	1.5E+01	1.5E+01	U	2.40E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I
8050344	CO-60	10198-40-0	3.75E+01	pCi/L	7.7E+00	7.7E+00		3.02E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I
8050344	CS-134	13967-70-9	-1.21E+00	pCi/L	2.1E+00	2.1E+00	U	3.56E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I
8050344	CS-137	10045-97-3	1.48E-01	pCi/L	1.9E+00	1.9E+00	U	3.32E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I
8050344	EU-152	14683-23-9	-9.22E-02	pCi/L	4.4E+00	4.4E+00	U	7.48E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I
8050344	EU-154	15585-10-1	-2.36E+00	pCi/L	5.0E+00	5.0E+00	U	8.62E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I
8050344	EU-155	14391-16-3	-4.89E-01	pCi/L	2.8E+00	2.8E+00	U	4.99E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I
8050344	K-40	13966-00-2	-1.11E+01	pCi/L	3.6E+01	3.6E+01	U	7.33E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I
8050344	RU-106	13967-48-1	-1.87E+00	pCi/L	1.6E+01	1.6E+01	U	2.78E+01		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I
8050344	SB-125	14234-35-6	9.18E-01	pCi/L	4.3E+00	4.3E+00	U	7.60E+00		GAMMALL_GS	2.0002E+00	L	03/06/2008 07:49	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KGXJQ10	B1T5R7		MW6-SBB-A1	W08-002	W05335					01/10/2008 11:22

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050345	I-129L	15046-84-1	3.32E-01	pCi/L	1.7E-01	1.7E-01	U	3.45E-01	102.7	I129LL_SEP_LEPS	3.8988E+00	L	03/24/2008 14:07	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Note: Gamma spectrometry results not validated per VSR instructions.

3/31/2008 12:45:09 PM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 38653 File Name: h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

9KGXJR10 B1T5P9 MW6-SBB-A1 W08-002 W05335 01/10/2008 08:46

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050345	I-129L	15046-84-1	1.99E-02	pCi/L	1.2E-01	1.2E-01	U	2.25E-01	97.8	I129LL_SEP_LEPS	3.9031E+00	L	03/24/2008 14:09	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KGXJT10	B1T5R3		MW6-SBB-A1	W08-002	W05335					01/10/2008 10:19

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050345	I-129L	15046-84-1	1.23E-01	pCi/L	1.6E-01	1.6E-01	U	3.10E-01	103.2	I129LL_SEP_LEPS	3.90E+00	L	03/24/2008 16:02	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KGXJW10	B1T5W8		MW6-SBB-A1	W08-002	W05335					02/10/2008 13:44

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8050338	ALPHA	12587-46-1	9.79E-01	pCi/L	8.3E-01	8.6E-01	U	1.17E+00	100.0	9310_ALPHABETA	2.00E-01	L	03/12/2008 08:26	I
8050343	BETA	12587-47-2	1.22E+01	pCi/L	2.1E+00	2.6E+00		2.96E+00	100.0	9310_ALPHABETA	2.001E-01	L	03/11/2008 13:32	I
8050344	BE-7	13966-02-4	-3.07E+00	pCi/L	1.2E+01	1.2E+01	U	2.10E+01		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I
8050344	CO-60	10198-40-0	-2.09E-01	pCi/L	1.4E+00	1.4E+00	U	2.45E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I
8050344	CS-134	13967-70-9	1.12E+00	pCi/L	1.4E+00	1.4E+00	U	2.71E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I
8050344	CS-137	10045-97-3	-3.90E-01	pCi/L	1.2E+00	1.2E+00	U	2.07E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I
8050344	EU-152	14683-23-9	3.79E+00	pCi/L	3.3E+00	3.3E+00	U	6.25E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I
8050344	EU-154	15585-10-1	-3.02E-01	pCi/L	3.1E+00	3.1E+00	U	5.82E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I
8050344	EU-155	14391-16-3	-1.96E+00	pCi/L	3.0E+00	3.0E+00	U	4.95E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I
8050344	K-40	13966-00-2	1.85E+01	pCi/L	1.9E+01	1.9E+01	U	1.83E+01		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I
8050344	RU-106	13967-48-1	3.91E+00	pCi/L	1.2E+01	1.2E+01	U	2.15E+01		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I
8050344	SB-125	14234-35-6	9.54E-01	pCi/L	3.3E+00	3.3E+00	U	5.81E+00		GAMMALL_GS	2.0004E+00	L	03/06/2008 07:42	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Note: Gamma spectrometry results not validated per VSR instructions.

9/17/2008 8:12:32 AM

TestAmerica Report

Lab Code: TARL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 39857 File Name: h:\Reportdb\edd\FeadIV\Rad\W05335I.Edd, h:\Reportdb\edd\FeadIV\Rad\39857.Ed

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KGXKC10	B1RDM2		MW6-SBB-A1	S08-012	W05335I					02/11/2008 11:36

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8219506	H-3	UJ	10028-17-8	1.31E+01	pCi/L	1.2E+01	2.6E+01	U	2.65E+01	100.0	906.0ML_H3_LSC	1.00E-02	L	09/03/2008 08:26	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KGXKD10	B1RDN3		MW6-SBB-A1	S08-012	W05335I					02/11/2008 09:58

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8219506	H-3	UJ	10028-17-8	1.66E+01	pCi/L	1.3E+01	2.6E+01	U	2.69E+01	100.0	906.0ML_H3_LSC	1.00E-02	L	09/03/2008 08:26	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9KGXKE10	B1RDK9		MW6-SBB-A1	S08-012	W05335I					02/11/2008 13:34

Batch	Analyte		CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
8219506	H-3	UJ	10028-17-8	-1.32E+01	pCi/L	1.2E+01	2.5E+01	U	2.67E+01	100.0	906.0ML_H3_LSC	1.00E-02	L	09/03/2008 08:26	I

LS
8-09-2010

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

/

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001504
Client ID: B1P8P1 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Radiochemistry
Sampled: 08/15/07
Received: 08/15/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415		7.20	pCi/L	+-3.02	pCi/L	1.00	2.8		08/21/07
Gross beta	12587-47-2	LA-508-415		750	pCi/L	+-75.0	pCi/L	1.00	6.8		08/21/07
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.20e+04	pCi/L	+-2.40e+03	pCi/L	1.00	2.1e+02		08/28/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001505
Client ID: B1P8L2 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Radiochemistry
Sampled: 08/15/07
Received: 08/15/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415		290	pCi/L	+-37.7	pCi/L	1.00	6.9		08/21/07
Gross beta	12587-47-2	LA-508-415		1.90e+04	pCi/L	+-1.90e+03	pCi/L	1.00	14		08/21/07
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.00e+04	pCi/L	+-2.00e+03	pCi/L	1.00	2.1e+02		08/28/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001506
Client ID: B1P9K4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Radiochemistry
Sampled: 08/15/07
Received: 08/15/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415		7.60	pCi/L	+-2.89	pCi/L	1.00	2.5		08/21/07
Gross beta	12587-47-2	LA-508-415		320	pCi/L	+-35.2	pCi/L	1.00	6.5		08/21/07
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		9.20e+03	pCi/L	+-1.84e+03	pCi/L	1.00	2.1e+02		08/28/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001507
Client ID: B1P8N6 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Radiochemistry
Sampled: 08/15/07
Received: 08/15/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415		56.0	pCi/L	+-9.52	pCi/L	1.00	3.0		08/21/07
Gross beta	12587-47-2	LA-508-415		3.00e+03	pCi/L	+-300	pCi/L	1.00	6.9		08/21/07
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		5.30e+03	pCi/L	+-1.11e+03	pCi/L	1.00	2.1e+02		08/28/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001508
Client ID: B1P8L7 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Radiochemistry
Sampled: 08/15/07
Received: 08/15/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.00e+03	pCi/L	+-250	pCi/L	1.00	2.1e+02		08/28/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

Report WGPP/ver. 5.2
GPAP

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001509
Client ID: B1P9J9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Radiochemistry
Sampled: 08/15/07
Received: 08/15/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		2.80e+03	pCi/L	+-588	pCi/L	1.00	2.1e+02		08/28/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001511
Client ID: B1P8R1 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071460
Department: Radiochemistry
Sampled: 08/15/07
Received: 08/15/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.40e+03	pCi/L	+-336	pCi/L	1.00	2.1e+02		08/28/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001512
Client ID: B1P8T5 PNNL-GPP WSCF
Matrix: WATER

Group #: WSCF20071460
Department: Radiochemistry
Sampled: 08/15/07
Received: 08/15/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.20e+04	pCi/L	+-2.40e+03	pCi/L	1.00	2.1e+02		08/28/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
D - Analyte was identified at a secondary dilution factor
N - Spike sample recovery is outside control limits.(inorg)

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

Report WGPP/ver. 5.2
GPAP

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001552
Client ID: B1P9F4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415		200	pCi/L	+-28.0	pCi/L	1.00	10		08/30/07
Gross beta	12587-47-2	LA-508-415		3.10e+03	pCi/L	+-310	pCi/L	1.00	14		08/30/07
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		5.20e+03	pCi/L	+-1.09e+03	pCi/L	1.00	2.2e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

Report WGPP/ver. 5.2
GPAP

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001553
Client ID: B1P9F9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415		19.0	pCi/L	+-5.70	pCi/L	1.00	5.7		08/30/07
Gross beta	12587-47-2	LA-508-415		1.40e+03	pCi/L	+-140	pCi/L	1.00	7.4		08/30/07
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.10e+04	pCi/L	+-2.20e+03	pCi/L	1.00	2.2e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

Report WGPP/ver. 5.2
GPAP

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001554
Client ID: B1P8P6 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415		160	pCi/L	+-24.0	pCi/L	1.00	10		08/30/07
Gross beta	12587-47-2	LA-508-415		6.80e+03	pCi/L	+-680	pCi/L	1.00	14		08/30/07
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.00e+04	pCi/L	+-2.00e+03	pCi/L	1.00	2.2e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001555
Client ID: B1P9H4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.20e+04	pCi/L	+-2.40e+03	pCi/L	1.00	2.2e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

Report WGPP/ver. 5.2
GPAP

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001556
Client ID: B1P9H9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.20e+04	pCi/L	+-2.40e+03	pCi/L	1.00	2.2e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

Report WGPP/ver. 5.2
GPAP

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: W07-008
Sample # W07P001557
Client ID: B1P9J4 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415		4.70	pCi/L	+-1.69	pCi/L	1.00	1.9		08/30/07
Gross beta	12587-47-2	LA-508-415		120	pCi/L	+-13.2	pCi/L	1.00	2.0		08/30/07
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.20e+04	pCi/L	+-2.40e+03	pCi/L	1.00	2.2e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

Report WGPP/ver. 5.2
GPAP

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001559
Client ID: B1P666 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		4.70e+03	pCi/L	+-987	pCi/L	1.00	2.3e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001562
Client ID: B1P6B7 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		420	pCi/L	+-168	pCi/L	1.00	2.3e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001564
Client ID: B1P697 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.10e+03	pCi/L	+-275	pCi/L	1.00	2.3e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001566
Client ID: B1P6B2 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		1.20e+03	pCi/L	+-300	pCi/L	1.00	2.3e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001568
Client ID: B1P6C9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		3.50e+03	pCi/L	+-735	pCi/L	1.00	2.3e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001573
Client ID: B1P6F4 PNNL-GPP WSCF
Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		5.30e+03	pCi/L	+-1.11e+03	pCi/L	1.00	2.3e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001574
Client ID: B1P6F9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421		660	pCi/L	+-205	pCi/L	1.00	2.3e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent E6-35
SAF Number: I07-062
Sample # W07P001575
Client ID: B1P6H9 PNNL-GPP WSCF

Matrix: WATER

Group #: WSCF20071517
Department: Radiochemistry
Sampled: 08/23/07
Received: 08/23/07

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Tritium by Liq Sct column prep											
Tritium	10028-17-8	LA-508-421	U	200	pCi/L	+-134	pCi/L	1.00	2.3e+02		09/04/07

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)
D - Analyte was identified at a secondary dilution factor(inorg)
C - The Analyte was found in the Associated Blank.(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-133
Sample # W08GR02623
Client ID: B1W1B1 TRENT WSCF

Matrix: WATER

Group #: WSCF20081478
Department: Radiochemistry
Sampled: 07/16/08
Received: 07/17/08

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	0.0150	pCi/L	+-0.0795	pCi/L	1.00	0.14		09/10/08
Am-243 tracer by AEA	AM243	LA-508-471		10.0	pCi/L			1.00	0.10		09/10/08
Gamma Energy Analysis-grd H2O											
Cobalt-60	10198-40-0	LA-508-481	U	3.18	pCi/L	+-6.28	pCi/L	1.00	11		07/21/08
Cesium-137	10045-97-3	LA-508-481	U	1.68	pCi/L	+-6.07	pCi/L	1.00	11		07/21/08
Plutonium Isotopics by AEA											
Plutonium-238	13981-16-3	LA-508-471	U	0.0480	pCi/L	+-0.0557	pCi/L	1.00	0.088		09/09/08
Pu-239/240 by AEA	PU-239/240	LA-508-471		0.0170	pCi/L	+-0.0175	pCi/L	1.00	0.012		09/09/08
Pu-242 tracer by AEA	PU242	LA-508-471		16.0	pCi/L			1.00	0.032		09/09/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	0.370	pCi/L	+-2.69	pCi/L	1.00	0.92		07/30/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		94.7	Percent			1.00	0.0		07/30/08
TC99 by ICP-200.8 MS Prep											**08/01/08**
TC99 by ICP-200.8 MS											
Technetium by ICP-MS	14133-76-7	LA-505-412	U	< 1.00e-03	ug/L			1.00	1.0e-03		08/01/08
TC99 by Liquid Scin.											
Tc-99 by Liquid Scin.	14133-76-7	LA-508-421	U	-0.100	pCi/L	+-1.00	pCi/L	1.00	5.9		07/29/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		0.810	pCi/L	+-0.243	pCi/L	1.00	0.042		09/09/08
Uranium-235 J	15117-96-1	LA-508-471		0.0550	pCi/L	+-0.0358	pCi/L	1.00	0.013		09/09/08
Uranium-238	U-238	LA-508-471		0.470	pCi/L	+-0.150	pCi/L	1.00	0.012		09/09/08
U-232 tracer by AEA	U232	LA-508-471		10.0	pCi/L			1.00	0.086		09/09/08

LS
8-09-2010

Note: Gamma spectrometry and Tc-99 ICP-MS results not validated per VSR instructions.

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

J - Analyte < lowest calibration but > = MDL.(org)
U - Analyzed for but not detected above limiting criteria.
X - Other flags/notes described in the comments/narrative(inorg)

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

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-133
Sample # W08GR02624
Client ID: B1W1B2 TRENT WSCF

Matrix: WATER

Group #: WSCF20081478
Department: Radiochemistry
Sampled: 07/16/08
Received: 07/17/08

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	0.0500	pCi/L	+-0.0930	pCi/L	1.00	0.16		09/11/08
Am-243 tracer by AEA	AM243	LA-508-471		10.0	pCi/L			1.00	0.099		09/11/08
Gamma Energy Analysis-grd H2O											
Cobalt-60	10198-40-0	LA-508-481	U	-2.07	pCi/L	+-3.91	pCi/L	1.00	6.7		07/23/08
Cesium-137	10045-97-3	LA-508-481	U	-2.87	pCi/L	+-4.21	pCi/L	1.00	7.1		07/23/08
Plutonium Isotopics by AEA											
Plutonium-238	13981-16-3	LA-508-471	U	0.0270	pCi/L	+-0.0664	pCi/L	1.00	0.12		09/10/08
Pu-239/240 by AEA	PU-239/240	LA-508-471	U	0.0140	pCi/L	+-0.0211	pCi/L	1.00	0.033		09/10/08
Pu-242 tracer by AEA	PU242	LA-508-471		16.0	pCi/L			1.00	0.049		09/10/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	-0.390	pCi/L	+-2.68	pCi/L	1.00	1.1		07/30/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		82.2	Percent			1.00	0.0		07/30/08
TC99 by ICP-200.8 MS Prep											**08/01/08**
TC99 by ICP-200.8 MS											
Technetium by ICP-MS	14133-76-7	LA-505-412	U	< 1.00e-03	ug/L			1.00	1.0e-03		08/01/08
TC99 by Liquid Scin.											
Tc-99 by Liquid Scin.	14133-76-7	LA-508-421	U	-1.70	pCi/L	+-3.59	pCi/L	1.00	5.9		07/29/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		0.630	pCi/L	+-0.195	pCi/L	1.00	0.049		09/09/08
Uranium-235	15117-96-1	LA-508-471	U	0.0100	pCi/L	+-0.0284	pCi/L	1.00	0.054		09/09/08
Uranium-238	U-238	LA-508-471		0.290	pCi/L	+-0.107	pCi/L	1.00	0.034		09/09/08
U-232 tracer by AEA	U232	LA-508-471		10.0	pCi/L			1.00	0.080		09/09/08

Note: Gamma spectrometry and Tc-99 ICP-MS results not validated per VSR instructions.

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor

D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

J - Analyte < lowest calibration but > = MDL.(org)
U - Analyzed for but not detected above limiting criteria.
X - Other flags/notes described in the comments/narrative(inorg)

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

Appendix 4

Laboratory Narrative and Chain-of-Custody Documentation

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

Tel: 509 375 3131 Fax: 509 375 5590
www.stl-inc.com

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

July 25, 2007

Attention: Steve Trent

SAF Number :W07-005, S07-005, S07-003, I07-042
Date SDG Closed :May 30, 2007
Number of Samples :Twenty (20)
Sample Type :Water
SDG Number :W05177
Data Deliverable:45-Day / Summary

CASE NARRATIVE

I.Introduction

Between May 14, 2007 and May 30, 2007 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1N5V1	JW5XJ	5/14/07	WATER
B1N5V6	JW5XV	5/14/07	WATER
B1N5T8	JW5X0	5/14/07	WATER
B1N5W1	JW5X6	5/14/07	WATER
B1N4V0	JW5X7	5/14/07	WATER
B1N4V1	JW50C	5/14/07	WATER
B1N3Y6	JW50V	5/14/07	WATER
B1MDR1	JW517	5/14/07	WATER
B1N593	JW551	5/15/07	WATER
B1N5B3	JW58N	5/15/07	WATER
B1N598	JW586	5/15/07	WATER
B1N5F3	JW59C	5/15/07	WATER
B1N5D5	JW595	5/15/07	WATER

B1N5L4	JW6CC	5/15/07	WATER
B1N5J9	JW6CQ	5/15/07	WATER
B1N5K9	JW6C0	5/15/07	WATER
B1N5M4	JW6C4	5/15/07	WATER
B1N5K4	JXH60	5/21/07	WATER
B1MN47	JXWPF	5/24/07	WATER
B1N2L4	JX1CV	5/30/07	WATER

II.Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium 90 by method RICH-RC-5006
Gamma Spectroscopy
Gamma (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counter
Technetium-99 by TEVA method RICH-RC-5065
Technetium-99 method RICH-RC-5078
Nickel-63 by method RICH-RC-5069
Tritium by method RICH-RC-5007
Total Uranium
Total Uranium by method RICH-RC-5058

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:
Samples B1MDR1, B1N593 and B1MDR1 (DUP) were analyzed with reduced aliquots based on weight screen results. The duplicates were not within RPD. A recount did not bring them within RPD, but the difference is within 1 CRDL so the data will be accepted. Except as noted, the LCS, batch blank, sample and sample duplicate (B1MDR1) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
Samples B1MDR1 and B1N593 were analyzed with reduced aliquots based on weight screen results. Except as noted, the LCS, batch blank, sample and sample duplicate (B1N2L4) results are within contractual requirements.

Strontium 90 by method RICH-RC-5006:
The LCS, batch blank, sample and sample duplicate (B1N2L4) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec by method RICH-RC-5017:
The LCS had a high recovery on the first analysis. The entire batch was reanalyzed and had acceptable results. Except as noted, the LCS, batch blank, sample and sample duplicate (B1N5V1) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS and blank was switched. The samples were recounted to verify the switch, then renamed in the calculations. Except as noted, the LCS, batch blank, sample and sample duplicate (B1MN47) results are within contractual requirements.

Liquid Scintillation Counter

Technetium-99 by TEVA method RICH-RC-5065:
The TSIE was out on the original count. The samples were shaken, wiped and recounted with acceptable results. Except as noted, the LCS, batch blank, sample, sample duplicate (B1N5L4) and sample matrix spike (B1N5J9) results are within contractual requirements.

Technetium-99 by method RICH-RC-5078:
The sample and its duplicate (B1N5V6 and B1N5V6 DUP) did not agree on the first count. The samples were recounted and remained out of limits. The samples were reanalyzed. The blank was high and the samples verified the first results. The client was notified on July 24, 2007 by IRF 07-070. The client agreed to accept the proposed resolution which was to accept the results of the original analysis based on the rest of the QC results. Except as noted, the LCS, batch blank, samples, and sample matrix spike (B1N5V6) results are within contractual requirements.

Pacific Northwest National Laboratories
July 25, 2007

Nickel-63 by method RICH-RC-5069:
The LCS, batch blank, sample and sample duplicate (B1N593) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, sample and sample duplicate (B1N5B3) results are within contractual requirements.

Total Uranium
Total Uranium by method RICH-RC-5058:
The LCS, batch blank, samples, sample duplicate (B1N5V1), and sample matrix spike (B1N5V6) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, 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 Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Sherryl A. Adam
Project Manager

PNNL J7E170168
WO5177
Due 06 28 07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-168**

Page 1 of 1

Collector Fluor Hanford, BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-8	**Ice Chest No.** SPP-03-021 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5V1		W	5-14-07	1213	1x20-mL P	Activity Scan	None
B1N5V1		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N5V1		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N5V1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5V1		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5XJ	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford, BREWINGTON	D.L. Brewington		MAY 14 2007 1440		S. Smith	S. Smith	MAY 14 2007 1640
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

STL RICHLAND

PNNL J7E170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-174**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-W-506-8	**Ice Chest No.** GPP-03-027 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5V6		W	5-14-07	1257	1x20-mL P	Activity Scan	None
B1N5V6		W			3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1N5V6		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N5V6		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5XV	
						5-14-07	

Relinquished By Fluor Hanford D. R. BREWINGTON	Print D.R. Brewington Sign	Date/Time 1440 MAY 14 2007	Received By S. Smith	Print S. Smith Sign	Date/Time 1440 MAY 14 2007
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

PNNL J7E170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-162**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-8	**Ice Chest No.** GRP-03-037 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5T8		W	5-14-07	1027	1x20-mL P	Activity Scan	None
B1N5T8		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N5T8		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N5T8		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5T8		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5X0	
						5-14-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington	D. R. Brewington	MAY 14 2007 1440	S. Smith	S. Smith	S. Smith	MAY 14 2007 1540
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

87

STL RICHLAND

PNNL J7E170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-182**

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-8	**Ice Chest No.** GRP-03-027 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5W1		W	5-14-07	11 20	1x20-mL P	Activity Scan	None
B1N5W1		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N5W1		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N5W1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5W1		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5X6	
						5-14-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		1440 MAY 14 2007		S. Smith	S. Smith	1440 MAY 14 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

STL RICHLAND

PNNL J7E170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-150**

Page 1 of 1

Collector Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HN-N-506-8	**Ice Chest No.** GRP-03-027 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4V0		W	5-14-07	0936	1x20-mL P	Activity Scan	None
B1N4V0		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4V0		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N4V0		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW5X7	
						5-14-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Hanford D. R. BREWINGTON			MAY 14 2007 1440		S. Smith	S. Smith	MAY 14 2007 1440
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL JTE170168
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-151**

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-8	**Ice Chest No.** GRP-03-027 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4V1		W	5-14-07	0800	1x20-mL P	Activity Scan	None
B1N4V1		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4V1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N4V1		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW50C	

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford D. E. PARCHEN (Print) (Sign)	1440 MAY 14 2007	S. Smith (Print) S. Smith (Sign)	1440 MAY 14 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

90

PNNL J7E170177
W05177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-005-138

Page 1 of 1

Collector: Fluor Hanford F.M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV. MAY 2007	HNF-N-506-7	Ice Chest No.: 595 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N3Y6		W	5/14/7	1236	1x20-mL P	Activity Scan	None
B1N3Y6		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N3Y6		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1N3Y6		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N3Y6		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
						JW.50V	

Relinquished By	Date/Time	Received By	Date/Time
Print: Fluor Hanford F.M. HALL Sign: MAY 14 2007	1440	Print: S. Smith Sign: S. Smith MAY 14 2007	1440

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

SIL RICHLAND

PNNL J7E170190
WO5177
Due 06-28-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-003-205

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: S07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, MARCH 2007	HNF-N-506-7	Ice Chest No.: 562 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MDR1		W	5/14/7	1000	1x20-mL P	Activity Scan	None
B1MDR1		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MDR1		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

JW517

Relinquished By: Fluor Hanford F. M. HALL Print / Sign: MAY 14 2007	Date/Time: 1440	Received By: Print / Sign: S. Smith MAY 14 2007	Date/Time: 1440
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

94

PNNL J7E170202
W05177
due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-386

Page 1 of 1

Collector L.D. WALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W07-005	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, MAY 2007	HNF-N-506-6	Ice Chest No. 447 Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N593		W	5-15-07	0827	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1N593		W			1x20-mL P	Activity Scan	None
B1N593		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N593		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N593		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1N593		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1N593		W			1x1000-mL G/P	NI63_LSC: Nickel-63 (1)	HNO3 to pH <2
						JW551	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. Wall		MAY 15 2007 1315		S. Smith	S. Smith	MAY 15 2007 1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

PNNL 07E170202
WOS177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-402**

Page 1 of 1

Collector L.D. WALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-6	**Ice Chest No.** 443 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5B3		W	5-15-07	0919	1x20-mL P	Activity Scan	None
B1N5B3		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5B3		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1N5B3		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JW58N	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. Wall		MAY 15 2007 1315	S. Smith		S. Smith	MAY 15 2007 1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL J7E170202
WC5177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-394**

Page 1 of 1

Collector: D. WALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	HNF-N-606-6	Ice Chest No.: 443 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N598		W	5-15-07	1010	1x20-mL P	Activity Scan	None
B1N598		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N598		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW586	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. Wall		MAY 15 2007 1315	S. Smith	S. Smith		MAY 15 2007 1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SHF RICHLAND

98

PNNL J7E170202
W05177
Due 06 29 07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-450

Page 1 of 1

Collector: L.D. WALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	1/ NF-N-506-6	Ice Chest No.: 443 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5F3		W	51507	1102	1x20-mL P	Activity Scan	None
B1N5F3		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5F3		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1N5F3		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JW59C	

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
L.D. WALL L.D. Wall	MAY 15 2007 1315	S. Smith S. Smith	MAY 15 2007 1315
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL J7E170202
W05177
Due 6-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-438

Page 1 of 1

Collector L.D. WALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W07-005	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, MAY 2007	HNF-N-506-6	Ice Chest No. 443 Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5D5		W	5/15/07	1155	1x20-mL P	Activity Scan	None
B1N5D5		W	↓		1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N5D5		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JW585	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
L.D. WALL	L.D. Wall		MAY 1 5 2007 1315	S. Smith	S. Smith		MAY 1 5 2007 1315
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

100

STL RICHLAND

PNNL ~~J7E170230~~ 58 J7E170231
W05177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-518

Page 1 of 1

Collector: ~~Fluor Hanford~~ D. E. PARCHEN	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	HWF-N-5068	Ice Chest No.: SMC 24 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5L4		W	5-15-07	0849	1x20-mL P	Activity Scan	None
B1N5L4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JWLCC	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~Fluor Hanford~~ D. E. PARCHEN			1315 MAY 15 2007	S. Smith		S. Smith	1315 MAY 15 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL J7E170231
W05177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-494

Page 1 of 1

Collector: Fluor Hanford D. E. PARCHEN	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	HNF-N-506 8	Ice Chest No. SMC 24 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5J9		W	5-15-07	1006	1x20-mL P	Activity Scan	None
B1N5J9		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JW6CG	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			MAY 15 2007		S. Smith	S. Smith	MAY 15 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

103

STL RICHLAND

PNNL J7F170231 W05177 Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-510

Page 1 of 1

Collector: Fluor Hanford D. E. PARCHEN	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	HNF-N-506 8	Ice Chest No.: SML 24 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5K9		W	5-15-07	1110	1x20-mL P	Activity Scan	None
B1N5K9		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JW6CU	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			MAY 15 2007 B15		S. Smith	S. Smith	MAY 15 2007 B15
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL JTE170231
W05177
Due 06-29-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-534

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506 9	**Ice Chest No** SML 24 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5M4		W	5-15-07	1153	1x20-mL P	Activity Scan	None
B1N5M4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JW6C4	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. E. PARCHEN			MAY 15 2007		S. Smith	S. Smith	MAY 15 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

105

PNNL J7E230215 W05177 Due 07.05.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-005-502

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MAY 2007	HNF-N-506-7	Ice Chest No.: 562 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N5K4		W	5/21/7	1028	1x20-mL P	Activity Scan	None
B1N5K4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JXH60	

Relinquished By: Fluor Hanford F. M. HALL Print Sign MAY 2 1 2007	Date/Time 1508	Received By: S. Smith Print S. Smith Sign MAY 2 1 2007	Date/Time 1508
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

107

PNNL JTE290176
W05177
Due 07.09.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-038-12

Page 1 of 1

Collector: Fluor Hanford	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: E. M. HALL I07-038	Sampling Origin: Hanford site	Purchase Order/Charge Code
Project Title: 2ZP1-LOI, APRIL 2007	HNF-N-506-7	Ice Chest No.: 362 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MN47		W	5/24/7	0850	1x20-mL P	Activity Scan	None
B1MN47		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JXWPF	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford E. M. HALL		MAY 24 2007	1530	WYSEL/ANDERSON		MAY 24 2007	1530

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

STL RICHLAND

109

PNNL J7E310108 WCS177 Due 07.13.07

STL RICHLAND

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-042-2

Page 1 of 1

Collector	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-042	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100NR2IAM-LOI, MAY 2007	Logbook: HNF-N-506-8	**Ice Chest No.** SKIWS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N2L4		W	5/30/07	1121	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1N2L4		W	↓	↓	1x20-mL P	Activity Scan	None
B1N2L4		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JXICV	

L. Wells 5/30/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford	D.K. Brunzen	D.K. Brunzen	MAY 30 2007 1530	D. Smith	D. Smith	D. Smith	MAY 30 2007 1530
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

December 10, 2007

Attention: Steve Trent

SAF Number	:	S08-010, I08-002, G08-010, A08-010, W08-010
Date SDG Closed	:	October 11, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05246
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between October 8, 2007 and October 11, 2007 twenty water samples were received at TestAmerica Laboratories Richland (TALR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1PVX1	J8H42	10/8/07	WATER
B1PVX3	J8H5D	10/8/07	WATER
B1PTW7	J8H52	10/8/07	WATER
B1PTP4	J8H56	10/8/07	WATER
B1PTX1	J8H6M	10/8/07	WATER
B1PPN8	J8L60	10/9/07	WATER
B1PPP0	J8L65	10/9/07	WATER
B1NVK0	J8L9W	10/9/07	WATER
B1PVK4	J8L96	10/9/07	WATER
B1PVL2	J8L99	10/9/07	WATER
B1PVC9	J8MAA	10/9/07	WATER
B1PVH5	J8MAD	10/9/07	WATER
B1PVW2	J8MAF	10/9/07	WATER

B1PPK8	J8NL9	10/10/07	WATER
B1PPK2	J8NMF	10/10/07	WATER
B1PPJ6	J8NMN	10/10/07	WATER
B1PPJ8	J8NM0	10/10/07	WATER
B1PPJ4	J8T3G	10/10/07	WATER
B1PWK4	J8T3T	10/11/07	WATER
B1PWL6	J8T32	10/11/07	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Carbon-14 by method RICH-RC-5022

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
The LCS in the original had a low recovery. A recount confirmed the low recovery. The samples were reanalyzed with acceptable results. Samples B1PTW7, B1PTP4, B1PVK4, B1PVL2, B1PVK0 and B1PVH5 were analyzed with reduced volumes base on high weight screens. Sample B1PTP4 DUP was analyzed with reduced volume due to insufficient sample remaining. Except as noted, the LCS, batch blank, samples and sample duplicate (B1PTP4) results are within contractual requirements.

Fluor Hanford
December 10, 2007

Gross Beta by method RICH-RC-5014:
Samples B1PTW7, B1PTX1, B1PPN8, B1PVK4, B1PVL2, B1PVK0, B1PVC9, B1PVH5, and B1PVK0 DUP were analyzed with reduced volumes base on high weight screens. Samples B1PPN8 and B1PVK4 did not meet the CRDL. The results exceed the MDA achieved. Except as noted, the LCS, batch blank, samples and sample duplicate (B1PVK0) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
The LCS, batch blank, samples and sample duplicate (B1PVX1) results are within contractual requirements.

Gamma Spectroscopy
Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1PPJ4) results are within contractual requirements.

Liquid Scintillation Counting
Carbon-14 by method RICH-RC-5022:
The LCS, batch blank, samples and sample duplicate (B1PTW7) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, 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 Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

TestAmerica Richland

FLUOR HANFORD	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST JTJ090222 W05274 RW Due 11.22.07	C.O.C. # S08-010-126 Page 1 of 1

Collector: Josh Herrick, Fluor Hanford	Contact/Requester: Steve Trent 10/10/07	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV. OCTOBER 2007	HNF-N-506-5	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PVX1		W	10807	1257	1x20-mL P	Activity Scan	None
B1PVX1		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						J8H42	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Josh Herrick, Fluor Hanford			OCT 08 2007 1453		LNLANE	TAL-R	OCT 08 2007 1453
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

42

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J090222 W05248 Due 11 2 2 07

C.O.C. # S08-010-130

Page 1 of 1

Collector: Josh Herrick, Fluor Hanford	Contact/Requester: Steve Trent 10/10/07	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, OCTOBER 2007	HNF-N-506-5	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS: ** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PVX3		W	10-8-06	1140	1x20-mL P	Activity Scan	None
B1PVX3		W	"	"	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						J8H5D.	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Josh Herrick, Fluor Hanford			OCT 08 2007 1453		LVLANE	TAL-R	OCT 08 2007 1453
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J090227 W05246

C.O.C. # I08-002-80

Page 1 of 1

Collector Josh Herrick, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: 108-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2), OCTOBER 2007	HNF-N-506-5	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PTW7		W	10807	1257	1x20-mL P	Activity Scan	None
B1PTW7		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1PTW7		W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	None
						J8H52	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Josh Herrick, Fluor Hanford			OCT 08 2007 1453		LLANE TAL-R		OCT 08 2007 1453
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica Richland

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J040227 W05246 Due 11.22.07

C.O.C. # **I08-002-74**

Page 1 of 1

Collector Josh Herrick, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: 108-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2), OCTOBER 2007	HNF-N-526-5	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PTP4		W	10.8.07	1008	1x20-mL P	Activity Scan	None
B1PTP4		W	✓	✓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1PTP4		W	✓	✓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1PTP4		W	✓	✓	2x1000-mL G/P	C14_LSC: C-14 (1)	None
						J8H56	

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Josh Herrick, Fluor Hanford	10.8.07 1453	LWLANE TAL-R	10.8.07 1453
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica Richland

46

TestAmerica Richland

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JTJ090227 W05246 Due 11.22.07

C.O.C. # I08-002-86

Page 1 of 1

Collector: Josh Herrick, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: 108-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2), OCTOBER 2007	HNF-N-506-5	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PTX1		W	10.8.07	1140	1x20-mL P	Activity Scan	None
B1PTX1		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1PTX1		W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	None
						JTHGM	

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Josh Herrick, Fluor Hanford	OCT 08 2007 1453	LLANE TAL-R	OCT 08 2007 1453

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J100266 W05246 DUE 11-23-07 J8L60

C.O.C. # G08-010-16

Page 1 of 1

Collector: Fluor Hanford K. B. HULSE	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code: ERC-96-037 JA 10-9-07
Project Title: INR2-RB, OCTOBER 2007	HNF-N-506-12	Ice Chest No.: 104 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: SURV	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPN8		W	10/9/07	1102	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1PPN8		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			OCT 0 9 2007 1315	J.G. Hogan Fluor Hanford			OCT 0 9 2007 1315
J.G. Hogan Fluor Hanford			OCT 0 9 2007 1420	S. Smith			OCT 0 9 2007 1420

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica Richland

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G08-010-18

Page 1 of 1

J7J100266 W05246 DUE 11-23-07 J8L65

Collector: Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-010 K. B. HULSE	Sampling Origin: Hanford Site	Purchase Order/Charge Code: ERC-96-034 JA 10-9-07
Project Title: INR2-RB, OCTOBER 2007	HNF-N-506-12	Ice Chest No.: 104 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: SURV	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPP0		W	10/9/07	1151	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1PPP0		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K. B. HULSE			1315 OCT 0 9 2007	J.G. Hogan Fluor Hanford			1315 OCT 0 9 2007
J.G. Hogan Fluor Hanford			1420 OCT 0 9 2007	S. Smith			1420 OCT 0 9 2007

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J100281 W05246 DUE 11-23-07 J8L9W

C.O.C. # S08-010-60

Page 1 of 1

Collector: J.G. Hogan	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-010 Fluor Hanford	Sampling Origin: Hanford Site	Purchase Order/Charge Code:
Project Title: SURV. OCTOBER 2007	HWF-N-506 ID Pg 18	Ice Chest No.: ~~ERC-96-034~~ ~~GWO-06-12~~ PA 10-9-07 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.:
Protocol: SURV	Priority: 45 Days	Offsite Property No.:

POSSIBLE SAMPLE HAZARDS/REMARKS: " "

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PVK0		W	10/9/07	0956	1x20-mL P	Activity Scan	None
B1PVK0		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	J.G. Hogan Fluor Hanford	J Hogan	OCT 0 9 2007 1420	S. Smith		S. Smith	OCT 0 9 2007 1420
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica Richland

52

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J100281 W05246 DUE 11-23-07 J8L96

C.O.C. # S08-010-66

Page 1 of 1

Collector: J.G. Hogan	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: Fluor Hanford S08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code: ~~ERC-96-034~~ JA 10-9-07
Project Title: SURV, OCTOBER 2007	HNF-N-506 10 pg 18	Ice Chest No.: ~~GWO-0672~~ Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PVK4		W	10/9/07	1113	1x20-mL P	Activity Scan	None
B1PVK4		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
J.G. Hogan, Fluor Hanford / J.G. Hogan	OCT 0 9 2007 1420	S. Smith / S. Smith	OCT 0 9 2007 1420
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica Richland

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J100281 W05246 DUE 11-23-07 J8L99

C.O.C. # S08-010-78

Page 1 of 1

Collector: J.G. Hogan, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, OCTOBER 2007	HWF-W-506 10 pg 18	Ice Chest No.: ~~EPC-96034~~ ~~GWO-0612~~ Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PVL2		W	10/9/07	1210	1x20-mL P	Activity Scan	None
B1PVL2		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
J.G. Hogan, Fluor Hanford	OCT 0 9 2007 1420	S. Smith	OCT 0 9 2007 1420

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J100281 W05246 DUE 11-23-07 J8MAA

C.O.C. # S08-010-7

Page 1 of 1

Collector: Steve Overdahl, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code: ERC 96-034 10-7-07
Project Title: SURV, OCTOBER 2007	HNF-N-506-5	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS: ** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PVC9		W	10907	0830	1x20-mL P	Activity Scan	None
B1PVC9		W	"	"	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Steve Overdahl, Fluor Hanford	OCT 09 2007 1315	JG HOGAN	OCT 09 2007 1315
JG HOGAN	OCT 09 2007 1420	S. Smith	OCT 09 2007 1420

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J100281 WO5246 DUE 11-23-07 JSMAD

C.O.C. # S08-010-38

Page 1 of 1

Collector Steve Overdahl Fluor Hanford	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. S08-010	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SURV, OCTOBER 2007	HNF-N-506-5	Ice Chest No. ~~EPE 96-034~~ 10-9-07 GW-1 Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PVH5		W	10-9-07	1010	1x20-mL P	Activity Scan	None
B1PVH5		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1PVH5		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Steve Overdahl Fluor Hanford			OCT 09 2007 1315	J G Hogan			OCT 09 2007 1315
J G Hogan			OCT 09 2007 1420				OCT 09 2007 1420

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J100281 W05246 DUE 11-23-07 J8MAF

C.O.C. # S08-010-4

Page 1 of 1

Collector: Steve Overdahl, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code: FRC96-034 PA 10-5-07
Project Title: SURV, OCTOBER 2007	HNF-N-506	Ice Chest No.: Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS: ** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PVW2		W	10907	0905	1x20-mL P	Activity Scan	None
B1PVW2		W	✓	✓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Steve Overdahl, Fluor Hanford	OCT 09 2007 1315	JG HOGAN	OCT 09 2007 1315
JG HOGAN	OCT 09 2007 1420	S. Smith	OCT 09 2007 1420

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TestAmerica Richland

57

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J110113 W05246 DUE 11-23-07 J8NL9

C.O.C. # A08-010-29

Page 1 of 1

Collector Steve Overdahl Fluor Hanford	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. A08-010	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title LLWMA(2)-PA, OCTOBER 2007	HNF-N-506.5	Ice Chest No. 595 Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPK8		W	10/10/07	1234	1x20-mL P	Activity Scan	None
B1PPK8		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Steve Overdahl Fluor Hanford			OCT 10 2007 1455		S. Smith	S. Smith	OCT 10 2007 1455
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J110113 W05246 DUE 11-23-07 J8NMF

C.O.C. # A08-010-21

Page 1 of 1

Collector: Steve Overdahl, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(2)-PA, OCTOBER 2007	HNF-N-506-5	Ice Chest No.: 595 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPK2		W	10/10/07	1110	1x20-mL P	Activity Scan	None
B1PPK2		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Steve Overdahl, Fluor Hanford			OCT 10 2007 1455		S. Smith	S. Smith	OCT 10 2007 1455
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica Richland

60

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J110113 W05246 DUE 11-23-07 J8NMN

C.O.C. # A08-010-9

Page 1 of 1

Collector: Roy Shepard, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(2)-PA, OCTOBER 2007	HNF-N-506-12 pg 4	Ice Chest No.: SAWS-118 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: Other	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPJ6		W	10/10/07	1121	1x20-mL P	Activity Scan	None
B1PPJ6		W	10/10/07	1121	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Roy Shepard, Fluor Hanford	10/10/07 1340	Steve Overdahl, Fluor Hanford	OCT 10 2007 1340
Steve Overdahl, Fluor Hanford	OCT 10 2007 1455	S. Smith	OCT 10 2007 1455

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION: Disposal Method (e.g., Return to customer, per lab procedure, used in process) — Disposed By — Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J110113 W05246 DUE 11-23-07 J8NM0

C.O.C. # A08-010-13

Page 1 of 1

Collector: Roy Shepard, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(2)-PA OCTOBER 2007	HNF-N-506-12 pg 4	Ice Chest No.: SAWS-118 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: Other	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPJ8		W	10/10/07	0928	1x20-mL P	Activity Scan	None
B1PPJ8		W	10/10/07	0928	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Roy Shepard, Fluor Hanford	10/10/07 1340	Steve Dyrcschl, Fluor Hanford	OCT 10 2007 1340
Steve Overstreet, Fluor Hanford	OCT 10 2007 1455	S. Smith	OCT 10 2007 1455
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JTJ120216 W05246 Due 11.26.07

C.O.C. # A08-010-5

Page 1 of 1

Collector: Fluor Hanford K. B. HULSE	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(2)-PA, OCTOBER 2007	HNF-N-506 12	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: N/A
Protocol: Other	Priority: 45 Days	Offsite Property No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PPJ4		W	10/11/07	1108	1x20-mL P	Activity Scan	None
B1PPJ4		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JJT3G	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			OCT 11 2007 1505		LJ LANE	TAL-R	OCT 11 2007 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica Richland

64

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7J120218 W05246 Due 11-26-07

C.O.C. # **W08-010-108**

Page 1 of 1

Collector Fluor Hanford K. B. HULSE	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-010	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, OCTOBER 2007	HNF-N-506 12	**Ice Chest No.** ED3 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** N/A
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.** N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PWK4		W	10/11/07	1108	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1PWK4		W	↓	↓	1x20-mL P	Activity Scan	None
						J8T3T	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			OCT 11 2007 1505		LN LANE	TAL-R	OCT 11 2007 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica Richland

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JTJ120222 W05246 Due 11.26.07

C.O.C. # W08-010-116

Page 1 of 1

Collector: Roy Shepard, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-010	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, OCTOBER 2007	Logbook: HNF-N-506-11	Ice Chest No.: SMC-538 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PWL6		W	10/11/07	1027	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1PWL6		W	↓	↓	1x20-mL P	Activity Scan	None
B1PWL6		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						J8T32	

R. Wall 10/11/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Roy Shepard, Fluor Hanford			OCT 11 2007 1505		LW LANE	TAL-R	OCT 11 2007 1505
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

March 10, 2008

Attention: Steve Trent

SAF Number	:	W08-012, I08-013, A08-012, G08-012, S08-012, I08-012, I08-019, I08-016
Date SDG Closed	:	January 7, 2008
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05309
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between January 3, 2008 and January 7, 2008 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1RJR6	KE3EV	1/3/08	WATER
B1RHH7	KE3FL	1/3/08	WATER
B1RHK0	KE3FM	1/3/08	WATER
B1RBN0	KE3F3	1/3/08	WATER
B1RBN1	KE3F5	1/3/08	WATER
B1R9C0	KE3GE	1/3/08	WATER
B1R9C1	KE3GF	1/3/08	WATER
B1R9P0	KE3G2	1/3/08	WATER
B1R9N6	KE3G6	1/3/08	WATER
B1R9N9	KE3G7	1/3/08	WATER
B1RHP4	KE4LM	1/4/08	WATER
B1RCM9	KE4LQ	1/4/08	WATER
B1RBH7	KE4LX	1/4/08	WATER

B1R9D1	KE4L3	1/4/08	WATER
B1R9F1	KE4MA	1/4/08	WATER
B1R9C7	KE4MC	1/4/08	WATER
B1RTF5	KE6DE	1/7/08	WATER
B1RRC8	KE6DJ	1/7/08	WATER
B1RRC4	KE6DK	1/7/08	WATER
B1RRC3	KE6DL	1/7/08	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy
Uranium 234, 235 and 238 by method RICH-RC-5039
Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Selenium-79 by method RICH-RC-5043
Carbon-14 by method RICH-RC-5022
Chemical Analysis
Hexavalent Chromium by EPA method 7196A
Total Coliform by method 9223

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

Fluor Hanford
March 10, 2008

V. Comments

Alpha Spectroscopy

Uranium 234, 235 and 238 by method RICH-RC-5039:
The LCS, batch blank, sample and sample duplicate (B1RBH7) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:
Sample B1R9N6 was analyzed with reduced volume based on elevated screen result. Samples B1RJR6, B1RHK0, B1R9N9, B1RCM9 and B1RHK0 (DUP) were analyzed with reduced volumes based on weight screen. Except as noted, the LCS, batch blank, samples and sample duplicate (B1RHK0) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
Samples B1R9N6 and B1R9N9 were analyzed with reduced volumes based on elevated screen results. Samples B1RJR6 and B1RJR6 (DUP) were analyzed with reduced volumes based on weight screen. Samples B1R9N6 and B1R9N9 did not meet the RDL due to the reduced aliquot sizes. The activity detected was greater than the IDC, therefore the data can be accepted. Except as noted, the LCS, batch blank, samples and sample duplicate (B1RJR6) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
Sample B1R9N6 was analyzed with reduced volume based on elevated screen result. Sample B1R9N6 did not meet the RDL due to the reduced aliquot size. The activity detected was greater than the IDC, therefore the data can be accepted. The LCS, batch blank, samples and sample duplicate (B1RHK0) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:
The LCS had a high yield of Eu-152 at 127% on the first count. The LCS was recounted, providing a yield of 99%. The LCS, batch blank, samples and sample duplicate (B1R9N9) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS failed on the original analysis. The samples were reanalyzed. There was insufficient volume for sample B1RBN0 therefore no result will be reported. Except as noted, the LCS, batch blank, samples and sample duplicate (B1RBH7) results are within contractual requirements.

Liquid Scintillation Counting

Selenium-79 by method RICH-RC-5043:
There is no LCS for selenium-79. Except as noted, the batch blank, samples and sample duplicate (B1RBH7) results are within contractual requirements.

Carbon-14 by method RICH-RC-5022:
The LCS, batch blank, samples and sample duplicate (B1RRC4) results are within contractual requirements.

Fluor Hanford
March 10, 2008

Chemical Analysis

Total Coliform by method 9223

The LCS, batch blank, samples and sample duplicate (B1RHH7) results are within contractual requirements.

Hexavalent Chromium by EPA method 7196A

BATCH 8009380

The LCS, batch blank, samples, sample duplicate (B1RTF5), sample matrix spike (B1RTF5), and matrix spike duplicate (B1RTF5) results are within contractual requirements.

BATCH 8009381

The LCS, batch blank, samples, sample duplicate (B1RRC8), sample matrix spike (B1RRC8), and matrix spike duplicate (B1RRC8) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, 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 Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040121 W05309 DUE 021808 KEBEV

C.O.C. # W08-012-11

Page 1 of 1

Collector R. A. Shepard	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. W08-012	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, DECEMBER 2007	14NF-N-506-13	Ice Chest No. Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RJR6		W	1308	1219	1x20-mL P	Activity Scan	None
B1RJR6		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
R. A. Shepard	1/3/08 1420	Josh Herrick	1/3/08 1420
Josh Herrick	1/3/08 1530	RALJLANE TAL-R	1-3-08 1530

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA RICHLAND

69

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040124 W05309 DUE 021808 KE3FL

C.O.C. # **W08-012-14**

Page 1 of 1

Collector Dave Williamson, Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA DECEMBER 2007	HNF-N-506-11	**Ice Chest No.** 6C3-03-006 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RHH7		W	1/3/08	1242	1x20-mL P	Activity Scan	None
B1RHH7		W	↓	↓	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool~4C
B1RHH7		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

1/3/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Dave Williamson, Fluor Hanford	Dave Williamson		1/3/08 1550		LVLANE	TAL-N	1-3-08 1550
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040124 W05309 DUE 021808 KE3FM

C.O.C. # **W08-012-18**

Page 1 of 1

Collector ~~Dave Williamson~~ Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, DECEMBER 2007	HNF-N-506-11	**Ice Chest No.** SAWS 109 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RHK0		W	1/3/08	1125	1x20-mL P	Activity Scan	None
B1RHK0		W			1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool~4C
B1RHK0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1RHK0		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1RHK0		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

1/3/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	~~Dave Williamson~~ ~~Fluor Hanford~~		1/3/08 1530		LWLANE	TALK	1-3-08 1530
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040128 W05309 DUE 021808 KE3F3

C.O.C. # I08-013-13

Page 1 of 1

Collector: R. R. Fox	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1, DECEMBER 2007	HNF-N-506-10	Ice Chest No.: SML-524 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RBN0		W	1-3-08	1016	1x20-mL P	Activity Scan	None
B1RBN0		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. R. Fox			1410 JAN 03 2008	Josh Herrick			1410 JAN 03 2008
Josh Herrick			1530 1/3/08		LUSLANE	THL-K	1530 1-3-08

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040128 W05309 DUE 021808 KE3F5

C.O.C. # I08-013-14

Page 1 of 1

Collector R. R. Fox	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. I08-013	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2ZP1, DECEMBER 2007	HNF-N-506-70	Ice Chest No. SML-524 Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RBN1		W	1-3-08	1006	1x20-mL P	Activity Scan	None
B1RBN1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. R. Fox			JAN 03 2008 1410	Josh Herrick			JAN 03 2008 1410
Josh Herrick			1-3-08 1530	LJLANE TAL-K			1-3-08 1530

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040132 WO5309 DUE 021808 KE3GE

C.O.C. # A08-012-7

Page 1 of 1

Collector: ~~Dave Williamson~~ Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(1)-PA, DECEMBER 2007	4NI-N-306.1	Ice Chest No.: ERR-08-006 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9C0		W	1/2/08	0938	1x20-mL P	Activity Scan	None
B1R9C0		W	✓		2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
			1/3/08				

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Dave Williamson, ~~Fluor Hanford~~			1530 JAN 03 2008		LJLANE		1530 1-3-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040132 W05309 DUE 021808 KE3GF

C.O.C. # A08-012-8

Page 1 of 1

Collector Dave Williamson Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. A08-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title LLWMA(1)-PA, DECEMBER 2007	HNF-N-506-11	**Ice Chest No.** 6.2P.01.006 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol Other	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9C1		W	1/3/08	0938	1x20-mL P	Activity Scan	None
B1R9C1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

1/3/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Dave Williamson Fluor Hanford		1530 JAN 03 2008		K LILANE		1530 1-3-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040136 W05309 DUE 021808 KE3G2

C.O.C. # G08-012-79

Page 1 of 1

Collector R. A. Shepard	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. G08-012	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title INR2-RB, DECEMBER 2007	HNF-N 506-13	Ice Chest No. Temp.
Shipped To (Lab) TestAmerica Incornorated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9P0		W	1-3-08	0800	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1R9P0		W	↓	↓	1x20-mL P	Activity Scan	None
B1R9P0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1R9P0		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			1/3/08 1420	Josh Herrick			1/3/08 1420
Josh Herrick			1/3/08 1530	LJLANE TAL-IL			1-3-08 1530

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040136 W05309 DUE 021808 KE3G6

C.O.C. # G08-012-72

Page 1 of 1

Collector: R. A. Shepard	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB, DECEMBER 2007	HNF-N-506-03	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9N6		W	1308	1305	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1R9N6		W			1x20-mL P	Activity Scan	None
B1R9N6		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1R9N6		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			1/3/08 1420	Josh Herrick			1/3/08 1420
Josh Herrick			1/3/08 1530	RK LILANE THL-K			1-3-08 1530

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040132 RR WO5309 DUE 021808 KE3G7

C.O.C. # G08-012-78

Page 1 of 1

Collector: R. A. Shepard	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: G08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: INR2-RB, DECEMBER 2007	HNF-N-506-13	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9N9		W	1308	1114	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1R9N9		W	↓	↓	1x20-mL P	Activity Scan	None
B1R9N9		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1R9N9		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
R. A. Shepard	1308 1420	Josh Herrick	1308 1420
Josh Herrick	1-3-08 1530	K. LILANE TAL-R	1-3-08 1530

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040285 W05309 DUE 021808 KEHLM

C.O.C. # W08-012-30

Page 1 of 1

Collector: F.M. Hall	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, DECEMBER 2007	HNF-N-506-11	Ice Chest No.: 3ML-232 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RHP4		W	1-4-08	0936	1x20-mL P	Activity Scan	None
B1RHP4		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
F.M. Hall			JAN 04 2008 /415		LJLAVE	TAL-K	JAN 04 2008 /415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040286 W05309 DUE 021808 KEYLQ

C.O.C. # S08-012-41

Page 1 of 1

Collector: F.M. Hall	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: S08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SURV, DECEMBER 2007	HNF-N-506-11	Ice Chest No.: SinL-232 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RCM9		W	1-4-08	0934	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1RCM9		W			1x20-mL P	Activity Scan	None
B1RCM9		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1RCM9		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
F.M. Hall			1415 JAN 04 2008		LJLANE	TAL-K	1415 JAN 04 2008
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040287 W05309 DUE 021808 KE4LX

C.O.C. # I08-012-16

Page 1 of 1

Collector Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I08-012	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2UPL DECEMBER 2007	logbook: HNF-N-506-10	**Ice Chest No.** SAWS-107 **Temp.**
Shipped To (Lab) TestAmerica Incorporated Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RBH7		W	1/4/08	0900	1x20-mL P	Activity Scan	None
B1RBH7		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1RBH7		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1RBH7		W			2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1RBH7		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1RBH7		W			2x1000-mL G/P	Selenium-79	HNO3 to pH <2
B1RBH7		W			1x1000-mL G/P	UISO_PLATE_AEA: List-1 (3)	HNO3 to pH <2

R. Wall 1/4/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D.R. Bringh		D.R. Bringh	JAN 04 2008 1415	LJLANE	TAL-R		JAN 04 2008 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040288 W05309 DUE 021808 KE4L3

C.O.C. # A08-012-23

Page 1 of 1

Collector: R. R. Fox	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(1)-PA, DECEMBER 2007	HNF-N-506 13	Ice Chest No.: SML 538 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9D1		W	1-4-08	0925	1x20-mL P	Activity Scan	None
B1R9D1		W	↓	↓	2x~~1000~~-mL G/P 1-10 LITER	I129LL_SEP_LEPS_GS_LL: I-129 (1) NF 1-4-08	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. R. Fox			JAN 04 2008 /415		LWLANE	TAL-R	JAN 04 2008 /415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040289 W05309 DUE 021808 KEHMA

C.O.C. # A08-012-43

Page 1 of 1

Collector: Fluor Hanford R. T. SICKLE	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(1)-PA, DECEMBER 2007	HWF-N-506 13	Ice Chest No. SML 538 Temp.
Shipped To (Lab): TestAmerica Incorporated Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9F1		W	1-4-08	1209	1x20-mL P	Activity Scan	None
B1R9F1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			JAN 04 2008 1415		LULANE	TAL-R	JAN 04 2008 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A040289 W05309 DUE 021808 KE4MC

C.O.C. # A08-012-15

Page 1 of 1

Collector: Fluor Hanford R. T. SICKLE	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: A08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(1)-PA, DECEMBER 2007	HNF-N-506 13	Ice Chest No.: SML 538 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: Other	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1R9C7		W	1-4-08	1051	1x20-mL P	Activity Scan	None
B1R9C7		W	↓	↓	2x~~4000~~-mL G/P 1-10 LITER	I129LL_SEP_LEPS_GS_LL: I-129 (1) AF 1-4-08	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			JAN 04 2008 1415		LJLANE	TAL-R	JAN 04 2008 1415
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A070190 WO5309 DUE 2-21-08 KEGDE

C.O.C. # **I08-019-8**

Page 1 of 1

Collector Fluor Hanford RICHLAND	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I08-019	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title ISRM, JANUARY 2008	HNF-N-506 10	**Ice Chest No.** GW1 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RTF5		W	1-7-08	1227	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C
B1RTF5		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford RICHLAND	D.R. Bunger		JAN 07 2008 1515	R.R. LULANE	TAL-R		JAN 07 2008 1515
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A070191 WO5309 DUE 2-21-08 KEGDJ

C.O.C. # **I08-016-20**

Page 1 of 1

Collector: ~~Fluor Hanford~~ R. T. SICKLE	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-016	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2), JANUARY 2008	HNF-N-506-11	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RRC8		W	1/7/08	1222	1x20-mL P	Activity Scan	None
B1RRC8		W	1/7/08	1222	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			1400 1-7-08	D.R. Brewington	D.R. Brewington		1400 1-7-08
D.R. Brewington	D.R. Brewington		1515 1-7-08	LWL ANE TAL-K			1515 1-7-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8A070191 W05309 DUE 2-21-08 KEL DK

C.O.C. # I08-016-11

Page 1 of 1

Collector	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I08-016 ~~Fluor Hanford~~ R. T. SICKLE	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 100KR4IAM(1/2), JANUARY 2008	HNF-N-506-11	Ice Chest No. Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RRC4		W	1/7/08	1008	1x20-mL P	Activity Scan	None
B1RRC4		W			2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1RRC4		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Received By
Print: Fluor Hanford R. T. SICKLE; Sign: ; Date/Time: JAN 07 2008	Print: D.R. Brewington; Sign: ; Date/Time: 1-7-08
Print: D.R. Brewington; Sign: ; Date/Time: 1-7-08 1515	Print: LJ LANE TAL-R; Date/Time: 1-7-08 1515
Date/Time:	Date/Time:
Date/Time:	Date/Time:

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA RICHLAND

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JSA070191 WO5309 DUE 2-21-08 KEGDL

C.O.C. # **I08-016-10**

Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I08-016 Fluor Hanford R. T. SICKLE	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 100KR4IAM(1/2), JANUARY 2008	HNF-N-506-11	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
100 Area Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RRC3		W	1/7/08	1008	1x20-mL P	Activity Scan	None
B1RRC3		W	↓	↓	2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1RRC3		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Received By
Print: Fluor Hanford R. T. SICKLE Sign: [signature] Date/Time 1400 1-7-08	Print: D.A. Brewer for D.R. Bruff Sign: [signature] Date/Time 1400 1-7-08
Relinquished By: D.A. Brewer for D.R. Bruff Date/Time 1515 1-7-08	Received By: [signature] LILANE TAL-K Date/Time 1515 1-7-08
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA RICHLAND 99

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

March 31, 2008

Attention: Steve Trent

SAF Number	:	W08-002, S08-012, W08-012
Date SDG Closed	:	February 14, 2008
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05335
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between February 11, 2007 and February 13, 2008 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1T5R7	KGXJQ	2/11/08	WATER
B1T5P9	KGXJR	2/11/08	WATER
B1T5R3	KGXJT	2/11/08	WATER
B1T5W8	KGXJW	2/11/08	WATER
B1RDM2	KGXKC	2/11/08	WATER
B1RDN3	KGXKD	2/11/08	WATER
B1RDK9	KGXKE	2/11/08	WATER
B1RJ21	KG0EW	2/12/08	WATER
B1RJ84	KG0FJ	2/12/08	WATER
B1T504	KG0GW	2/12/08	WATER
B1T508	KG0G7	2/12/08	WATER
B1T500	KG0HD	2/12/08	WATER
B1T4Y3	KG0HF	2/12/08	WATER

B1T4Y2	KG0HN	2/12/08	WATER
B1T529	KG3RN	2/13/08	WATER
B1T512	KG3RT	2/13/08	WATER
B1T537	KG3RW	2/13/08	WATER
B1T530	KG3R0	2/13/08	WATER
B1T511	KG3R2	2/13/08	WATER
B1T519	KG3R3	2/13/08	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Enriched Tritium by method RICH-RC-5024
Technetium-99 by method RICH-RC-5078

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
Samples B1T508, B1T504, B1T500, B1T511, B1T519, B1T529, B1T512, B1T537 and B1T529 DUP were analyzed with reduced aliquots based on weight screens. The CRDL was not met on the samples B1T529 and B1T512 The activity was greater than the IDC therefore the results can be accepted. Except as noted, the LCS, batch blank, samples and sample duplicate (B1T529) results are within contractual requirements.

Fluor Hanford
March 31, 2008

Gross Beta by method RICH-RC-5014:
Samples B1T508, B1T500, B1T511, B1T519, B1T529, B1T512, B1T537 and B1T512 DUP were analyzed with reduced aliquots based on weight screens. The CRDL was not met on the samples listed above except for B1T519. The activity was greater than the IDC therefore the results can be accepted.

Sample B1T512 and B1T512 DUP were not within limits on the first count. Both samples were recounted and within acceptable limits.

Except as noted, the LCS, batch blank, samples and sample duplicate (B1T512) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017:
The LCS had a 126% yield for Co-60. The LCS was recounted and had a accepted result. There was insufficient volume for a duplicate. Sample B1RJ21 was recounted on a different detector for the duplicate (B1RJ21 DUP). Except as noted, the LCS, batch blank, samples and sample duplicate (B1RJ21) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1T5R7) results are within contractual requirements.

Liquid Scintillation Counting
Technetium-99 by method RICH-RC-5078:
The LCS, batch blank, samples, sample duplicate (B1T504), and sample matrix spike (B1T508) results are within contractual requirements.

Enriched Tritium by method RICH-RC-5024
TestAmerica Richland proposed to report W05335 without the enriched tritium results. The client accepted the proposed resolution (Tracking Number: 08-027) on March 26, 2008.

I certify that this Certificate of Analysis is in compliance with the SOW, 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 Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

September 17, 2008

Attention: Steve Trent

SAF Number	:	S08-012
Date SDG Closed	:	February 14, 2008
Number of Samples	:	Three (3)
Sample Type	:	Water
SDG Number	:	W05335I
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

On February 11, 2007 three water samples were received at TestAmerica for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Fluor Hanford specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1RDM2	KGXKC	2/11/08	WATER
B1RDN3	KGXKD	2/11/08	WATER
B1RDK9	KGXKE	2/11/08	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

Fluor Hanford
September 17, 2008

The requested analyses were:

Liquid Scintillation Counting
Enriched Tritium by method RICH-RC-5024

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Liquid Scintillation Counting
Enriched Tritium by method RICH-RC-5024
The enriched tritium blanks are still above the CRDL. The investigation is ongoing. On July 28, TestAmerica proposed to analyze the enriched tritium samples by the mid level tritium procedure in order to clear off the backlog. TestAmerica will assure a DL of < 30pCi/L.

Mid Level Tritium by method RICH-RC-5007:
The MDAs are slightly above the CRDL of 25. Except as noted, the LCS, batch blank, samples and sample duplicate (B1RDM2) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, 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 Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Seger
Project Manager

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B110205 W05335 DUE 3-27-08 KGXJQ

C.O.C. # **W08-002-310**

Page 1 of 1

Collector D. J. Sparks	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA FEBRUARY 2008	AWF-W-SUG-14	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T5R7		W	1/19/08	1122	1x20-mL P	Activity Scan	None
B1T5R7		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
D. J. Sparks			1115 2-11-08		W LANE	TALR	1115 2-11-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA

49

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B110205 W05335 DUE 3-27-08 KGXJR

C.O.C. # **W08-002-298**

Page 1 of 1

Collector D. J. Sparks	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	AWF-N-506-14	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T5P9		W	1/10/08	0846	1x20-mL P	Activity Scan	None
B1T5P9		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
D. J. Sparks	[signature]	1115 2-11-08	[signature]	LILANE TALK	1115 2-11-08
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B110205 W05335 DUE 3-27-08 KGXJT

C.O.C. # **W08-002-304**

Page 1 of 1

Collector D. J. Sparks	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	HWF-N-506.14	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T5R3		W	1-10-08	1619	1x20-mL P	Activity Scan	None
B1T5R3		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	D. J. Sparks		1115 2-11-08		LJ LANE	TAL-R	1115 2-11-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B110205 W05335 DUE 3-27-08 KGXJW

C.O.C. # **W08-002-352**

Page 1 of 1

Collector D. J. Sparks	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	HNF-N-506-14	**Ice Chest No.** **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T5W8		W	2/10/08	1344	1x20-mL P	Activity Scan	None
B1T5W8		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T5W8		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	D. J. Sparks		1115 2-11-08		LJ LANE	TAL-K	1115 2-11-08
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

51

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B110208 W05335 DUE 3-27-08 KGXKC

C.O.C. # S08-012-589

Page 1 of 1

Collector R. A. Shepard	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. S08-012	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SURV. DECEMBER 2007	HNF-W-50612	Ice Chest No. GW-1 Temp.
Shipped To (Lab) TestAmerica Incorporated Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RDM2		W	2/11/08	1136	1x20-mL P	Activity Scan	None
B1RDM2		W	↓	↓	3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			FEB 11 2008 1410		LJ LANE	TAL-R	FEB 11 2008 1410
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B110208 W05335 DUE 3-27-08 KGXKD

C.O.C. # S08-012-455

Page 1 of 1

Collector R. A. Shepard	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. S08-012	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SURV, DECEMBER 2007	HWF-N-506-12	Ice Chest No. GW-1 Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RDN3		W	2/11/08	0958	1x20-mL P	Activity Scan	None
B1RDN3		W	↓	↓	3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			FEB 11 2008 1410		L V LANE	TAL-R	FEB 11 2008 1410
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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54

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B110208 W05335 DUE 3-27-08 KGXKE

C.O.C. # S08-012-417

Page 1 of 1

Collector R. A. Shepard	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. S08-012	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SURV. DECEMBER 2007	HNF-N-506-12	Ice Chest No. GW-1 Temp.
Shipped To (Lab) TestAmerica Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RDK9		W	2/11/08	1334	1x20-mL P	Activity Scan	None
B1RDK9		W	↓	↓	3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. A. Shepard			FEB 11 2008 1410		LULANE	TAL-R	FEB 11 2008 1410
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B120167 W05335 DUE 3-28-08 KGOEW

C.O.C. # W08-012-43

Page 1 of 1

Collector: FLUOR HANFORD R.F. CARRIGAN	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, DECEMBER 2007	Logbook: HNF-N-506-14	Ice Chest No.: SIML-232 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RJ21		W	2/11/08	0936	1x20-mL P	Activity Scan	None
B1RJ21		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1RJ21		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2

D. Wood 2/11/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD R.F. CARRIGAN		Ron F Carrigan	FEB 12 2008 0745	D. R. Williamson		David Williamson	FEB 12 2008 0745
D. R. Williamson		David Williamson	FEB 12 2008 0915	LJ LANE	TALR		FEB 12 2008 0915

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liqui		
SO = Solid	T = Tissue		
SL = Sludge	WI = Wine		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B120167 W05335 DUE 3-28-08 KGOFJ

C.O.C. # W08-012-75

Page 1 of 1

Collector: FLUOR HANFORD R.F. CARRIGAN	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-012	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA DECEMBER 2007	Logbook: HNF-N-506-14	Ice Chest No.: SMB-232 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 08 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
FY07 and FY08 samples cannot be in the same SDG

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1RJ84		W	2/11/08	1031	1x20-mL P	Activity Scan	None
B1RJ84		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1RJ84		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2

R. Wall 2/11/08

Relinquished By	Date/Time	Received By	Date/Time
Print: FLUOR HANFORD R.F. CARRIGAN; Sign: Ron F Carrigan	FEB 11 2008 0745	Print: D. R. Williamson; Sign: D. R. Williamson	FEB 12 2008 0745
D. R. Williamson D. R. Williamson	FEB 12 2008 0915	LJ LANE TALR	FEB 12 2008 0915

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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FLUOR HANFORD

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B120174 W05335 DUE 3-28-08 KGOGW

C.O.C. # **W08-002-34**

Page 1 of 1

Collector: R.F. CARRIGAN	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA FEBRUARY 2008	Logbook: HNF-N-506-14	Ice Chest No.: SmL 232 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T504		W	2/11/08	1424	1x20-mL P	Activity Scan	None
B1T504		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1T504		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T504		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

R. Wall 2/11/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD R.F. CARRIGAN	Rm F Carrigan		FEB 12 2008 0745	D. R. Williamson	D. R. Williamson		FEB 12 2008 0745
D. R. Williamson	D. R. Williamson		FEB 12 2008 0915	LJ LANE TALR			FEB 12 2008 0915
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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FLUOR HANFORD

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B120174 W05335 DUE 3-28-08 KG0G7

C.O.C. # W08-002-40

Page 1 of 1

Collector: R.F. CARRIGAN	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2008	Logbook: HNF-N-506-14	Ice Chest No.: SmL 232 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time — Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T508		W	2/11/08	1329	1x20-mL P	Activity Scan	None
B1T508		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1T508		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T508		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

R. Wall 2/11/08

Relinquished By	Received By
Print: FLUOR HANFORD R.F. CARRIGAN; Sign: Ron Carrigan; Date/Time: FEB 12 2008 0745	Print: D. R. Williamson; Sign: D. Williamson; Date/Time: FEB 12 2008 0745
Print: D. R. Williamson; Sign: D. Williamson; Date/Time: FEB 12 2008 0915	Sign: LJ LANE TALR; Date/Time: FEB 12 2008 0915
Date/Time:	Date/Time:
Date/Time:	Date/Time:

Matrix *

S = Soil	DS = Drum Solid		
SE = Sediment	DL = Drum Liquid		
SO = Solid	T = Tissue		
SL = Sludge	WI = Wine		
W = Water	L = Liquid		
O = Oil	V = Vegetation		
A = Air	X = Other		

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) — Disposed By — Date/Time

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B120174 W05335 DUE 3-28-08 KGOHD

C.O.C. # **W08-002-28**

Page 1 of 1

Collector FLUOR HANFORD R.F. CARRIGAN	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	Logbook: HNF-N-506-14	**Ice Chest No.** SML-232 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T500		W	2/11/08	1242	1x20-mL P	Activity Scan	None
B1T500		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1T500		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T500		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

R. Wall 2/11/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD R.F. CARRIGAN	Ron F Carrigan		FEB 12 2008 0745	D. R. Williamson	D. R. Williamson		FEB 12 2008 0745
D. R. Williamson	D. R. Williamson		FEB 12 2008 0915	LJLANE TALK			FEB 12 2008 0915
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B120174 W05335 DUE 3-28-08 KGOHF

C.O.C. # **W08-002-23**

Page 1 of 1

Collector FLUOR HANFORD R.F. CARRIGAN	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	Logbook: HNF-N-506-14	**Ice Chest No.** SML-232 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T4Y3		W	2/11/08	0825	1x20-mL P	Activity Scan	None
B1T4Y3		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2

R. Wall 2/11/08

FEB 12 2008

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD R.F. CARRIGAN	Paul F Carrigan		~~FEB 11 2008~~ 0745 2/12/08	D. R. Williamson	D R Williamson		0745 FEB 12 2008
D. R. Williamson	D R Williamson		0915 FEB 12 2008	LJLANE TALR			0915 FEB 12 2008
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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FLUOR HANFORD

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B120174 WO5335 DUE 3-28-08 KGOHN

C.O.C. # **W08-002-22**

Page 1 of 1

Collector: R.F. CARRIGAN	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2008	logbook: HNF-N-506-14	Ice Chest No.: SML-232 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T4Y2		W	2/11/08	1128	1x20-mL P	Activity Scan	None
B1T4Y2		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2

R. Woodd 2/11/08

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD R.F. CARRIGAN		Ron F Carrigan	FEB 12 2008 0745	D. R. Williamson		D R Williamson	FEB 12 2008 0745
D. R. Williamson		D R Williamson	FEB 12 2008 0915		LJ LANE	TALR	FEB 12 2008 0915
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B140114 W05335 DUE 3-28-08 KG3RN

C.O.C. # **W08-002-64**

Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	HWF-W-506-12	**Ice Chest No.** SML-438 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T529		W	2/13/08	1035	1x20-mL P	Activity Scan	None
B1T529		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T529		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
			FEB 13 2008 1435		David Williamson		FEB 13 2008 1435
Relinquished By	David Williamson		2/13/08 1520	Received By	S. Smith	S. Smith	2-13-08 1520
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wipe
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B140114 W05335 DUE 3-28-08 KG3RT

C.O.C. # **W08-002-47**

Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	HNF-W-506-R	**Ice Chest No.** SML438 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T512		W	2/13/08	1216	1x20-mL P	Activity Scan	None
B1T512		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T512		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
[illegible]		[signature]	FEB 13 2008 1435	David Williamson		[signature]	FEB 13 2008 1435
David Williamson		[signature]	2-13-08 1520	A. Smith		S. Smith	2-13-08 1520

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

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68

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B140114 W05335 DUE 3-28-08 KG3RW

C.O.C. # **W08-002-70**

Page 1 of 1

Collector	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	1f NF-N-506-12	**Ice Chest No.** SML-438 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T537		W	2/13/08	0908	1x20-mL P	Activity Scan	None
B1T537		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T537		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
		FEB 13 2008	1435	David W. Williamson			FEB 13 2008 1435
David W. Williamson			2/13/08 1520	Samantha S Smith			2-13-08 1520
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B140114 W05335 DUE 3-28-08 KG3RO

C.O.C. # **W08-002-65**

Page 1 of 1

Collector Fluor Hanford J. G. HOGAN	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	HWF-N-566-12	**Ice Chest No.** SML-438 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T530		W	2-13-08	0800	1x20-mL P	Activity Scan	None
B1T530		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T530		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford J. G. HOGAN			FEB 13 2008 1435	David Williamson			FEB 13 2008 1435
David Williamson			2/13/08 1520	L. Smith	S. Smith		2-13-08 1520
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

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FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B140114 W05335 DUE 3-28-08 KG3R2

C.O.C. # **W08-002-46**

Page 1 of 1

Collector J. G. HOGAN	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W08-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, FEBRUARY 2008	1WF-W-506-12	**Ice Chest No.** SML-438 **Temp.**
Shipped To (Lab) TestAmerica Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Site-Wide Generator Knowledge Information Form applies.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T511		W	2/13/08	1216	1x20-mL P	Activity Scan	None
B1T511		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T511		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	J. G. HOGAN		FEB 13 2008 1435		David Williamson		FEB 13 2008 1435
David Williamson			2/13/08 1520	A. Smith		S. Smith	2-13-08 1520

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

TESTAMERICA

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J8B140114 W05335 DUE 3-28-08 KG3R3

C.O.C. # **W08-002-52**

Page 1 of 1

Collector: K. B. Hulse	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W08-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, FEBRUARY 2008	HNF-N-506-15	Ice Chest No.: SML 438 Temp.
Shipped To (Lab): TestAmerica Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS Hold Time
Site-Wide Generator Knowledge Information Form applies.
Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1T519		W	2-13-08	1246	1x20-mL P	Activity Scan	None
B1T519		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1T519		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1T519		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
K. B. Hulse / K B Hulse	FEB 13 2008 1435	D. R. Williamson / D R Williamson	FEB 13 2008 1435
D. R. Williamson / D R Williamson	FEB 13 2008 1520	S. Smith / S. Smith	FEB 13 2008 1520
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

Sample Delivery Group	WSCF20071460
Sample Matrix	Water
Data Deliverable	Summary Report

Introduction

Ten (10) groundwater samples were received at the WSCF Laboratory on August 15, 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. Additionally, a draft copy of a proposed Issue Resolution Form is included as Attachment 5 documenting missed 48-hour hold time requirement for anions.

It should be noted that the attached chain of custody was stamped "iced" and initialed 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 13-14, for a complete listing of approved analytical methods.

Inorganic Comments

Anions – 48-hold time requirement for this analysis was not met. See comment below. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See pages 26-31 for QC details. Analytical Note(s):

- 48-hour hold time requirement was not met. Refer to proposed IRF (Attachment 5) for detail.
- Sample results were D flagged if dilution(s) were required.
- Sample results that were less than the reportable limit, however greater than the method detection limit, were B flagged.

- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1P9Y6 (SDG# 20071479); B1P9P5 (SDG# 20071493); and, B1P9J9 and B1P8P1 of this SDG.

- Nitrite-N – Matrix Spike and Matrix Spike Duplicate (B1P9Y6) recoveries exceeded established laboratory limits. Affected sample results were N flagged.

All other QC controls are within the established limits.

Cyanide – 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 per GRP Letter of Instruction. See page 32 for QC details. Analytical Note(s):

- Sample results were D flagged if dilution(s) were required.

All QC controls are within the established limits.

Hexavalent Chromium – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 33 for QC details.

All QC controls are within the established limits.

Total Alkalinity – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 34 for QC details. Analytical Note(s):

- Duplicate was analyzed on samples B1P978 (SDG# 20071364) and B1P9J9 of this SDG.

All QC controls are within the established limits.

Radiochemistry Comments

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 43-44 for QC details. Analytical Note(s):

- Tritium – Duplicate and Matrix Spike were analyzed on sample# B1NXT2 (SDG# 20071384).

- Gross Alpha – Duplicate Relative Percent Difference (RPD) slightly exceeded established laboratory limits. No flags issued.

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

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

09/28/07

I07-058-97

Collector Steve Overdahl Fluor Hanford 20071460	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. 107-058	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 100HR3IAM(1/2)-LOL AUGUST 2007	HNF-N-506-5	Ice Chest No. 6W-1 Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P4J5 (F) wc	P001503	W	81507	0908	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool~4C

ICED
Initial
Date

Relinquished By	Date/Time	Received By	Date/Time
Steve Overdahl Fluor Hanford Print / Sign	AUG 15 2007 1232	TA FRAZIER Print / Sign	AUG 15 2007 1232
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

W07-008-189

20071460

Collector: Ray Shepard, Fluor Hanford	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506 9	Ice Chest No.: SML 101 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8P1	1504	W	8-15-07	1011	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8P1		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8P1		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8P1		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P8P1		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED
Initial
Date

1310

Relinquished By	Received By
Print: Ray Shepard, Fluor Hanford; Sign: [signature]; Date/Time: AUG 15 2007 1310	Print: TA FRAZIER; Sign: [signature]; Date/Time: AUG 15 2007 1310
Relinquished By; Date/Time	Received By; Date/Time
Relinquished By; Date/Time	Received By; Date/Time
Relinquished By; Date/Time	Received By; Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION

Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

FLUOR HANFORD

Fluor Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071460

W07-008-149

Collector F. M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	Logbook: HNF-N-506-8	**Ice Chest No.** GW0-06-12 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8L2	1505	W	8/15/07	1212	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8L2	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8L2		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8L2		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P8L2		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

R. Wall 8/15/07

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F.M. HALL			AUG 15 2007 1510	TA Bracia			AUG 15 2007 1510
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

W07-008-141

20071460

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	Logbook: HNF-N-506-8	**Ice Chest No.** 6000-06-12 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9K4	1506	W	8/15/07	1032	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9K4		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9K4		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9K4		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P9K4		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

R. Wall 8/15/07

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 15 2007 1510	TAFMAZIA			AUG 15 2007 1510
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071460

W07-008-181

Page 1 of 1

Collector Roy Shepard Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SML 101 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8N6	1507	W	8-15-07	0917	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8N6	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8N6		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8N6		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P8N6		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED
Initial
Date

Relinquished By Roy Shepard Fluor Hanford Print Sign Date/Time AUG 15 2007 1510	Received By TA FRAZIER Print Sign 1510 Date/Time AUG 15 2007	Matrix *
Relinquished By Date/Time	Received By Date/Time	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solid, DL = Drum Liqui, T = Tissue, WI = Wine, L = Liquid, V = Vegetation, X = Other
Relinquished By Date/Time	Received By Date/Time	
Relinquished By Date/Time	Received By Date/Time	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

W07-008-157

Page 1 of 1

20071460

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	Logbook: HNF-N-506-8	Ice Chest No. 600-06-12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8L7	1508	W	8/15/07	1129	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8L7	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8L7		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8L7		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

L. Wall 8/15/07

ICED Initial Date

Relinquished By	Date/Time	Received By	Date/Time
Print: Fluor Hanford F. M. HALL Sign: [signature]	8/15/07 1310 AUG 15 2007 1510	Print: TA Brazier Sign: [signature]	8/15/07 1310 AUG 15 2007 1510
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wire	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071460

W07-008-133

Collector Fluor Hanford F.M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	Logbook: HNF-N-506-8	**Ice Chest No.** 600-06-12 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9J9	1509	W	8/15/07	0942	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9J9	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9J9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9J9		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

J. Wall 8/15/07

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F.M. HALL			AUG 15 2007 1510	TA GRAZIER			AUG 15 2007 1510
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

W07-008-3

Page 1 of 1

20071460

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	Logbook: HNF-N-506-8	Ice Chest No.: 6000-0612 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P861	1510	W	8/15/07	0843	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P861	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C

R. Wall 8/15/07

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 1 5 2007 1510 1310	TA FRAZIER			AUG 1 5 2007 1510 1310
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2007 1460

W07-008-205

Collector Roy Shepard Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SMK 101 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8R1	1511	W	8-15-07	1159	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8R1		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8R1		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8R1		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

ICED
Initial
Date

1310

Relinquished By	Date/Time	Received By	Date/Time
Roy Shepard Fluor Hanford (Print) (Sign) AUG 15 2007	1310	TA Erazian	AUG 15 2007 1510

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liqui
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071460

W07-008-221

Collector Roy Shepard Fluor Hanford	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. W07-008	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SML101 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8T5	1512	W	8-15-07	1118	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8T5		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8T5		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8T5		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

ICED
Initial
Date

Relinquished By Roy Shepard Fluor Hanford Print Sign	Date/Time 1510 AUG 15 2007	Received By JA FRAZIER Print Sign	Date/Time 1510 AUG 15 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

Sample Delivery Group	WSCF20071517
Sample Matrix	Water
Data Deliverable	Summary Report

Introduction

Twenty-seven (27) groundwater samples were received at the WSCF Laboratory on August 23, 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.

It should be noted that the attached chain of custody was stamped "iced" and initialed 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 13 through 14, for a complete listing of approved analytical methods.

Inorganic Comments

Anions – Hold time requirements for this analysis were met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See pages 42 through 48 for QC details. Analytical Note(s):

- Duplicates, Matrix Spikes and Matrix Spike Duplicates were analyzed on samples B1P8P1 (SDG# 20071460); and, B1P9F9, B1P697 and B1P6H9 of this SDG.
- Sample results were D flagged if dilution(s) were required.
- Sample results that were less than the reportable limit, however less than the method detection limit were B flagged.

All QC controls are within the established limits.

Cyanide – 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 per GRP Letter of Instruction. See page 49 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1P9C4 (SDG# 20071493).
- Insufficient spike concentrations. Sample concentration was significantly greater than spike concentrations.

All other QC controls are within the established limits.

ICP-MS Metals – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See pages 50 through 53 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1P615 (SDG# 20071479).
- Chromium, Magnesium, Silver, Vanadium and Zinc contamination detected in the blank was evaluated and affect sample results were C flagged.
- Calcium, Magnesium and Sodium – insufficient spike concentrations. Sample concentrations were greater than four times the spike concentration. For results higher than the highest calibration standard, a high-level standard and an ICP interference check sample were analyzed to ensure acceptable sample results.

All other QC controls are within the established limits.

Total Alkalinity – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 54 for QC details.

All QC controls are within the established limits.

Radiochemistry Comments

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 70 through 71 for QC details. Analytical Note(s):

- Tritium – Duplicates and Matrix Spikes were analyzed on samples B1P6J9 (SDG# 20071521) and B1P6B7 of this SDG.
- Gross Alpha/Gross Beta – Duplicate Relative Percent Difference (RPD) slightly exceeded established laboratory limits.

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

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

10/04/07 20071517

C.O.C. # W07-008-93

Page 1 of 1

Collector: Fluor Hanford L. D. WALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No.: 12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9F4 W07	W1SS2	W	8-23-07	1055	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9F4		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9F4		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9F4		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P9F4		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL	L.D. Wall		AUG 2 3 2007 1125	TA Brazier	Terry Brazier		AUG 2 3 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-101

Collector: Fluor Hanford L. D. WALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No.: 12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9F9	1553	W	8-27-07	1016	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9F9	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9F9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9F9		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P9F9		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL		L. D. Wall	AUG 23 2007 1125	TA Mazia		Jenkins	AUG 23 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2107517

C.O.C. # W07-008-197

Page 1 of 1

Collector: Fluor Hanford L. D. WALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No.: 12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8P6	1554	W	8-23-07	0754	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P8P6		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P8P6		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P8P6		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P8P6		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL		L. D. Wall	AUG 2 3 2007 11:25		JA Pinarin		AUG 2 3 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-109

Collector ~~Fluor Hanford~~ L. D. WALL	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No. 12 Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9H4	1555	W	8-23-07	0941	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9H4	↓	W	↓	↓	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9H4	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9H4	↓	W	↓	↓	1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~Fluor Hanford~~ L. D. WALL		L. D. Wall	AUG 2 3 2007 1125	TA FRAZIER		Teresa Frazier	AUG 2 3 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-117

Collector Fluor Hanford L. D. WALL	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. W07-008	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, AUGUST 2007	HNF-N-506-8	Ice Chest No. C2 Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9H9	1556	W	8-23-07	0907	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9H9		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9H9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9H9		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL			AUG 23 2007 1125	TA FRAZIER			AUG 23 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-125

Page 1 of 1

Collector: Fluor Hanford L. D. WALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506.8	Ice Chest No.: 12 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9J4	1557	W	8-23-07	0830	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P9J4		W			1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C
B1P9J4		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None
B1P9J4		W			1x250-mL G/P	335.2_CYANIDE: Cyanide (1)	NaOH to pH >= 12 Cool~4C
B1P9J4		W			1x500-mL G/P	ALPHABETA_GPC: Alpha + Beta (2); ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford L. D. WALL	L. D. Wall		AUG 23 2007 1125	TA FRAZIER	Teresa Frazier		AUG 23 2007 1125
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SF = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # 107-062-88

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. 107-062	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOL AUGUST 2007	HNF-N-506 9	**Ice Chest No.** SML 595 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P665 (F)	1558	W	8-23-07	1225	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P666	1559	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P666	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 23 2007 1325	TA FUAZIA			AUG 23 2007 1305
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil	DS	= Drum Solid
SE	= Sediment	DL	= Drum Liquid
SO	= Solid	T	= Tissue
SL	= Sludge	WI	= Wine
W	= Water	L	= Liquid
O	= Oil	V	= Vegetation
A	= Air	X	= Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2007/517

C.O.C. # W07-008-379

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506 9	Ice Chest No.: SML 595 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P9X6	1560	W	8-23-07	1225	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C

ICED
Initial
Date

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Fluor Hanford F. M. HALL		AUG 23 2007 1325	TA FRAZIER		AUG 23 2007 1325

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-158

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Steve Trent	**Telephone No.** 509-373-5869 **MSIN** **FAX**
SAF No. I07-062	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, AUGUST 2007	HNF-N-506 9	**Ice Chest No** SML 595 **Temp.**
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6B6 (F)	1561	W	8-23-07	1025	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6B7	1562	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6B7	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 23 2007 1325	TARNAZIAN			AUG 23 2007 1325
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-142

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOI, AUGUST 2007	HNF-N-506 9	Ice Chest No.: SWIL 595 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P696 (F)	1563	W	4-23-07	0917	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P697	1564	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P697	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			AUG 23 2007 1325	TAPMAZIN			AUG 23 2007 1325
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

FLUOR HANFORD

Fluor Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-150

Page 1 of 1

Collector: D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOL AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No. Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No. (dd-)
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6B1 (F)	1565	W	8/23/07	1207	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6B2	1566	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6B2	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED Initial Date

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford Print D. R. BREWINGTON Sign D.R. Brewington	AUG 23 2007 1350	Print TA FORAZIR Sign Teresa Forazir	AUG 23 2007 8/23/07 1350
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-178

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOL AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No.: GWL Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6C8 (F)	1567	W	8/23/07	0857	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6C9	1568	W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6C9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED
Initial
Date

Relinquished By: Fluor Hanford D. R. BREWINGTON Print / Sign	Date/Time: AUG 23 2007 1350	Received By: TA FMAZ122 Print / Sign	Date/Time: AUG 23 2007 1350
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I07-062-202

Page 1 of 1

20071517

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOL AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No.: eW-1 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6F3 (F)	1569	W	8/23/07	0938	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6F4	1573	W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6F4		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON			AUG 23 2007 1350	TA Ramzia Jones			AUG 23 2007 1350
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # I07-062-210

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	Contact/Requester Steve Trent	Telephone No. 509-373-5869 MSIN FAX
SAF No. I07-062	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title 2ZP1-LOL AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No. Cold-/ Temp.
Shipped To (Lab) Waste Sampling & Characterization	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6F8 (F)	1570	W	8/23/07	1030	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6F9	1574	W	↓	↓	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6F9	↓	W	↓	↓	1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED Initial Date

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford D. R. BREWINGTON Print Sign	AUG 23 2007 1350	TAIEMRAZIAN Print Sign	AUG 23 2007 1350
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2007 1517

I07-062-218

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOI, AUGUST 2007	HNF-N-506-5 pg 13	Ice Chest No.: 6W-1 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6H3 (F)	1571	W	8/23/07	1259	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6H4	1576	W	8/23/07	1259	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R.		1350 AUG 23 2007	TA Rumzier	Teresa Rumzier		1350 AUG 23 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

2007/517

C.O.C. # I07-062-226

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: I07-062	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2ZP1-LOI, AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No.: GW-1 Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P6H8 (F)	1572	W	8/23/07	1130	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	HNO3 to pH <2
B1P6H9	1575	W			1x500-mL P	300.0_ANIONS_IC: List-1 (5)	Cool~4C
B1P6H9		W			1x250-mL G	TRITIUM_EIE_LSC: Tritium (1)	None

ICED Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON			AUG 23 2007 1310	TA Frazier			AUG 23 2007 1350
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-431

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506-5 pg. 12	Ice Chest No.: Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1PB22	1577	W	8/23/07	0857	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C

ICFD Initial Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		AUG 23 2007 1350	TARRAZION	Jesus Tarrazion		AUG 23 2007 1350
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

20071517

C.O.C. # W07-008-439

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Steve Trent	Telephone No.: 509-373-5869 MSIN FAX
SAF No.: W07-008	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, AUGUST 2007	HNF-N-506-5 pg 12	Ice Chest No. Temp.
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.: Gw-1
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** 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)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.
All SDG?s are to be sent to Steve Trent, FH

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1P8W6	1578	W	8/23/07	0938	1x500-mL G/P	2320_ALKALINITY: Alkalinity (1)	Cool~4C

ICED
Initial
Date

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington		AUG 23 2007 1350	TA Ezazi			AUG 23 2007 1350
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liquid	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

Attachment 2
Narrative
WSCF20081478

Introduction

Two (2) S&GRP samples were received at the WSCF Laboratory on July 17, 2008. These 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 copy of Issue Resolution Form 08-101, documenting missed hold time for pH and Hexavalent Chromium is included as Attachment 3. A Data Summary Report (Attachment 4) 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 5. 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. 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 17 through 20, for a complete listing of approved analytical methods.

Inorganic Comments

Ammonia – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 25 for QC details.

All QC controls are within the established limits.

Anions – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See pages 26 through 28 for QC details. Analytical Result(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1VWR4 (SDG# 20081354, SAF# F06-027) and B1W829 (SDG 20081456, SAF# F06-027).

All QC controls are within the established limits.

Cyanide – The hold time requirement (14 days) for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 29 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TTV3 (SDG# 20081329, SAF# F08-051).

All other QC controls are within the established limits.

Hexavalent Chromium – The hold time requirement (24 hours) for this analysis was not met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 30 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TTV3 (SDG 20081329, SAF# F08-051).

- The hold time requirement was not met for samples B1W1B1 and B1W1B2 on account of sample delivery after the 24 hour hold time.

All other 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 per the GRP Letter of Instruction. See pages 31 through 33 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TTV1 (SDG# 20081283, SAF# F08-051).

- Batch QC (B1W1B5) – Calcium, Sodium, Silicon, and Magnesium sample results exceeded the spiking levels by a factor of four. Spike recoveries are not valid. Check standard was analyzed to ensure Calcium, Sodium, Silicon, and Magnesium linearity because sample results were greater than the calibration standard.

All other 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 per the GRP Letter of Instruction. See pages 34 through 36 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1W1B1 (SDG# 20081478, SAF# F08-133) and B1W1B6 (SDG# 20081508, SAF# F08-134.

All QC controls are within the established limits.

pH – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See page 38 for QC details. Analytical Result(s):

- Duplicate analysis was performed on sample B1W1B1 of this SDG.
- The hold time requirement was not met for samples B1W1B1 and B1W1B2 on account of sample delivery after the 24 hour hold time.

All QC controls are within the established limits.

Total Alkalinity – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 37 for QC details. Analytical Note(s):

- Duplicate analysis was performed on sample B1W2X7 from SDG 20081470.

All QC controls are within the established limits.

Organic Comments

Semi-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 per the GPP Letter of Instruction. See pages 52 through 57 for QC details. Analytical Result(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1WPJ9, SDG 20081861, SAF# F02-009).
- The surrogate Terphenly-d14 exceeded the laboratory established RPD value for the MS/MSD. The data was accepted since the Terphenly-d14 recovery in the MS/MSD met the laboratory established criteria.

All QC controls are within the established limits.

TPHD-WA – 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 51 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V569 (SDG# 20081468, SAF# F08-100).

All QC controls are within the established limits.

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 per the GRP Letter of Instruction. See pages 58 through 61 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V569 (SDG# 20081468, SAF# F08-100).

All QC controls are within the established limits.

Attachment 2
Narrative
WSCF20081478

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike *(Matrix Spikes apply only to Neptunium, Technetium & Tritium and Matrix Spike Duplicate applies to Neptunium),* Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 66 through 72 for QC details. Analytical Note(s):

- Rad Chem analyses requested to be performed on these samples included: Americium by AEA, Gamma Energy Analysis, Uranium by AEA, Plutonium Isotopics by AEA, Sr-89/90, Tc-99 by ICP-MS, and Tc-99 by LSC.

- Uranium by AEA: Duplicate was analyzed on sample# B1R0V3, (SDG#20081415, SAF# F07-045).

- The RPD value for U-234 and U-238 from the duplicate analysis performed on sample B1W1B1 did not meet the laboratory established limit, but the RPD criterion does not apply due to the low count rate.

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

Andrew Kopriva
WSCF Client Services

Fluor Hanford Inc. 08/29/08

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

F08-133-001 PAGE 1 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
MA White	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, I-004	200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		F08-133		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-488-1	232'	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization 20081478	N/A		N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, 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)

SPECIAL HANDLING AND/OR STORAGE
Radioactive Tie To: B1W193

PRESERVATION	HNO3 to pH <2(ULTREX)	HCl or H2SO4 to pH <2/Cool~4C	Cool~4C	HCl to pH <2/Cool~4C	HNO3 to pH <2	Cool~4C	NaOH to pH >= 12/Cool~4C	Cool~4C	H2SO4 to pH <2	Cool~4C
TYPE OF CONTAINER	Nalgene	aGs*	aG	aG	G/P	aG	G/P	P	G/P	G/P
NO. OF CONTAINER(S)	1	3	4	2	1	1	1	1	1	1
VOLUME	500mL ✓	40mL ✓	1000mL ✓	1000mL ✓	500mL ✓	500mL ✓	250mL ✓	500mL ✓	250mL ✓	500mL ✓
SAMPLE ANALYSIS	Tc-99 by ICPMS (Technetium-99)	SEE ITEM (1) IN SPECIAL INSTRUCTIONS VOA	Semi-VOA - 8270B (TCL);	SEE ITEM (2) IN SPECIAL INSTRUCTIONS TPHD	SEE ITEM (3) IN SPECIAL INSTRUCTIONS 2008 60.7	Chromium Hex - 7196;	Cyanide (Total) - 335.2;	SEE ITEM (4) IN SPECIAL INSTRUCTIONS IC	Cations (IC) - 300.7 (Nitrogen in ammonium)	2320_ALKALINITY (Alkalinity)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B1 W086R02623	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
					807801								
	LOT #			029038	~~807801~~ JMS 7-16-08	028541	028541	029796	~~029038~~ ~~029041~~ 029796 031390	029038	031390	003220	

ICED

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	7-16-08 1200	MO 413 Frig 1	7-16-08 1200
MO 413 Frig	7-17-8 0830	DConnolly	7-17-8 0830
DConnolly	7-17-8 0855	CA Hudson	7-17-8 0855

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene}
(2)TPH-DieselKerosene Range - WTPH-D {Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range}
(3)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium} ICP/MS - 200.8 (Add-on) {Arsenic, Thallium, Uranium} ICP Metals - 6010B (TAL) {Aluminum, Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium} ICP Metals - 6010B (Add-On) {Lithium, Phosphorus, Silicon, Strontium} 200.8_HG - ICPMS;
(4)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}

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

A-6003-618(01/06)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F08-133-001	PAGE 2 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
MA White	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, I-004	200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		F08-133		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-488-1	232'	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization	N/A		N/A		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
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)

SPECIAL HANDLING AND/OR STORAGE
Radioactive Tie To: B1W193

PRESERVATION	None	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2	HNO3 to pH <2	HNO3 to pH<2	HNO3 to pH <2			
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P	G/P	P	G/P	G/P			
NO. OF CONTAINER(S)	1	1	1	2	1	1	1			
VOLUME	125mL	500mL	1000mL	1000mL	1000mL	1000mL	1000mL			
SAMPLE ANALYSIS	pH - 150.1;	Gamma Spectroscopy (Cesium-137, Cobalt-60)	Strontium-89,90 -- Total Sr;	Technetium-99;	Isotopic Plutonium;	Isotopic Uranium;	Americium-241;			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W1B1	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓			
	LOT #			027006	629991	031204	031204	031204	~~031204~~ 028655	~~031204~~ 028655 7-4-08			

CHAIN OF POSSESSION		SIGN/ PRINT NAMES	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	7-16-08 1000	MO 413 Frig 1	7-16-08 1000
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MO 413 Frig 1	7-17-08 0830	DCannolly	7-17-08 0830
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
DCannolly	7-17-08 0855	LA Hudson	7-17-08 0855
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

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

ICED

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

A-6003-618(01/06)

Fluor Hanford Inc. | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F08-133-005 | PAGE 1 OF 2

COLLECTOR MAWhite	**COMPANY CONTACT** TRENT, SJ	**TELEPHONE NO.** 373-5869	**PROJECT COORDINATOR** WIDRIG, DL
SAMPLING LOCATION C5862, I-004-D	**PROJECT DESIGNATION** 200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		**SAF NO.** F08-133
ICE CHEST NO.	**FIELD LOGBOOK NO.** HNF-N-488-1	**ACTUAL SAMPLE DEPTH** 232'	**COA** 123517ES10
SHIPPED TO Waste Sampling & Characterization	**OFFSITE PROPERTY NO.** N/A		**BILL OF LADING/AIR BILL NO.** N/A

PRICE CODE 7N | **AIR QUALITY** ☐ | **DATA TURNAROUND** 45 Days / 45 Days | **METHOD OF SHIPMENT** GOVERNMENT VEHICLE

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, 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)

SPECIAL HANDLING AND/OR STORAGE: Radioactive Tie To: B1W193

PRESERVATION	HNO3 to pH <2(ULTREX)	HCl or H2SO4 to pH <2/Cool~4C	Cool~4C	HCl to pH <2/Cool~4C	HNO3 to pH <2	Cool~4C	NaOH to pH >= 12/Cool~4C	Cool~4C	H2SO4 to pH <2	Cool~4C
TYPE OF CONTAINER	Nalgene	aGs*	aG	aG	G/P	aG	G/P	P	G/P	G/P
NO. OF CONTAINER(S)	1	3	4	2	1	1	1	1	1	1
VOLUME	500mL ✓	40mL ✓	1000mL ✓	1000mL ✓	500mL ✓	500mL ✓	250mL ✓	500mL ✓	250mL ✓	500mL ✓
SAMPLE ANALYSIS	Tc-99 by ICPMS (Technetium-99) ✓	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	Semi-VOA - 8270B (TCL);	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	Chromium Hex - 7196; ✓	Cyanide (Total) - 335.2; ✓	SEE ITEM (4) IN SPECIAL INSTRUCTIONS	Cations (IC) - 300.7 (Nitrogen in ammonium)	2320_ALKALINITY (Alkalinity)

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME											
B1W1B2 2624	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	LOT#			029038	807801	030441 028541	028541	029038	028946	031390	029796	31390	029038

ICED

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MAWhite MAWhite	7-16-08 1200	MO 413 Frig 1	7-16-08 1200
MO 413 Frig 1	7-17-8 0830	DConnolly	7-17-8 0830
DConnolly	7-17-8 0855	CA Hudson	7-17-8 0855

SPECIAL INSTRUCTIONS

** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.
(1)VOA - 8260B (TCL); VOA - 8260B (Add-On) {1-Butanol, Trichloromonofluoromethane, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene}
(2)TPH-DieselKerosene Range - WTPH-D {Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range}
(3)ICP/MS - 200.8 (TAL) {Antimony, Cadmium, Chromium} ICP/MS - 200.8 (Add-on) {Arsenic, Thallium, Uranium} ICP Metals - 6010B (TAL) {Aluminum, Barium, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium} ICP Metals - 6010B (Add-On) {Lithium, Phosphorus, Silicon, Strontium} 200.8_HG - ICPMS;
(4)IC Anions - 300.0 {Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorus in phosphate, Sulfate}

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

A-6003-618(01/06)

Fluor Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	F08-133-005	PAGE 2 OF 2

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE 7N	DATA TURNAROUND
MA White	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY ☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**		
C5862, I-004-D	200-BP-5 OU Characterization of Well 699-52-55B ("H") - Groundwater		F08-133		
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**	
	HNF-N-488.1	232'	123517ES10	GOVERNMENT VEHICLE	
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**		
Waste Sampling & Characterization	N/A		N/A		

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, 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)

SPECIAL HANDLING AND/OR STORAGE
Radioactive Tie To: B1W193

PRESERVATION	None	HNO3 to pH <2	HNO3 to pH <2	HCl to pH <2	HNO3 to pH <2	HNO3 to pH<2	HNO3 to pH <2			
TYPE OF CONTAINER	G/P	Square Bottle - Poly	G/P	G/P	P	G/P	G/P			
NO. OF CONTAINER(S)	1	1	1	2	1	1	1			
VOLUME	125mL	500mL	1000mL	1000mL	1000mL	1000mL	1000mL			
SAMPLE ANALYSIS	pH - 150.1;	Gamma Spectroscopy (Cesium-137, Cobalt-60)	Strontium-89,90 -- Total Sr;	Technetium-99;	Isotopic Plutonium;	Isotopic Uranium;	Americium-241;			
	✓	✓	✓	✓	✓	✓	✓			

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME									
B1W1B2	WATER	7-16-08	1000	✓	✓	✓	✓	✓	✓	✓		
	LOT#			027006	629581	031204	031204	031204	031204	031204		

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
MA White MA White	7-16-08 1000	MO413 Frig 1	7-16-08 1000
MO413 Frig 1	7-17-8 0830	DCounts DS	7-17-8 0830
DCounts DS	7-17-8 0855	CA Hudson	7-17-8 0855

SPECIAL INSTRUCTIONS
** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.

ICED

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

A-6003-618(01/06)

Appendix 5

Data Validation Supporting Documentation

APPENDIX A

RADIOCHEMICAL DATA VALIDATION CHECKLIST

VALIDATION LEVEL:	A	B	(C)	D	E
PROJECT: BP-5			DATA PACKAGE: VSR10-022		
VALIDATOR: Carl Schloesslin		LAB: TestAmerica		DATE: 8-09-2010	
WSCF20071460, WSCF20071517, WSCF20081478			SDG: W05177, W05246, W05309, W05335, W05335I		

ANALYSES PERFORMED

Gross Alpha/Beta X	Strontium-90 X	Technetium-99 X	Alpha Spectroscopy X	Gamma Spectroscopy	Selenium-79 X
Total Uranium X	Radium-22	Tritium X	Carbon-14 X	Nickel-63 X	Iodine-129 X

SAMPLES/MATRIX

SDG W05177 water samples: B1N5V1, B1N5V6, B1N5T8, B1N5W1, B1N4V0, B1N4V1, B1N3Y6, B1MDR1, B1N593, B1N5B3, B1N598, B1N5F3, B1N5D5, B1N5L4, B1N5J9, B1N5K9, B1N5M4, B1N5K4, B1MN47, B1N2L4

SDG W05246 water samples: B1PVX1, B1PVX3, B1PTW7, B1PTP4, B1PTX1, B1PPN8, B1PPP0, B1PVK0, B1PVK4, B1PVL2, B1PVC9, B1PVH5, B1PVW2, B1PPK8, B1PPK2, B1PPJ6, B1PPJ8, B1PPJ4, B1PWK4, B1PWL6

See comments page for additional samples. **Note: Gamma spectrometry results not validated per VSR instructions.**

1. Completeness ..... ☐ N/A

Technical verification forms present?.....Yes (No) N/A

Comments:

W05246: COC S08-010-130 lists a sample collection date of 10-08-06 for sample B1PVX3; this is a typo and should actually be 10-08-07.
W05309: No I-129 result reported for sample B1RBN0. The original batch failed LCS criteria, and there was insufficient sample for reanalysis.
W05335: COCs W08-002-310, W08-002-298 & W08-002-304 list sample collection dates of 1-10-08 for samples B1T5R7, B1T5P9 & B1T5R3; these are typos and should actually be 2-10-08.

2. Initial Calibration (Levels D, E) ..... ☒ N/A

Instruments/detectors calibrated?.....Yes No N/A

Initial calibration acceptable? .....Yes No N/A

Standards NIST traceable?.....Yes No N/A

Standards Expired? .....Yes No N/A

Calculation check acceptable? .....Yes No N/A

Comments:

3. Continuing Calibration (Levels D, E) ..... ☒ N/A

Calibration checked within required frequency? ..... Yes No N/A

Calibration check acceptable? ..... Yes No N/A

Calibration check standards traceable? ..... Yes No N/A

Calibration check standards expired? ..... Yes No N/A

Calculation check acceptable? ..... Yes No N/A

Comments:

4. Background Counts (Levels D, E) ..... ☒ N/A

Background Counts checked within required frequency? ..... Yes No N/A

Background Counts acceptable? ..... Yes No N/A

Calculation check acceptable? ..... Yes No N/A

Comments:

5. Blanks (Levels B, C, D, E) ..... ☐ N/A

Method blank analyzed within required frequency?.....Yes No N/A

Method blank results acceptable? .....Yes No N/A

Analytes detected in method blank? .....Yes No N/A

Field blank(s) analyzed? .....Yes No N/A

Field blank results acceptable? .....Yes No N/A

Analytes detected in field blank(s)?.....Yes No N/A

Transcription/Calculation Errors? (Levels D, E).....Yes No N/A

Comments:

WSCF20081478 MB detections: U-233/234 0.047 pCi/L, U-235 0.018 pCi/L, U-238 0.013 pCi/L

6. Laboratory Control Samples or Blank Spike Samples (Levels C, D, E) ..... ☐ N/A

LCS /BSS analyzed within required frequency? .....Yes No N/A

LCS/BSS recoveries acceptable?.....Yes No N/A

LCS/BSS traceable? (Levels D,E) .....Yes No N/A

LCS/BSS expired? (Levels D,E).....Yes No N/A

LCS/BSS levels correct? (Levels D,E) .....Yes No N/A

Transcription/Calculation Errors? (Levels D, E).....Yes No N/A

Comments:

W05309: An LCS was not performed for Se-79 analysis.

7. Chemical Carrier Recovery (Levels C, D, E) ..... ☐ N/A

Chemical carrier added? .....Yes No N/A

Chemical recovery acceptable?.....Yes No N/A

Chemical carrier traceable? (Levels D, E).....Yes No N/A

Chemical carrier expired? (Levels D, E) .....Yes No N/A

Transcription/Calculation errors? (Levels D, E).....Yes No N/A

Comments: None

8. Tracer Recovery (Levels C, D, E) ..... ☐ N/A

Tracer added?.....Yes No N/A

Tracer recovery acceptable? .....Yes No N/A

Tracer traceable? (Levels D, E) .....Yes No N/A

Tracer expired? (Levels D, E).....Yes No N/A

Transcription/Calculation errors? (Levels D, E).....Yes No N/A

Comments: None

9. Matrix Spikes (Levels C, D, E)..... ☐ N/A

Matrix spike analyzed? .....Yes No N/A

Spike recoveries acceptable? .....Yes No N/A

Spike source traceable? (Levels D, E) .....Yes No N/A

Spike source expired? Levels D, E).....Yes No N/A

Transcription/Calculation Errors? (Levels D, E) .....Yes No N/A

Comments:

W05177: An MS was not performed for tritium analysis.
W05246: An MS was not performed for C-14 analysis.
W05309: An MS was not performed for C-14 analysis.
W05335I: An MS was not performed for tritium analysis.

10. Duplicates (Levels C, D, E) ..... ☐ N/A

Duplicates Analyzed at required frequency? ..... Yes No N/A

RPD Values Acceptable? ..... Yes No N/A

Transcription/Calculation Errors? (Levels D, E) ..... Yes No N/A

Comments: None

11. Field QC Samples (Levels C, D E) ..... ☐ N/A

Field duplicate sample(s) analyzed? ..... Yes No N/A

Field duplicate RPD values acceptable? ..... Yes No N/A

Field split sample(s) analyzed? ..... Yes No N/A

Field split RPD values acceptable? ..... Yes No N/A

Performance audit sample(s) analyzed? ..... Yes No N/A

Performance audit sample results acceptable? ..... Yes No N/A

Comments: None

12. Holding Times (All levels)

Are sample holding times acceptable? ..... Yes No N/A

Comments:

W05335I: Samples B1RDM2, B1RDN3 & B1RDK9 analyzed for tritium 205 days after collection (HT = 180 days)

13. Results and Detection Limits (All Levels) ☐ N/A

Results reported for all required sample analyses? Yes No N/A

Results supported in raw data?(Levels D, E) Yes No N/A

Results Acceptable? (Levels D, E) Yes No N/A

Transcription/Calculation errors? (Levels D, E) Yes No N/A

MDA's meet required detection limits? Yes No N/A

Transcription/calculation errors? (Levels D, E) Yes No N/A

Comments:

W05177: Sample B1N4V1 H-3 MDC = 294 pCi/L (CRDL = 30 pCi/L)

WSCF20071517: Sample B1P6H9 H-3 MDC = 230 pCi/L (CRDL = 30 pCi/L)

CRDLs for gross alpha, gross beta, Ni-63 and Se-79 not provided in SAP.

Comments:

Samples continued:

SDG W05309 water samples: B1RJR6, B1RHK0, B1RBN0, B1RBN1, B1R9C0, B1R9C1, B1R9P0, B1R9N6, B1R9N9, B1RCM9, B1RBH7, B1R9D1, B1R9F1, B1R9C7, B1RRC4, B1RRC3

SDG W05335/W05335I water samples: B1T5R7, B1T5P9, B1T5R3, B1T5W8, B1RDM2, B1RDN3, B1RDK9, B1RJ21, B1RJ84, B1T504, B1T508, B1T500, B1T4Y3, B1T4Y2, B1T529, B1T512, B1T537, B1T530, B1T511, B1T519

SDG WSCF20071460 water samples: B1P8L2, B1P8L7, B1P8N6, B1P8P1, B1P8R1, B1P8T5, B1P9J9, B1P9K4

SDG WSCF20071517 water samples: B1P666, B1P697, B1P6B2, B1P6B7, B1P6C9, B1P6F4, B1P6F9, B1P6H9, B1P8P6, B1P9F4, B1P9F9, B1P9H4, B1P9H9, B1P9J4

SDG WSCF20081478 water samples: B1W1B1, B1W1B2

Appendix 6

Additional Documentation Requested By Client

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5111AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152447	ALPHA	3.35E-01	pCi/L	3.2E-01	U	4.83E-01	100.0		9310_ALPHAB	2.00E-01	07/03/2007				D
BLK	12587-46-1			3.1E-01						L	07:45				

TAL Richland
rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

1

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5121AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/30/2007 11:21
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 05/30/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152448	BETA	1.08E+00	pCi/L	9.0E-01	U	1.70E+00	100.0		9310_ALPHAB	2.004E-01	07/02/2007				D
BLK	12587-47-2			8.9E-01						L	18:51				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX5131AB **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/30/2007 11:21
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 05/30/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BW	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152449	SR-90	2.13E-01	pCi/L	2.5E-01	U	4.90E-01	81.7		SRISO_SEP_P	1.0001E+00	07/07/2007				D
BLK	10098-97-2			2.5E-01						L	10:44				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX5151AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05177 36067
Matrix: WATER WATER
QC Type: BLK

Collection Date: 05/24/2007 08:50
Sample On Date:
Received Date: 05/24/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152451	I-129L	-4.47E-02	pCi/L	1.5E-01	U	2.62E-01	95.4		I129LL_SEP_L	3.97E+00	07/12/2007				
BLK	15046-84-1			1.5E-01						L	17:09				D

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5171AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:13
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152452	Uranium	0.00E+00	ug/L	0.0E+00	U	8.22E-02			UTOT_KPA	2.55E-02	07/11/2007				D
BLK	7440-61-1			0.0E+00						ML	13:54				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52E2AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/15/2007 08:49
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7184182	TC-99	9.98E-01	pCi/L	5.4E+00	U	9.67E+00	100.0		TC99_ETVDSK	1.267E-01	07/04/2007				D
BLK	14133-76-7			4.0E+00						L	15:45				

TAL Richland
rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52G1AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:57
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152461	TC-99	3.87E+00	pCi/L	6.2E+00	U	1.03E+01	100.0		TC99_SEP_LS	1.269E-01	06/27/2007				D
BLK	14133-76-7			4.4E+00						L	10:47				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52N1AB	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/15/2007 08:27
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152465	NI-63	7.33E-01	pCi/L	2.6E+00	U	3.64E+00	94.6		NI63_LSC	3.998E-01	06/26/2007				D
BLK	13981-37-8			1.5E+00						L	23:57				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52Q1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05177 36067
Matrix: WATER WATER
QC Type: BLK

Collection Date: 05/15/2007 09:19
Sample On Date:
Received Date: 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152466	H-3	1.67E+01	pCi/L	1.3E+02	U	2.90E+02	100.0		906.0_H3_LSC	5.00E-03	06/24/2007				D
BLK	10028-17-8			1.2E+02						L	04:28				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52Q1DX **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 09:19

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152466	H-3	1.99E+02	pCi/L	1.4E+02	U	2.97E+02	100.0		906.0_H3_LSC	5.00E-03	06/24/2007				D
BLK	10028-17-8			1.3E+02						L	19:29				

TAL Richland
rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5111CS	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152447	ALPHA	2.00E+01	pCi/L	5.0E+00		5.78E-01	100.0	2.26E+01	9310_ALPHAB	2.017E-01	07/03/2007			70	D
BS	12587-46-1			2.0E+00				88.5		L	07:45			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX5121CS	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/30/2007 11:21
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/30/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152448	BETA	2.04E+01	pCi/L	4.6E+00		1.64E+00	100.0	2.27E+01	9310_ALPHAB	1.999E-01	07/02/2007			70	D
BS	12587-47-2			1.6E+00				90.0		L	18:51			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX5131CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/30/2007 11:21
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/30/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152449	SR-90	1.35E+01	pCi/L	2.1E+00		4.99E-01	83.0	1.39E+01	SRISO_SEP_P	9.995E-01	07/07/2007			70	D
BS	10098-97-2			7.2E-01				97.6		L	10:44			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX5151CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/24/2007 08:50

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/24/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152451	I-129L	8.03E+00	pCi/L	1.1E+00		3.94E-01	96.1	9.54E+00	I129LL_SEP_L	3.9577E+00	07/12/2007			70	D
BS	15046-84-1			1.1E+00				84.2		L	17:06			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX5171CS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05177 36067
Matrix: WATER WATER
QC Type: BS

Collection Date: 05/14/2007 12:13
Sample On Date:
Received Date: 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152452	Uranium	3.52E+01	ug/L	4.1E+00		8.15E-02		3.50E+01	UTOT_KPA	2.57E-02	07/11/2007			70	D
BS	7440-61-1			4.1E+00				100.7		ML	13:58			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX5171DS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/14/2007 12:13

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152452	Uranium	3.60E+00	ug/L	3.7E-01		8.42E-02		3.64E+00	UTOT_KPA	2.49E-02	07/11/2007			70	D
BS	7440-61-1			3.7E-01				99.0		ML	14:00			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX52E2CS	**Sdg/Rept Nbr:**	W05177 36067	**Collection Date:**	05/15/2007 08:49
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7184182	TC-99	5.19E+02	pCi/L	3.6E+01		9.79E+00	100.0	5.42E+02	TC99_ETVDSK	1.254E-01	07/04/2007			70	D
BS	14133-76-7			1.3E+01				95.7		L	15:45			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52G1CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/14/2007 12:57

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152461	TC-99	4.35E+02	pCi/L	3.1E+01		1.04E+01	100.0	5.32E+02	TC99_SEP_LS	1.274E-01	06/27/2007			70	D
BS	14133-76-7			1.2E+01				81.8		L	10:47			130	

TAL Richland
rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52N1CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 08:27

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CK	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152465	NI-63	2.87E+02	pCi/L	2.1E+01		3.45E+00	100.2	3.80E+02	NI63_LSC	3.986E-01	06/27/2007			70	D
BS	13981-37-8			4.9E+00				75.6		L	01:40			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52Q1CS **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 09:19
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CM	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152466	H-3	2.59E+03	pCi/L	2.4E+02		2.91E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	06/24/2007			70	D
BS	10028-17-8			2.0E+02				94.9		L	05:49			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JX52Q1EM **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 09:19
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152466	H-3	2.47E+03	pCi/L	2.4E+02		2.97E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	06/24/2007			70	D
BS	10028-17-8			2.0E+02				90.7		L	20:51			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5172ER	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 10:00
Client Id:	B1MDR1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152447	ALPHA	3.33E+00	pCi/L	1.9E+00		1.41E+00	100.0		9310_ALPHAB	1.857E-01	07/03/2007	32.1	0.7		D
DUP	12587-46-1	2.41E+00		1.7E+00						L	18:54	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5511JR	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/15/2007 08:27
Client Id:	B1N593	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152465	NI-63	3.60E+02	pCi/L	2.7E+01		4.83E+00	71.2		NI63_LSC	3.986E-01	06/26/2007	.9	0.2		D
DUP	13981-37-8	3.63E+02		6.6E+00						L	22:15	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JW58N1ER **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 09:19
Client Id: B1N5B3 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BI	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152466	H-3	9.58E+04	pCi/L	3.7E+03		2.91E+02	100.0		906.0_H3_LSC	5.00E-03	06/24/2007	.0	0.		D
DUP	10028-17-8	9.58E+04		1.0E+03						L	23:34	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5XJ1FR	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:13
Client Id:	B1N5V1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152452	Uranium	4.83E+01	ug/L	5.7E+00		8.42E-02			UTOT_KPA	2.49E-02	07/11/2007	.1	0.		D
DUP	7440-61-1	4.83E+01		5.7E+00						ML	14:05	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5XV1FR	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/14/2007 12:57
Client Id:	B1N5V6	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BM	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152461	TC-99	5.30E+02	pCi/L	3.7E+01		1.07E+01	100.0		TC99_SEP_LS	1.252E-01	06/27/2007	22.9	5.2		D
DUP	14133-76-7	6.66E+02		1.3E+01						L	10:47	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JW6CC2CR **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 08:49

Client Id: B1N5L4 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7184182	TC-99	1.69E+02	pCi/L	1.5E+01		9.82E+00	100.0		TC99_ETVDSK	1.25E-01	07/04/2007	1.4	0.2		D
DUP	14133-76-7	1.72E+02		8.1E+00						L	15:45	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX1CV1DR	**Sdg/Rept Nbr:**	W05177 36067	**Collection Date:**	05/30/2007 11:21
Client Id:	B1N2L4	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	05/30/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-042	MW6-SBB-A19981								BQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152448	BETA	9.86E+02	pCi/L	1.9E+02		2.61E+00	100.0		9310_ALPHAB	2.001E-01	07/02/2007	3.9	0.3		D
DUP	12587-47-2	1.03E+03		1.4E+01						L	18:06	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JX1CV1ER	**Sdg/Rept Nbr:**	W05177 36067	**Collection Date:**	05/30/2007 11:21
Client Id:	B1N2L4	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	05/30/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-042	MW6-SBB-A19981								BR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152449	SR-90	5.59E+02	pCi/L	7.9E+01		5.55E-01	75.8		SRISO_SEP_P	1.0043E+00 L	07/07/2007 10:44	7.6 20.0	0.7 3		D
DUP	10098-97-2	5.18E+02		4.5E+00											

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JXWPF1CR	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:** 05/24/2007 08:50
Client Id:	B1MN47	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/24/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-038	MW6-SBB-A19981								CP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152451	I-129L	-7.47E-03	pCi/L	1.3E-01	U	2.43E-01	95.1		I129LL_SEP_L	3.918E+00	07/12/2007	244.1	0.9		D
DUP	15046-84-1	7.52E-02		1.3E-01						L	14:46	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JW5XV1EW
Client Id: B1N5V6
Moisture/Solids%*:

Sdg/Rept Nbr: W05177 36067
Matrix: WATER WATER
QC Type: MS

Collection Date: 05/14/2007 12:57
Sample On Date:
Received Date: 05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152452	Uranium	3.52E+01	ug/L	4.9E+00		7.94E-02		3.41E+01	UTOT_KPA	2.64E-02	07/11/2007			60	D
MS	7440-61-1			4.9E+00				103.4		ML	14:08			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id:	JW5XV1GW	**Sdg/Rept Nbr:**	W05177	36067	**Collection Date:**	05/14/2007 12:57
Client Id:	B1N5V6	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	**MS**		**Received Date:**	05/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7152461	TC-99	3.00E+03	pCi/L	2.3E+02		1.04E+01	100.0	3.63E+03	TC99_SEP_LS	1.252E-01	06/27/2007			60	D
MS	14133-76-7			3.3E+01				82.7		L	10:47			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, July 25, 2007

TAL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05177.Edd, h:\Reportdb\edd\FeadIV\Rad\36067.Edd

Lab Sample Id: JW6CQ2CW **Sdg/Rept Nbr:** W05177 36067 **Collection Date:** 05/15/2007 10:06

Client Id: B1N5J9 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** MS **Received Date:** 05/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7184182	TC-99	3.44E+03	pCi/L	2.3E+02		9.79E+00	100.0	3.61E+03	TC99_ETVDSK	1.252E-01	07/04/2007			60	D
MS	14133-76-7			3.3E+01				95.2		L	15:45			140	

TAL Richland
rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J83911AB	**Sdg/Rept Nbr:**	W05246 37692	**Collection Date:**	10/08/2007 12:57
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	10/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289528	SR-90	-1.55E-01	pCi/L	2.1E-01	U	5.17E-01	64.5		SRISO_SEP_P	1.0006E+00	11/25/2007				D
BLK	10098-97-2			1.9E-01						L	06:57				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J83921AB	**Sdg/Rept Nbr:**	W05246 37692	**Collection Date:**	10/11/2007 11:08
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	10/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289530	I-129L	1.90E-02	pCi/L	1.4E-01	U	2.69E-01	100.8		I129LL_SEP_L	3.8741E+00	11/21/2007				D
BLK	15046-84-1			1.4E-01						L	19:21				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id: J839R1AB **Sdg/Rept Nbr:** W05246 37692 **Collection Date:** 10/08/2007 12:57

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 10/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289524	C-14	-9.26E-02	pCi/L	6.8E+00	U	8.30E+00	100.0		C14_LSC	2.00E-01	11/09/2007				D
BLK	14762-75-5			3.4E+00						L	01:34				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J839W3AB	**Sdg/Rept Nbr:**	W05246 37692	**Collection Date:**	10/08/2007 10:08
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	10/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7333585	ALPHA	1.98E-01	pCi/L	2.7E-01	U	5.02E-01	100.0		9310_ALPHAB	2.025E-01	12/05/2007				D
BLK	12587-46-1			2.7E-01						L	07:34				

TAL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J839X1AB	**Sdg/Rept Nbr:**	W05246 37692	**Collection Date:**	10/09/2007 09:56
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	10/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289526	BETA	3.34E-01	pCi/L	1.1E+00	U	2.48E+00	100.0		9310_ALPHAB	1.995E-01	11/21/2007				D
BLK	12587-47-2			1.1E+00						L	14:30				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id: J83911CS **Sdg/Rept Nbr:** W05246 37692 **Collection Date:** 10/08/2007 12:57

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289528	SR-90	1.44E+01	pCi/L	2.2E+00		4.94E-01	68.5	1.37E+01	SRISO_SEP_P	1.0008E+00	11/25/2007			70	D
BS	10098-97-2			8.7E-01				105.1		L	06:57			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id: J83921CS **Sdg/Rept Nbr:** W05246 37692 **Collection Date:** 10/11/2007 11:08

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BI	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289530	I-129L	8.23E+00	pCi/L	1.1E+00		5.06E-01	97.4	9.66E+00	I129LL_SEP_L	3.9145E+00	11/21/2007			70	D
BS	15046-84-1			1.1E+00				85.2		L	19:22			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J839R1CS	**Sdg/Rept Nbr:**	W05246	37692	**Collection Date:** 10/08/2007 12:57
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 10/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BK	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289524	C-14	4.36E+01	pCi/L	1.1E+01		8.32E+00	100.0	4.62E+01	C14_LSC	2.00E-01	11/09/2007			70	D
BS	14762-75-5			4.7E+00				94.4		L	02:16			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J839W4CS	**Sdg/Rept Nbr:**	W05246 37692	**Collection Date:**	10/08/2007 10:08
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	10/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BM	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7333585	ALPHA	2.12E+01	pCi/L	5.3E+00		5.98E-01	100.0	2.26E+01	9310_ALPHAB	2.001E-01	12/05/2007			70	D
BS	12587-46-1			2.1E+00				93.8		L	07:34			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id: J839X1CS **Sdg/Rept Nbr:** W05246 37692 **Collection Date:** 10/09/2007 09:56

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 10/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289526	BETA	2.13E+01	pCi/L	3.6E+00		2.46E+00	100.0	2.25E+01	9310_ALPHAB	2.001E-01	11/21/2007			70	D
BS	12587-47-2			2.4E+00				94.7		L	14:30			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J8H421CR	**Sdg/Rept Nbr:**	W05246 37692	**Collection Date:**	10/08/2007 12:57
Client Id:	B1PVX1	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	10/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-010	MW6-SBB-A19981								BP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289528	SR-90	-2.65E-02	pCi/L	2.3E-01	U	5.06E-01	84.4		SRISO_SEP_P	1.0001E+00	11/25/2007	0.0	0.2		D
DUP	10098-97-2	1.11E-02		1.5E-01						L	06:56	20.0	3		

TAL Richland
rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

11

Monday, December 10, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J8H521ER	**Sdg/Rept Nbr:**	W05246 37692	**Collection Date:**	10/08/2007 12:57
Client Id:	B1PTW7	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	10/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-002	MW6-SBB-A19981								BQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289524	C-14	7.94E+01	pCi/L	1.5E+01		8.28E+00	100.0		C14_LSC	2.00E-01	11/09/2007	1.5	0.1		D
DUP	14762-75-5	8.07E+01		5.6E+00						L	03:41	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J8H563FR	**Sdg/Rept Nbr:**	W05246 37692	**Collection Date:**	10/08/2007 10:08
Client Id:	B1PTP4	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	10/08/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-002	MW6-SBB-A19981								BR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7333585	ALPHA	2.10E+00	pCi/L	1.4E+00		1.66E+00	100.0		9310_ALPHAB	1.973E-01	12/04/2007	37.2	0.7		D
DUP	12587-46-1	1.44E+00		1.3E+00						L	20:49	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J8L9W1DR	**Sdg/Rept Nbr:**	W05246	37692	**Collection Date:** 10/09/2007 09:56
Client Id:	B1PVK0	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 10/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-010	MW6-SBB-A19981								BS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289526	BETA	8.41E+00	pCi/L	2.5E+00		3.82E+00	100.0		9310_ALPHAB	1.512E-01	11/21/2007	12.0	0.6		D
DUP	12587-47-2	9.49E+00		2.3E+00						L	13:16	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, December 10, 2007

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05246.Edd, h:\Reportdb\edd\FeadIV\Rad\37692.Edd

Lab Sample Id:	J8T3G1CR	**Sdg/Rept Nbr:**	W05246	37692	**Collection Date:** 10/11/2007 11:08
Client Id:	B1PPJ4	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 10/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
A08-010	MW6-SBB-A19981								BT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7289530	I-129L	1.57E+00	pCi/L	3.6E-01	U	6.37E-01	98.6		I129LL_SEP_L	3.9554E+00	11/21/2007	76.3	3.4		D
DUP	15046-84-1	7.01E-01		3.6E-01						L	17:27	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id:	KFAE02AB	**Sdg/Rept Nbr:**	W05309 38518	**Collection Date:**	01/04/2008 09:00
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	**BLK**	**Received Date:**	01/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8031494	Se-79	1.45E+00	pCi/L	9.5E+00	U	1.19E+01	73.5		SE79_SEP_IE	2.003E-01	02/06/2008				D
BLK	15758-45-9			5.0E+00						L	22:22				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id:	KFAE02CB	**Sdg/Rept Nbr:**	W05309	38518	**Collection Date:** 01/04/2008 09:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 01/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8031494	Se-79	1.74E-01	pCi/L	9.6E+00	U	1.21E+01	72.0		SE79_SEP_IE	2.002E-01	02/06/2008				D
BLK	15758-45-9			5.0E+00						L	23:14				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KFAE31AB **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/04/2008 09:00

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 01/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009374	U-234	2.66E-02	pCi/L	7.9E-02	U	2.09E-01	79.1		UISO_PLATE_	2.0002E-01	01/17/2008				D
BLK	13966-29-5			7.9E-02						L	12:10				
8009374	U-235	-6.28E-03	pCi/L	7.9E-02	U	1.79E-01	79.1		UISO_PLATE_	2.0002E-01	01/17/2008				D
BLK	15117-96-1			7.9E-02						L	12:10				
8009374	U-238	3.29E-02	pCi/L	7.9E-02	U	1.79E-01	79.1		UISO_PLATE_	2.0002E-01	01/17/2008				D
BLK	U-238			7.9E-02						L	12:10				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id:	KFAE91AB	**Sdg/Rept Nbr:**	W05309	38518	**Collection Date:** 01/03/2008 11:25
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009376	ALPHA	1.98E-01	pCi/L	2.9E-01	U	5.75E-01	100.0		9310_ALPHAB	2.003E-01	02/05/2008				D
BLK	12587-46-1			2.9E-01						L	20:15				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KFAEK1AB **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/07/2008 10:08

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 01/07/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009369	C-14	5.03E-01	pCi/L	4.1E+00	U	8.26E+00	100.0		C14_LSC	2.00E-01	01/17/2008				D
BLK	14762-75-5			3.4E+00						L	07:46				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KFAEP1AB **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/03/2008 11:25

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009370	SR-90	8.49E-02	pCi/L	1.5E-01	U	3.11E-01	85.6		SRISO_SEP_P	1.0002E+00	02/01/2008				D
BLK	10098-97-2			1.5E-01						L	06:50				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KFAFG1AB **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/03/2008 12:19

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009378	BETA	1.72E+00	pCi/L	1.6E+00	U	3.13E+00	100.0		9310_ALPHAB	2.003E-01	02/05/2008				D
BLK	12587-47-2			1.5E+00						L	14:59				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id:	KHEDN1AB	**Sdg/Rept Nbr:**	W05309 38518	**Collection Date:**	01/03/2008 10:06
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8051374	I-129L	-8.06E-02	pCi/L	1.3E-01	U	2.11E-01	98.9		I129LL_SEP_L	3.859E+00	02/26/2008				D
BLK	15046-84-1			1.3E-01						L	18:11				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KFAE31CS **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/04/2008 09:00

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 01/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009374	U-234	7.83E+00	pCi/L	1.6E+00		1.38E-01	99.4	8.76E+00	UISO_PLATE_	2.0003E-01	01/17/2008			70	D
BS	13966-29-5			1.0E+00				89.4		L	12:16			130	
8009374	U-238	7.49E+00	pCi/L	1.6E+00		1.38E-01	99.4	9.17E+00	UISO_PLATE_	2.0003E-01	01/17/2008			70	D
BS	U-238			1.0E+00				81.7		L	12:16			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KFAE91CS **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/03/2008 11:25

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BI	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009376	ALPHA	1.94E+01	pCi/L	4.4E+00		5.92E-01	100.0	2.24E+01	9310_ALPHAB	2.002E-01	02/05/2008			70	D
BS	12587-46-1			2.0E+00				86.7		L	20:15			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id:	KFAEK1CS	**Sdg/Rept Nbr:**	W05309 38518	**Collection Date:**	01/07/2008 10:08
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	01/07/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BK	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009369	C-14	4.58E+01	pCi/L	5.9E+00		8.26E+00	100.0	4.53E+01	C14_LSC	2.00E-01	01/17/2008			70	D
BS	14762-75-5			4.8E+00				101.0		L	08:29			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KFAEP1CS **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/03/2008 11:25

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BM	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009370	SR-90	1.47E+01	pCi/L	2.2E+00		3.55E-01	82.4	1.35E+01	SRISO_SEP_P	1.0001E+00	02/01/2008			70	D
BS	10098-97-2			7.5E-01				108.4		L	06:50			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KFAFG1CS **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/03/2008 12:19

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009378	BETA	2.39E+01	pCi/L	3.9E+00		2.52E+00	100.0	2.26E+01	9310_ALPHAB	2.002E-01	02/05/2008			70	D
BS	12587-47-2			2.5E+00				105.9		L	14:59			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id:	KHEDN1CS	**Sdg/Rept Nbr:**	W05309 38518	**Collection Date:**	01/03/2008 10:06
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8051374	I-129L	9.03E+00	pCi/L	1.2E+00		4.57E-01	96.0	9.85E+00	I129LL_SEP_L	3.9529E+00	02/26/2008			70	D
BS	15046-84-1			1.2E+00				91.7		L	18:13			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KE3EV1DR **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/03/2008 12:19

Client Id: B1RJR6 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-012	MW6-SBB-A19981								AT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009378	BETA	4.16E+00	pCi/L	1.8E+00		2.86E+00	100.0		9310_ALPHAB	1.922E-01	02/05/2008	7.0	0.2		D
DUP	12587-47-2	4.47E+00		1.6E+00						L	14:59	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KE3FM1GR
Client Id: B1RHK0
Moisture/Solids%*:

Sdg/Rept Nbr: W05309 38518
Matrix: WATER WATER
QC Type: DUP

Collection Date: 01/03/2008 11:25
Sample On Date:
Received Date: 01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-012	MW6-SBB-A19981								AU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009370	SR-90	8.75E-02	pCi/L	1.8E-01	U	3.71E-01	88.6		SRISO_SEP_P	1.0023E+00	02/01/2008	46.1	0.3		D
DUP	10098-97-2	5.47E-02		1.8E-01						L	06:50	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KE3FM1HR
Client Id: B1RHK0
Moisture/Solids%*:

Sdg/Rept Nbr: W05309 38518
Matrix: WATER WATER
QC Type: DUP

Collection Date: 01/03/2008 11:25
Sample On Date:
Received Date: 01/03/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-012	MW6-SBB-A19981								AV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009376	ALPHA	2.95E+00	pCi/L	1.4E+00		1.33E+00	100.0		9310_ALPHAB	1.189E-01	02/05/2008	79.1	1.7		D
DUP	12587-46-1	1.28E+00		1.2E+00						L	18:20	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KE4LX1JR
Client Id: B1RBH7
Moisture/Solids%*:

Sdg/Rept Nbr: W05309 38518
Matrix: WATER WATER
QC Type: DUP

Collection Date: 01/04/2008 09:00
Sample On Date:
Received Date: 01/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-012	MW6-SBB-A19981								AX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009374	U-234	4.05E-01	pCi/L	2.5E-01		1.85E-01	82.2		UISO_PLATE_	2.0002E-01	01/17/2008	5.9	0.1		D
DUP	13966-29-5	4.30E-01		2.4E-01						L	12:10	20.0	3		
8009374	U-235	2.91E-02	pCi/L	7.0E-02	U	1.59E-01	82.2		UISO_PLATE_	2.0002E-01	01/17/2008	200.0	0.6		D
DUP	15117-96-1	0.00E+00		7.0E-02						L	12:10	20.0	3		
8009374	U-238	3.76E-01	pCi/L	2.4E-01		1.59E-01	82.2		UISO_PLATE_	2.0002E-01	01/17/2008	2.1	0.		D
DUP	U-238	3.68E-01		2.3E-01						L	12:10	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KE4LX1KR
Client Id: B1RBH7
Moisture/Solids%*:

Sdg/Rept Nbr: W05309 38518
Matrix: WATER WATER
QC Type: DUP

Collection Date: 01/04/2008 09:00
Sample On Date:
Received Date: 01/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-012	MW6-SBB-A19981								AY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8051374	I-129L	8.57E-02	pCi/L	1.4E-01	U	2.68E-01	97.6		I129LL_SEP_L	4.0049E+00	02/26/2008	77.2	0.5		D
DUP	15046-84-1	3.80E-02		1.4E-01						L	14:16	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id:	KE4LX2HR	**Sdg/Rept Nbr:**	W05309 38518	**Collection Date:**	01/04/2008 09:00
Client Id:	B1RBH7	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	01/04/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-012	MW6-SBB-A19981								AZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8031494	Se-79	5.63E+00	pCi/L	1.2E+01	U	1.39E+01	63.1		SE79_SEP_IE	1.999E-01	02/06/2008	15.4	0.1		D
DUP	15758-45-9	6.57E+00		5.9E+00						L	21:29	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 10, 2008

TAL Richland QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05309.Edd, h:\Reportdb\edd\FeadIV\Rad\38518.Edd

Lab Sample Id: KE6DK1DR **Sdg/Rept Nbr:** W05309 38518 **Collection Date:** 01/07/2008 10:08

Client Id: B1RRC4 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 01/07/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I08-016	MW6-SBB-A19981								BA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8009369	C-14	1.59E+03	pCi/L	6.2E+01		8.26E+00	100.0		C14_LSC	2.00E-01	01/17/2008	10.5	3.6		D
DUP	14762-75-5	1.43E+03		2.0E+01						L	10:37	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id: KHAQ41AB **Sdg/Rept Nbr:** W05335 38653 **Collection Date:** 02/11/2008 14:24

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 02/12/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050337	TC-99	2.46E+00	pCi/L	6.3E+00	U	1.04E+01	100.0		TC99_SEP_LS	1.253E-01	03/11/2008				D
BLK	14133-76-7			4.4E+00						L	00:01				

TestAmerica

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

/

Monday, March 31, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id:	KHAQ71AB	**Sdg/Rept Nbr:**	W05335 38653	**Collection Date:**	02/13/2008 10:35
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	02/13/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050338	ALPHA	-5.23E-03	pCi/L	1.4E-01	U	3.48E-01	100.0		9310_ALPHAB	2.001E-01	03/12/2008				D
BLK	12587-46-1			1.4E-01						L	14:35				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id: KHAQ91AB **Sdg/Rept Nbr:** W05335 38653 **Collection Date:** 02/13/2008 12:16

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 02/13/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050343	BETA	4.08E-01	pCi/L	9.7E-01	U	1.93E+00	100.0		9310_ALPHAB	2.003E-01	03/11/2008				D
BLK	12587-47-2			9.7E-01						L	14:22				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id: KHARF1AB **Sdg/Rept Nbr:** W05335 38653 **Collection Date:** 01/10/2008 11:22

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 02/11/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050345	I-129L	-2.01E-01	pCi/L	3.1E-01	U	5.13E-01	98.6		I129LL_SEP_L	3.9781E+00	03/24/2008				D
BLK	15046-84-1			3.1E-01						L	16:04				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id: KHAQ41CS **Sdg/Rept Nbr:** W05335 38653 **Collection Date:** 02/11/2008 14:24
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/12/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050337	TC-99	5.12E+02	pCi/L	3.6E+01		1.03E+01	100.0	5.39E+02	TC99_SEP_LS	1.249E-01	03/11/2008			70	D
BS	14133-76-7			1.3E+01				95.0		L	01:03			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id:	KHAQ71CS	**Sdg/Rept Nbr:**	W05335	38653	**Collection Date:** 02/13/2008 10:35
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 02/13/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050338	ALPHA	1.85E+01	pCi/L	4.0E+00		3.96E-01	100.0	2.25E+01	9310_ALPHAB	2.003E-01	03/12/2008			70	D
BS	12587-46-1			1.4E+00				82.5		L	14:35			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id:	KHAQ91CS	**Sdg/Rept Nbr:**	W05335 38653	**Collection Date:**	02/13/2008 12:16
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	02/13/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050343	BETA	4.80E+01	pCi/L	7.0E+00		1.77E+00	100.0	4.10E+01	9310_ALPHAB	2.002E-01	03/11/2008			70	D
BS	12587-47-2			2.3E+00				117.1		L	14:22			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id: KHARF1CS **Sdg/Rept Nbr:** W05335 38653 **Collection Date:** 01/10/2008 11:22

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/11/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050345	I-129L	8.81E+00	pCi/L	1.2E+00		6.02E-01	100.5	9.72E+00	I129LL_SEP_L	3.9732E+00	03/24/2008			70	D
BS	15046-84-1			1.2E+00				90.6		L	16:04			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id: KG0GW1FR **Sdg/Rept Nbr:** W05335 38653 **Collection Date:** 02/11/2008 14:24

Client Id: B1T504 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 02/12/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-002	MW6-SBB-A19981								AU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050337	TC-99	1.65E+02	pCi/L	1.6E+01		1.03E+01	100.0		TC99_SEP_LS	1.249E-01	03/10/2008	1.9	0.3		D
DUP	14133-76-7	1.62E+02		8.2E+00						L	16:44	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id:	KG3RN1ER	**Sdg/Rept Nbr:**	W05335	38653	**Collection Date:** 02/13/2008 10:35
Client Id:	B1T529	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 02/13/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-002	MW6-SBB-A19981								AV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050338	ALPHA	8.01E+01	pCi/L	1.8E+01		2.66E+00	100.0		9310_ALPHAB	4.24E-02	03/12/2008	15.1	1.		D
DUP	12587-46-1	9.32E+01		8.3E+00						L	10:57	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id:	KG3RT2ER	**Sdg/Rept Nbr:**	W05335	38653	**Collection Date:** 02/13/2008 12:16
Client Id:	B1T512	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 02/13/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-002	MW6-SBB-A19981								AW	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050343	BETA	2.67E+03	pCi/L	3.4E+02		6.02E+00	100.0		9310_ALPHAB	6.48E-02	03/12/2008	7.1	0.8		D
DUP	12587-47-2	2.86E+03		3.0E+01						L	17:02	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id: KGXJQ1CR **Sdg/Rept Nbr:** W05335 38653 **Collection Date:** 01/10/2008 11:22

Client Id: B1T5R7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 02/11/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-002	MW6-SBB-A19981								AX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050345	I-129L	3.50E-01	pCi/L	1.9E-01	U	3.43E-01	97.3		I129LL_SEP_L	3.9049E+00	03/24/2008	5.3	0.1		D
DUP	15046-84-1	3.32E-01		1.9E-01						L	14:08	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Monday, March 31, 2008

TestAmerica Qc Matrix Spike Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335.Edd, h:\Reportdb\edd\FeadIV\Rad\38653.Edd

Lab Sample Id: KG0G71FW **Sdg/Rept Nbr:** W05335 38653 **Collection Date:** 02/11/2008 13:29

Client Id: B1T508 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** MS **Received Date:** 02/12/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W08-002	MW6-SBB-A19981								AT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8050337	TC-99	3.48E+03	pCi/L	3.7E+02		1.03E+01	100.0	3.58E+03	TC99_SEP_LS	1.25E-01	03/10/2008			60	D
MS	14133-76-7			4.1E+01				97.0		L	18:49			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, September 17, 2008

TestAmerica QC Blank Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335I.Edd, h:\Reportdb\edd\FeadIV\Rad\39857.Ed

Lab Sample Id: KTQAE1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05335I 39857
Matrix: WATER WATER
QC Type: BLK

Collection Date: 02/11/2008 11:36
Sample On Date:
Received Date: 02/11/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8219506	H-3	1.36E+00	pCi/L	2.6E+01	U	2.65E+01	100.0		906.0ML_H3_L	1.00E-02	09/03/2008				D
BLK	10028-17-8			1.2E+01						L	08:26				

TestAmerica
rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

1

Wednesday, September 17, 2008

TestAmerica QC Control Sample Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335I.Edd, h:\Reportdb\edd\FeadIV\Rad\39857.Ed

Lab Sample Id:	KTQAE1CS	**Sdg/Rept Nbr:**	W05335I 39857	**Collection Date:**	02/11/2008 11:36
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	02/11/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8219506	H-3	2.84E+03	pCi/L	3.4E+02		2.65E+01	100.0	2.79E+03	906.0ML_H3_L	1.00E-02	09/03/2008			70	D
BS	10028-17-8			4.0E+01				101.9		L	08:26			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Wednesday, September 17, 2008

TestAmerica QC Duplicate Report

Lab Code: TARL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05335I.Edd, h:\Reportdb\edd\FeadIV\Rad\39857.Ed

Lab Sample Id: KGXKC1ER
Client Id: B1RDM2
Moisture/Solids%*:

Sdg/Rept Nbr: W05335I 39857
Matrix: WATER WATER
QC Type: DUP

Collection Date: 02/11/2008 11:36
Sample On Date:
Received Date: 02/11/2008

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S08-012	MW6-SBB-A19981								AD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
8219506	H-3	1.23E+01	pCi/L	2.6E+01	U	2.66E+01	100.0		906.0ML_H3_L	1.00E-02	09/03/2008	6.4	0.		D
DUP	10028-17-8	1.31E+01		1.2E+01						L	08:26	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20071460
Matrix: WATER
Test: Gross Alpha/Gross Beta (AB32)

Sample Date: 08/15/07
Receive Date:08/15/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W07P001504											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Gross alpha	12587-46-1	9.0		RPD			22.222	20.000 *		08/21/07
DUP	Gross beta	12587-47-2	7.8E+02		RPD			3.922	20.000		08/21/07
BATCH QC											
BLANK	Gross alpha	12587-46-1	U8.5E-01	n/a	pCi/L	-10.000	10.000				08/21/07
BLANK	Gross beta	12587-47-2	U-1.6	n/a	pCi/L	-10.000	10.000				08/21/07
LCS	Gross alpha	12587-46-1	172.0	111.004	% Recov	80.000	120.000				08/21/07
LCS	Gross beta	12587-47-2	496.0	110.554	% Recov	80.000	120.000				08/21/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Radiochemistry**

SDG Number: WSCF20071460
Matrix: WATER
Test: Tritium by Liq Sct column prep

Sample Date: 08/07/07
Receive Date:08/07/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W07P001489											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Tritium	10028-17-8	U1.1E+02		RPD			n/a	20.000		08/28/07
MS	Tritium	10028-17-8	16328.0	96.122	% Recov	75.000	125.000				08/28/07
BATCH QC											
BLANK	Tritium	10028-17-8	U-3.1E+01	n/a	pCi/L	-10.000	1000.000				08/28/07
LCS	Tritium	10028-17-8	2050.0	101.879	% Recov	80.000	120.000				08/28/07

w13qlog v4.2 01-oct-2007 10:46:58

Department: Radiochemistry

W13q Worklist/Batch/QC Report for Group# WSCF20071517

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
33263	1	33667	37920	BLANK		Tritium by Liq Sct column prep
33263	4	33667	37920	LCS		Tritium by Liq Sct column prep
33263	5	33667	37920	SAMPLE	W07P001552	Tritium by Liq Sct column prep
33263	6	33667	37920	SAMPLE	W07P001553	Tritium by Liq Sct column prep
33263	7	33667	37920	SAMPLE	W07P001554	Tritium by Liq Sct column prep
33263	8	33667	37920	SAMPLE	W07P001555	Tritium by Liq Sct column prep
33263	9	33667	37920	SAMPLE	W07P001556	Tritium by Liq Sct column prep
33263	10	33667	37920	SAMPLE	W07P001557	Tritium by Liq Sct column prep
33263	3	33667	37920	DUP	W07P001588	Tritium by Liq Sct column prep
33263	2	33667	37920	MS	W07P001588	Tritium by Liq Sct column prep
33265	1	33669	37921	BLANK		Tritium by Liq Sct column prep
33265	4	33669	37921	LCS		Tritium by Liq Sct column prep
33265	5	33669	37921	SAMPLE	W07P001559	Tritium by Liq Sct column prep
33265	3	33669	37921	DUP	W07P001562	Tritium by Liq Sct column prep
33265	2	33669	37921	MS	W07P001562	Tritium by Liq Sct column prep
33265	6	33669	37921	SAMPLE	W07P001562	Tritium by Liq Sct column prep
33265	7	33669	37921	SAMPLE	W07P001564	Tritium by Liq Sct column prep
33265	8	33669	37921	SAMPLE	W07P001566	Tritium by Liq Sct column prep
33265	9	33669	37921	SAMPLE	W07P001568	Tritium by Liq Sct column prep
33265	10	33669	37921	SAMPLE	W07P001573	Tritium by Liq Sct column prep
33265	11	33669	37921	SAMPLE	W07P001574	Tritium by Liq Sct column prep
33265	12	33669	37921	SAMPLE	W07P001575	Tritium by Liq Sct column prep
33140	1	33545	38057	BLANK		Gross Alpha/Gross Beta (AB32)
33140	2	33545	38057	LCS		Gross Alpha/Gross Beta (AB32)
33140	3	33545	38057	DUP	W07P001552	Gross Alpha/Gross Beta (AB32)
33140	4	33545	38057	SAMPLE	W07P001552	Gross Alpha/Gross Beta (AB32)
33140	5	33545	38057	SAMPLE	W07P001553	Gross Alpha/Gross Beta (AB32)
33140	18	33545	38057	SAMPLE	W07P001554	Gross Alpha/Gross Beta (AB32)
33140	6	33545	38057	SAMPLE	W07P001557	Gross Alpha/Gross Beta (AB32)

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20071517
Matrix: WATER
Test: Gross Alpha/Gross Beta (AB32)

Sample Date: 08/23/07
Receive Date:08/23/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W07P001552											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Gross alpha	12587-46-1	2.5E+02		RPD			22.222	20.000 *		08/30/07
DUP	Gross beta	12587-47-2	3.4E+03		RPD			9.231	20.000		08/30/07
BATCH QC											
BLANK	Gross alpha	12587-46-1	U-3.5E-01	n/a	pCi/L	-10.000	10.000				08/30/07
BLANK	Gross beta	12587-47-2	U-1.2	n/a	pCi/L	-10.000	10.000				08/30/07
LCS	Gross alpha	12587-46-1	39.6	102.220	% Recov	80.000	120.000				08/30/07
LCS	Gross beta	12587-47-2	123.0	109.626	% Recov	80.000	120.000				08/30/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20071517
Matrix: WATER
Test: Tritium by Liq Sct column prep

Sample Date: 08/24/07
Receive Date:08/24/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W07P001588											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Tritium	10028-17-8	U1.7E+02		RPD			n/a	20.000		09/04/07
MS	Tritium	10028-17-8	15445.9	91.096	% Recov	75.000	125.000				09/04/07
BATCH QC											
BLANK	Tritium	10028-17-8	U-3.5E+01	n/a	pCi/L	-10.000	1000.000				09/04/07
LCS	Tritium	10028-17-8	2030.0	101.065	% Recov	80.000	120.000				09/04/07
Lab ID: W07P001562											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Tritium	10028-17-8	4.0E+02		RPD			4.878	20.000		09/04/07
MS	Tritium	10028-17-8	16376.	96.625	% Recov	75.000	125.000				09/04/07
BATCH QC											
BLANK	Tritium	10028-17-8	U-7.4E+01	n/a	pCi/L	-10.000	1000.000				09/04/07
LCS	Tritium	10028-17-8	2380.0	92.936	% Recov	80.000	120.000				09/04/07

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Radiochemistry**

SDG Number: WSCF20081478
Matrix: WATER
Test: Americium by AEA

Sample Date: 07/16/08
Receive Date:07/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02623											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Americium-241	14596-10-2	U-4.1e-2		RPD			n/a	20.000		09/10/08
DUP	Am-243 tracer by AEA	AM243	10.01	70.770	% Recov	30.000	105.000				09/10/08
SURR	Am-243 tracer by AEA	AM243	10.01	56.900	% Recov	30.000	105.000				09/10/08
Lab ID: W08GR02624											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Am-243 tracer by AEA	AM243	10.01	68.260	% Recov	30.000	105.000				09/11/08
BATCH QC											
BLANK	Americium-241	14596-10-2	U1.4e-2	n/a	pCi/L	-10.000	1000.000				09/10/08
BLANK	Am-243 tracer by AEA	AM243	10.01	59.080	% Recov	30.000	105.000				09/10/08
LCS	Americium-241	14596-10-2	13.3	112.236	% Recov	80.000	120.000				09/10/08
LCS	Am-243 tracer by AEA	AM243	10.01	59.871	% Recov	30.000	105.000				09/10/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081478
Matrix: WATER
Test: Plutonium Isotopics by AEA

Sample Date: 07/16/08
Receive Date:07/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02623											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Plutonium-238	13981-16-3	U-1.7e-2		RPD			n/a	20.000		09/09/08
DUP	Pu-239/240 by AEA	PU-239/240	U1.3e-2		RPD			n/a	20.000		09/09/08
DUP	Pu-242 tracer by AEA	PU242	15.59	95.780	% Recov	30.000	105.000				09/09/08
SURR	Pu-242 tracer by AEA	PU242	15.59	96.550	% Recov	30.000	105.000				09/09/08
Lab ID: W08GR02624											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Pu-242 tracer by AEA	PU242	15.59	94.110	% Recov	30.000	105.000				09/10/08
BATCH QC											
BLANK	Plutonium-238	13981-16-3	U1.4e-2	n/a	pCi/L	-10.000	1000.000				09/09/08
BLANK	Pu-239/240 by AEA	PU-239/240	U1.4e-2	n/a	pCi/L	-10.000	1000.000				09/09/08
BLANK	Pu-242 tracer by AEA	PU242	15.59	87.210	% Recov	30.000	105.000				09/09/08
LCS	Pu-239/240 by AEA	PU-239/240	12.39	96.458	% Recov	80.000	120.000				09/09/08
LCS	Pu-242 tracer by AEA	PU242	17.3	97.780	% Recov	30.000	105.000				09/09/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Radiochemistry**

SDG Number: WSCF20081478
Matrix: WATER
Test: Strontium 89/90

Sample Date: 07/16/08
Receive Date:07/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02623											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Sr-85 Tracer by Beta Counting	SR85	93.5	93.500	% Recov	30.000	105.000				07/30/08
DUP	Strontium-89/90	SR-RAD	U-4.1		RPD			n/a	20.000		07/30/08
SURR	Sr-85 Tracer by Beta Counting	SR85	94.7	94.700	% Recov	30.000	105.000				07/30/08
Lab ID: W08GR02624											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Sr-85 Tracer by Beta Counting	SR85	82.2	82.200	% Recov	30.000	105.000				07/30/08
BATCH QC											
BLANK	Sr-85 Tracer by Beta Counting	SR85	87.5	87.500	% Recov	30.000	105.000				07/30/08
BLANK	Strontium-89/90	10098-97-2	U-8.6E-01	n/a	pCi/L	-10.000	100.000				07/30/08
LCS	Sr-85 Tracer by Beta Counting	SR85	87	87.000	% Recov	30.000	105.000				07/30/08
LCS	Strontium-89/90	10098-97-2	153	110.231	% Recov	80.000	120.000				07/30/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081478
Matrix: WATER
Test: TC99 by Liquid Scin.

Sample Date: 10/25/07
Receive Date:10/25/07

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02464											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Tc-99 by Liquid Scin.	14133-76-7	1.4E+02		RPD			6.897	20.000		07/29/08
MS	Tc-99 by Liquid Scin.	14133-76-7	801.2	106.507	% Recov	75.000	125.000				07/29/08
BATCH QC											
BLANK	Tc-99 by Liquid Scin.	14133-76-7	U-4.2	n/a	pCi/L	-10.000	10.000				07/29/08
LCS	Tc-99 by Liquid Scin.	14133-76-7	198.3	105.423	% Recov	80.000	120.000				07/29/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081478
Matrix: WATER
Test: Uranium Isotopics by AEA

Sample Date: 07/16/08
Receive Date:07/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR02623											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	U-232 tracer by AEA	U232	10.22	100.190	% Recov	30.000	105.000				09/09/08
DUP	Uranium-233/234	U-233/234	0.66		RPD			20.408	20.000 *		09/09/08
DUP	Uranium-235	15117-96-1	U8.9e-3		RPD			n/a	20.000		09/09/08
DUP	Uranium-238	U-238	0.29		RPD			47.368	20.000 *		09/09/08
SURR	U-232 tracer by AEA	U232	10.22	92.780	% Recov	30.000	105.000				09/09/08
Lab ID: W08GR02624											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	U-232 tracer by AEA	U232	10.22	94.910	% Recov	30.000	105.000				09/09/08
BATCH QC											
BLANK	U-232 tracer by AEA	U232	10.22	100.650	% Recov	30.000	105.000				09/09/08
BLANK	Uranium-233/234	13966-29-5	4.7e-2	0.047	pCi/L	-10.000	1000.000				09/09/08
BLANK	Uranium-235	15117-96-1	1.8e-2	0.018	pCi/L	-10.000	1000.000				09/09/08
BLANK	Uranium-238	24678-82-8	1.3e-2	0.013	pCi/L	-10.000	1000.000				09/09/08
LCS	U-232 tracer by AEA	U232	11.35	77.670	% Recov	30.000	105.000				09/09/08
LCS	Uranium-233/234	13966-29-5	N/A	n/a	% Recov	75.000	125.000				09/09/08
LCS	Uranium-238	24678-82-8	19.97	105.355	% Recov	80.000	120.000				09/09/08