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Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains 130 Pages

Report Nbr: 35293

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05146	W07-003	B1MJV8	J7C260186-1	JRQ791AA	9JRQ7910	7092473
		B1MJV8	J7C260186-1	JRQ791AC	9JRQ7910	7092468
		B1MJX0	J7C260186-2	JRQ8F1AA	9JRQ8F10	7092468
		B1MK16	J7C260186-3	JRQ8G1AA	9JRQ8G10	7092474
		B1MK16	J7C260186-3	JRQ8G1AC	9JRQ8G10	7092475
		B1MK16	J7C260186-3	JRQ8G1AD	9JRQ8G10	7092468
		B1MKT7	J7C260186-4	JRQ8H1AA	9JRQ8H10	7092464
		B1MKV6	J7C260186-5	JRQ8K1AA	9JRQ8K10	7092464
		B1MK83	J7C260204-1	JRRA91AA	9JRRA910	7092471
		B1MK83	J7C260204-1	JRRA91AC	9JRRA910	7092468
		B1MK83	J7C260204-1	JRRA91AD	9JRRA910	7092464
		B1MKB8	J7C260204-2	JRRCA1AA	9JRRCA10	7092471
		B1MKB8	J7C260204-2	JRRCA1AC	9JRRCA10	7092468
		B1MKB8	J7C260204-2	JRRCA1AD	9JRRCA10	7092464
		B1MK46	J7C260205-1	JRRCD1AA	9JRRCD10	7092471

Comments:

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PROJ. 52494
CAT. T3.1
WORKING COPY

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Report Nbr: 35293

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05146	W07-003	B1MK46	J7C260205-1	JRRCD1AC	9JRRCD10	7092468
		B1MK46	J7C260205-1	JRRCD1AD	9JRRCD10	7092464
		B1MK71	J7C260205-2	JRRCE1AA	9JRRCE10	7092471
		B1MK71	J7C260205-2	JRRCE1AC	9JRRCE10	7092468
		B1MK71	J7C260205-2	JRRCE1AD	9JRRCE10	7092464
		B1MK66	J7C260205-3	JRRCF1AA	9JRRCF10	7092471
		B1MK66	J7C260205-3	JRRCF1AC	9JRRCF10	7092468
		B1MK66	J7C260205-3	JRRCF1AD	9JRRCF10	7092464
		B1MK41	J7C270298-1	JRT4P1AA	9JRT4P10	7092473
		B1MK41	J7C270298-1	JRT4P1AC	9JRT4P10	7092474
		B1MK41	J7C270298-1	JRT4P1AD	9JRT4P10	7092475
		B1MK41	J7C270298-1	JRT4P1AE	9JRT4P10	7092468
		B1MKL8	J7C270298-2	JRT4R1AA	9JRT4R10	7092475
		B1MKL8	J7C270298-2	JRT4R1AC	9JRT4R10	7092472
		B1MKL8	J7C270298-2	JRT4R1AD	9JRT4R10	7092468
		B1MKL8	J7C270298-2	JRT4R1AE	9JRT4R10	7092464
		B1MKM9	J7C270298-3	JRT4T1AA	9JRT4T10	7092475
		B1MKM9	J7C270298-3	JRT4T1AC	9JRT4T10	7092472
		B1MKM9	J7C270298-3	JRT4T1AD	9JRT4T10	7092468
		B1MKM9	J7C270298-3	JRT4T1AE	9JRT4T10	7092464
	I07-032	B1MDJ5	J7C280120-1	JRVQJ1AA	9JRVQJ10	7092476
		B1MDJ5	J7C280120-1	JRVQJ1AC	9JRVQJ10	7092477
	W07-003	B1MKD2	J7C280198-1	JRWEK1AA	9JRWEK10	7092468
	A07-003	B1MCT3	J7C280203-1	JRWE11AA	9JRWE110	7092471
		B1MCT3	J7C280203-1	JRWE11AC	9JRWE110	7092476
		B1MCT3	J7C280203-1	JRWE11AD	9JRWE110	7092468

Comments:

Report Nbr: 35293

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05146	A07-003	B1MCT5	J7C280203-2	JRWFA1AA	9JRWFA10	7092471
		B1MCT5	J7C280203-2	JRWFA1AC	9JRWFA10	7092476
		B1MCT5	J7C280203-2	JRWFA1AD	9JRWFA10	7092468
	W07-003	B1MKP7	J7C290122-1	JR0H61AA	9JR0H610	7092471
		B1MKP7	J7C290122-1	JR0H61AC	9JR0H610	7092474
		B1MKP7	J7C290122-1	JR0H61AD	9JR0H610	7092475
		B1MKP7	J7C290122-1	JR0H61AE	9JR0H610	7092468
		B1MKP7	J7C290122-1	JR0H61AF	9JR0H610	7092464
		B1MK51	J7C290122-2	JR0JA1AA	9JR0JA10	7092471
		B1MK51	J7C290122-2	JR0JA1AC	9JR0JA10	7092474
		B1MK51	J7C290122-2	JR0JA1AD	9JR0JA10	7092475
		B1MK51	J7C290122-2	JR0JA1AE	9JR0JA10	7092468
		B1MK51	J7C290122-2	JR0JA1AF	9JR0JA10	7092464
		B1MK56	J7C290122-3	JR0JF1AA	9JR0JF10	7092471
		B1MK56	J7C290122-3	JR0JF1AC	9JR0JF10	7092474
		B1MK56	J7C290122-3	JR0JF1AD	9JR0JF10	7092475
		B1MK56	J7C290122-3	JR0JF1AE	9JR0JF10	7092468
		B1MK56	J7C290122-3	JR0JF1AF	9JR0JF10	7092464

Comments:

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

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

May 11, 2007

Attention: Dot Stewart

SAF Number	:	W07-003, I07-032, A07-003
Date SDG Closed	:	March 28, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05146
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between March 26, 2007 and March 28, 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#	MATRIX	DATE OF RECEIPT
B1MJV8	JRQ79	WATER	3/26/07
B1MJX0	JRQ8F	WATER	3/26/07
B1MK16	JRQ8G	WATER	3/26/07
B1MKT7	JRQ8H	WATER	3/26/07
B1MKV6	JRQ8K	WATER	3/26/07
B1MK46	JRRCD	WATER	3/26/07
B1MK71	JRRCE	WATER	3/26/07
B1MK66	JRRCF	WATER	3/26/07
B1MK83	JRRA9	WATER	3/26/07
B1MKB8	JRRCA	WATER	3/26/07
B1MK41	JRT4P	WATER	3/26/07
B1MKL8	JRT4R	WATER	3/26/07
B1MKM9	JRT4T	WATER	3/27/07

B1MDJ5	JRVQJ	WATER	3/26/07
B1MKD2	JRWEK	WATER	3/27/07
B1MCT3	JRWE1	WATER	3/27/07
B1MCT5	JRWFA	WATER	3/27/07
B1MKP7	JR0H6	WATER	3/28/07
B1MK51	JR0JA	WATER	3/28/07
B1MK56	JR0JF	WATER	3/28/07

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 Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065
Tritium by method RICH-RC-5007
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058
Chemical Analysis
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.

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

Samples B1MK16, B1MK41 and B1MK41 DUP were analyzed with reduced volumes based on an elevated screen results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MK41) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

Sample B1MKM9 was analyzed with a reduced volume based on an elevated screen result. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MK16) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1MDJ5) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:

The LCS had an MDA slightly above the CRDL of 6. The result exceeds the MDA achieved. The data is acceptable. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MKM9) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:

The LCS, batch blank, samples and sample duplicate (B1MCT3) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:

The LCS, batch blank, samples, sample duplicate (B1MKD2), and sample matrix spike (B1MK56) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1MKB8) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1MKP7), and sample matrix spike (B1MK51) results are within contractual requirements.

Pacific Northwest National Laboratories
May 11, 2007

Chemical Analysis

Total Coliform by method 9223

The LCS that was batched with sample B1MJV8 had a negative check added to it. A second batch that contained sample B1MK41 was being analyzed at the same time as the first set mentioned above and that LCS was acceptable. A blank check was performed with both batches. No colonies were found in either B1MJV8 or B1MK41 therefore the data was accepted. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MK41) 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:

Sherryl A. Adam
for Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**STL Richland's SOP number**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/vn), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) ***u_c - Combined Uncertainty.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, ***u_c the combined uncertainty***. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

5/11/2007 10:17:03 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35293 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.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:
9JR0H610	B1MKP7		MW6-SBB-A1	W07-003	W05146					03/28/2007 10:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	1.98E+04	pCi/L	4.8E+02	9.1E+02		3.28E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/06/2007 13:16	I
7092474	ALPHA	12587-46-1	2.77E+00	pCi/L	1.5E+00	1.6E+00		1.67E+00	100.0	9310_ALPHABETA	2.015E-01	L	04/16/2007 20:47	I
7092475	BETA	12587-47-2	4.70E+03	pCi/L	3.3E+01	6.5E+02		2.92E+00	100.0	9310_ALPHABETA	2.006E-01	L	04/16/2007 20:01	I
7092468	TC-99	14133-76-7	1.77E+04	pCi/L	7.2E+01	1.2E+03		9.87E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	04/12/2007 02:14	I
7092464	Uranium	7440-61-1	4.53E+00	ug/L	4.8E-01	4.8E-01		7.97E-02		UTOT_KPA	2.63E-02	ML	05/07/2007 12:17	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:
9JR0JA10	B1MK51		MW6-SBB-A1	W07-003	W05146					03/28/2007 11:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	1.97E+03	pCi/L	2.0E+02	2.3E+02		3.26E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/06/2007 14:39	I
7092474	ALPHA	12587-46-1	-1.01E-01	pCi/L	5.1E-01	5.1E-01	U	1.72E+00	100.0	9310_ALPHABETA	1.983E-01	L	04/17/2007 06:58	I
7092475	BETA	12587-47-2	1.75E+02	pCi/L	6.3E+00	2.8E+01		2.98E+00	100.0	9310_ALPHABETA	1.983E-01	L	04/16/2007 20:01	I
7092468	TC-99	14133-76-7	6.93E+02	pCi/L	1.5E+01	5.3E+01		9.88E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	04/12/2007 02:14	I
7092464	Uranium	7440-61-1	7.93E-01	ug/L	8.1E-02	8.1E-02		7.59E-02		UTOT_KPA	2.76E-02	ML	05/07/2007 12:30	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:
9JR0JF10	B1MK56		MW6-SBB-A1	W07-003	W05146					03/28/2007 09:11

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	3.71E+04	pCi/L	6.5E+02	1.6E+03		3.27E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/06/2007 16:01	I
7092474	ALPHA	12587-46-1	2.11E-01	pCi/L	6.7E-01	6.7E-01	U	1.68E+00	100.0	9310_ALPHABETA	1.994E-01	L	04/17/2007 06:58	I
7092475	BETA	12587-47-2	3.70E+01	pCi/L	3.1E+00	7.5E+00		2.78E+00	100.0	9310_ALPHABETA	1.986E-01	L	04/16/2007 20:06	I
7092468	TC-99	14133-76-7	1.34E+02	pCi/L	7.4E+00	1.5E+01		9.78E+00	100.0	TC99_ETVDSK_LS	1.263E-01	L	04/12/2007 02:14	I
7092464	Uranium	7440-61-1	8.17E-01	ug/L	8.4E-02	8.4E-02		7.76E-02		UTOT_KPA	2.70E-02	ML	05/07/2007 12:33	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:
9JRQ7910	B1MJV8		MW6-SBB-A1	W07-003	W05146					03/26/2007 11:31

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092468	TC-99	14133-76-7	1.40E+02	pCi/L	7.6E+00	1.5E+01		9.81E+00	100.0	TC99_ETVDSK_LS	1.274E-01	L	04/12/2007 02:14	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:

STL 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

5/11/2007 10:17:03 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35293 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.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:
9JRQ8F10	B1MJX0		MW6-SBB-A1	W07-003	W05146					03/26/2007 12:14

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092468	TC-99	14133-76-7	1.07E+03	pCi/L	1.8E+01	7.8E+01		1.00E+01	100.0	TC99_ETVDSK_LS	1.256E-01	L	04/12/2007 02:14	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:
9JRQ8G10	B1MK16		MW6-SBB-A1	W07-003	W05146					03/26/2007 12:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092474	ALPHA	12587-46-1	2.09E+00	pCi/L	1.5E+00	1.6E+00	U	2.10E+00	100.0	9310_ALPHABETA	1.734E-01	L	04/16/2007 20:47	I
7092475	BETA	12587-47-2	6.82E+01	pCi/L	4.0E+00	9.7E+00		2.69E+00	100.0	9310_ALPHABETA	1.997E-01	L	04/16/2007 20:01	I
7092468	TC-99	14133-76-7	2.61E+02	pCi/L	9.7E+00	2.3E+01		1.01E+01	100.0	TC99_ETVDSK_LS	1.245E-01	L	04/12/2007 02:14	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:
9JRQ8H10	B1MKT7		MW6-SBB-A1	W07-003	W05146					03/26/2007 10:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092464	Uranium	7440-61-1	5.44E+01	ug/L	6.5E+00	6.5E+00		8.22E-02		UTOT_KPA	2.55E-02	ML	05/07/2007 11:58	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:
9JRQ8K10	B1MKV6		MW6-SBB-A1	W07-003	W05146					03/26/2007 09:23

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092464	Uranium	7440-61-1	-2.03E-02	ug/L	4.7E-03	4.7E-03	U	8.32E-02		UTOT_KPA	2.52E-02	ML	05/07/2007 12:00	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:
9JRRA910	B1MK83		MW6-SBB-A1	W07-003	W05146					03/26/2007 12:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	2.39E+04	pCi/L	5.3E+02	1.1E+03		3.27E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/05/2007 22:10	I
7092468	TC-99	14133-76-7	1.24E+02	pCi/L	7.3E+00	1.4E+01		9.87E+00	100.0	TC99_ETVDSK_LS	1.26E-01	L	04/12/2007 02:14	I
7092464	Uranium	7440-61-1	2.61E+00	ug/L	2.7E-01	2.7E-01		8.19E-02		UTOT_KPA	2.56E-02	ML	05/07/2007 12:04	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:
9JRRCA10	B1MKB8		MW6-SBB-A1	W07-003	W05146					03/26/2007 09:23

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	6.80E+01	pCi/L	1.4E+02	1.5E+02	U	3.28E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/05/2007 23:33	I
7092468	TC-99	14133-76-7	4.45E+00	pCi/L	4.2E+00	6.1E+00	U	9.88E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	04/12/2007 02:14	I
7092464	Uranium	7440-61-1	3.53E+00	ug/L	3.6E-01	3.6E-01		8.00E-02		UTOT_KPA	2.62E-02	ML	05/07/2007 12:06	I

STL 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.

5/11/2007 10:17:03 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35293 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.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:
9JRRCD10	B1MK46		MW6-SBB-A1	W07-003	W05146					03/26/2007 08:39

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	2.70E+04	pCi/L	5.6E+02	1.2E+03		3.27E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/06/2007 02:17	I
7092468	TC-99	14133-76-7	6.34E+03	pCi/L	4.3E+01	4.4E+02		9.90E+00	100.0	TC99_ETVDSK_LS	1.25E-01	L	04/12/2007 02:14	I
7092464	Uranium	7440-61-1	4.65E+00	ug/L	4.8E-01	4.8E-01		8.35E-02		UTOT_KPA	2.51E-02	ML	05/07/2007 12:08	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:
9JRRCE10	B1MK71		MW6-SBB-A1	W07-003	W05146					03/26/2007 11:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	2.49E+04	pCi/L	5.4E+02	1.1E+03		3.27E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/06/2007 03:40	I
7092468	TC-99	14133-76-7	5.62E+02	pCi/L	1.3E+01	4.4E+01		9.76E+00	100.0	TC99_ETVDSK_LS	1.27E-01	L	04/12/2007 02:14	I
7092464	Uranium	7440-61-1	1.20E+00	ug/L	1.2E-01	1.2E-01		8.03E-02		UTOT_KPA	2.61E-02	ML	05/07/2007 12:10	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:
9JRRCF10	B1MK66		MW6-SBB-A1	W07-003	W05146					03/26/2007 12:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	1.83E+04	pCi/L	4.7E+02	8.5E+02		3.29E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/06/2007 05:02	I
7092468	TC-99	14133-76-7	1.98E+02	pCi/L	8.6E+00	1.9E+01		9.87E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	04/12/2007 02:14	I
7092464	Uranium	7440-61-1	6.45E+00	ug/L	6.6E-01	6.6E-01		8.35E-02		UTOT_KPA	2.51E-02	ML	05/07/2007 12:11	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:
9JRT4P10	B1MK41		MW6-SBB-A1	W07-003	W05146					03/27/2007 12:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092474	ALPHA	12587-46-1	2.02E+00	pCi/L	1.6E+00	1.7E+00	U	2.39E+00	100.0	9310_ALPHABETA	1.661E-01	L	04/16/2007 20:47	I
7092475	BETA	12587-47-2	1.40E+02	pCi/L	5.7E+00	1.9E+01		2.77E+00	100.0	9310_ALPHABETA	1.997E-01	L	04/16/2007 20:01	I
7092468	TC-99	14133-76-7	6.42E+02	pCi/L	1.4E+01	4.9E+01		9.87E+00	100.0	TC99_ETVDSK_LS	1.259E-01	L	04/12/2007 02:14	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:
9JRT4R10	B1MKL8		MW6-SBB-A1	W07-003	W05146					03/27/2007 09:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092475	BETA	12587-47-2	1.30E+03	pCi/L	1.6E+01	1.7E+02		2.68E+00	100.0	9310_ALPHABETA	1.996E-01	L	04/16/2007 20:01	I
7092472	BE-7	13966-02-4	-1.18E+01	pCi/L	1.4E+01	1.4E+01	U	2.24E+01		GAMMALL_GS	2.0042E+00	L	04/18/2007 07:13	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.

5/11/2007 10:17:03 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35293 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

7092472	CO-60	10198-40-0	-5.54E-01	pCi/L	1.8E+00	1.8E+00	U	3.22E+00		GAMMALL_GS	2.0042E+00	L	04/18/2007	07:13	I
7092472	CS-134	13967-70-9	-1.11E-01	pCi/L	1.6E+00	1.6E+00	U	2.97E+00		GAMMALL_GS	2.0042E+00	L	04/18/2007	07:13	I
7092472	CS-137	10045-97-3	6.66E-01	pCi/L	1.5E+00	1.5E+00	U	2.99E+00		GAMMALL_GS	2.0042E+00	L	04/18/2007	07:13	I
7092472	EU-152	14683-23-9	-4.62E-02	pCi/L	3.8E+00	3.8E+00	U	6.89E+00		GAMMALL_GS	2.0042E+00	L	04/18/2007	07:13	I
7092472	EU-154	15585-10-1	-1.30E+00	pCi/L	4.5E+00	4.5E+00	U	8.36E+00		GAMMALL_GS	2.0042E+00	L	04/18/2007	07:13	I
7092472	EU-155	14391-16-3	1.42E+00	pCi/L	3.0E+00	3.0E+00	U	5.77E+00		GAMMALL_GS	2.0042E+00	L	04/18/2007	07:13	I
7092472	K-40	13966-00-2	-1.61E+01	pCi/L	3.2E+01	3.2E+01	U	6.80E+01		GAMMALL_GS	2.0042E+00	L	04/18/2007	07:13	I
7092472	RU-106	13967-48-1	-9.16E+00	pCi/L	1.5E+01	1.5E+01	U	2.44E+01		GAMMALL_GS	2.0042E+00	L	04/18/2007	07:13	I
7092472	SB-125	14234-35-6	-1.45E-02	pCi/L	3.6E+00	3.6E+00	U	6.50E+00		GAMMALL_GS	2.0042E+00	L	04/18/2007	07:13	I
7092468	TC-99	14133-76-7	5.32E+03	pCi/L	4.0E+01	3.7E+02		9.86E+00	100.0	TC99_ETVDSK_LS	1.254E-01	L	04/12/2007	02:14	I
7092464	Uranium	7440-61-1	2.16E+00	ug/L	2.2E-01	2.2E-01		8.32E-02		UTOT_KPA	2.52E-02	ML	05/07/2007	12:13	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:
9JRT4T10	B1MKM9		MW6-SBB-A1	W07-003	W05146					03/27/2007 10:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092475	BETA	12587-47-2	2.33E+01	pCi/L	2.7E+00	5.6E+00		2.91E+00	100.0	9310_ALPHABETA	1.885E-01	L	04/16/2007 20:01	I
7092472	BE-7	13966-02-4	1.22E+01	pCi/L	2.0E+01	2.0E+01	U	3.78E+01		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092472	CO-60	10198-40-0	-1.05E+00	pCi/L	2.6E+00	2.6E+00	U	4.46E+00		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092472	CS-134	13967-70-9	1.06E+00	pCi/L	2.4E+00	2.4E+00	U	4.52E+00		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092472	CS-137	10045-97-3	-4.64E-01	pCi/L	2.0E+00	2.0E+00	U	3.58E+00		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092472	EU-152	14683-23-9	-3.66E+00	pCi/L	5.7E+00	5.7E+00	U	9.37E+00		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092472	EU-154	15585-10-1	-1.79E+00	pCi/L	7.3E+00	7.3E+00	U	1.31E+01		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092472	EU-155	14391-16-3	1.61E+00	pCi/L	5.5E+00	5.5E+00	U	9.86E+00		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092472	K-40	13966-00-2	2.01E+01	pCi/L	7.0E+01	7.0E+01	U	1.53E+02		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092472	RU-106	13967-48-1	8.62E+00	pCi/L	2.0E+01	2.0E+01	U	3.78E+01		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092472	SB-125	14234-35-6	-1.17E+00	pCi/L	5.6E+00	5.6E+00	U	9.83E+00		GAMMALL_GS	1.982E+00	L	04/18/2007 07:13	I
7092468	TC-99	14133-76-7	6.27E+01	pCi/L	5.9E+00	1.0E+01		9.89E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	04/12/2007 02:14	I
7092464	Uranium	7440-61-1	3.33E+00	ug/L	3.4E-01	3.4E-01		8.22E-02		UTOT_KPA	2.55E-02	ML	05/07/2007 12:15	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:
9JRVQJ10	B1MDJ5		MW6-SBB-A1	I07-032	W05146					03/26/2007 11:54

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092476	I-129L	15046-84-1	2.21E-01	pCi/L	2.0E-01	2.0E-01	U	4.13E-01	61.4	I129LL_SEP_LEPS	3.9173E+00	L	04/26/2007 06:44	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.

5/11/2007 10:17:03 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **Version:** 05 **Rpt Nbr:** 35293 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

7092477	SR-90	10098-97-2	7.05E-02	pCi/L	1.7E-01	2.1E-01	U	4.52E-01	81.4	SRISO_SEP_PRE	1.0063E+00	L	04/27/2007	05:59	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:
9JRWE110	B1MCT3		MW6-SBB-A1	A07-003	W05146					03/27/2007 10:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	1.22E+02	pCi/L	1.4E+02	1.5E+02	U	3.28E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/06/2007 06:24	I
7092476	I-129L	15046-84-1	-6.88E-03	pCi/L	2.3E-01	2.3E-01	U	4.29E-01	58.6	I129LL_SEP_LEPS	3.9124E+00	L	04/26/2007 06:45	I
7092468	TC-99	14133-76-7	6.23E+00	pCi/L	4.2E+00	6.1E+00	U	9.64E+00	100.0	TC99_ETVDSK_LS	1.283E-01	L	04/12/2007 02:14	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:
9JRWEK10	B1MKD2		MW6-SBB-A1	W07-003	W05146					03/27/2007 12:16

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092468	TC-99	14133-76-7	1.02E+01	pCi/L	4.4E+00	6.5E+00		9.82E+00	100.0	TC99_ETVDSK_LS	1.261E-01	L	04/12/2007 02:14	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:
9JRWFA10	B1MCT5		MW6-SBB-A1	A07-003	W05146					03/27/2007 09:09

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7092471	H-3	10028-17-8	1.23E+00	pCi/L	1.3E+02	1.5E+02	U	3.27E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/06/2007 07:47	I
7092476	I-129L	15046-84-1	1.61E-02	pCi/L	5.7E-01	5.7E-01	U	1.02E+00	24.9	I129LL_SEP_LEPS	3.8795E+00	L	04/26/2007 08:30	I
7092468	TC-99	14133-76-7	1.57E+00	pCi/L	4.1E+00	5.9E+00	U	9.84E+00	100.0	TC99_ETVDSK_LS	1.257E-01	L	04/12/2007 02:14	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.

Friday, May 11, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7H51AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05146 35293
Matrix: WATER WATER
QC Type: BLK

Collection Date: 03/28/2007 10:10
Sample On Date:
Received Date: 03/28/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
7092464	Uranium	-1.87E-02	ug/L	3.4E-03	U	8.12E-02			UTOT_KPA	2.58E-02	05/07/2007				D
BLK	7440-61-1			3.4E-03						ML	11:50				

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.

Friday, May 11, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7H81AB **Sdg/Rept Nbr:** W05146 35293 **Collection Date:** 03/27/2007 12:16

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 03/27/2007

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
7092468	TC-99	-9.55E-01	pCi/L	5.8E+00	U	9.90E+00	100.0		TC99_ETVDSK	1.253E-01	04/12/2007				D
BLK	14133-76-7			4.1E+00						L	02:14				

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.

Friday, May 11, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR7J61AB	**Sdg/Rept Nbr:**	W05146 35293	**Collection Date:**	03/27/2007 12:30
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	03/27/2007

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
7092474	ALPHA	1.13E-01	pCi/L	3.7E-01	U	9.36E-01	100.0		9310_ALPHAB	1.974E-01	04/17/2007				D
BLK	12587-46-1			3.7E-01						L	06:58				

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.

Friday, May 11, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7J71AB **Sdg/Rept Nbr:** W05146 35293 **Collection Date:** 03/26/2007 12:56

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 03/26/2007

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
7092475	BETA	-4.19E-01	pCi/L	1.1E+00	U	2.54E+00	100.0		9310_ALPHAB	2.022E-01	04/16/2007				D
BLK	12587-47-2			1.1E+00						L	20:06				

STL 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.

Friday, May 11, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7J91AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05146 35293
Matrix: WATER WATER
QC Type: BLK

Collection Date: 03/27/2007 10:50
Sample On Date:
Received Date: 03/27/2007

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
7092476	I-129L	-2.68E-03	pCi/L	1.4E-01	U	2.67E-01	95.4		I129LL_SEP_L	3.9958E+00	04/26/2007				D
BLK	15046-84-1			1.4E-01						L	08:31				

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.

Friday, May 11, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR7JD1AB	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:** 03/26/2007 09:23
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 03/26/2007

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
7092471	H-3	1.46E+02	pCi/L	1.6E+02	U	3.28E+02	100.0		906.0_H3_LSC	5.00E-03	04/05/2007				D
BLK	10028-17-8			1.4E+02						L	19:26				

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.

Friday, May 11, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR7JD1DX	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:** 03/26/2007 09:23
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 03/26/2007

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/Crit 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
7092471	H-3	1.56E+02	pCi/L	1.6E+02	U	3.36E+02	100.0		906.0_H3_LSC	5.00E-03	04/06/2007				D
BLK	10028-17-8			1.4E+02						L	10:31				

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.

Friday, May 11, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7JT1AB **Sdg/Rept Nbr:** W05146 35293 **Collection Date:** 03/27/2007 10:30

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 03/27/2007

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
7092472	BE-7	7.74E+00	pCi/L	2.0E+01	U	3.97E+01			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	13966-02-4			2.0E+01						L	08:57				
7092472	CO-60	-1.25E-01	pCi/L	2.4E+00	U	4.67E+00			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	10198-40-0			2.4E+00						L	08:57				
7092472	CS-134	1.42E+00	pCi/L	3.0E+00	U	5.72E+00			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	13967-70-9			3.0E+00						L	08:57				
7092472	CS-137	-1.11E+00	pCi/L	2.2E+00	U	3.76E+00			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	10045-97-3			2.2E+00						L	08:57				
7092472	EU-152	3.19E+00	pCi/L	5.2E+00	U	1.02E+01			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	14683-23-9			5.2E+00						L	08:57				
7092472	EU-154	-2.92E+00	pCi/L	7.9E+00	U	1.41E+01			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	15585-10-1			7.9E+00						L	08:57				
7092472	EU-155	-2.05E+00	pCi/L	4.9E+00	U	8.57E+00			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	14391-16-3			4.9E+00						L	08:57				
7092472	K-40	-2.56E+01	pCi/L	5.2E+01	U	1.18E+02			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	13966-00-2			5.2E+01						L	08:57				
7092472	RU-106	-1.12E+00	pCi/L	2.0E+01	U	3.64E+01			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	13967-48-1			2.0E+01						L	08:57				
7092472	SB-125	7.35E-01	pCi/L	5.8E+00	U	1.05E+01			GAMMALL_GS	1.9972E+00	04/18/2007				D
BLK	14234-35-6			5.8E+00						L	08:57				

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.

Friday, May 11, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR7KA1AB	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:** 03/26/2007 11:54
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 03/26/2007

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
7092477	SR-90	7.78E-02	pCi/L	2.3E-01	U	4.98E-01	76.0		SRISO_SEP_P	9.98E-01	04/27/2007				D
BLK	10098-97-2			2.3E-01						L	05:59				

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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR7H51CS	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:** 03/28/2007 10:10
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 03/28/2007

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
7092464	Uranium	3.53E+01	ug/L	4.2E+00		8.42E-02		3.63E+01	UTOT_KPA	2.49E-02	05/07/2007			70	D
BS	7440-61-1			4.2E+00				97.4		ML	11:54			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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7H51DS **Sdg/Rept Nbr:** W05146 35293 **Collection Date:** 03/28/2007 10:10

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/28/2007

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
7092464	Uranium	3.51E+00	ug/L	3.6E-01		8.32E-02		3.63E+00	UTOT_KPA	2.52E-02	05/07/2007			70	D
BS	7440-61-1			3.6E-01				96.6		ML	11:56			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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR7H81CS	**Sdg/Rept Nbr:**	W05146 35293	**Collection Date:**	03/27/2007 12:16
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	03/27/2007

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
7092468	TC-99	5.23E+02	pCi/L	4.1E+01		9.85E+00	100.0	5.43E+02	TC99_ETVDSK	1.254E-01	04/12/2007			70	D
BS	14133-76-7			1.3E+01				96.3		L	02:14			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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR7J61CS	**Sdg/Rept Nbr:**	W05146 35293	**Collection Date:**	03/27/2007 12:30
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	03/27/2007

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
7092474	ALPHA	2.17E+01	pCi/L	5.8E+00		8.99E-01	100.0	2.30E+01	9310_ALPHAB	2.002E-01	04/17/2007			70	D
BS	12587-46-1			3.0E+00				94.1		L	06:58			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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7J71CS **Sdg/Rept Nbr:** W05146 35293 **Collection Date:** 03/26/2007 12:56

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/26/2007

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
7092475	BETA	1.94E+01	pCi/L	4.2E+00		2.28E+00	100.0	2.28E+01	9310_ALPHAB	1.987E-01	04/16/2007			70	D
BS	12587-47-2			2.1E+00				85.1		L	20:06			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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7J91CS **Sdg/Rept Nbr:** W05146 35293 **Collection Date:** 03/27/2007 10:50

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/27/2007

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
7092476	I-129L	1.01E+01	pCi/L	1.3E+00		5.16E-01	99.5	1.02E+01	I129LL_SEP_L	3.7705E+00	04/26/2007			70	D
BS	15046-84-1			1.3E+00				99.0		L	08:32			130	

STL Richland

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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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7JD1CS **Sdg/Rept Nbr:** W05146 35293 **Collection Date:** 03/26/2007 09:23

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/26/2007

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
7092471	H-3	2.37E+03	pCi/L	2.5E+02		3.26E+02	100.0	2.71E+03	906.0_H3_LSC	5.00E-03	04/05/2007			70	D
BS	10028-17-8			2.1E+02				87.5		L	20:48			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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7JD1EM **Sdg/Rept Nbr:** W05146 35293 **Collection Date:** 03/26/2007 09:23

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/26/2007

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
7092471	H-3	2.39E+03	pCi/L	2.5E+02		3.32E+02	100.0	2.71E+03	906.0_H3_LSC	5.00E-03	04/06/2007			70	D
BS	10028-17-8			2.1E+02				88.2		L	11:54			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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR7JT1CS	**Sdg/Rept Nbr:**	W05146 35293	**Collection Date:**	03/27/2007 10:30
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	03/27/2007

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
7092472	CO-60	4.16E+01	pCi/L	1.0E+01		5.79E+00		3.81E+01	GAMMALL_GS	1.9995E+00	04/18/2007			75	D
BS	10198-40-0			1.0E+01				109.4		L	08:57			125	
7092472	CS-137	2.28E+01	pCi/L	7.3E+00		6.87E+00		2.48E+01	GAMMALL_GS	1.9995E+00	04/18/2007			70	D
BS	10045-97-3			7.3E+00				91.9		L	08:57			130	
7092472	EU-152	6.11E+01	pCi/L	1.9E+01		1.23E+01		7.61E+01	GAMMALL_GS	1.9995E+00	04/18/2007			70	D
BS	14683-23-9			1.9E+01				80.3		L	08:57			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.

Friday, May 11, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id: JR7KA1CS **Sdg/Rept Nbr:** W05146 35293 **Collection Date:** 03/26/2007 11:54

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/26/2007

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
7092477	SR-90	1.49E+01	pCi/L	2.3E+00		4.73E-01	79.2	1.36E+01	SRISO_SEP_P	1.0009E+00	04/27/2007			70	D
BS	10098-97-2			7.4E-01				109.8		L	05:59			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.

Friday, May 11, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR0H61GR	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:** 03/28/2007 10:10
Client Id:	B1MKP7	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 03/28/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7092464	Uranium	4.64E+00	ug/L	4.9E-01		8.38E-02			UTOT_KPA	2.50E-02	05/07/2007	2.5	0.3		D
DUP	7440-61-1	4.53E+00		4.9E-01						ML	12:25	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.

Friday, May 11, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JRQ8G1ER	**Sdg/Rept Nbr:**	W05146 35293	**Collection Date:**	03/26/2007 12:56
Client Id:	B1MK16	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	03/26/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7092475	BETA	5.96E+01	pCi/L	8.6E+00		2.76E+00	100.0		9310_ALPHAB	2.006E-01	04/16/2007	13.5	1.4		D
DUP	12587-47-2	6.82E+01		3.8E+00						L	20:01	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.

Friday, May 11, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JRRCA1ER	**Sdg/Rept Nbr:**	W05146 35293	**Collection Date:**	03/26/2007 09:23
Client Id:	B1MKB8	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	03/26/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7092471	H-3	6.46E+01	pCi/L	1.5E+02	U	3.26E+02	100.0		906.0_H3_LSC	5.00E-03	04/06/2007	5.2	0.		D
DUP	10028-17-8	6.80E+01		1.4E+02						L	00:55	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.

Friday, May 11, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JRT4P1GR	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:** 03/27/2007 12:30
Client Id:	B1MK41	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 03/27/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7092474	ALPHA	5.65E-01	pCi/L	8.9E-01	U	1.78E+00	100.0		9310_ALPHAB	1.668E-01	04/16/2007	112.5	2.3		D
DUP	12587-46-1	2.02E+00		8.8E-01						L	20:47	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.

Friday, May 11, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JRT4T1FR	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:** 03/27/2007 10:30
Client Id:	B1MKM9	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 03/27/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7092472	BE-7	-1.82E+01	pCi/L	1.6E+01	U	2.35E+01			GAMMALL_GS	2.0041E+00	04/18/2007	0.0	2.8		D
DUP	13966-02-4	1.22E+01		1.6E+01						L	08:56	20.0	3		
7092472	CO-60	-4.55E-01	pCi/L	1.8E+00	U	3.25E+00			GAMMALL_GS	2.0041E+00	04/18/2007	0.0	0.5		D
DUP	10198-40-0	-1.05E+00		1.8E+00						L	08:56	20.0	3		
7092472	CS-134	-1.86E+00	pCi/L	1.8E+00	U	2.64E+00			GAMMALL_GS	2.0041E+00	04/18/2007	0.0	2.4		D
DUP	13967-70-9	1.06E+00		1.8E+00						L	08:56	20.0	3		
7092472	CS-137	-9.48E-01	pCi/L	1.7E+00	U	2.83E+00			GAMMALL_GS	2.0041E+00	04/18/2007	0.0	0.4		D
DUP	10045-97-3	-4.64E-01		1.7E+00						L	08:56	20.0	3		
7092472	EU-152	1.05E+00	pCi/L	4.4E+00	U	8.15E+00			GAMMALL_GS	2.0041E+00	04/18/2007	0.0	1.5		D
DUP	14683-23-9	-3.66E+00		4.4E+00						L	08:56	20.0	3		
7092472	EU-154	-3.62E-01	pCi/L	4.9E+00	U	9.36E+00			GAMMALL_GS	2.0041E+00	04/18/2007	0.0	0.4		D
DUP	15585-10-1	-1.79E+00		4.9E+00						L	08:56	20.0	3		
7092472	EU-155	2.35E-01	pCi/L	3.9E+00	U	6.93E+00			GAMMALL_GS	2.0041E+00	04/18/2007	149.0	0.5		D
DUP	14391-16-3	1.61E+00		3.9E+00						L	08:56	20.0	3		
7092472	K-40	-3.76E+00	pCi/L	2.8E+01	U	5.79E+01			GAMMALL_GS	2.0041E+00	04/18/2007	292.4	1.2		D
DUP	13966-00-2	2.01E+01		2.8E+01						L	08:56	20.0	3		
7092472	RU-106	-1.60E+01	pCi/L	1.7E+01	U	2.70E+01			GAMMALL_GS	2.0041E+00	04/18/2007	0.0	2.1		D
DUP	13967-48-1	8.62E+00		1.7E+01						L	08:56	20.0	3		
7092472	SB-125	-4.67E-01	pCi/L	3.8E+00	U	6.78E+00			GAMMALL_GS	2.0041E+00	04/18/2007	0.0	0.3		D
DUP	14234-35-6	-1.17E+00		3.8E+00						L	08:56	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.

Friday, May 11, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JRVQJ1DR	**Sdg/Rept Nbr:**	W05146 35293	**Collection Date:**	03/26/2007 11:54
Client Id:	B1MDJ5	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	03/26/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-032	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
7092477	SR-90	2.76E-01	pCi/L	2.3E-01	U	4.54E-01	84.0		SRISO_SEP_P	1.0031E+00	04/27/2007	118.6	1.3		D
DUP	10098-97-2	7.05E-02		2.3E-01						L	05:59	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.

Friday, May 11, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JRWE11ER	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:** 03/27/2007 10:50
Client Id:	B1MCT3	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 03/27/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
A07-003	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
7092476	I-129L	4.02E-02	pCi/L	2.5E-01	U	4.82E-01	43.8		I129LL_SEP_L	3.8981E+00	04/26/2007	282.7	0.3		D
DUP	15046-84-1	-6.88E-03		2.5E-01						L	06:45	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.

Friday, May 11, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JRWEK1CR	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:**	03/27/2007 12:16
Client Id:	B1MKD2	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:**	03/27/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7092468	TC-99	1.22E+01	pCi/L	6.7E+00		9.88E+00	100.0		TC99_ETVDSK	1.25E-01	04/12/2007	18.0	0.4		D
DUP	14133-76-7	1.02E+01		4.5E+00						L	02:14	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.

Friday, May 11, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR0JA1GW	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:** 03/28/2007 11:30
Client Id:	B1MK51	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**MS**		**Received Date:** 03/28/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7092464	Uranium	3.20E+01	ug/L	3.9E+00		7.59E-02		3.27E+01	UTOT_KPA	2.76E-02	05/07/2007			60	D
MS	7440-61-1			3.9E+00				97.8		ML	12:31			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.

Friday, May 11, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05146.Edd, h:\Reportdb\edd\FeadIV\Rad\35293.Edd

Lab Sample Id:	JR0JF1GW	**Sdg/Rept Nbr:**	W05146	35293	**Collection Date:**	03/28/2007 09:11
Client Id:	B1MK56	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	MS		**Received Date:**	03/28/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-003	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
7092468	TC-99	3.54E+03	pCi/L	2.5E+02		9.85E+00	100.0	3.62E+03	TC99_ETVDSK	1.254E-01	04/12/2007			60	D
MS	14133-76-7			3.3E+01				97.8		L	02:14			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.

RQC050

Severn Trent Laboratories, Inc.
WET CHEM BATCHSHEET

Run Date: 5/11/07
Time: 11:06:23

STL Richland

PRODUCTION FIGURES - WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE

METHOD: IZ COLIFORM BY METHOD 9223
QC BATCH #: 7092473
PREP DATE: 4/02/07
COMP DATE: 4/02/07
USER: WAGARR

INITIALS:
PREP DMD
ANAL DMD

DATA ENTRY:
INITIALS
DATE

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID:	# COL
JRQ79-1-AA	J-7C260186-001	XX I 88 IZ 5I	E	3/28/07	B1MJV8	<1
JRT4P-1-AA	J-7C270298-001	XX I 88 IZ 5I	E		B1MK41	<1
JRT4P-1-AF	J-7C270298-001-X	XX I 88 IZ 5I	E		B1MK41 DUP	<1
JR7J2-1-AA	J-7D020000-473-B	XX I 88 IZ 5I			INTRA-LAB BLANK	<1
JR7J2-1-AC	J-7D020000-473-C	XX I 88 IZ 5I			INTRA-LAB CHECK	19.9

Control Limits

(0-0)

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/26/2007 11:45:33 AM

Lot No., Due Date: J7C290122,J7C260186,J7C270298; 05/14/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7092474; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05146; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JRQ8G1AA 173.40<200.00 JRT4P1AC 166.10<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JRT4P1AG ALPHA 110.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JR0H61AC ALPHA 2.8E+00 L:1.7E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. Yes No N/A ✓
OK

First Level Review Lisa Anderson Date 4/26/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7092472
W05146

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review: Sheryl A. Adam Date: 4-27-07

SEVERN STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/17/2007 4:38:00 PM

Lot No., Due Date: J7C290122,J7C260186,J7C270298; 05/14/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7092475; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05146; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JRT4T1AA 188.50<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc. Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JRQ8G1AC BETA 6 8E+01 L:2.7E+00 JRT4P1AD BETA 1.4E+02 L:2.8E+00 JRT4R1AA BETA 1.3E+03 L:2.7E+00 JRT4T1AA BETA 2.3E+01 L:2.9E+00 JR0H61AD BETA 4.7E+03 L:2.9E+00 JR0JA1AD BETA 1.7E+02 L:3.0E+00 JR0JF1AD BETA 3.7E+01 L:2.8E+00		✓	
8.23 Result <= Action Level, when Defined. OK: No Action Level Found => BETA OK: No Callin Level Found => BETA	✓		

8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Lisa Anderson **Date** 4/17/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7092475
W05146

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	√		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	√		
3. Are the correct isotopes reported?	√		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	√		
2. Does the blank result meet the Contract criteria?	√		
3. Is the blank result < the Contract Detection Limit?	√		
4, Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			√
5. Is the LCS recovery with contract acceptance criteria?	√		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	√		
8. Do the MS/MSD results and yields meet acceptance criteria?			√
9. Do the duplicate sample results and yields meet acceptance criteria?	√		
C. Other 1. Are all Nonconformances included and noted?			√
2. Are all required forms filled out?	√		
3. Was the correct methodology used?	√		
4. Was transcription checked?	√		
5. Were all calculations checked at a minimum frequency?	√		
6. Were units checked?	√		

Comments on any "No" response:

Second Level Review: Sheryl R. Adam Date: 4-18-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/28/2007 11:01:10 AM

Lot No., Due Date: J7C280120; 05/14/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7092477; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05146; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?	✓		
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Lisa Anderson **Date** 4/28/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7092477
W05146

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review: Cheryl A. Adam Date: 4-30-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/26/2007 11:42:26 AM

Lot No., Due Date: J7C270298; 05/14/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7092472; RGAMMA Gamma by GER

SDG, Matrix: W05146; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?		✓	
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?	✓		
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:
NCM 10-09794

First Level Review Lisa Anderson **Date** 4/26/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7092472
W05146

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?		✓	
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: See NCM

Second Level Review: Sheryl A. Adam Date: 4-27-07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09794**
NCM Initiated By: Lisa Antonson
Date Opened: 04/26/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by GER
Lot #'s (Sample #'s): J7C270298 (2,3), J7D020000 (472),
QC Batches: 7092472

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	04/26/2007	The LCS on this Gamma batch had an MDA slightly above the CRDL of 6. The result exceeds the MDA achieved, data accepted.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	04/26/2007	NA

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/28/2007 10:55:40 AM

Lot No., Due Date: J7C280120,J7C280203; 05/14/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7092476; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05146; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes ✓ No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes ✓ No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes ✓ No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes ✓ No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes ✓ No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits? Yes ✓ No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes ✓ No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A ✓

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes ✓ No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes ✓ No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units? Yes ✓ No N/A

4.2 Were analysis volumes entered correctly? Yes ✓ No N/A

4.3 Were Yields entered correctly? Yes ✓ No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes ✓ No N/A

4.5 Were raw counts reviewed for anomalies? Yes ✓ No N/A

5.0 Other

5.1 Are all nonconformances included and noted? Yes No N/A ✓

5.2 Are all required forms filled out? Yes ✓ No N/A

5.3 Was the correct methodology used? Yes ✓ No N/A

5.4 Was transcription checked? Yes ✓ No N/A

5.5 Were all calculations checked at a minimum frequency? Yes ✓ No N/A

5.6 Are worksheet entries complete and correct? Yes ✓ No N/A

6.0 Comments on any No response:

First Level Review Lisa Christenson **Date** 4/28/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7092476
W05146

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	√		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	√		
3. Are the correct isotopes reported?	√		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	√		
2. Does the blank result meet the Contract criteria?	√		
3. Is the blank result < the Contract Detection Limit?	√		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			√
5. Is the LCS recovery with contract acceptance criteria?	√		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	√		
8. Do the MS/MSD results and yields meet acceptance criteria?			√
9. Do the duplicate sample results and yields meet acceptance criteria?	√		
C. Other 1. Are all Nonconformances included and noted?			√
2. Are all required forms filled out?	√		
3. Was the correct methodology used?	√		
4. Was transcription checked?	√		
5. Were all calculations checked at a minimum frequency?	√		
6. Were units checked?	√		

Comments on any "No" response:

Second Level Review: Cheryl A. Adam Date: 4-30-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/26/2007 11:59:25 AM

Lot No., Due Date: J7C290122,J7C260186,J7C260204,J7C260205,J7C270298,J7C280203,J7C280198; 05/14/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7092468; RTC99 Tc-99 by LSC

SDG, Matrix: W05146; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JR0JF1AG TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. Yes ✓ No N/A
OK

First Level Review Lisa Anderson Date 4/26/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 709248
W05146

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review: Sheryl R Adam Date: 4-27-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/9/2007 2:47:32 PM

Lot No., Due Date: J7C290122,J7C260204,J7C260205,J7C280203; 05/14/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7092471; RTRITIUM H-3 by LSC

SDG, Matrix: W05146; WATER

		Yes	No	N/A
8.0	Correction Calculation Protocol Used. OK	✓		
8.01	The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02	Final Results Are in the Appropriate Activity Units OK	✓		
8.03	Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04	The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06	At Least the Minimum Sample Volume Was Used Analysis Volume => JRRA91AA 5.00<10.00 JRRCA1AA 5.00<10.00 JRRCD1AA 5.00<10.00 JRRCE1AA 5.00<10.00 JRRCF1AA 5.00<10.00 JRWE11AA 5.00<10.00 JRWFA1AA 5.00<10.00 JR0H61AA 5.00<10.00 JR0JA1AA 5.00<10.00 JR0JF1AA 5.00<10.00 Q:VB ok AL 4/9/07		✓	
8.07	The Correct Count Geometry was Used. Count Geometry => JR7JD1AF SVP15/5<>SVP10/10 JR7JD1AG SVP15/5<>SVP10/10 JR7JD1AA SVP15/5<>SVP10/10 JR7JD1AC SVP15/5<>SVP10/10 JRRA91AA SVP15/5<>SVP10/10 JRRCA1AA SVP15/5<>SVP10/10 JRRCA1AE SVP15/5<>SVP10/10 JRRCD1AA SVP15/5<>SVP10/10 JRRCE1AA SVP15/5<>SVP10/10 JRRCF1AA SVP15/5<>SVP10/10 JRWE11AA SVP15/5<>SVP10/10 JRWFA1AA SVP15/5<>SVP10/10 JR7JD1AH SVP15/5<>SVP10/10 JR7JD1AD SVP15/5<>SVP10/10 JR7JD1AE SVP15/5<>SVP10/10 JR0H61AA SVP15/5<>SVP10/10 JR0JA1AA SVP15/5<>SVP10/10 JR0JF1AA SVP15/5<>SVP10/10 Q:VC ok AL 4/9/07		✓	
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09	Method Blank is within Control Limits. OK	✓		
8.1	Comments:			
8.11	Matrix Blank is within Control Limits. OK	✓		
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13	QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JRRCA1AE H-3 91.0 (RPD)		✓	
8.14	LCS within Control Limits. OK	✓		
8.15	MLCS within Control Limits. OK	✓		
8.16	MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓

8.17 Tracer within Control Limits. Yes No N/A ✓
No Tracers found in Batch!

8.18 Samples are above Minimum Tracer Yield (No Failed Samples) Yes No N/A ✓
No Tracers found in Batch!

8.19 Sample Specific MDC <= CRDL. Yes ✓ No N/A
OK

8.2 Comments:

8.21 Result < Lc, Activity Not Detected, U Flag. Yes No N/A ✓
No Limit Specified!

8.22 Result < Mdc, Activity Not Detected, U Flag. Yes ✓ No N/A
No Positive Results
OK Calc_IDL Not Calculated

8.23 Result <= Action Level, when Defined. Yes ✓ No N/A
OK; No Action Level Found => H-3

OK; No Callin Level Found => H-3

8.24 Result + 3s >=0, Not Too Negative. Yes ✓ No N/A
OK

8.25 Counting Spectrum are within FWHM Limits. Yes No N/A ✓
No FWHM found in Batch Data!

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓
No Count Library found in Batch Data!

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments:

8.31 Results Blank Subtracted as Appropriate. Yes ✓ No N/A
OK

First Level Review Angela Long **Date** 4/9/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7092471

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?			√
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	√		
3. Are the correct isotopes reported?	√		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	√		
2. Does the blank result meet the Contract criteria?	√		
3. Is the blank result < the Contract Detection Limit?	√		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			√
5. Is the LCS recovery with contract acceptance criteria?	√		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	√		
8. Do the MS/MSD results and yields meet acceptance criteria?			√
9. Do the duplicate sample results and yields meet acceptance criteria?	√		
C. Other 1. Are all Nonconformances included and noted?			√
2. Are all required forms filled out?	√		
3. Was the correct methodology used?	√		
4. Was transcription checked?	√		
5. Were all calculations checked at a minimum frequency?	√		
6. Were units checked?	√		

Comments on any "No" response: _____

Second Level Review: Erika Jordan Date: 4/10/07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/8/2007 1:19:15 PM

Lot No., Due Date: J7C290122,J7C260186,J7C260204,J7C260205,J7C270298; 05/14/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7092464; RUNAT UNat by KPA

SDG, Matrix: W05146; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes ✓	No	N/A
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A

5.0 Other

5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes	No	N/A ✓
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review [signature] **Date** 5-8-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7092464
W05146

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 5-8-07

SEVERN TRENT **STL**

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/1/2007 4:39:08 PM

Lot No., Due Date: J7C260186,J7C270298; 05/14/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7092473;

SDG, Matrix: W05146; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes	No	N/A ✓
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes	No	N/A ✓
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes ✓	No	N/A
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes ✓	No	N/A
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:
See NCM 10-09831.

First Level Review Angela Long **Date** 5/1/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7092473
W05146

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: See NCM

Second Level Review: Sheryl A Adam Date: 5-2-07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09831**
NCM Initiated By: angela long
Date Opened: 05/01/2007
Date Closed:

Classification: **Deficiency**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests:
Lot #'s (Sample #'s): J7C260186 (1), J7C270298 (1), J7D020000 (473),
QC Batches: 7092473

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
angela long	05/01/2007	Sample JRQ791AA did not have the correct spike added to it, it was batched with some other samples and a blank check was performed with both batches of the two samples. No colonies were found in JRQ791AA, so the both samples will be accepted.

Corrective Action

Name	Date	Corrective Action
angela long	05/01/2007	The analyst was asked to be more careful.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Date Printed: 5/1/2007

STL RICHLAND

PNNL J7C260186
W05146
Due 05-10-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-102

Page 1 of 1

Collector: Fluor Hanford R. T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-506-7	Ice Chest No.: SML562 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 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
B1MJV8		W	3-26-07	1431	1x20-mL P	Activity Scan	None
B1MJV8		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MJV8		W	↓	↓	1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool 4C

JRQ79

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford R. T. SICKLE (Print) (Sign)	MAR 26 2007 1440	Eric Dooley (Print) Eric Dooley (Sign)	MAR 26 2007 1440

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 J7C260186
WO 5146
Due 05-10-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-116

Page 1 of 1

Collector: Fluor Hanford R. T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-506-7	Ice Chest No.: SML-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 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
B1MJX0		W	3-26-7	1214	1x20-mL P	Activity Scan	None
B1MJX0		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JRQ8F	

Relinquished By	Date/Time	Received By	Date/Time
Fluor Hanford R. T. SICKLE (Print) (Sign)	1440 MAR 26 2007	Eric Darby (Print) Eric Darby (Sign)	1440 MAR 26 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

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STL RICHLAND

PNNL J7C260186
W05146
Due 05-10-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-140

Page 1 of 1

Collector: Fluor Hanford R. T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-506-7	Ice Chest No.: SMC 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 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
B1MK16		W	3-26-07	1256	1x20-mL P	Activity Scan	None
B1MK16		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MK16		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
						JRQ86	

Relinquished By	Date/Time	Received By	Date/Time
Print: Fluor Hanford R. T. SICKLE Sign: [signature]	1440 MAR 26 2007	Print: Eric Denby Sign: Eric Denby	1440 MAR 26 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

PNNL JTC260186 W05146 Due 05-10-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-454

Page 1 of 1

Collector: Fluor Hanford ~~R. T. SICKLE~~	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-506-7	Ice Chest No. SML-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 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
B1MKT7		W	3-26-7	1095	1x20-mL P	Activity Scan	None
B1MKT7		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JRQ8H	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			1440 MAR 26 2007		Eric Dunby	Eric Dunby	1440 MAR 26 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

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PNNL J7C260186
W05146
Due 05-10-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-472

Page 1 of 1

Collector: Fluor Hanford R. T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-506-7	Ice Chest No.: SML 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 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
B1MKV6		W	3-26-07	0923	1x20-mL P	Activity Scan	None
B1MKV6		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

JRQ8K

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			MAR 26 2007 1440		Eric Dowby	Eric Dowby	MAR 26 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 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

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SEVERN TRENT **STL**

Sample Check-in List

Date/Time Received: 3/24/07

Client: PGW SDG #: W05146 NA [ ] SAF #: W07-003 NA [ ]

Work Order Number: J7C260186 Chain of Custody # W07-003

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 5
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: E. Daby Date: 3/24/07 1440

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL JTC260205
W05146
Due 05-10-07
FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-300

Page 1 of 1

Collector: M.R. WEIL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	Logbook: HNF-N-506-6	Ice Chest No.: GRP-06-005 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 PNNL samples submitted under A, G, L 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
B1MK46		W	3/26/07	0839	1x20-mL P	Activity Scan	None
B1MK46		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MK46		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MK46		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None

JRRCD

E. Weld 3/26/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD M.R. WEIL			MAR 2 6 2007 1435		Eric Darby	Eric Darby	MAR 2 6 2007 1435
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 = 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

SIT RECEIVED

75

STL RICHLAND

PNNL J7C260205
W05146
due 05-10-07
FLUOR HANFORD

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-346

Page 1 of 1

Collector: M.R. WEIL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	Logbook: HNF-N-506-6	Ice Chest No.: 6RP-06-005 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 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
B1MK71		W	3/26/07	1108	1x20-mL P	Activity Scan	None
B1MK71		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MK71		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MK71		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						~~JRRE~~ SS	
						JRRCE	
			R. Weil 3/26/07				

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
FLUOR HANFORD M.R. WEIL	MAR 2 6 2007 1435	E. Darby Eric Darby	MAR 2 6 2007 1435
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 JTC260205
W05146
Due 05-10-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-338

Page 1 of 1

Collector: FLUOR HANFORD M.R. WEIL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	Logbook: HNF-N-506-6	Ice Chest No.: GRP-06-005 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 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
B1MK66		W	3/26/07	1208	1x20-mL P	Activity Scan	None
B1MK66		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MK66		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MK66		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JRRCF	

L Wall 3/26/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
FLUOR HANFORD M.R. WEIL			MAR 2 6 2007 1435	E Rady	Eric Dorsey		MAR 2 6 2007 1435
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

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SEVERN TRENT **STL**

Sample Check-in List

Date/Time Received: 3/26/07 1435

Client: PGW SDG #: W05146 NA [ ] SAF #: W07-003 NA [ ]

Work Order Number: J7C260205 Chain of Custody # W07-003-346, 500, 338

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5.Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA [ ] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Eric Darby Date: 3/26/07 1435

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL J7C260204
W05146
Due 05.10.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-366

Page 1 of 1

Collector: Fluor Hanford D. R. BREWINGTON	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-506	Ice Chest No.: SAWS-115 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 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
B1MK83		W	3-26-07	1230	1x20-mL P	Activity Scan	None
B1MK83		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MK83		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MK83		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None

JRRA9

3-26-07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON			MAR 26 2007 1430		Eric Darby		MAR 26 2007 1430
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

STL RICHLAND

PNNL J7C260204
W05146
Due 05-10-07
Fluor Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-400

Page 1 of 1

Collector: D. R. BREWINGTON	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-5061	Ice Chest No.: SAWS-115 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 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
B1MKB8		W	3-26-07	0923	1x20-mL P	Activity Scan	None
B1MKB8		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MKB8		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MKB8		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JRRCA	
						3-26-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D.R. Brewington		1430 MAR 26 2007	Eric Darby	Eric Darby		1430 MAR 26 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

SEVERN TRENT **STL**

Sample Check-in List

Date/Time Received: 3/26/07 1430

Client: PtW SDG #: W05146 NA [ ] SAF #: W07-003 NA [ ]

Work Order Number: JTC260204 Chain of Custody # W07-003 366.400

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2 05.28.07
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____ broken
   _____ leaking
   _____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Eu Darby Date: 3/26/07 1430

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

STL RICHLAND

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7C270298 W05146 Due 05.11.07

C.O.C. # W07-003-156

Page 1 of 1

Collector: Fluor Hanford ~~D. R. BREWINGTON~~	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-506 1	Ice Chest No.: SAWS-115 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 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
B1MK41		W	3.27.07	1230	1x20-mL P	Activity Scan	None
B1MK41		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MK41		W			1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool 4C
B1MK41		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2

JRT4P

3.27.07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford	D. R. BREWINGTON	D.R. Brewington	MAR 27 2007 1505	Eric Darby	Eric Darby	Eric Darby	MAR 27 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 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

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PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7C270398 W05146 Due 05.11.07

C.O.C. # W07-003-212

Page 1 of 1

Collector: D. R. BREWINGTON	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-5061	Ice Chest No.: SAWS-115 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 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
B1MKL8		W	3.27.07	0906	1x20-mL P	Activity Scan	None
B1MKL8		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MKL8		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MKL8		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1MKL8		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

JRT4R

3-27-07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Hanford D. R. BREWINGTON	D. R. Brewington		1505 MAR 27 2007	Eric Dardy	Eric Dardy		1505 MAR 27 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

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STL RICHLAND

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JTC 270298 W05146 due 05-11-07

C.O.C. # W07-003-228

Page 1 of 1

Collector Fluor Hanford D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MARCH 2007	HNF N-5061	**Ice Chest No.** SAWS-115 **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 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
B1MKM9		W	3-27-07	1030	1x20-mL P	Activity Scan	None
B1MKM9		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MKM9		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MKM9		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1MKM9		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
						JRT4T	
						3-27-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford D. R. BREWINGTON	D. R. Brewington		1505 MAR 27 2007	Eric Darby	Eric Darby		1505 MAR 27 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

SEVERN TRENT **STL**

Sample Check-in List

Date/Time Received: 3/27/07

Client: PGW SDG #: W05146 NA [ ] SAF #: W07-003 NA [ ]

Work Order Number: JTC270298 Chain of Custody # W07-003-152,212,228

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: E. Danby Date: 3/27/07 1505

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL J7C280120 ~~280204~~ SS
W05146
Due 05-10-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7C280120 W05146 Due 05-10-07

C.O.C. # I07-032-6

Page 1 of 1

Collector: D. R. BREWINGTON	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: I07-032	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 2UP1-LOI, MARCH 2007	HNF-N-506 1	Ice Chest No.: SAWS-115 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
B1MDJ5		W	3-26-07	1154	1x20-mL P	Activity Scan	None
B1MDJ5		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1MDJ5		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						~~JRRCC~~ SS	
						JRVQJ	
						3-26-07	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Pacific Northwest D. R. BREWINGTON			1430 MAR 26 2007		Eric Dowling		1430 MAR 26 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

SITE RECORD

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 03-26-07 1430

Client: PGW SDG #: W05146 NA [ ] SAF #: I07-032 NA [ ]

Work Order Number: J7C280120 Chain of Custody # I07-032-6

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]

2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]

3. Chain of Custody record present? Yes [✓] No [ ]

4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]

6. Number of samples in shipping container: 1

7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]

8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - 1 appropriate samples labels

9. Samples are:
   - 1 in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles
   - (Only for samples requiring head space)

10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] adjusted pH [ ]

11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.

12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]

13. Description of anomalies (include sample numbers): _____

Sample Custodian: L. Smith (ED) Date: 03-26-07

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL JTC 280198
W05146
Due 05.11.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-382

Page 1 of 1

Collector: Fluor Hanford K. B. HULSE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-506 7	Ice Chest No.: SAWS-115 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 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
B1MKD2		W	3-27-07	1216	1x20-mL P	Activity Scan	None
B1MKD2		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JRWER	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			MAR 27 2007 1505	Eric Darby	Eric Darby		MAR 27 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 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

ENGINEERING FILE

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 3/27/07 1505

Client: PGW SDG #: W05146 NA [ ] SAF #: W07-003 NA [ ]

Work Order Number: J7C280198 Chain of Custody # W07-003-382

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Em Darby Date: 3/27/07 1505

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL J7C280203
W05146
Due 05-11-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # A07-003-3

Page 1 of 1

Collector Fluor Hanford K. B. HULSE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. A07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title LLWMA(3)-PA, MARCH 2007	HNF-N-506 7	**Ice Chest No.** SAWS-115 **Temp.**
Shipped To (Lab) Severn Trent 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 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
B1MCT3		W	3-27-07	1050	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MCT3		W	↓	↓	1x20-mL P	Activity Scan	None
B1MCT3		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1MCT3		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JRWEI	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			1505 MAR 27 2007		Eric Darby	Eric Darby	1505 MAR 27 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

SIL RICHLAND

90

PNNL J7C28C203
LW05146
Due 05-11-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # A07-003-5

Page 1 of 1

Collector: Fluor Hanford K. B. HULSE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: A07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: LLWMA(3)-PA, MARCH 2007	HNF-N-506 7	Ice Chest No.: SAWS-115 Temp.
Shipped To (Lab): Severn Trent 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 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
B1MCT5		W	3-27-07	0909	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MCT5		W	↓	↓	1x20-mL P	Activity Scan	None
B1MCT5		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1MCT5		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JRWFA	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford K. B. HULSE			MAR 27 2007 1505 3-27-07		Eric Dooley	Eric Dooley	MAR 27 2007 1505 3-27-07
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 *
SE = Soil, SF = 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

SITE RECORD

91

SEVERN TRENT **STL**

Sample Check-in List

Date/Time Received: 3/27/07 1505

Client: PGW SDG #: W05146 NA [ ] SAF #: A07-003 NA [ ]

Work Order Number: J7C280203 Chain of Custody # A07-003-3.5

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5.Vermiculite/packing materials is NA [ ] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: E. Darby Date: 3/27/07 1505

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL JTC290123 W05196440 Rw 3/28/07 Acc 05.11.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-003-282**

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MARCH 2007	HNF-N-506-2	**Ice Chest No.** ROSS **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 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
B1MKP7		W	3/28/7	1010	1x20-mL P	Activity Scan	None
B1MKP7		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MKP7		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MKP7		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MKP7		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JROHL	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL			MAR 28 2007 1310		Eric Darby		MAR 28 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	= 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 J7C290122
W05146
Due 05-11-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-308

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W07-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, MARCH 2007	HNF-N-506-2	Ice Chest No.: Ross 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 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
B1MK51		W	3/28/7	1130	1x20-mL P	Activity Scan	None
B1MK51		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MK51		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MK51		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MK51		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JRCJA	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL		MAR 28 2007	1310		Eric Darby	Eric Darby	MAR 28 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 = 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 J7C290122
W05146
Due 05 11.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W07-003-316

Page 1 of 1

Collector Fluor Hanford F. M. HALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W07-003	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, MARCH 2007	HNF-N-506-2	Ice Chest No. ROSS 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 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
B1MK56		W	3/28/7	0911	1x20-mL P	Activity Scan	None
B1MK56		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1MK56		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1MK56		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MK56		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JRCJF	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F. M. HALL		MAR 2 8 2007	1310		Eric Dorsey	MAR 2 8 2007	1310 3/28/07
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

SEVERN TRENT **STL**

Sample Check-in List

Date/Time Received: 3/28/07 1310

Client: PGN SDG #: W05146 NA [ ] SAF #: W07-003 NA [ ]

Work Order Number: J7C290122 Chain of Custody # W07-003-282,308,316

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Ir Darby Date: 3/28/07 1310

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

STL RICHLAND

4/12/2007 9:47:19 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Pipet #: 235

AnalyDueDate: 05/14/2007 205146

Sep1 DT/Tm Tech:

Batch: 7092474 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7092464 DHSS, 7092468 FPS5, 7092473 88IZ, 7092474 AZS7, 7092475 BCS8,

Prep Tech: BockJ / APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JRQ8G-1-AA J7C260186-3-SAMP 03/26/2007 12:56		173.40g,in AmtRec: 20ML,500MLP,LP #Containers: 3		1.5	42.6	.50	10B Scr:	2112 Alpha: 1.86E-04 uCi/Sa	4/16/07 OK Beta: 4.13E-04 uCi/Sa	
2 JRT4P-1-AC J7C270298-1-SAMP 03/27/2007 12:30		166.10g,in AmtRec: 20ML,2X500ML,LP #Containers: 4			44.6		10C Scr:	Alpha: -1.59E-05 uCi/Sa	Beta: 3.76E-04 uCi/Sa	
3 JRT4P-1-AG-X J7C270298-1-DUP 03/27/2007 12:30		166.80g,in AmtRec: 20ML,2X500ML,LP #Containers: 4			36.9		10D Scr:	Alpha: -1.59E-05 uCi/Sa	Beta: 3.76E-04 uCi/Sa	
4 JR0H6-1-AC J7C290122-1-SAMP 03/28/2007 10:10		201.50g,in AmtRec: 20ML,2X500ML,2XLP #Containers: 5			39.7		10F Scr:	Alpha: 1.06E-03 uCi/Sa	Beta: 2.69E-04 uCi/Sa	
5 JR0JA-1-AC J7C290122-2-SAMP 03/28/2007 11:30		198.30g,in AmtRec: 20ML,2X500ML,2XLP #Containers: 5			31.7		10A Scr:	0723 Alpha: -1.64E-04 uCi/Sa	4/17/07 Beta: 1.11E-03 uCi/Sa	
6 JR0JF-1-AC J7C290122-3-SAMP 03/28/2007 09:11		199.40g,in AmtRec: 20ML,2X500ML,2XLP #Containers: 5			28.3		10B Scr:	Alpha: 4.98E-05 uCi/Sa	Beta: 2.17E-05 uCi/Sa	
7 JR7J6-1-AA-B J7D020000-474-BLK 03/27/2007 12:30		197.40g,in AmtRec: #Containers: 1			0.5		10C Scr:	Alpha:	Beta:	

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.26

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STL RICHLAND

4/12/2007 9:47:23 AM

Sample Preparation/Analysis

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

AnalyDueDate: 05/14/2007

Batch: 7092474 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JR7J6-1-AC-C J7D020000-474-LCS 03/27/2007 12:30		200.20g,in AmtRec:	ASD4159 03/23/07,pd 06/01/01,r #Containers: 1	1.5	0.4	.50	1 CAP 4/17/05 Scr:	0723 Alpha:	4/17/05 Beta:	

Comments: JRQ8G-SAMP "Comments. Aliquots that are reduced are due to wright screen activity. JB 04/12/07"

PH<2.0 JB 4-12-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JRQ8G1AA-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JR7J61AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JR7J61AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JRQ8G1AA-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JR7J61AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JR7J61AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

4/26/2007 11:44:44 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/26/2006, 5/1/2007, Batch: '7092474', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7092474						
AC		CalcC	BockJ	4/12/2007 9:47:24		
SC			wagarr	IsBatched	4/2/2007 4:09:49 PM	ICOC_RADCALC v4.8.26
SC			BockJ	Prep1C	4/12/2007 9:47:24 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	4/12/2007 1:30:53 PM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	4/16/2007 6:49:49 PM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	InCnt1	4/16/2007 7:19:47 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	4/17/2007 8:43:32 AM	RICH-RD-0003 REVISION 4
AC			AshworthA	4/12/2007 1:30:53 PM		
AC			AshworthA	4/16/2007 6:49:49 PM		
AC			DAWKINSO	4/16/2007 7:19:47 PM		
AC			BlackCL	4/17/2007 8:43:32		

AC: Accepting Entry; SC: Status Change

STL RICHLAND

4/12/2007 9:48:45 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: 235

AnalyDueDate: 05/14/2007 W05146

Sep1 DT/Tm Tech:

Batch: 7092475 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ/APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JRQ8G-1-AC J7C260186-3-SAMP 03/26/2007 12:56	199.70g,in	AmtRec: 20ML,500MLP,LP #Containers: 3		1.5	78.4	100	27A	2051	4/16/07	Scr: Alpha: 1.86E-04 uCi/Sa Beta: 4.13E-04 uCi/Sa
2 JRQ8G-1-AE-X J7C260186-3-DUP 03/26/2007 12:56	200.60g,in	AmtRec: 20ML,500MLP,LP #Containers: 3			82.7		27B			Scr: Alpha: 1.86E-04 uCi/Sa Beta: 4.13E-04 uCi/Sa
3 JRT4P-1-AD J7C270298-1-SAMP 03/27/2007 12:30	199.70g,in	AmtRec: 20ML,2X500ML,LP #Containers: 4			84.8		27C			Scr: Alpha: -1.59E-05 uCi/Sa Beta: 3.76E-04 uCi/Sa
4 JRT4R-1-AA J7C270298-2-SAMP 03/27/2007 09:06	199.60g,in	AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5			72.7		27D			Scr: Alpha: 1.02E-03 uCi/Sa Beta: 4.93E-04 uCi/Sa
5 JRT4T-1-AA J7C270298-3-SAMP 03/27/2007 10:30	188.50g,in	AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5			111.4		28/A 4/16/2007			Scr: Alpha: -1.00E-04 uCi/Sa Beta: 1.84E-03 uCi/Sa
6 JR0H6-1-AD J7C290122-1-SAMP 03/28/2007 10:10	200.60g,in	AmtRec: 20ML,2X500ML,2XLP #Containers: 5			81.6		28/B 4/16/2007			Scr: Alpha: 1.06E-03 uCi/Sa Beta: 2.69E-04 uCi/Sa
7 JR0JA-1-AD J7C290122-2-SAMP 03/28/2007 11:30	198.30g,in	AmtRec: 20ML,2X500ML,2XLP #Containers: 5			55.1		28C			Scr: Alpha: -1.64E-04 uCi/Sa Beta: 1.11E-03 uCi/Sa

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.26

100

STL RICHLAND

4/12/2007 9:48:47 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory .
Pacific Northwest National Lab

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/14/2007

Sep1 DT/Tm Tech:

Batch: 7092475 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JR0JF-1-AD J7C290122-3-SAMP 03/28/2007 09:11		198.60g,in AmtRec: 20ML,2X500ML,2XLP	#Containers: 5	1.5	50.8	100	31A Scr:	2059 Alpha: 4.98E-05 uCi/Sa	4/16/07 DD Beta: 2.17E-05 uCi/Sa	
9 JR7J7-1-AA-B J7D020000-475-BLK 03/26/2007 12:56		202.20g,in AmtRec:	#Containers: 1		0.1		31B Scr:	Alpha:	Beta:	
10 JR7J7-1-AC-C J7D020000-475-LCS 03/26/2007 12:56		198.70g,in AmtRec:	BESB3042 03/23/07,pd 08/08/06,r #Containers: 1		0.3		31D Scr:	Alpha:	Beta:	

Comments: JRQ8G-SAMP "Comments. Aliquots that are reduced are due to wright screen activity. JB 04/12/07"

PH<2.0 4-12-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JRQ8G1AC-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JR7J71AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JR7J71AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JRQ8G1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7J71AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7J71AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

101

STL RICHLAND

4/12/2007 9:48:50 AM

Sample Preparation/Analysis

Balance Id:1120482733

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/14/2007

Sep1 DT/Tm Tech:

Batch: 7092475 pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Approved By _____ Date: _____

4/17/2007 4:37:23 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/17/2006, 4/22/2007, Batch: '7092475', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7092475						
AC		CalcC	BockJ	4/12/2007 9:39:35		
SC			wagarr	IsBatched	4/2/2007 4:09:49 PM	ICOC_RADCALC v4.8.26
SC			BockJ	Prep1C	4/12/2007 9:39:35 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	4/12/2007 1:31:01 PM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	4/16/2007 6:50:03 PM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	InCnt1	4/16/2007 7:20:14 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	4/16/2007 9:44:27 PM	RICH-RD-0003 REVISION 4
AC			BockJ	4/12/2007 9:48:52		
AC			AshworthA	4/12/2007 1:31:01 PM		
AC			AshworthA	4/16/2007 6:50:03 PM		
AC			DAWKINSO	4/16/2007 7:20:14 PM		
AC			DAWKINSO	4/16/2007 9:44:27 PM		

AC: Accepting Entry; SC: Status Change

STL RICHLAND

4/25/2007 4:15:44 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 05/14/2007

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
5I CLIENT: HANFORD

Balance Id:1120482733,E32905

Pipet #: _____

Sep1 DT/Tm Tech: 04/17/2007 10:05,ManisD

Sep2 DT/Tm Tech:

Prep Tech: ManisD

Batch: 7092477 **WATER** **pCi/L** **PM, Quote: SA , 57671**

SEQ Batch, Test: None All Tests: 7092476 BNTB, 7092477 CLTL,

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JRVQJ-1-AC J7C280120-1-SAMP		1006.30g,in	SRTB14649 04/09/07,pd 09/11/06,r	0.8742	1.5	26	100	SA SA	0737 0644	4/26/07 4/27/07	
						04/17/2007 10:05;s1					
03/26/2007 11:54		AmtRec: 20ML,3XLP,2X4LP	#Containers: 6					Scr:	Alpha:		Beta:
2 JRVQJ-1-AD-X J7C280120-1-DUP		1003.10g,in	SRTB14650 04/09/07,pd 09/11/06,r	0.8399	1.5	26.2	100	SB SB	0737 0644	4/26/07 4/27/07	
						04/17/2007 10:05;s1					
03/26/2007 11:54		AmtRec: 20ML,3XLP,2X4LP	#Containers: 6					Scr:	Alpha:		Beta:
3 JR7KA-1-AA-B J7D020000-477-BLK		998.00g,in	SRTB14651 04/09/07,pd 09/11/06,r	0.7138	1.5	26	100	SC SC	0737 0644	4/26/07 4/27/07	
						04/17/2007 10:05;s1					
03/26/2007 11:54		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:
4 JR7KA-1-AC-C J7D020000-477-LCS		1000.90g,in	SRSG1331 02/28/07,pd 09/11/06,r	0.7917	1.5	26.1	100	SD SD	0737 0644	4/26/07 4/27/07	
						04/17/2007 10:05;s1					
03/26/2007 11:54		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:

STL RICHLAND

4/25/2007 4:15:52 PM

Sample Preparation/Analysis

CL Sr-90 Prp/SepRC5006(5071)
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth
5I CLIENT: HANFORD

Balance Id:1120482733,1120482733,1120

Pipet #: _____

AnalyDueDate: 05/14/2007

Sep1 DT/Tm Tech: 04/17/2007 10:05,ManisD

Batch: 7092477 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ManisD

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JRVQJ1AC-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JR7KA1AA-BLK:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:

JR7KA1AC-LCS:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

JRVQJ1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JR7KA1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JR7KA1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

4/28/2007 11:00:05 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/28/2006, 5/3/2007, Batch: '7092477', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7092477						
AC		CalcC	BockJ	4/12/2007 2:12:40 PM		
SC			wagarr	IsBatched	4/2/2007 4:09:49 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/12/2007 2:12:40 PM	RICH-RC-5015 Revision 4
SC			BockJ	Prep1C	4/12/2007 2:22:12 PM	RICH-RC-5016 REVISION 6
SC			ManisD	InSep1	4/12/2007 4:29:00 PM	RICH-RC-5006 REV 6
SC			ManisD	Sep1C	4/17/2007 10:45:01 AM	RICH-RC-5006 REV 6
SC			BlackCL	InCnt1	4/17/2007 10:47:48 AM	RICH-RD-0007 REVISION 5
SC			BlackCL	Cnt1C	4/17/2007 1:01:59 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	InCnt2	4/25/2007 4:29:38 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	4/27/2007 7:05:51 AM	RICH-RD-0003 REVISION 4
AC			BockJ	4/12/2007 2:22:12 PM		
AC			ManisD	4/12/2007 4:29:00 PM		
AC			ManisD	4/17/2007 10:45:01		
AC			BlackCL	4/17/2007 10:47:48		
AC			BlackCL	4/17/2007 1:01:59 PM		
AC			DAWKINSO	4/25/2007 4:29:38 PM		
AC			BlackCL	4/27/2007 7:05:51		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 8

ICOCFractions v4.8.26

STL RICHLAND

4/13/2007 10:39:14 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/14/2007 N05146

Sep1 DT/Tm Tech:

Batch: 7092472 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JRT4R-1-AC J7C270298-2-SAMP 03/27/2007 09:06		2004.20g,in AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5				100	62 Scr:	0853 Alpha: 1.02E-03 uCi/Sa	4/18/07 Beta: 4.93E-04 uCi/Sa	
2 JRT4T-1-AC J7C270298-3-SAMP 03/27/2007 10:30		1982.00g,in AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5					63 Scr:	Alpha: -1.00E-04 uCi/Sa	Beta: 1.84E-03 uCi/Sa	
3 JRT4T-1-AF-X J7C270298-3-DUP 03/27/2007 10:30		2004.10g,in AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5					60 Scr:	1036 Alpha: -1.00E-04 uCi/Sa	4/18/07 Beta: 1.84E-03 uCi/Sa	
4 JR7JT-1-AA-B J7D020000-472-BLK 03/27/2007 10:30		1997.20g,in AmtRec: #Containers: 1					64 Scr:	1037 Alpha:	Beta:	
5 JR7JT-1-AC-C J7D020000-472-LCS 03/27/2007 10:30		1999.50g,in AmtRec: #Containers: 1	QCAG1353 03/23/07,pd 03/07/05,r				67 Scr:	1037 Alpha:	Beta:	

Comments: pH < 2.0 JS 4-13-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JRT4R1AC-SAMP Constituent List:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

STL RICHLAND

4/13/2007 10:39:18 AM

Sample Preparation/Analysis

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 05/14/2007

Sep1 DT/Tm Tech:

Batch: 7092472 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
Cs-137	RDL:6.00E+00 pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00 pCi/L	LCL:70	UCL:130	RPD:20	
Eu-154	RDL:0.00E+00 pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00 pCi/L	LCL:	UCL:	RPD:	
K-40	RDL:0.00E+00 pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00 pCi/L	LCL:	UCL:	RPD:	
JR7JT1AA-BLK:										
Co-60	RDL:0.00E+00 pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00 pCi/L	LCL:	UCL:	RPD:	
Cs-137	RDL:6.00E+00 pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00 pCi/L	LCL:	UCL:	RPD:	
Eu-154	RDL:0.00E+00 pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00 pCi/L	LCL:	UCL:	RPD:	
K-40	RDL:0.00E+00 pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00 pCi/L	LCL:	UCL:	RPD:	
JR7JT1AC-LCS:										
Cs-137	RDL:15 pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15 pCi/L	LCL:70	UCL:130	RPD:20	
K-40	RDL:6 pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:-- pCi/L	LCL:70	UCL:130	RPD:20	
RA-228	RDL:-- pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:-- pCi/L	LCL:70	UCL:130	RPD:20	
U-238	RDL:-- pCi/L	LCL:70	UCL:130	RPD:20						

JRT4R1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7JT1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7JT1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

4/26/2007 11:38:17 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/26/2006, 5/1/2007, Batch: '7092472', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7092472						
AC		CalcC	BockJ	4/13/2007 10:32:22		
SC			wagarr	IsBatched	4/2/2007 4:09:49 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/13/2007 10:32:22 AM	RICH-RC-5017 Revision 5
SC			AshworthA	InPrep2	4/16/2007 1:55:43 PM	RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C	4/17/2007 6:44:06 PM	RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1	4/17/2007 7:45:03 PM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC	4/18/2007 11:47:05 AM	RICH-RD-0007 REVISION 5
AC			AshworthA	4/16/2007 1:55:43 PM		
AC			AshworthA	4/17/2007 6:44:06 PM		
AC			DAWKINSO	4/17/2007 7:45:03 PM		
AC			StringerR	4/18/2007 11:47:05		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.26

STL RICHLAND

4/13/2007 11:01:36 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/14/2007 W05146

Sep1 DT/Tm Tech:

Batch: 7092476 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ, Bosted

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JRVQJ-1-AA J7C280120-1-SAMP 03/26/2007 11:54		3917.30g,in AmtRec: 20ML,3XLP,2X4LP	ITA6151 03/15/07 #Containers: 6		22.7	1500	L2	0824 Scr:	4/26/07 Alpha:	Beta:
2 JRWE1-1-AC J7C280203-1-SAMP 03/27/2007 10:50		3912.40g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6152 03/15/07 #Containers: 5		21.7		L4	0825 Scr:	Alpha: -1.75E-03 uCi/Sa	Beta: 1.63E-03 uCi/Sa
3 JRWE1-1-AE-X J7C280203-1-DUP 03/27/2007 10:50		3898.10g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6153 03/15/07 #Containers: 5		16.2		L5	0825 Scr:	Alpha: -1.75E-03 uCi/Sa	Beta: 1.63E-03 uCi/Sa
4 JRWFA-1-AC J7C280203-2-SAMP 03/27/2007 09:09		3879.50g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6154 03/15/07 #Containers: 5		9.2		L2	1010 Scr:	4/26/07 Alpha: -6.05E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa
5 JR7J9-1-AA-B J7D020000-476-BLK 03/27/2007 10:50		3995.80g,in AmtRec:	ITA6155 03/15/07 #Containers: 1		35.3		L4	1011 Scr:	4/26/07 Alpha:	Beta:
6 JR7J9-1-AC-C J7D020000-476-LCS 03/27/2007 10:50		3770.50g,in AmtRec:	ISD0740 12/20/06 #Containers: 1		40.2		LS	1012 Scr:	4/26/07 Alpha:	Beta:

STL RICHLAND

4/13/2007 11:01:40 AM

Sample Preparation/Analysis

Balance Id:1120482733

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/14/2007

Sep1 DT/Tm Tech:

Batch: 7092476 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: ~~PH<2.0 JB 4-13-07~~ pH neutral JB 4-13 07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JRVQJ1AA-SAMP Constituent List:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JR7J91AA-BLK:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JR7J91AC-LCS:
I-129 RDL:5 pCi/L LCL:70 UCL:130 RPD:20

JRVQJ1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7J91AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7J91AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

111

4/28/2007 10:54:19 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/28/2006, 5/3/2007, Batch: '7092476', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7092476						
AC		CalcC	BockJ	4/13/2007 10:43:00		
SC			wagarr	IsBatched	4/2/2007 4:09:49 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/13/2007 10:43:00 AM	RICH-RC-5017 Revision 5
SC			BockJ	Prep1C	4/13/2007 11:02:07 AM	RICH-RC-5017 REVISION 5
SC			BostedD	InPrep2	4/13/2007 11:18:14 AM	RICHRC5025 REV3
SC			BostedD	Prep2C	4/25/2007 2:35:27 PM	RICHRC5025 REV3
SC			StringerR	InCnt1	4/25/2007 2:53:29 PM	RICH-RD-0007 REVISION 5
SC			SmithS	CalcC	4/26/2007 10:32:19 AM	RICH-RD-0007 REVISION 5
AC			BockJ	4/13/2007 11:02:07		
AC			BostedD	4/13/2007 11:18:14		
AC			BostedD	4/25/2007 2:35:27 PM		
AC			StringerR	4/25/2007 2:53:29 PM		
AC			SmithS	4/26/2007 10:32:19		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt:6

ICOCFractions v4.8.26

STL RICHLAND

4/5/2007 2:21:19 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/14/2007 W05146

Sep1 DT/Tm Tech:

Batch: 7092468 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JRQ79-1-AC J7C260186-1-SAMP 03/26/2007 11:31		AmtRec: 20ML,2X500MLP	127.40g,in #Containers: 3	127.40g		60	Scr:	Alpha: 9.67E-05 uCi/Sa	Beta: 4.16E-04 uCi/Sa	
2 JRQ8F-1-AA J7C260186-2-SAMP 03/26/2007 12:14		AmtRec: 20ML,500MLP	125.60g,in #Containers: 2	125.60g			Scr:	Alpha: 4.50E-05 uCi/Sa	Beta: 1.43E-04 uCi/Sa	
3 JRQ8G-1-AD J7C260186-3-SAMP 03/26/2007 12:56		AmtRec: 20ML,500MLP,LP	124.50g,in #Containers: 3	124.50g			Scr:	Alpha: 1.86E-04 uCi/Sa	Beta: 4.13E-04 uCi/Sa	
4 JRRA9-1-AC J7C260204-1-SAMP 03/26/2007 12:30		AmtRec: 20ML,2X500MLP,LP	126.00g,in #Containers: 4	126.00g			Scr:	Alpha: -6.26E-04 uCi/Sa	Beta: 1.06E-03 uCi/Sa	1.7E-01L
5 JRRCA-1-AC J7C260204-2-SAMP 03/26/2007 09:23		AmtRec: 20ML,2X500MLP,LP	125.50g,in #Containers: 4	125.50g			Scr:	Alpha: 2.10E-04 uCi/Sa	Beta: 3.83E-04 uCi/Sa	
6 JRRCD-1-AC J7C260205-1-SAMP 03/26/2007 08:39		AmtRec: 20ML,2X500ML,LP	125.00g,in #Containers: 4	125.00g			Scr:	Alpha: 3.01E-04 uCi/Sa	Beta: 1.44E-04 uCi/Sa	
7 JRRCE-1-AC J7C260205-2-SAMP 03/26/2007 11:08		AmtRec: 20ML,2X500ML,LP	127.00g,in #Containers: 4	127.00g			Scr:	Alpha: 2.67E-04 uCi/Sa	Beta: 5.28E-04 uCi/Sa	

STL RICHLAND

4/5/2007 2:21:21 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5i CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/14/2007

Sep1 DT/Tm Tech:

Batch: 7092468 WATER pCi/L PM, Quote: SA , 57671

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JRRCF-1-AC J7C260205-3-SAMP			125.20g,in	125.20g		60				
03/26/2007 12:08		AmtRec: 20ML,2X500ML,LP	#Containers: 4				Scr:	Alpha: -3.49E-04 uCi/Sa	Beta: 1.32E-03 uCi/Sa	1.4E-01L
9 JRT4P-1-AE J7C270298-1-SAMP			125.90g,in	125.90g						
03/27/2007 12:30		AmtRec: 20ML,2X500ML,LP	#Containers: 4				Scr:	Alpha: -1.59E-05 uCi/Sa	Beta: 3.76E-04 uCi/Sa	
10 JRT4R-1-AD J7C270298-2-SAMP			125.40g,in	125.40g						
03/27/2007 09:06		AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				Scr:	Alpha: 1.02E-03 uCi/Sa	Beta: 4.93E-04 uCi/Sa	
11 JRT4T-1-AD J7C270298-3-SAMP			125.30g,in	125.30g						
03/27/2007 10:30		AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				Scr:	Alpha: -1.00E-04 uCi/Sa	Beta: 1.84E-03 uCi/Sa	
12 JRWEK-1-AA J7C280198-1-SAMP			126.10g,in	126.10g						
03/27/2007 12:16		AmtRec: 20ML,500MLP	#Containers: 2				Scr:	Alpha: -6.03E-05 uCi/Sa	Beta: 1.09E-04 uCi/Sa	
13 JRWEK-1-AC-X J7C280198-1-DUP			125.00g,in	125.00g						
03/27/2007 12:16		AmtRec: 20ML,500MLP	#Containers: 2				Scr:	Alpha: -6.03E-05 uCi/Sa	Beta: 1.09E-04 uCi/Sa	
14 JRWE1-1-AD J7C280203-1-SAMP			128.30g,in	128.30g		✓				
03/27/2007 10:50		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: -1.75E-03 uCi/Sa	Beta: 1.63E-03 uCi/Sa	

STL RICHLAND

4/5/2007 2:21:22 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/14/2007

Sep1 DT/Tm Tech:

Batch: 7092468 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JRWFA-1-AD J7C280203-2-SAMP 03/27/2007 09:09			125.70g,in	125.70g		60				
	AmtRec: 20ML,500ML,LP,2X4LP		#Containers: 5					Scr:	Alpha: -6.05E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa
16 JR0H6-1-AE J7C290122-1-SAMP 03/28/2007 10:10			125.50g,in	125.50g						
	AmtRec: 20ML,2X500ML,2XLP		#Containers: 5					Scr:	Alpha: 1.06E-03 uCi/Sa	Beta: 2.69E-04 uCi/Sa
17 JR0JA-1-AE J7C290122-2-SAMP 03/28/2007 11:30			125.10g,in	125.10g						
	AmtRec: 20ML,2X500ML,2XLP		#Containers: 5					Scr:	Alpha: -1.64E-04 uCi/Sa	Beta: 1.11E-03 uCi/Sa
18 JR0JF-1-AE J7C290122-3-SAMP 03/28/2007 09:11			126.30g,in	126.30g						
	AmtRec: 20ML,2X500ML,2XLP		#Containers: 5					Scr:	Alpha: 4.98E-05 uCi/Sa	Beta: 2.17E-05 uCi/Sa
19 JR0JF-1-AG-S J7C290122-3-MS 03/28/2007 09:11			125.40g,in	125.40g	TCSG1789 02/28/07,pd 01/10/06,r					
	AmtRec: 20ML,2X500ML,2XLP		#Containers: 5					Scr:	Alpha: 4.98E-05 uCi/Sa	Beta: 2.17E-05 uCi/Sa
20 JR7H8-1-AA-B J7D020000-468-BLK 03/27/2007 12:16			125.30g,in	125.30g						
	AmtRec:		#Containers: 1					Scr:	Alpha:	Beta:
21 JR7H8-1-AC-C J7D020000-468-LCS 03/27/2007 12:16			125.40g,in	125.40g	TCSE2095 02/28/07,pd 01/10/06,r					
	AmtRec:		#Containers: 1					Scr:	Alpha:	Beta:

STL RICHLAND

4/5/2007 2:21:27 PM

Sample Preparation/Analysis

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/14/2007

Batch: 7092468 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
22 JR7H8-1-AD-BN J7D020000-468-IBLK 03/27/2007 12:16	AmtRec:		#Containers: 1				Scr:		Alpha:	Beta:
23 JR7H8-1-AE-BN J7D020000-468-IBLK 03/27/2007 12:16	AmtRec:		#Containers: 1				Scr:		Alpha:	Beta:

Comments: pH <2.0 gb 4-5-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JRQ791AC-SAMP Constituent List:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JR0JF1AG-MS:

JR7H81AA-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JR7H81AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JR7H81AD-IBLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JR7H81AE-IBLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JRQ791AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR0JF1AG-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7H81AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7H81AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

4/5/2007 2:21:30 PM

Sample Preparation/Analysis

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 05/14/2007

Batch: 7092468 pCi/L
SEQ Batch, Test: None

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

JR7H81AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7H81AE-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

4/26/2007 11:57:32 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/26/2006, 5/1/2007, Batch: '7092468', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7092468						
AC		CalcC	BockJ	4/5/2007 1:50:17 PM		
SC			wagarr	IsBatched	4/2/2007 4:09:49 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/5/2007 1:50:17 PM	rich-rc-5016 rEVISION 6
SC			BockJ	Prep1C	4/5/2007 2:21:26 PM	RICH-RC-5016 REVISION 6
SC			FABREM	Sep1C	4/10/2007 7:38:05 PM	RICH-RC-5065 REVISION 5
SC			DAWKINSO	InCnt1	4/10/2007 8:15:23 PM	RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	4/12/2007 7:25:37 AM	RICH-RD-0001 REVISION 3
AC			BockJ	4/5/2007 2:21:26 PM		
AC			FABREM	4/10/2007 7:38:05 PM		
AC			DAWKINSO	4/10/2007 8:15:23 PM		
AC			BlackCL	4/12/2007 7:25:37		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt:5

ICOCFractions v4.8.26

STL RICHLAND

4/2/2007 4:05:43 PM

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 05/14/2007 W05146

Batch: 7092471 WATER pCi/L

SEQ Batch, Test: None

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

PM, Quote: SA , 57671

Balance Id: 17445
Pipet #:
Sep1 DT/Tm Tech: 4-4-07 Tm
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JRRA9-1-AA J7C260204-1-SAMP 03/26/2007 12:30		AmtRec: 20ML,2X500MLP,LP	#Containers: 4			Scr:	Alpha: -6.26E-04 uCi/Sa	Beta: 1.06E-03 uCi/Sa 1.7E-01L
2 JRRCA-1-AA J7C260204-2-SAMP 03/26/2007 09:23		AmtRec: 20ML,2X500MLP,LP	#Containers: 4			Scr:	Alpha: 2.10E-04 uCi/Sa	Beta: 3.83E-04 uCi/Sa
3 JRRCA-1-AE-X J7C260204-2-DUP 03/26/2007 09:23		AmtRec: 20ML,2X500MLP,LP	#Containers: 4			Scr:	Alpha: 2.10E-04 uCi/Sa	Beta: 3.83E-04 uCi/Sa
4 JRRCD-1-AA J7C260205-1-SAMP 03/26/2007 08:39		AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: 3.01E-04 uCi/Sa	Beta: 1.44E-04 uCi/Sa
5 JRRCE-1-AA J7C260205-2-SAMP 03/26/2007 11:08		AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: 2.67E-04 uCi/Sa	Beta: 5.28E-04 uCi/Sa
6 JRRCF-1-AA J7C260205-3-SAMP 03/26/2007 12:08		AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: -3.49E-04 uCi/Sa	Beta: 1.32E-03 uCi/Sa 1.4E-01L
7 JRWE1-1-AA J7C280203-1-SAMP 03/27/2007 10:50		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha:	Beta:

STL RICHLAND

4/2/2007 4:05:45 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 05/14/2007

Batch: 7092471 **WATER** **pCi/L** **PM, Quote: SA , 57671**
SEQ Batch, Test: None

Balance Id: 17445
Pipet #:
Sep1 DT/Tm Tech: 4-4-0 Zem
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JRWFA-1-AA J7C280203-2-SAMP 03/27/2007 09:09		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha:	Beta:
9 JR0H6-1-AA J7C290122-1-SAMP 03/28/2007 10:10		AmtRec: 20ML,2X500ML,2XLP	#Containers: 5			Scr:	Alpha:	Beta:
10 JR0JA-1-AA J7C290122-2-SAMP 03/28/2007 11:30		AmtRec: 20ML,2X500ML,2XLP	#Containers: 5			Scr:	Alpha:	Beta:
11 JR0JF-1-AA J7C290122-3-SAMP 03/28/2007 09:11		AmtRec: 20ML,2X500ML,2XLP	#Containers: 5			Scr:	Alpha:	Beta:
12 JR7JD-1-AA-B J7D020000-471-BLK 03/26/2007 09:23		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
13 JR7JD-1-AC-C J7D020000-471-LCS 03/26/2007 09:23		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
14 JR7JD-1-AD-BX J7D020000-471-MBLK 03/26/2007 09:23		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

120

STL RICHLAND

4/2/2007 4:05:50 PM

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 4-4-07 Tezw
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/14/2007

Batch: 7092471 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JR7JD-1-AE-CM J7D020000-471-MLCS 03/26/2007 09:23		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
16 JR7JD-1-AF-BN J7D020000-471-IBLK 03/26/2007 09:23		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
17 JR7JD-1-AG-BN J7D020000-471-IBLK 03/26/2007 09:23		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
18 JR7JD-1-AH-BN J7D020000-471-IBLK 03/26/2007 09:23		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JRRA91AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JR7JD1AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JR7JD1AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JR7JD1AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

STL RICHLAND

4/2/2007 4:05:56 PM

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 4-4-07 Tan
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/14/2007

Batch: 7092471 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

```
JR7JD1AE-MLCS:
  H-3          RDL:400        pCi/L     LCL:70      UCL:130     RPD:20
JR7JD1AF-IBLK:
  H-3          RDL:400        pCi/L     LCL:        UCL:        RPD:
JR7JD1AG-IBLK:
  H-3          RDL:400        pCi/L     LCL:        UCL:        RPD:
JR7JD1AH-IBLK:
  H-3          RDL:400        pCi/L     LCL:        UCL:        RPD:
JRRA91AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JR7JD1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JR7JD1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JR7JD1AD-MBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JR7JD1AE-MLCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JR7JD1AF-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JR7JD1AG-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JR7JD1AH-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

4/9/2007 2:46:58 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/9/2006, 4/14/2007, Batch: '7092471', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7092471						
AC		CalcC	McDowellD	4/4/2007 1:51:25 PM		
SC			wagarr	IsBatched	4/2/2007 4:09:49 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	4/4/2007 1:51:25 PM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	4/5/2007 10:03:42 AM	RICH-RC-5007 REVISION 6
SC			StringerR	InCnt1	4/5/2007 10:37:58 AM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	4/7/2007 12:59:27 PM	RICH-RD-0001 REVISION 3
AC			McDowellD	4/5/2007 10:03:42		
AC			StringerR	4/5/2007 10:37:58		
AC			StringerR	4/7/2007 12:59:27 PM		

AC: Accepting Entry; SC: Status Change

STL RICHLAND

4/12/2007 1:34:22 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

AnalyDueDate: 05/14/2007 1205146

Batch: 7092464 WATER ug/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JRQ8H-1-AA J7C260186-4-SAMP 03/26/2007 10:08		25.50g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -4.59E-05 uCi/Sa	Beta: 1.38E-04 uCi/Sa
2 JRQ8K-1-AA J7C260186-5-SAMP 03/26/2007 09:23		25.20g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -2.01E-04 uCi/Sa	Beta: 7.33E-04 uCi/Sa 6.1E-02L
3 JRRA9-1-AD J7C260204-1-SAMP 03/26/2007 12:30		25.60g,in AmtRec: 20ML,2X500MLP,LP	#Containers: 4			Scr:	Alpha: -6.26E-04 uCi/Sa	Beta: 1.06E-03 uCi/Sa 1.7E-01L
4 JRRCA-1-AD J7C260204-2-SAMP 03/26/2007 09:23		26.20g,in AmtRec: 20ML,2X500MLP,LP	#Containers: 4			Scr:	Alpha: 2.10E-04 uCi/Sa	Beta: 3.83E-04 uCi/Sa
5 JRRCD-1-AD J7C260205-1-SAMP 03/26/2007 08:39		25.10g,in AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: 3.01E-04 uCi/Sa	Beta: 1.44E-04 uCi/Sa
6 JRRCE-1-AD J7C260205-2-SAMP 03/26/2007 11:08		26.10g,in AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: 2.67E-04 uCi/Sa	Beta: 5.28E-04 uCi/Sa
7 JRRCF-1-AD J7C260205-3-SAMP 03/26/2007 12:08		25.10g,in AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: -3.49E-04 uCi/Sa	Beta: 1.32E-03 uCi/Sa 1.4E-01L

4/12/2007 1:34:24 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/14/2007

Sep1 DT/Tm Tech:

Batch: 7092464 WATER ug/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JRT4R-1-AE J7C270298-2-SAMP 03/27/2007 09:06		25.20g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha: 1.02E-03 uCi/Sa	Beta: 4.93E-04 uCi/Sa
9 JRT4T-1-AE J7C270298-3-SAMP 03/27/2007 10:30		25.50g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha: -1.00E-04 uCi/Sa	Beta: 1.84E-03 uCi/Sa
10 JR0H6-1-AF J7C290122-1-SAMP 03/28/2007 10:10		26.30g,in AmtRec: 20ML,2X500ML,2XLP	#Containers: 5			Scr:	Alpha: 1.06E-03 uCi/Sa	Beta: 2.69E-04 uCi/Sa
11 JR0H6-1-AG-X J7C290122-1-DUP 03/28/2007 10:10		25.00g,in AmtRec: 20ML,2X500ML,2XLP	#Containers: 5			Scr:	Alpha: 1.06E-03 uCi/Sa	Beta: 2.69E-04 uCi/Sa
12 JR0JA-1-AF J7C290122-2-SAMP 03/28/2007 11:30		27.60g,in AmtRec: 20ML,2X500ML,2XLP	#Containers: 5			Scr:	Alpha: -1.64E-04 uCi/Sa	Beta: 1.11E-03 uCi/Sa
13 JR0JA-1-AG-S J7C290122-2-MS 03/28/2007 11:30		27.60g,in AmtRec: 20ML,2X500ML,2XLP	UNSF3672 03/28/07,pd 01/23/07,r #Containers: 5			Scr:	Alpha: -1.64E-04 uCi/Sa	Beta: 1.11E-03 uCi/Sa
14 JR0JF-1-AF J7C290122-3-SAMP 03/28/2007 09:11		27.00g,in AmtRec: 20ML,2X500ML,2XLP	#Containers: 5			Scr:	Alpha: 4.98E-05 uCi/Sa	Beta: 2.17E-05 uCi/Sa

STL RICHLAND

4/12/2007 1:34:26 PM

Sample Preparation/Analysis

Balance Id:1120482733

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA

Pipet #:

AnalyDueDate: 05/14/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7092464 ug/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JR7H5-1-AA-B J7D020000-464-BLK 03/28/2007 10:10		25.80g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
16 JR7H5-1-AC-C J7D020000-464-LCS 03/28/2007 10:10		24.90g,in AmtRec:	UNSF3673 03/28/07,pd 01/23/07,r #Containers: 1			Scr:	Alpha:	Beta:
17 JR7H5-1-AD-C J7D020000-464-LCS 03/28/2007 10:10		25.20g,in AmtRec:	UNSC1625 04/05/07,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

Comments: PH <2.0 JB 4-12-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JRQ8H1AA-SAMP Constituent List:

Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:

JR0JA1AG-MS:

JR7H51AA-BLK:

Uranium	RDL:1.44E-01	ug/L	LCL:	UCL:	RPD:

JR7H51AC-LCS:

Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20

JR7H51AD-LCS:

Uranium	RDL:0.144343	ug/L	LCL:70	UCL:130	RPD:20

JRQ8H1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JR0JA1AG-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

4/12/2007 1:34:30 PM

Sample Preparation/Analysis

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 05/14/2007

Sep1 DT/Tm Tech:

Batch: 7092464 ug/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

```
JR7H51AA-BLK:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JR7H51AC-LCS:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JR7H51AD-LCS:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

5/8/2007 3:17:08 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/8/2006, 5/13/2007, Batch: '7092464', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7092464						
AC		Cnt1C	BockJ	4/12/2007 12:52:25		
SC			wagarr	IsBatched	4/2/2007 4:09:49 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/12/2007 12:52:25 PM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	4/12/2007 1:34:29 PM	RICH-RC-5015 REVISION 4
SC			AshworthA	InPrep2	4/30/2007 8:46:21 AM	RICH-RC-5015 REVISION 4
SC			AshworthA	Prep2C	5/1/2007 8:47:56 AM	RICH-RC-5015 REVISION 4
SC			NelsonT	Cnt1C	5/7/2007 12:40:34 PM	RICH-RC-5058 REV 7
AC			BockJ	4/12/2007 1:34:29 PM		
AC			AshworthA	4/30/2007 8:46:21		
AC			AshworthA	5/1/2007 8:47:56 AM		
AC			NelsonT	5/7/2007 12:40:34 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.26

STL RICHLAND

4/2/2007 4:06:01 PM

384868, Pacific Northwest National Laboratory .
Pacific Northwest National Lab

AnalyDueDate: 05/14/2007 W0546

Batch: 7092473 WATER

SEQ Batch, Test: None

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223
5I CLIENT: HANFORD

PM, Quote: SA , 57671

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JRQ79-1-AA J7C260186-1-SAMP 03/26/2007 11:31		AmtRec: 20ML,2X500MLP	#Containers: 3			Scr:	Alpha: 9.67E-05 uCi/Sa	Beta: 4.16E-04 uCi/Sa
2 JRT4P-1-AA J7C270298-1-SAMP 03/27/2007 12:30		AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: -1.59E-05 uCi/Sa	Beta: 3.76E-04 uCi/Sa
3 JRT4P-1-AF-X J7C270298-1-DUP 03/27/2007 12:30		AmtRec: 20ML,2X500ML,LP	#Containers: 4			Scr:	Alpha: -1.59E-05 uCi/Sa	Beta: 3.76E-04 uCi/Sa
4 JR7J2-1-AA-B J7D020000-473-BLK 03/27/2007 12:30		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 JR7J2-1-AC-C J7D020000-473-LCS 03/27/2007 12:30		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JRQ791AA-SAMP Constituent List:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 5
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added ICOC v4.8.26

4/2/2007 4:06:06 PM

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
IZ COLIFORM BY METHOD 9223
5I CLIENT: HANFORD

AnalyDueDate: 05/14/2007

Batch: 7092473
SEQ Batch, Test: None

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

JR7J21AA-BLK:

JR7J21AC-LCS:

JRQ791AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7J21AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JR7J21AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____