

Analytical Data Package Prepared For
Pacific Northwest National Lab

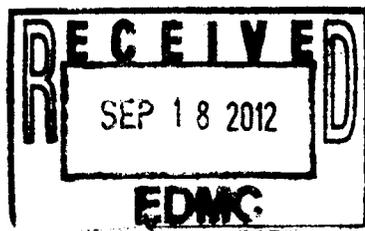
Radiochemical Analysis By
STL Richland STLRL
 2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.
 Data Package Contains _____ Pages

Report Nbr: 31289

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04831	W06-012	B1H126	J5L130355-1	HR2JP1AC	9HR2JP10	6003488
		B1H126	J5L130355-1	HR2JP2AA	9HR2JP20	6027445
		B1H115	J5L130355-2	HR2JQ1AC	9HR2JQ10	6003488
		B1H115	J5L130355-2	HR2JQ2AA	9HR2JQ20	6027445
		B1FW00	J5L130357-1	HR2JX1AA	9HR2JX10	6003494
		B1FW00	J5L130357-1	HR2JX1AC	9HR2JX10	6003495
		B1FW00	J5L130357-1	HR2JX1AD	9HR2JX10	6003498
		B1FW00	J5L130357-1	HR2JX1AF	9HR2JX10	6003488
		B1FW00	J5L130357-1	HR2JX2AE	9HR2JX20	6027445
		B1FW37	J5L130358-1	HR2KR1AA	9HR2KR10	6003502
		B1FW37	J5L130358-1	HR2KR2AC	9HR2KR20	6027445
		B1H0C9	J5L130358-2	HR2KX1AA	9HR2KX10	6003502
		B1H0C9	J5L130358-2	HR2KX2AC	9HR2KX20	6027445
		B1H0W9	J5L130358-3	HR2K01AA	9HR2K010	6003502
		B1H0W9	J5L130358-3	HR2K01AC	9HR2K010	6003499

I06-011

W06-012



Comments:

Report Nbr: 31289

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04831	W06-012	B1H0W9	J5L130358-3	HR2K01AD	9HR2K010	6003488
	S06-012	B1H1F3	J5L130364-1	HR2L01AA	9HR2L010	6003494
		B1H1F3	J5L130364-1	HR2L01AC	9HR2L010	6003495
	A06-012	B1H1F3	J5L130364-1	HR2L02AD	9HR2L020	6027445
		B1FV71	J5L130365-1	HR2L41AA	9HR2L410	6003494
		B1FV71	J5L130365-1	HR2L41AC	9HR2L410	6003500
		B1FV71	J5L130365-1	HR2L41AD	9HR2L410	6003502
		B1FV71	J5L130365-1	HR2L41AF	9HR2L410	6003488
		B1FV71	J5L130365-1	HR2L42AE	9HR2L420	6027445
	W06-012	B1H134	J5L140368-1	HR49X1AC	9HR49X10	6003488
		B1H134	J5L140368-1	HR49X2AA	9HR49X20	6027445
		B1H130	J5L140368-2	HR4911AC	9HR49110	6003488
		B1H130	J5L140368-2	HR4912AA	9HR49120	6027445
		B1H0Y9	J5L140368-3	HR4921AC	9HR49210	6003488
		B1H0Y9	J5L140368-3	HR4922AA	9HR49220	6027445
		B1H107	J5L140368-4	HR4941AC	9HR49410	6003488
		B1H107	J5L140368-4	HR4942AA	9HR49420	6027445
		B1H0Y5	J5L140368-5	HR4971AC	9HR49710	6003488
		B1H0Y5	J5L140368-5	HR4971AD	9HR49710	6003494
		B1H0Y5	J5L140368-5	HR4971AE	9HR49710	6003500
		B1H0Y5	J5L140368-5	HR4971AF	9HR49710	6003502
		B1H0Y5	J5L140368-5	HR4972AA	9HR49720	6027445
	S06-012	B1H1N0	J5L140372-1	HR5AP1AA	9HR5AP10	6003488
	I06-011	B1FW04	J5L140373-1	HR5AW1AA	9HR5AW10	6003494
		B1FW04	J5L140373-1	HR5AW1AD	9HR5AW10	6003488
		B1FW04	J5L140373-1	HR5AW2AC	9HR5AW20	6027445

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04831	S06-012	B1H202	J5L150391-1	HR8DN1AA	9HR8DN10	6003488
		B1H1X9	J5L150392-1	HR8DP1AA	9HR8DP10	6003493
		B1H1X9	J5L150392-1	HR8DP1AC	9HR8DP10	6003488
	S06-010	B1H3L4	J5L150394-1	HR8D91AA	9HR8D910	6003494
		B1H3L4	J5L150394-1	HR8D91AC	9HR8D910	6003500
		B1H3L4	J5L150394-1	HR8D91AD	9HR8D910	6003502
		B1H3L4	J5L150394-1	HR8D91AE	9HR8D910	6003495
		B1H3L4	J5L150394-1	HR8D91AG	9HR8D910	6003488
		B1H3L4	J5L150394-1	HR8D92AF	9HR8D920	6027445
		B1H3L5	J5L150394-2	HR8EK1AA	9HR8EK10	6003494
		B1H3L5	J5L150394-2	HR8EK1AC	9HR8EK10	6003500
		B1H3L5	J5L150394-2	HR8EK1AD	9HR8EK10	6003502
		B1H3L5	J5L150394-2	HR8EK1AE	9HR8EK10	6003495
		B1H3L5	J5L150394-2	HR8EK1AG	9HR8EK10	6003488
		B1H3L5	J5L150394-2	HR8EK2AF	9HR8EK20	6027445
		B1H3L6	J5L150394-3	HR8EN1AA	9HR8EN10	6003494
		B1H3L6	J5L150394-3	HR8EN1AC	9HR8EN10	6003500
		B1H3L6	J5L150394-3	HR8EN1AD	9HR8EN10	6003502
		B1H3L6	J5L150394-3	HR8EN1AE	9HR8EN10	6003495
		B1H3L6	J5L150394-3	HR8EN1AG	9HR8EN10	6003488
		B1H3L6	J5L150394-3	HR8EN2AF	9HR8EN20	6027445

Comments:

Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

January 31, 2006

Attention: Dot Stewart

SAF Number	:	S06-012, W06-012, I06-011, A06-012, S06-010
Date SDG Closed	:	December 15, 2005
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W04831
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between December 13, 2005 and December 15, 2005, 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:

<u>PGW ID#</u>	<u>STLR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B1H126	HR2JP	WATER	12/13/05
B1H115	HR2JQ	WATER	12/13/05
B1FW00	HR2JX	WATER	12/13/05
B1FW37	HR2KR	WATER	12/13/05
B1H0C9	HR2KX	WATER	12/13/05
B1H0W9	HR2K0	WATER	12/13/05
B1H1F3	HR2L0	WATER	12/13/05
B1FV71	HR2L4	WATER	12/13/05
B1H134	HR49X	WATER	12/14/05
B1H130	HR491	WATER	12/14/05
B1H0Y9	HR492	WATER	12/14/05
B1H107	HR494	WATER	12/14/05
B1H0Y5	HR497	WATER	12/14/05

B1FW04	HR5AW	WATER	12/14/05
B1H1N0	HR5AP	WATER	12/14/05
B1H202	HR8DN	WATER	12/15/05
B1H1X9	HR8DP	WATER	12/15/05
B1H3L4	HR8D9	WATER	12/15/05
B1H3L5	HR8EK	WATER	12/15/05
B1H3L6	HR8EN	WATER	12/15/05

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy

Uranium 234, 235 and 238 by method RICH-RC-5039

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014

Gross Beta by method RICH-RC-5014

Strontium-90 by method RICH-RC-5006

Gamma Spectroscopy

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

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

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065

Tritium by method RICH-RC-5007

Laser Induced Phosphorimetry

Total Uranium by method RICH-RC-5058

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Uranium 234, 235 and 238 by method RICH-RC-5039

The spectrum for the LCS was smeared, leading to a falsely high result in the LCS for U-235 which is usually not monitored in the LCS. The sample spectra did not indicate any smearing and the results are accepted. Other than as noted, the LCS, batch blank, samples and sample duplicate (B1H1X9) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

The LCS, batch blank, samples and sample duplicate (B1FV71) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

The LCS, batch blank, samples and sample duplicate (B1FW37) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1FW00) results are within contractual requirements.

Gamma Spectroscopy

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

The blank shows a low level of K-40 which is above the MDA for the blank. Other than as noted, the LCS, batch blank, samples and sample duplicate (B1H0W9) results are within contractual requirements.

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

The achieved MDAs for samples B1H3L4 and B1H3L5 Exceed the CRDL, however the sample activities greatly exceed the achieved MDAs. The LCS, batch blank, samples and sample duplicate (B1FW00) results are within contractual requirements.

Liquid Scintillation Counting

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

The initial batch for this analysis had a high blank result and the batch was reanalyzed with good results. The LCS, batch blank, samples, sample duplicate (B1H115), and sample matrix spike (B1FV71) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1FW00) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1H126), and sample matrix spike (B1H202) results are within contractual requirements.

Pacific Northwest National Laboratories
January 31, 2006

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:

A handwritten signature in black ink, appearing to read "Hans Carman", written over a horizontal line.

Hans Carman
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, $R = \text{constants} * f(x,y,z,\dots)$. 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/\sqrt{n}), 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 $(\text{Result}/\text{Expected})-1$ 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%. $Lc = (1.645 * \text{Sqrt}(2 * (\text{BkgndCnt}/\text{BkgndCntMin})/\text{SCntMin})) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. 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%. $MDC = (4.65 * \text{Sqrt}((\text{BkgndCnt}/\text{BkgndCntMin})/\text{SCntMin}) + 2.71/\text{SCntMin}) * (\text{ConvFct}/(\text{Eff} * \text{Yld} * \text{Abn} * \text{Vol}) * \text{IngrFct})$. 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 = $(S-D)/[\text{sqrt}(\text{TPUs}^2 + \text{TPUd}^2)]$ 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.

STL Richland Report

Lab Code: STLR

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 31289 File Name: h:\Reportdb\ledd\Fead\VRad\W04831.Edd, h:\Reportdb\ledd\Fead\VRad\31289.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:	Unit	Analyte	Method	Alq Size	Analy Date/Time	Act
9HR2JP10	B1H126		MW6-SBB-A1	W06-012	W04831					12/13/2005 11:08						
Batch 6003488	Uranium	7440-61-1	Result 3.34E+00	Unit ug/L	CntU 2S 3.4E-01	Qual 3.4E-01	MDA 7.88E-02	TrcYield 100.0	UTOT_KPA	01/27/200 12:59	ML	Uranium	UTOT_KPA	2.66E-02	12/27/200 12:59	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:	Unit	Analyte	Method	Alq Size	Analy Date/Time	Act
9HR2JP20	B1H126		MW6-SBB-A1	W06-012	W04831					12/13/2005 11:08						
Batch 6027445	TC-99	14133-76-7	Result 2.03E+01	Unit pCi/L	TotU 2S 4.6E+00	Qual 6.3E+00	MDA 9.94E+00	TrcYield 100.0	TC99_ETVDSK_LS	01/29/200 19:40	L	TC-99	TC99_ETVDSK_LS	1.285E-01	01/29/200 19:40	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analyte	Method	Alq Size	Analy Date/Time	Act
9HR2JQ10	B1H115		MW6-SBB-A1	W06-012	W04831					12/13/2005 12:08						
Batch 6003488	Uranium	7440-61-1	Result 5.92E+00	Unit ug/L	CntU 2S 6.1E-01	Qual 6.1E-01	MDA 8.42E-02	TrcYield 100.0	UTOT_KPA	01/27/200 13:06	ML	Uranium	UTOT_KPA	2.49E-02	01/27/200 13:06	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analyte	Method	Alq Size	Analy Date/Time	Act
9HR2JQ20	B1H115		MW6-SBB-A1	W06-012	W04831					12/13/2005 12:08						
Batch 6027445	TC-99	14133-76-7	Result 2.86E+02	Unit pCi/L	TotU 2S 1.0E+01	Qual 2.3E+01	MDA 1.02E+01	TrcYield 100.0	TC99_ETVDSK_LS	01/29/200 21:45	L	TC-99	TC99_ETVDSK_LS	1.266E-01	01/29/200 21:45	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analyte	Method	Alq Size	Analy Date/Time	Act
9HR2JX10	B1FW00		MW6-SBB-A1	I06-011	W04831					12/13/2005 09:26						
Batch 6003498	Uranium	7440-61-1	Result 1.54E+00	Unit ug/L	CntU 2S 1.6E-01	Qual 1.6E-01	MDA 8.03E-02	TrcYield 80.1	UTOT_KPA	01/27/200 13:08	ML	Uranium	UTOT_KPA	2.61E-02	01/27/200 13:08	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.

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 31289 File Name: h:\Reportdb\edd\Fead\W04831.Edd, h:\Reportdb\edd\Fead\W04831.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
9HR2K010	B1H0W9												12/13/2005 10:12	
MW6-SBB-A1 W06-012 W04831														
6003502	BETA	12587-47-2	6.45E+01	pCi/L	4.5E+00	9.6E+00	U	3.73E+00	100.0	9310_ALPHABETA	1.541E-01	L	01/29/200 08:13	I
6003499	BE-7	13966-02-4	-1.50E+01	pCi/L	2.5E+01	2.5E+01	U	4.17E+01		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003499	CO-60	10198-40-0	1.67E+00	pCi/L	3.0E+00	3.0E+00	U	6.11E+00		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003499	CS-134	13967-70-9	-5.19E-01	pCi/L	2.3E+00	2.3E+00	U	4.07E+00		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003499	CS-137	10045-97-3	-6.79E-01	pCi/L	1.9E+00	1.9E+00	U	3.45E+00		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003499	EU-152	14683-23-9	-1.27E-02	pCi/L	5.3E+00	5.3E+00	U	9.45E+00		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003499	EU-154	15585-10-1	-2.51E+00	pCi/L	7.0E+00	7.0E+00	U	1.25E+01		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003499	EU-155	14391-16-3	-1.43E+00	pCi/L	5.7E+00	5.7E+00	U	9.97E+00		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003499	K-40	13966-00-2	5.24E+01	pCi/L	4.8E+01	4.8E+01	U	4.23E+01		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003499	RU-106	13967-48-1	-1.49E+01	pCi/L	1.8E+01	1.8E+01	U	2.98E+01		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003499	SB-125	14234-35-6	1.10E+00	pCi/L	5.2E+00	5.2E+00	U	9.68E+00		GAMMALL_GS	1.9957E+00	L	01/23/200 08:51	I
6003488	Uranium	7440-61-1	3.13E+00	ug/L	3.2E-01	3.2E-01		8.22E-02		UTOT_KPA	2.55E-02	ML	01/27/200 13:10	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:				
9HR2KR10	B1FW37									12/13/2005 07:30				
MW6-SBB-A1 W06-012 W04831														
6003502	BETA	12587-47-2	6.92E-01	pCi/L	1.2E+00	1.2E+00	U	2.61E+00	100.0	9310_ALPHABETA	2.001E-01	L	01/29/200 07:59	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:				
9HR2KR20	B1FW37									12/13/2005 07:30				
MW6-SBB-A1 W06-012 W04831														
6027445	TC-99	14133-76-7	1.54E+01	pCi/L	4.6E+00	6.3E+00		1.05E+01	100.0	TC99_ETVDSK_LS	1.213E-01	L	01/29/200 23:50	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9HR2KX10	B1H0C9									12/13/2005 08:50				
MW6-SBB-A1 W06-012 W04831														
6003502	BETA	12587-47-2	1.91E+03	pCi/L	2.3E+01	3.0E+02		3.61E+00	100.0	9310_ALPHABETA	1.65E-01	L	01/29/200 07:59	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:				
9HR2KX20	B1H0C9									12/13/2005 08:50				
MW6-SBB-A1 W06-012 W04831														
6027445	TC-99	14133-76-7	6.70E+03	pCi/L	4.5E+01	4.2E+02		1.02E+01	100.0	TC99_ETVDSK_LS	1.268E-01	L	01/30/200 00:53	I

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

rptFeadRadSummaryEdd v3.48

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.

1/31/2006 1:52:38 PM

STL Richland Report

Lab Code: STLR

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 31289 File Name: h:\Reportdb\ledd\Fead\W04831.Edd, h:\Reportdb\ledd\Fead\W04831.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:	Unit	Analyte	Alq Size	Act
9HR2L010	B1H1F3		MW6-SBB-A1	S06-012	W04831					12/13/2005	L	H3_LSC	5.00E-03	I
Batch			Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method					
6003494	H-3	10028-17-8	1.12E+03	pCi/L	1.8E+02	2.0E+02	3.33E+02	100.0	906.0_H3_LSC				01/07/200	04:54
6003495	I-129L	15046-84-1	4.17E+00	pCi/L	7.4E-01	7.4E-01	3.93E-01	95.4	1129LL_SEP_LEPS				01/27/200	20:02

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analyte	Alq Size	Act
9HR2L020	B1H1F3		MW6-SBB-A1	S06-012	W04831					12/13/2005	L	TC99_ETVDSK_LS	1.265E-01	I
Batch			Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method					
6027445	TC-99	14133-76-7	1.03E+02	pCi/L	6.8E+00	1.1E+01	1.02E+01	100.0	TC99_ETVDSK_LS				01/30/200	01:55

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analyte	Alq Size	Act
9HR2L410	B1FV71		MW6-SBB-A1	A06-012	W04831					12/13/2005	L	H3_LSC	5.00E-03	I
Batch			Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method					
6003494	H-3	10028-17-8	5.89E+02	pCi/L	1.6E+02	1.8E+02	3.32E+02	100.0	906.0_H3_LSC				01/07/200	06:15
6003500	ALPHA	12587-46-1	2.43E+00	pCi/L	1.2E+00	1.3E+00	1.37E+00	100.0	9310_ALPHABETA				01/29/200	07:55
6003502	BETA	12587-47-2	3.12E+01	pCi/L	2.8E+00	5.7E+00	2.59E+00	100.0	9310_ALPHABETA				01/29/200	08:13
6003488	Uranium	7440-61-1	4.70E+00	ug/L	4.8E-01	4.8E-01	8.84E-02		UTOT_KPA				01/27/200	13:12

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analyte	Alq Size	Act
9HR2L420	B1FV71		MW6-SBB-A1	A06-012	W04831					12/13/2005	L	TC99_ETVDSK_LS	1.31E-01	I
Batch			Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method					
6027445	TC-99	14133-76-7	7.09E+01	pCi/L	5.9E+00	9.3E+00	9.81E+00	100.0	TC99_ETVDSK_LS				01/30/200	04:00

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analyte	Alq Size	Act
9HR49110	B1H130		MW6-SBB-A1	W06-012	W04831					12/14/2005	L	UTOT_KPA	2.71E-02	I
Batch			Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method					
6003488	Uranium	7440-61-1	2.92E+00	ug/L	3.0E-01	3.0E-01	7.73E-02		UTOT_KPA				01/27/200	13:18

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analyte	Alq Size	Act
9HR49120	B1H130		MW6-SBB-A1	W06-012	W04831					12/14/2005	L	TC99_ETVDSK_LS	1.259E-01	I
Batch			Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method					
6027445	TC-99	14133-76-7	8.98E+01	pCi/L	6.5E+00	1.1E+01	1.02E+01	100.0	TC99_ETVDSK_LS				01/30/200	06:05

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.

1/31/2006 1:52:38 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 31289 File Name: h:\Reportdb\ledd\FeadIVRad\W04831.Edd, h:\Reportdb\ledd\FeadIVRad\31289.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:
9HR49210	B1H0Y9		MW6-SBB-A1	W06-012	W04831					12/14/2005 12:09
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method	Alq Size
6003488	Uranium	7440-61-1	3.83E+00	ug/L	3.9E-01	3.9E-01	7.82E-02	UTOT_KPA	UTOT_KPA	2.68E-02

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR49220	B1H0Y9		MW6-SBB-A1	W06-012	W04831					12/14/2005 12:09
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method	Alq Size
6027445	TC-99	14133-76-7	1.37E+03	pCi/L	2.1E+01	9.0E+01	1.01E+01	100.0	TC99_ETVDSK_LS	1.253E-01

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR49410	B1H107		MW6-SBB-A1	W06-012	W04831					12/14/2005 10:29
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method	Alq Size
6003488	Uranium	7440-61-1	4.50E+00	ug/L	4.6E-01	4.6E-01	8.45E-02	UTOT_KPA	UTOT_KPA	2.48E-02

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR49420	B1H107		MW6-SBB-A1	W06-012	W04831					12/14/2005 10:29
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method	Alq Size
6027445	TC-99	14133-76-7	8.21E+03	pCi/L	5.0E+01	5.1E+02	1.03E+01	100.0	TC99_ETVDSK_LS	1.253E-01

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR49710	B1H0Y5		MW6-SBB-A1	W06-012	W04831					12/14/2005 08:31
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method	Alq Size
6003494	H-3	10028-17-8	2.42E+04	pCi/L	5.3E+02	1.1E+03	3.33E+02	100.0	906.0_H3_LSC	5.00E-03
6003500	ALPHA	12587-46-1	3.19E+00	pCi/L	1.1E+00	1.3E+00	1.01E+00	100.0	9310_ALPHABETA	1.989E-01
6003502	BETA	12587-47-2	4.28E+03	pCi/L	3.1E+01	5.4E+02	3.02E+00	100.0	9310_ALPHABETA	1.958E-01
6003488	Uranium	7440-61-1	4.76E+00	ug/L	4.9E-01	4.9E-01	8.19E-02	UTOT_KPA	UTOT_KPA	2.56E-02

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR49720	B1H0Y5		MW6-SBB-A1	W06-012	W04831					12/14/2005 08:31
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method	Alq Size
6027445	TC-99	14133-76-7	1.87E+04	pCi/L	7.4E+01	1.2E+03	9.87E+00	100.0	TC99_ETVDSK_LS	1.289E-01

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR49720	B1H0Y5		MW6-SBB-A1	W06-012	W04831					12/14/2005 08:31
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	TrcYield	Method	Alq Size
6027445	TC-99	14133-76-7	1.87E+04	pCi/L	7.4E+01	1.2E+03	9.87E+00	100.0	TC99_ETVDSK_LS	1.289E-01

STL Richland
 rptFeaRadSummaryEdd 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.

STL Richland Report

Lab Code: STLLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 31289 File Name: h:\Reportdb\ledd\Fead\VRad\W04831.Edd, h:\Reportdb\ledd\Fead\VRad\31289.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:
9HR49X10	B1H134		MW6-SBB-A1	W06-012	W04831					12/14/2005 10:05
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	Method	Alq Size
6003488	Uranium	7440-61-1	7.68E+00	ug/L	9.1E-01	9.1E-01	8.52E-02	UTOT_KPA	UTOT_KPA	2.46E-02
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date: <td>Collection Date:</td>	Collection Date:
9HR49X20	B1H134		MW6-SBB-A1	W06-012	W04831					12/14/2005 10:05
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	Method	Alq Size
6027445	TC-99	14133-76-7	2.16E+01	pCi/L	4.7E+00	6.5E+00	1.03E+01	100.0	TC99_ETVDSK_LS	1.245E-01
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date: <td>Collection Date: </td>	Collection Date:
9HR5AP10	B1H1N0		MW6-SBB-A1	S06-012	W04831					12/14/2005 09:15
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	Method	Alq Size
6003488	Uranium	7440-61-1	8.10E+00	ug/L	9.6E-01	9.6E-01	8.48E-02	UTOT_KPA	UTOT_KPA	2.47E-02
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date: <td>Collection Date: </td>	Collection Date:
9HR5AW10	B1FW04		MW6-SBB-A1	I06-011	W04831					12/14/2005 08:51
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	Method	Alq Size
6003494	H-3	10028-17-8	5.38E+04	pCi/L	7.8E+02	2.4E+03	3.34E+02	100.0	906.0_H3_LSC	5.00E-03
6003488	Uranium	7440-61-1	1.15E+01	ug/L	1.4E+00	1.4E+00	8.06E-02	UTOT_KPA	UTOT_KPA	2.60E-02
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date: <td>Collection Date: </td>	Collection Date:
9HR5AW20	B1FW04		MW6-SBB-A1	I06-011	W04831					12/14/2005 08:51
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	Method	Alq Size
6027445	TC-99	14133-76-7	1.14E+02	pCi/L	7.1E+00	1.2E+01	1.02E+01	100.0	TC99_ETVDSK_LS	1.257E-01
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%:	Distilled Volume	Sample On Date: <td>Collection Date: </td>	Collection Date:
9HR8D910	B1H3L4		MW6-SBB-A1	S06-010	W04831					12/15/2005 09:30
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	Method	Alq Size
6003494	H-3	10028-17-8	6.52E+04	pCi/L	8.5E+02	2.8E+03	3.34E+02	100.0	906.0_H3_LSC	5.00E-03
6003500	ALPHA	12587-46-1	1.81E+01	pCi/L	3.3E+00	4.9E+00	1.82E+00	100.0	9310_ALPHABETA	1.624E-01
6003502	BETA	12587-47-2	3.55E+01	pCi/L	3.4E+00	5.7E+00	3.39E+00	100.0	9310_ALPHABETA	1.691E-01
6003495	I-129L	15046-84-1	2.93E+02	pCi/L	3.0E+01	3.0E+01	1.19E+00	99.5	1129LL_SEP_LEPS	3.8712E+00
6003488	Uranium	7440-61-1	4.01E+01	ug/L	4.7E+00	4.7E+00	7.76E-02	UTOT_KPA	UTOT_KPA	2.70E-02

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.

1/31/2006 1:52:38 PM

STL Richland Report

Lab Code: STLR

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 31289 File Name: h:\Reportdb\edd\Fead\Rad\W04831.Edd, h:\Reportdb\edd\Fead\Rad\31289.Edd

Lab Sample Id:	Client Id:	Client Analyte	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR8D920	B1H3L4			MW6-SBB-A1	S06-010	W04831					12/15/2005 09:30	
Batch				Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size
6027445	TC-99	14133-76-7		5.08E+02	pCi/L	1.3E+01	3.7E+01	1.05E+01	100.0	TC99_ETVDSK_LS	1.23E-01	Unit
												Analy Date/Time
												L
												01/30/200
												12:20
												Act
												I

Lab Sample Id:	Client Id:	Client Analyte	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR8DN10	B1H202			MW6-SBB-A1	S06-012	W04831					12/15/2005 09:26	
Batch				Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size
6003488	Uranium	7440-61-1		6.51E+00	ug/L	7.7E-01	7.7E-01	7.82E-02		UTOT_KPA	2.68E-02	Unit
												ML
												01/27/200
												13:31
												Act
												I

Lab Sample Id:	Client Id:	Client Analyte	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR8DP10	B1H1X9			MW6-SBB-A1	S06-012	W04831					12/15/2005 10:30	
Batch				Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size
6003493	U-234	13966-29-5		4.68E+01	pCi/L	2.4E+00	1.0E+01	1.51E-01	106.5	UIISO_PLATE_AEA	1.957E-01	Unit
												L
												01/28/200
												13:30
												Act
												I
6003493	U-235	15117-96-1		1.85E+00	pCi/L	4.8E-01	6.2E-01	1.51E-01	106.5	UIISO_PLATE_AEA	1.957E-01	Unit
												L
												01/28/200
												13:30
												Act
												I
6003493	U-238	U-238		4.41E+01	pCi/L	2.4E+00	9.5E+00	2.16E-01	106.5	UIISO_PLATE_AEA	1.957E-01	Unit
												L
												01/28/200
												13:30
												Act
												I
6003488	Uranium	7440-61-1		1.20E+02	ug/L	1.4E+01	1.4E+01	7.54E-02		UTOT_KPA	2.78E-02	Unit
												ML
												01/27/200
												13:38
												Act
												I

Lab Sample Id:	Client Id:	Client Analyte	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR8EK10	B1H3L5			MW6-SBB-A1	S06-010	W04831					12/15/2005 09:30	
Batch				Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size
6003494	H-3	10028-17-8		6.49E+04	pCi/L	8.5E+02	2.8E+03	3.37E+02	100.0	906.0_H3_LSC	5.00E-03	Unit
												L
												01/07/200
												11:42
												Act
												I
6003500	ALPHA	12587-46-1		1.81E+01	pCi/L	3.0E+00	4.6E+00	1.30E+00	100.0	9310_ALPHABETA	1.824E-01	Unit
												L
												01/29/200
												09:49
												Act
												I
6003502	BETA	12587-47-2		3.53E+01	pCi/L	3.4E+00	5.6E+00	3.46E+00	100.0	9310_ALPHABETA	1.679E-01	Unit
												L
												01/29/200
												08:13
												Act
												I
6003495	I-129L	15046-84-1		2.93E+02	pCi/L	3.0E+01	3.0E+01	1.23E+00	96.2	1129LL_SEP_LEPS	3.8978E+00	Unit
												L
												01/27/200
												21:48
												Act
												I
6003488	Uranium	7440-61-1		6.68E+01	ug/L	7.8E+00	7.8E+00	7.62E-02		UTOT_KPA	2.75E-02	Unit
												ML
												01/27/200
												13:44
												Act
												I

Lab Sample Id:	Client Id:	Client Analyte	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	QC Type:	Moisture/Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HR8EK20	B1H3L5			MW6-SBB-A1	S06-010	W04831					12/15/2005 09:30	
Batch				Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size
6027445	TC-99	14133-76-7		1.22E+01	pCi/L	4.3E+00	5.8E+00	1.00E+01	100.0	TC99_ETVDSK_LS	1.28E-01	Unit
												L
												01/30/200
												13:23
												Act
												I

Lab Sample Id:	Client Id:	Client Analyte	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	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.

1/31/2006 1:52:38 PM

STL Richland Report

Lab Code: STLR

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 31289 File Name: h:\Reportdb\edd\Fead\W04831.Edd, h:\Reportdb\edd\Fead\W04831.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6003494	H-3	10028-17-8	6.35E+04	pCi/L	8.4E+02	2.8E+03	3.34E+02	100.0	906.0_H3_LSC	5.00E-03	L	01/07/200	17:09	I
6003500	ALPHA	12587-46-1	1.98E+01	pCi/L	3.5E+00	5.2E+00	1.53E+00	100.0	9310_ALPHABETA	1.592E-01	L	01/29/200	09:49	I
6003502	BETA	12587-47-2	3.47E+01	pCi/L	3.5E+00	5.6E+00	3.66E+00	100.0	9310_ALPHABETA	1.61E-01	L	01/29/200	08:13	I
6003495	I-129L	15046-84-1	2.98E+02	pCi/L	3.0E+01	3.0E+01	9.58E-01	95.4	1129LL_SEP_LEPS	3.8987E+00	L	01/27/200	21:48	I
6003488	Uranium	7440-61-1	4.36E+01	ug/L	5.1E+00	5.1E+00	7.68E-02		UTOT_KPA	2.73E-02	ML	01/27/200	13:46	I

12/15/2005 09:30

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9HR8EN20	B1H3L6		MW6-SBB-A1	S06-010	W04831				12/15/2005 09:30					
6027445	TC-99	14133-76-7	1.12E+01	pCi/L	4.4E+00	5.8E+00	1.03E+01	100.0	TC99_ETVDSK_LS	1.253E-01	L	01/30/200	14:25	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.

Tuesday, January 31, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportabledd\Fead\VRad\W04831.Edd, h:\Reportabledd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GF1AB

Sdg/Rept Nbr: W04831

Collection Date: 12/13/2005 11:08

Client Id: NA

Matrix: WATER

Sample On Date: 12/13/2005

Moisture/Solids%*: BLK

QC Type: BLK

Received Date: 12/13/2005

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	RTyp
6003488	Uranium	1.33E-02	ug/L	1.4E-03	U	7.82E-02			UTOT_KPA	2.68E-02	01/27/2006				D
BLK	7440-61-1			1.4E-03						ML	11:37				H
															BV

Distilled Volume

Decant

SAS Nbr

File Id

FSuffix

RTyp

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.

Tuesday, January 31, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdbled\Fead\Rad\W04831.Edd, h:\Reportdbled\Fead\Rad\31289.Edd

Lab Sample Id: HT3GH1AB **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/15/2005 10:30
Client Id: NA **Matrix:** WATER **Decant:** 31289 **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 12/15/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Distilled Volume	File Id	F Suffix	R Typ						
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
6003493	U-234	6.72E-03	pCi/L	7.2E-02	U	2.31E-01	88.4		UIISO_PLATE_	2.011E-01	01/28/2006 13:32				D
BLK	13966-29-5			7.2E-02						L					
6003493	U-235	2.02E-02	pCi/L	7.0E-02	U	1.90E-01	88.4		UIISO_PLATE_	2.011E-01	01/28/2006 13:32				D
BLK	15117-96-1			7.0E-02						L					
6003493	U-238	-5.38E-02	pCi/L	4.0E-02	U	2.89E-01	88.4		UIISO_PLATE_	2.011E-01	01/28/2006 13:32				D
BLK	U-238			3.8E-02						L					

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.

Tuesday, January 31, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GJ1AB **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 09:26
Client Id: NA **Matrix:** WATER **Sample On Date:** 12/13/2005
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981								CA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6003494	H-3	1.05E+02	pCi/L	1.6E+02	U	3.32E+02	100.0		906.0_H3_LSC	5.00E-03	01/06/2006				D
BLK	10028-17-8			1.4E+02						L	23:27				

Tuesday, January 31, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W04831.Edd, h:\Reportdb\edd\Fead\W04831.Edd, h:\Reportdb\edd\Fead\W04831.Edd

Lab Sample Id: HT3GJ1DX **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 09:26
Client Id: NA **Matrix:** WATER **Sample On Date:** 12/13/2005
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981								CC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6003494	H-3	-1.09E+02	pCi/L	1.5E+02	U	3.35E+02	100.0		906.0_H3_LSC	5.00E-03	01/07/2006				D
BLK	10028-17-8			1.3E+02						L	14:26				

Tuesday, January 31, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Feat\Rad\W04831.Edd, h:\Reportdb\edd\Feat\Rad\31289.Edd

Lab Sample Id: HT3GK1AB Sdg/Rept Nbr: W04831 Collection Date: 12/13/2005 09:26
Client Id: NA Matrix: WATER Decant: 31289 Sample On Date:
Moisture/Solids%*: QC Type: BLK Received Date: 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981								CE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6003495	I-129L	1.00E-01	pCi/L	1.7E-01	U	3.21E-01	97.3		I129LL_SEP_L	4.00E+00	01/28/2006				D
BLK	15046-84-1			1.7E-01						L	09:41				

Tuesday, January 31, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05

File Name: h:\Reportdb\ledd\Fead\VRad\W04831.Edd, h:\Reportdb\ledd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GL1AB **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 09:26
Client Id: NA **Matrix:** WATER **Decant:** 31289 **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 12/13/2005

SAF Nbr	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
6003498	SR-90	-3.66E-02	pCi/L	2.3E-01	U	5.20E-01	76.0	SRISO_SEP_P	1.0015E+00	01/20/2006	L	D
BLK	10098-97-2			2.3E-01						08:49		
											CG	H

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.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadI\Rad\W04831.Edd, h:\Reportdb\edd\FeadI\Rad\31289.Edd

Lab Sample Id: HT3GM1AB **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 10:12
Client Id: NA **Matrix:** WATER **Decant:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 12/13/2005

Batch # / Qc Type	Analyt/ CAS#	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
6003499	BE-7	2.36E+00	1.8E+01	U	3.37E+01		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	13966-02-4		1.8E+01					L	08:51		
6003499	CO-60	-1.24E+00	1.8E+00	U	3.04E+00		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	10198-40-0		1.8E+00					L	08:51		
6003499	CS-134	-2.61E-01	1.3E+00	U	2.37E+00		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	13967-70-9		1.3E+00					L	08:51		
6003499	CS-137	-2.31E-01	1.5E+00	U	2.66E+00		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	10045-97-3		1.5E+00					L	08:51		
6003499	EU-152	-6.88E-02	3.8E+00	U	6.72E+00		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	14683-23-9		3.8E+00					L	08:51		
6003499	EU-154	4.44E-01	4.3E+00	U	8.55E+00		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	15585-10-1		4.3E+00					L	08:51		
6003499	EU-155	-9.71E-01	3.0E+00	U	5.25E+00		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	14391-16-3		3.0E+00					L	08:51		
6003499	K-40	2.04E+01	4.2E+01	U	5.24E+00		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	13966-00-2		4.2E+01					L	08:51		
6003499	RU-106	-1.16E+01	1.4E+01	U	2.37E+01		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	13967-48-1		1.4E+01					L	08:51		
6003499	SB-125	-4.62E-01	3.6E+00	U	6.44E+00		GAMMALL_GS	1.9548E+00	01/23/2006		D
BLK	14234-35-6		3.6E+00					L	08:51		

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.

Tuesday, January 31, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W04831.Edd, h:\Reportdb\edd\Fead\Rad\31289.Edd

Lab Sample Id: HWF741AB Sdg/Rept Nbr: W04831 Collection Date: 12/13/2005 12:08
Client Id: NA Matrix: WATER Decant: 31289 Sample On Date:
Moisture/Solids%*: QC Type: BLK Received Date: 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp				
	MW6-SBB-A19981								CO	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6027445 TC-99	1.48E+01	6.0E+00	4.5E+00	100.0	1.02E+01	100.0		TC99_ETVDSK	1.264E-01	01/30/2006				D
BLK 14133-76-7									L	15:27				

Tuesday, January 31, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W04831.Edd, h:\Reportdb\edd\Fead\Rad\31289.Edd

Lab Sample Id: HT3GF1CS **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 11:08
Client Id: NA **Matrix:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BW	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6003488	Uranium	2.76E+01	ug/L	3.2E+00 3.2E+00		7.88E-02		3.43E+01 80.3	UTOT_KPA	2.66E-02 ML	01/27/2006 11:41			70	D
BS	7440-61-1													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.

Tuesday, January 31, 2006

STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GF1DS

Sdg/Rept Nbr: W04831

Collection Date: 12/13/2005 11:08

Client Id: NA

Matrix: WATER

Sample On Date: 12/13/2005

Moisture/Solids%*: BS

QC Type: BS

Received Date: 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981								BX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	ToI/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
6003488	Uranium	3.72E+00	ug/L	3.8E-01		8.88E-02		3.82E+00	UTOT_KPA	2.36E-02	01/27/2006			70	D
BS	7440-61-1			3.8E-01				97.5		ML	11:43			130	

Tuesday, January 31, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GH1CS **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/15/2005 10:30
Client Id: NA **Matrix:** WATER **Decant:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/15/2005

Batch # / Qc Type	Analyst CAS#	Result/Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	RTyp
6003493	U-234	9.47E+00	pCi/L	2.9E+00	9.63E-01	32.6	8.78E+00	1.983E-01	UISO_PLATE_	L	01/28/2006	70	70	70	D
BS	13966-29-5			1.9E+00			107.8				13:33			130	
6003493	U-238	8.83E+00	pCi/L	2.8E+00	9.63E-01	32.6	9.20E+00	1.983E-01	UISO_PLATE_	L	01/28/2006	70	70	70	D
BS	U-238			1.8E+00			95.9				13:33			130	

SAF Nbr **Contract Nbr**
 MW6-SBB-A19981

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.

Tuesday, January 31, 2006

STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GJ1CS **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 09:26
Client Id: NA **Matrix:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	F Suffix	R Typ				
	MW6-SBB-A19981								CB	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	Typ
6003494 / BS	H-3 / 10028-17-8	2.82E+03	2.7E+02 / 2.2E+02	3.32E+02	100.0	100.8	2.80E+03	906.0_H3_LSC	5.00E-03	01/07/2006 00:49			70 / 130	D

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Tuesday, January 31, 2006

STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Feat\Rad\W04831.Edd, h:\Reportdb\edd\Feat\Rad\31289.Edd

Lab Sample Id: HT3GJ1EM **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 09:26
Client Id: NA **Matrix:** WATER **Decant:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981								CD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6003494	H-3	2.83E+03	pCi/L	2.8E+02	3.37E+02	100.0	2.80E+03	906.0_H3_LSC	5.00E-03	L	01/07/2006	15:48		70	D
BS	10028-17-8			2.2E+02			101.0							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.

Tuesday, January 31, 2006

STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GK1CS **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 09:26
Client Id: NA **Matrix:** WATER **Decant:** 31289 **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981							CF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	Typ
6003495	I-129L	8.71E+00	pCi/L	1.1E+00		2.57E-01	96.0	9.63E+00	I129LL_SEP_L	4.00E+00	01/28/2006			70	D
BS	15046-84-1			1.1E+00				90.4		L	09:42			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.

Tuesday, January 31, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GL1CS **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 09:26
Client Id: NA **Matrix:** WATER **Decant:** 31289 **Sample On Date:**
Moisture/Solids%*: BS **QC Type:** BS **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981							CH	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
6003498	SR-90	1.42E+01	pCi/L	2.2E+00		5.56E-01	73.8	1.36E+01	SRISO_SEP_P	9.962E-01	01/20/2006			70	D
BS	10098-97-2			7.7E-01				104.3		L	08:49			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GM1CS Sdg/Rept Nbr: W04831 Collection Date: 12/13/2005 10:12
 Client Id: NA Matrix: WATER Decant: WATER Sample On Date:
 Moisture/Solids%*: QC Type: BS Received Date: 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981									CJ H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	Typ
6003499 BS	CO-60 10198-40-0	3.75E+01	pCi/L	8.7E+00	4.91E+00	4.91E+00		3.81E+01	GAMMALL_GS	2.0101E+00	01/23/2006 08:52	70	70	70	D
6003499 BS	CS-137 10045-97-3	2.07E+01	pCi/L	6.2E+00	4.84E+00	4.84E+00		2.43E+01	GAMMALL_GS	2.0101E+00	01/23/2006 08:52	70	70	70	D
6003499 BS	EU-152 14683-23-9	8.10E+01	pCi/L	3.8E+01	2.29E+01	2.29E+01	U	7.77E+01	GAMMALL_GS	2.0101E+00	01/23/2006 08:52	70	70	70	D
								104.2		L				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.

Tuesday, January 31, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HT3GN1CS **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 11:54
Client Id: NA **Matrix:** WATER **Decant:** 31289 **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Distilled Volume	File Id	FSuffix	RType
								CL	H
	MW6-SBB-A19981								

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
6003500	ALPHA	2.52E+01	pCi/L	5.8E+00	100.0	9.86E-01	103.8	2.43E+01	9310_ALPHA	1.93E-01	01/29/2006 09:49			70	D
BS	12587-46-1			2.6E+00						L				130	

Tuesday, January 31, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\W04831.Edd, h:\Reportdb\edd\Fead\W04831.Edd, h:\Reportdb\edd\Fead\W04831.Edd

Lab Sample Id: HT3GP1CS **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 07:30
Client Id: NA **Matrix:** WATER **Decant:** 31289 **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Distilled Volume	File Id	FSuffix	RTyp
								CN	H
6003502	MW6-SBB-A19981								
BS									

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
6003502	BETA	2.43E+01	pCi/L	4.1E+00		2.89E+00	100.0	2.26E+01	9310_ALPHAB	1.982E-01	01/29/2006			70	D
				2.6E+00				107.6		L	08:13			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W04831.Edd, h:\Reportdb\edd\Fead\Rad\31289.Edd

Lab Sample Id: HWF741CS **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 12:08
Client Id: NA **Matrix:** WATER **Decant:** WATER **Sample On Date:**
Moisture/Solids%*: BS **QC Type:** BS **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981							CP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6027445	TC-99	5.35E+02	pCi/L	3.8E+01	9.98E+00	100.0		5.24E+02	TC99_ETVDSK	1.291E-01	01/30/2006			70	D
BS	14133-76-7			1.3E+01				102.0		L	16:30			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Tuesday, January 31, 2006

STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HR2JP1DR **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 11:08
Client Id: B1H126 **Matrix:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
W06-012	MW6-SBB-A19981								BK	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6003488	Uranium	2.95E+00	ug/L	3.0E-01		8.03E-02			UTOT_KPA	2.61E-02	01/27/2006	12.3	1.8		D
DUP	7440-61-1	3.34E+00		3.0E-01						ML	13:04	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.

Tuesday, January 31, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W04831.Edd, h:\Reportdb\edd\Fead\Rad\31289.Edd

Lab Sample Id: HR2JQ1DR **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 12:08
Client Id: B1H115 **Matrix:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	F Suffix	R Typ					
W06-012	MW6-SBB-A19981								BL	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6027445	TC-99	2.91E+02	pCi/L	2.3E+01		1.03E+01	100.0		TC99_ETVDSK	1.248E-01	01/29/2006	2.0	0.3		D
DUP	14133-76-7	2.86E+02		1.0E+01						L	20:43	20.0	3		

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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.

Tuesday, January 31, 2006

STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W04831.Edd, h:\Reportdb\edd\Fead\Rad\31289.Edd

Lab Sample Id: HR2JX1HR **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 09:26
Client Id: B1FW00 **Matrix:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
									BN	H					
106-011	MW6-SBB-A19981														
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 Type
6003495	I-129L	3.76E-01	pCi/L	1.7E-01	U	3.60E-01	99.2		I129LL_SEP_L	3.9526E+00	01/27/2006	31.9	0.9		D
DUP	15046-84-1	2.72E-01		1.7E-01						L	18:16	20.0	3		

Tuesday, January 31, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W04831.Edd, h:\Reportdb\edd\Fead\W04831.Edd, h:\Reportdb\edd\Fead\W04831.Edd

Lab Sample Id: HR2JX1JR **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 09:26
Client Id: B1FW00 **Matrix:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
									BO	H					
106-011	MW6-SBB-A19981														
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6003498	SR-90	8.88E-02	pCi/L	2.5E-01	U	5.27E-01	78.4		SRISO_SEP_P	1.0011E+00	01/20/2006	906.4	0.8		D
DUP	10098-97-2	-5.67E-02		2.5E-01						L	08:49	20.0	3		

Tuesday, January 31, 2006

STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\IVRad\W04831.Edd, h:\Reportdb\edd\Fead\IVRad\31289.Edd

Lab Sample Id: HR2K01ER **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/13/2005 10:12
Client Id: B1H0W9 **Matrix:** WATER **Decant:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
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
6003499	BE-7	-5.49E+00	pCi/L	2.6E+01	U	4.57E+01			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	0.0	0.5		D
DUP	13966-02-4	-1.50E+01		2.6E+01						L		20.0	3		
6003499	CO-60	1.05E+00	pCi/L	2.7E+00	U	5.22E+00			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	45.9	0.3		D
DUP	10198-40-0	1.67E+00		2.7E+00						L		20.0	3		
6003499	CS-134	8.44E-01	pCi/L	2.3E+00	U	4.35E+00			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	838.4	0.8		D
DUP	13967-70-9	-5.19E-01		2.3E+00						L		20.0	3		
6003499	CS-137	1.83E+00	pCi/L	2.3E+00	U	4.31E+00			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	436.2	1.6		D
DUP	10045-97-3	-6.79E-01		2.3E+00						L		20.0	3		
6003499	EU-152	1.20E+00	pCi/L	5.9E+00	U	1.04E+01			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	204.3	0.3		D
DUP	14683-23-9	-1.27E-02		5.9E+00						L		20.0	3		
6003499	EU-154	-2.47E+00	pCi/L	7.0E+00	U	1.23E+01			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	0.0	0.0		D
DUP	15585-10-1	-2.51E+00		7.0E+00						L		20.0	3		
6003499	EU-155	1.48E+00	pCi/L	5.6E+00	U	9.98E+00			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	10641.0	0.7		D
DUP	14391-16-3	-1.43E+00		5.6E+00						L		20.0	3		
6003499	K-40	-5.92E+01	pCi/L	6.5E+01	U	1.39E+02			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	0.0	2.4		D
DUP	13966-00-2	5.24E+01		6.5E+01						L		20.0	3		
6003499	RU-106	3.07E+00	pCi/L	2.0E+01	U	3.64E+01			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	0.0	1.3		D
DUP	13967-48-1	-1.49E+01		2.0E+01						L		20.0	3		
6003499	SB-125	-3.16E-01	pCi/L	5.4E+00	U	9.62E+00			GAMMALL_GS	1.9957E+00	01/23/2006 10:39	361.8	0.4		D
DUP	14234-35-6	1.10E+00		5.4E+00						L		20.0	3		

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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.

Tuesday, January 31, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VARad\W04831.Edd, h:\Reportdb\edd\Fead\VARad\31289.Edd

Lab Sample Id: HR2KR1DR

Sdg/Rept Nbr: W04831

Collection Date: 12/13/2005 07:30

Client Id: B1FW37

Matrix: WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
									BQ	H					
W06-012	MW6-SBB-A19981														
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6003502	BETA	1.88E+00	pCi/L	1.4E+00	U	2.83E+00	100.0		9310_ALPHA	1.967E-01	01/29/2006	92.5	1.2		D
DUP	12587-47-2	6.92E-01		1.4E+00						L	07:59	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.

Tuesday, January 31, 2006

STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HR2L41GR

Sdg/Rept Nbr: W04831

31289

Collection Date: 12/13/2005 11:54

Client Id: B1FV71

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
A06-012	MW6-SBB-A19981								BR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
6003500	ALPHA	3.86E+00	pCi/L	1.6E+00		1.42E+00	100.0		9310_ALPHA	1.587E-01	45.6	1.3		D
DUP	12587-46-1	2.43E+00		1.4E+00				L			20.0	3		

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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\IVRad\W04831.Edd h:\Reportdb\edd\Fead\IVRad\31289.Edd

Lab Sample Id: HR8DP1DR Sdg/Rept Nbr: W04831 Collection Date: 12/15/2005 10:30
 Client Id: B1H1X9 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 12/15/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qual	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
S06-012	MW6-SBB-A19981														BU H
6003493	U-234	4.51E+01	pCi/L	9.7E+00	2.00E-01	106.5	106.5	1.959E-01	UIISO_PLATE_	L	01/28/2006	3.7	0.2		D
DUP	13966-29-5	4.68E+01		2.4E+00							13:32	20.0	3		
6003493	U-235	1.75E+00	pCi/L	6.0E-01	8.60E-02	106.5	106.5	1.959E-01	UIISO_PLATE_	L	01/28/2006	5.8	0.2		D
DUP	15117-96-1	1.85E+00		4.7E-01							13:32	20.0	3		
6003493	U-238	4.13E+01	pCi/L	9.0E+00	1.79E-01	106.5	106.5	1.959E-01	UIISO_PLATE_	L	01/28/2006	6.5	0.4		D
DUP	U-238	4.41E+01		2.3E+00							13:32	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.

Tuesday, January 31, 2006

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W04831.Edd, h:\Reportdb\edd\Fead\VRad\31289.Edd

Lab Sample Id: HR2L41HW

Sdg/Rept Nbr: W04831

Collection Date: 12/13/2005 11:54

Client Id: B1FV71

Matrix: WATER

Sample On Date:

Moisture/Solids%*: MS

QC Type: MS

Received Date: 12/13/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
A06-012	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/	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6027445	TC-99	3.31E+03	pCi/L	2.1E+02	9.91E+00	100.0	3.46E+03	95.7	TC99_ETVDSK	1.294E-01	01/30/2006	02:58	60	D
MS	14133-76-7			3.2E+01						L			140	

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.

Tuesday, January 31, 2006

STL Richland Qc Matrix Spike Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\W04831.Edd, h:\Reportdb\edd\Fead\W04831.Edd

Lab Sample Id: HR8DN1CW **Sdg/Rept Nbr:** W04831 **Collection Date:** 12/15/2005 09:26
Client Id: B1H202 **Matrix:** WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** MS **Received Date:** 12/15/2005

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-012	MW6-SBB-A19981								BT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6003488	Uranium	3.63E+01	ug/L	5.1E+00		8.35E-02		3.59E+01	UTOT_KPA	2.51E-02	01/27/2006			60	D
MS	7440-61-1			5.1E+00				101.2		ML	13:33			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.

Lot No., Due Date: J5L130357,J5L130364,J5L150394; 01/30/2006
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 6003495; RGAMLEPS Gamma by LEPS
 SDG, Matrix: W04831; WATER

1.0 COC

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

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

3.0 QC & Samples

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

4.0 Raw Data

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

Yes No N/A

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

Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

Yes No N/A

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

Yes No N/A

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

Yes No N/A

5.0 Other

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

Yes No N/A

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

Yes No N/A

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

Yes No N/A

5.4 Was transcription checked? Yes No N/A

Yes No N/A

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

Yes No N/A

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

Yes No N/A

6.0 Comments on any No response:

First Level Review

Pam Anderson

Date

1-30-06



STL

Data Review Checklist RADIOCHEMISTRY Second Level Review

QC Batch Number: 6003195

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?	✓ <i>None</i>	✓	
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: Samples 7M04 7CR01

Second Level Review: *[Signature]* Date: 1-31-06

Lot No., Due Date: J5L130358; 01/30/2006
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 6003499; RGAMMA Gamma by GER
 SDG, Matrix: W04831; 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: 10 - 07424

First Level Review Pam Anderson

Date 1-25-06



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6003499

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 NCR

Second Level Review: [Signature]

Date: 1-31-06

Clouseau Nonconformance Memo

NCM #: 10-07424 NCM Initiated By: Pam Anderson Date Opened: 01/25/2006 Date Closed:	Classification: Anomaly Status: GLREVIEW Production Area: Environmental - Prep Tests: Gamma by GER Lot #'s (Sample #'s): J5L130358 (3), J6A030000 (499), QC Batches: 6003499
Nonconformance: Other (describe in detail) Subcategory: Other (explanation required)	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Pam Anderson	01/25/2006	1 The blank in the batch says K40 is found; however the result is just less than 1 times the error. It is possibly a false positive. Data will be accepted. 2 The sample also shows K 40 but the result is just above the MDA and the duplicate , which is the same sample counted on a different detector shows no K 40 as found.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Pam Anderson	01/25/2006	Note in case narrative.

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
		This section not yet completed by QA.	

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
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Lot No., Due Date: J5L150392; 01/30/2006
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6003493; RUIISO Uiso by ALP
SDG, Matrix: W04831; 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. 10-07444

First Level Review Pam Anderson

Date 1-30-06



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6003493

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: Mus m Date: 1-31-06

Clouseau Nonconformance Memo

SEVERN
TRENT
SERVICES

NCM #: 10-07444	Classification: Anomaly
NCM Initiated By: Pam Anderson	Status: GLREVIEW
Date Opened: 01/30/2006	Production Area: Environmental - Sep
Date Closed:	Tests: UIso by ALP
	Lot #'s (Sample #'s): J5L150392 (1), J6A030000 (493),
	QC Batches: 6003493
Nonconformance: Other (describe in detail)	
Subcategory: Other (explanation required)	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Pam Anderson	01/30/2006	The reported results are acceptable. U 235 for the LCS, which is not reported shows high recovery. The spectra for the LCS is smeared. Data will be accepted. No samples show smearing.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Pam Anderson	01/30/2006	None at this time.

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
	<u>Response</u>	<u>Response Note</u>			

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
		This section not yet completed by QA.	

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
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Lot No., Due Date: J5L130365,J5L140368,J5L150394; 01/30/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6003500; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W04831; WATER

1.0 COC1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A
 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
 Yes No N/A2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A
 Yes No N/A2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A
 Yes No N/A2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A
 Yes No N/A**3.0 QC & Samples**3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A
 Yes No N/A3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A
 Yes No N/A3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A
 Yes No N/A3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A
 Yes No N/A3.5 Are the sample yields and MDAs within contract limits? Yes No N/A
 Yes No N/A**4.0 Raw Data**4.1 Were results calculated in the correct units? Yes No N/A
 Yes No N/A4.2 Were analysis volumes entered correctly? Yes No N/A
 Yes No N/A4.3 Were Yields entered correctly? Yes No N/A
 Yes No N/A4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A
 Yes No N/A4.5 Were raw counts reviewed for anomalies? Yes No N/A
 Yes No N/A**5.0 Other**5.1 Are all nonconformances included and noted? Yes No N/A
 Yes No N/A5.2 Are all required forms filled out? Yes No N/A
 Yes No N/A5.3 Was the correct methodology used? Yes No N/A
 Yes No N/A5.4 Was transcription checked? Yes No N/A
 Yes No N/A5.5 Were all calculations checked at a minimum frequency? Yes No N/A
 Yes No N/A5.6 Are worksheet entries complete and correct? Yes No N/A
 Yes No N/A

6.0 Comments on any No response:

First Level Review Pam AndersonDate 1-30-06



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6003500

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: [Signature] Date: 1-31-06

Lot No., Due Date: J5L130358,J5L130365,J5L140368,J5L150394; 01/30/2006
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 6003502; RBETA-SR Beta by GPC-Sr/Y
 SDG, Matrix: W04831; 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 Pam Anderson

Date 1-30-06



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6003502

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: *M. L. ...* Date: 1-31-08

Lot No., Due Date: J5L130357; 01/30/2006
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 6003498; RSR85907 Sr-85/90 by GPC-7
 SDG, Matrix: W04831; WATER

8.0	Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01	The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02	Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03	Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04	The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06	At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07	The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09	Method Blank is within Control Limits. OK	Yes	No	N/A
8.1	Comments:			
8.11	Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13	QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> HR2JX1AJ SR-90 100.0 HR2JX1AJ SR-90 29.0 (RPD) <i>both < CRDL dup OK</i>	Yes	No	N/A
8.14	LCS within Control Limits. OK	Yes	No	N/A
8.15	MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16	MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17	Tracer within Control Limits. OK	Yes	No	N/A
8.18	Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19	Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK	Yes	No	N/A
8.23	Result <= Action Level, when Defined. OK; No Action Level Found => SR-90 OK; No Callin Level Found => SR-90	Yes	No	N/A
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. 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

Pam Anderson

Date

1-23-04



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 5003498

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: Paul Liu Date: 1-25-06

Lot No., Due Date: J5L130355,J5L130357,J5L130358,J5L130364,J5L130365,J5L140368,J5L140373,J5L150394;
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 6027445; RTC99 Tc-99 by LSC
 SDG, Matrix: W04831; 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 => HR2L41AH 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 (MBIks) 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!			✓

Lot No., Due Date: J5L130355,J5L130357,J5L130358,J5L130364,J5L130365,J5L140368,J5L140373,J5L150394;
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 6027445; RTC99 Tc-99 by LSC
 SDG, Matrix: W04831; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => HR2L41AH TCSG<>TCSE Q:V9	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIks) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. OK	Yes	No	N/A
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	Yes	No	N/A
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. 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 Pam Anderson

Date 6.31.06

Clouseau Nonconformance Memo

SEVERN
TRENT
SERVICES

NCM #: 10-07472 NCM Initiated By: Pam Anderson Date Opened: 01/31/2006 Date Closed:	Classification: Anomaly Status: GLREVIEW Production Area: Environmental - Sep Tests: Tc-99 by LSC Lot #'s (Sample #'s): J5L130355 (1,2), J5L130357 (1), J5L130358 (1,2), J5L130364 (1), J5L130365 (1), J5L140368 (1,2,3,4,5), J5L140373 (1), J5L150394 (1,2,3), J6A270000 (445), QC Batches: 6027445
Nonconformance: Other (describe in detail) Subcategory: Other (explanation required)	

Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Pam Anderson	01/31/2006	The original batch had a high blank. It was reanalyzed with a good blank and other QC. Data accepted.

Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Pam Anderson	01/31/2006	the batch was reanalyzed.

Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
		This section not yet completed by QA.	

Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
----------------------	--------------------	-----------------

Lot No., Due Date: J5L130357,J5L130364,J5L130365,J5L140368,J5L140373,J5L150394; 01/30/2006
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6003494; RTRITIUM H-3 by LSC
SDG, Matrix: W04831; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => HR2JX1AA 5.00<10.00 HR2L01AA 5.00<10.00 HR2L41AA 5.00<10.00 HR4971AD 5.00<10.00 HR5AW1AA 5.00<10.00 HR8D91AA 5.00<10.00 HR8EK1AA 5.00<10.00 HR8EN1AA 5.00<10.00 Q:VB	Yes	No	N/A
8.07 The Correct Count Geometry was Used. Count Geometry => HT3GJ1AF SVP15/5<>SVP10/10 HT3GJ1AG SVP15/5<>SVP10/10 HT3GJ1AA SVP15/5<>SVP10/10 HT3GJ1AC SVP15/5<>SVP10/10 HR2JX1AA SVP15/5<>SVP10/10 HR2JX1AG SVP15/5<>SVP10/10 HR2L01AA SVP15/5<>SVP10/10 HR2L41AA SVP15/5<>SVP10/10 HR4971AD SVP15/5<>SVP10/10 HR5AW1AA SVP15/5<>SVP10/10 HR8D91AA SVP15/5<>SVP10/10 HR8EK1AA SVP15/5<>SVP10/10 HT3GJ1AH SVP15/5<>SVP10/10 HT3GJ1AD SVP15/5<>SVP10/10 HT3GJ1AE SVP15/5<>SVP10/10 HR8EN1AA SVP15/5<>SVP10/10 Q:VC	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. OK	Yes	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A

8.19 Sample Specific MDC <= CRDL. OK	Yes <input checked="" type="checkbox"/>	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A <input checked="" type="checkbox"/>
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes <input checked="" type="checkbox"/>	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3 OK; No Callin Level Found => H-3	Yes <input checked="" type="checkbox"/>	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes <input checked="" type="checkbox"/>	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A <input checked="" type="checkbox"/>
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 <input checked="" type="checkbox"/>
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. OK	Yes <input checked="" type="checkbox"/>	No	N/A

First Level Review

Pam Anderson

Date

1-13-06



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6003494

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: *Muscar* Date: 1-15-06

Lot No., Due Date: J5L130355, J5L130357, J5L130358, J5L130365, J5L140368, J5L140372, J5L140373, J5L150394, J5L
Client, Site: 384868; PGW 615 HANFORD HANFORD
QC Batch No., Method Test: 6003488; RUNAT UNat by KPA
SDG, Matrix: W04831; 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

Pam Anderson

Date

1-30-06



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6003488

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: *[Signature]* Date: 1-31-06



STL

Sample Check-in List

Date/Time Received: 12 15 05 1325

Client: PVA SDG #: W09831 NA SAF #: 506-012 NA

HMC
3-15-06

Work Order Number: J5L150391

Chain of Custody # 506-012 ~~154~~ ^{HMC} 160

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: 17
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - _____ tape _____ hazard labels
 - custody seals appropriate samples labels
9. Samples are:
 - in good condition _____ leaking
 - _____ broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH<2 pH>2 pH>9
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: J.M.A. Date: 12 15 05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector **DURATEX** **MSIN** **FAX**
SAF No. **D. E. PARCHEN** **Telephone No.** **509-376-5056**
S06-010 **Sampling Origin** **Purchase Order/Charge Code**
Project Title **Saws - H90** **Temp.**
LTC/SURY, OCTOBER 2005 **Ice Chest No.** **AFS-04-121**
Shipped To (Lab) **Method of Shipment** **Bill of Lading/Air Bill No.**
Severn Trans Incorporated, Richland **Govt. Truck**
Protocol **SURY** **Offsite Property No.**
Priority: 45 Days

POSSIBLE SAMPLE HAZARDS/REMARKS **SPECIAL INSTRUCTIONS** **Hold Time** **Total Activity Exemption: Yes No**
**** **** **W09831**

Sample No.	Lab ID	*	Date	Time	No/Type Container	No/Type Container	Sample Analysis	Preservative
B1H3L5		W	12-15-05	0930	1x1000-mL P	906.0_H3_LSC: Tritium (1)	HAR8EK	None
B1H3L5		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)		HNO3 to pH <2
B1H3L5		W			1x20-mL P	Activity Scan		None
B1H3L5		W			1x500-mL G/P	UTOT_KPA: Uranium (1)		HNO3 to pH <2
B1H3L5		W			2x4000-mL G/P	1129LL_SEP_LEPS_GS_LL: 1-129 (1)		None
B1H3L5		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)		HCl to pH <2

Relinquished By **DURATEX** **Print** **Signature** **Date/Time** **Received By** **Jeff Jensen** **Print** **Signature** **Date/Time** **Matrix ***

Relinquished By **D. E. PARCHEN** **Print** **Signature** **Date/Time** **Received By** **Jeff Jensen** **Print** **Signature** **Date/Time** **Matrix ***

Relinquished By **Date/Time** **Received By** **Date/Time** **Matrix ***

Relinquished By **Date/Time** **Received By** **Date/Time** **Matrix ***

Relinquished By **Date/Time** **Received By** **Date/Time** **Matrix ***

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

- Matrix ***
- S. = Soil
 - SF. = Sediment
 - SO. = Solid
 - SL. = Sludge
 - O. = Oil
 - A. = Air
 - DS. = Drum Solid
 - DL. = Drum Liquid
 - T. = Tissue
 - WT. = Wine
 - L. = Liquid
 - V. = Vegetation
 - X. = Other

Page 1 of 1

DURATEX
D. F. BREWINGTON

Contact/Requester: **Dot Stewart** MSIN: **FAX**
 Sampling Origin: **Hanford Site**
 Purchase Order/Charge Code: **Temp.**

Project Title: **RCRA, DECEMBER 2005**
 Shipped To (Lab): **Logbook: DTS-SAWS-H103**
 Method of Shipment: **Govt. Vehicle**
 Priority: **45 Days**

POSSIBLE SAMPLE HAZARDS/REMARKS
 ** **
W04831
SPECIAL INSTRUCTIONS Hold Time: **14 days**
 Batch all PNNL GW samples submitted under "W", "S", "T", "A" or "G" 06 SAFs into one SDG, not to exceed SDG closure of 14 days.
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	* W	Date	Time	No/Type Container	Activity Scan	Sample Analysis	Preservative
B1H0Y5		W	12/14/05	0831	1x20-ml P	TC99_ETVDSK_LSC: Tc-99 (1)	HR997	None
B1H0Y5		W			1x500-ml P	UTOT_KPA: Uranium (1)		HCl to pH <2
B1H0Y5		W			1x500-ml GIP	906.0_H3_LSC: Tritium (1)		HNO3 to pH <2
B1H0Y5		W			1x1000-ml P	9310_ALPHABETA_GPC: Alpha + Beta (2)		None
B1H0Y5		W			1x1000-ml P			HNO3 to pH <2

Relinquished By: **DURATEX D. F. BREWINGTON** Date/Time: **DEC 14 2005** 14:30
 Sign: *[Signature]* Print: **Jeff Jensen** Sign: *[Signature]* Date/Time: **DEC 14 2005**

Received By: _____ Date/Time: _____
 Received By: _____ Date/Time: _____
 Received By: _____ Date/Time: _____
 Received By: _____ Date/Time: _____

Matrix *
 S = Soil <100 CPM
 SF = Sediment
 SO = Solid
 SL = Sludge
 W = Water
 O = Oil
 A = Air
 DS = Drumm Solid
 DL = Drumm Liquid
 T = Tissue
 WT = Wine
 LI = Liquid
 V = Vegetation
 X = Other

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



STL

Sample Check-in List

Date/Time Received: 12 13 05 1430

Client: P&L SDG #: W04931 NA SAF #: A06-012 NA
S06-012
W06-012

Work Order Number: JSL130364 Chain of Custody # A06-012-2, S06-012-11

Shipping Container ID: SMWS 209 Air Bill # W06-012-123, 352, 63

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: 20
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 _____ tape _____ hazard labels
 _____ custody seals _____ appropriate samples labels
9. Samples are:
 _____ in good condition _____ leaking
 _____ broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2 pH > 9
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: [Signature] Date: 12 13 05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____

Collector **R.T. SICKLE** Telephone No. **MSIN** FAX
 SAF No. **W06-012** Purchase Order/Charge Code
 Project Title **RCRA DECEMBER 2005** Ice Chest No. **ALUS 207** Temp.
 Shipped To (Lab) **Severn Trent Incorporated, Richland** Bill of Lading/Air Bill No.
 Protocol **RCRA** Offsite Property No.
 Priority: 45 Days

POSSIBLE SAMPLE HAZARDS/REMARKS
 ** **
W04631
JSL130358
Due 01 27 06
SPECIAL INSTRUCTIONS Hold Time **14 days.** Total Activity Exemption: Yes No
 Batch all PNNL GW samples submitted under "W", "S", "T", "A" or "G" 06 SAFs into one SDG, not to exceed SDG closure of
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	*	Date	Time	No/Type Container	Activity Scan	Sample Analysis	Preservative
B1FW37		W	12-13-05	0730	1x20-ml P	9310_ALPHABETA_GPC: Gross Beta (1)	HR2KR	None
B1FW37		W			1x1000-ml P			HNO3 to pH <2
B1FW37		W			1x500-ml P	TC99_ETVDSK_LSC: Tc-99 (1)		HCl to pH <2

Relinquished By **R.T. SICKLE** Print **Jeff Jensen** Sign **[Signature]** Date/Time **DEC 13 2005**
 Relinquished By **[Signature]** Date/Time **DEC 13 2005**
 Relinquished By **[Signature]** Date/Time **DEC 13 2005**
 Relinquished By **[Signature]** Date/Time **DEC 13 2005**

<100 CPM Matrix *

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

Relinquished By **[Signature]** Date/Time **DEC 13 2005**
 Relinquished By **[Signature]** Date/Time **DEC 13 2005**
 Relinquished By **[Signature]** Date/Time **DEC 13 2005**
 Relinquished By **[Signature]** Date/Time **DEC 13 2005**

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) **Disposed By** **[Signature]** Date/Time **DEC 13 2005**

Collector: **DURATEK R.T. SICKLE** Telephone No. **509-376-5056** MSIN **FAX**
 SAF No. **W06-012** Purchase Order/Charge Code
 Project Title **RCRA, DECEMBER 2005** Ice Chest No. **SAWS-498** Temp.
 Shipped To (Lab) **Severn-Treat Incorporated, Richland** Bill of Lading/Air Bill No. **3445-209**
 Protocol **RCRA** Method of Shipment **Govt. Vehicle** Offsite Property No.
 Priority: **45 Days**

POSSIBLE SAMPLE HAZARDS/REMARKS
 ** ** **W04831** **SPECIAL INSTRUCTIONS** **Hold Time** **Total Activity Exemption: Yes No**
 Batch all PNNL GW samples submitted under "W", "S", "T", "A" or "G" 06 SAFs into one SDG, not to exceed SDG closure of 14 days.
 Submit invoices & deliverables to DL Stewart, PNNL

Sample No.	Lab ID	* W	Date	Time	No./Type Container	Activity Scan	Sample Analysis	Preservative
B1H0C9		W	12-13-05	0850	1x20-mL P	Activity Scan	HR2KX	None
B1H0C9		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)		HNO3 to pH <2
B1H0C9		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)		HCl to pH <2
<i>OP</i>								
<i>12-13-05</i>								

Relinquished By: **DURATEK R.T. SICKLE** Date/Time: **DEC 13 2005 1430** Sign: *[Signature]*
 Received By: **Jeff Jensen** Date/Time: **DEC 13 2005 1430** Sign: *[Signature]*
 Relinquished By: _____ Date/Time: _____ Sign: _____
 Received By: _____ Date/Time: _____ Sign: _____
 Relinquished By: _____ Date/Time: _____ Sign: _____
 Received By: _____ Date/Time: _____ Sign: _____

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

<100 CP/M

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



STL

Sample Check-in List

Date/Time Received: 12 13 05 1430
 Client: PLW SDG #: W04831 NA SAF #: W06-012 NA
JSL130358
 Work Order Number: JSL130358 JW 121605 Chain of Custody # A06-012-2, S06-012-11
W06-012-123, 352, 63
 Shipping Container ID: SMWS 209 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: 20
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 pH > 9
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: *JM* Date: 12 13 05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



STL

Sample Check-in List

Date/Time Received: 12 13 05 1930

Client: P&W SDG #: W09131 NA SAF #: A06-012 NA
S06-012

Work Order Number: JSL130365 Chain of Custody # A06-012-2, S06-012-11

Shipping Container ID: SAWS 209 Air Bill # W06-012-123, 352, 63

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: 20
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 _____ tape _____ hazard labels
 _____ custody seals _____ appropriate samples labels
9. Samples are:
 _____ in good condition _____ leaking
 _____ broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2 pH > 9
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: [Signature] Date: 12 13 05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



STL

Sample Check-in List

Date/Time Received: 12 19 05 1430

Client: PAW SDG #: W09831 NA SAF #: Job-011 NA

*Sob-012
W06-012*

Work Order Number: JSL140368

Chain of Custody # Sob-012-88, Job-011-5

Shipping Container ID: #13, SAWS 209, WMI

Air Bill # W06-012-231, 249, 237, 289, 295

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: 23
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 pH > 9
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: [Signature] Date: 12 19 05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary: process as is.

Project Manager _____ Date _____



STL

Sample Check-in List

Date/Time Received: 12/30/05 1425

Client: PAW SDG #: WPAE31 NA SAF #: W06-012 106-011 NA

Work Order Number: USK/30351 Chain of Custody # W06-012-283,267

Shipping Container ID: #13 Air Bill # 706-011-2

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: 15
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - _____ tape _____ hazard labels
 - custody seals appropriate samples labels
9. Samples are:
 - in good condition _____ leaking
 - _____ broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2 pH > 9
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: [Signature] Date: 12/30/05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



STL

Sample Check-in List

Date/Time Received: 12/30/05 1425

Client: Paw SDG #: W04831 NA SAF #: W06-012 706-011 NA

Work Order Number: J5L130357 Chain of Custody # W06-012-283, 267

Shipping Container ID: #13 Air Bill # 706-011-2

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: 15
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - _____ tape _____ hazard labels
 - custody seals appropriate samples labels
9. Samples are:
 - in good condition _____ leaking
 - _____ broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2 pH > 9
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: [Signature] Date: 12/30/05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



STL

Sample Check-in List

Date/Time Received: 12/15/05 11:35

Client: PLW SDG #: 40431 NA SAF #: 506-012 NA

Work Order Number: J5L150392 Chain of Custody # 506-012-184

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	_____ hazard labels
_____ <input checked="" type="checkbox"/> custody seals	_____ <input checked="" type="checkbox"/> appropriate samples labels
9. Samples are:

_____ <input checked="" type="checkbox"/> in good condition	_____ leaking
_____ broken	_____ have air bubbles

 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2 pH > 9
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: [Signature] Date: 12/15/05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



STL

Sample Check-in List

Date/Time Received: 12 14 05 1430

S06-012
W06-012

Client: PAW SDG #: W09631 NA SAF #: I06-011 NA

Work Order Number: JSL190373

Chain of Custody # S06-012-88, I06-011-5

Shipping Container ID: #13, SANS 209, LMM1

Air Bill # W06-012-231, 249, 237, 289, 295

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: 23
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - tape _____ hazard labels
 - Custody seals _____ appropriate samples labels
9. Samples are:
 - in good condition _____ leaking
 - broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2 pH > 9
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: *[Signature]* Date: 12 14 05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____



STL

Sample Check-in List

Date/Time Received: 12 19 05 1430

Client: PAW SDG #: W09831 NA SAF #: 506-012 W06-012 Job-011 NA

Work Order Number: JSL140372 Chain of Custody # 506-012-88, Job-011-5

Shipping Container ID: #13, SAWS 209, LMM1 Air Bill # W06-012-231, 249, 237, 289, 295

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: 23
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - tape _____ hazard labels
 - custody seals _____ appropriate samples labels
9. Samples are:
 - in good condition _____ leaking
 - broken _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2 pH > 9
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: [Signature] Date: 12 19 05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

No action necessary; process as is.

Project Manager _____ Date _____



STL

Sample Check-in List

Date/Time Received: 12 15 05 10 30

Client: PLW SDG #: W09831 NA SAF #: 506-010 NA

Work Order Number: J5L150399 Chain of Custody # 506-010-236, 237, 238, 241, 239, 240

Shipping Container ID: AFS 09 121 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: 27
7. Sample holding times exceeded? NA Yes No
8. Samples have:
 - _____ tape
 - _____ hazard labels
 - custody seals
 - appropriate samples labels
9. Samples are:
 - in good condition
 - _____ leaking
 - _____ broken
 - _____ have air bubbles
 (Only for samples requiring head space)
10. Sample pH taken? NA pH < 2 pH > 2 pH > 9
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: [Signature] Date: 12 15 05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[] No action necessary; process as is.

Project Manager _____ Date _____