1214105

Analytical Data Package Prepared For

Pacific Northwest National Lab

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Radiochemical Analysis By

STL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 32825

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04941	W06-006	B1J9X5	J6F080350-1	H62FF1AA	9H62FF10	6181202
		B1J9X5	J6F080350-1	H62FF1AD	9H62FF10	6164416
		B1J9X5	J6F080350-1	H62FF2AC	9H62FF20	6205508
		B1J9W4	J6F080350-2	H62F21AC	9H62F210	6164416
		B1J9W4	J6F080350-2	H62F22AA	9H62F220	6205508
		B1J9T2	J6F080350-3	H62F61AC	9H62F610	6164416
		B1J9T2	J6F080350-3	H62F62AA	9H62F620	6205508
	G06-006	B1JDT1	J6F090255-1	H64W02AA	9H64W020	6205508
		B1JDT3	J6F090255-2	H64XA2AA	9H64XA20	6205508
		B1JDT7	J6F090255-3	H64XD2AA	9H64XD20	6205508
	W06-006	B1JBP1	J6F090295-1	H65FC1AC	9H65FC10	6164422
		B1JBP1	J6F090295-1	H65FC1AD	9H65FC10	6164416
		B1JBP1	J6F090295-1	H65FC2AA	9H65FC20	6205508
		B1JBP1	J6F090295-1	H65FC2AE	9H65FC20	6205150
		B1JBN0	J6F090295-2	H65F21AC	9H65F210	6164422

Comments:

Report Nbr: 32825

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04941	W06-006	B1JBN0	J6F090295-2	H65F21AD	9H65F210	6164416
		B1JBN0	J6F090295-2	H65F22AA	9H65F220	6205508
		B1JBN0	J6F090295-2	H65F22AE	9H65F220	6205150
		B1JBT3	J6F090295-3	H65F81AC	9H65F810	6164422
		B1JBT3	J6F090295-3	H65F81AD	9H65F810	6164416
		B1JBT3	J6F090295-3	H65F82AA	9H65F820	6205508
		B1JBT3	J6F090295-3	H65F82AE	9H65F820	6205150
		B1JB51	J6F090321-1	H65GW1AC	9H65GW10	6164422
		B1JB51	J6F090321-1	H65GW1AD	9H65GW10	6164416
		B1JB51	J6F090321-1	H65GW2AA	9H65GW20	6205508
		B1JB51	J6F090321-1	H65GW2AE	9H65GW20	6205150
		B1JB62	J6F090321-2	H65G91AC	9H65G910	6164422
		B1JB62	J6F090321-2	H65G91AD	9H65G910	6164416
		B1JB62	J6F090321-2	H65G92AA	9H65G920	6205508
		B1JB62	J6F090321-2	H65G92AE	9H65G920	6205150
		B1JB73	J6F090321-3	H65HG1AC	9H65HG10	6164422
		B1JB73	J6F090321-3	H65HG1AD	9H65HG10	6164416
		B1JB73	J6F090321-3	H65HG2AA	9H65HG20	6205508
		B1JB73	J6F090321-3	H65HG2AE	9H65HG20	6205150
	S06-006	B1J969	J6F090386-1	H654H2AA	9H654H20	6205150
		B1J967	J6F090386-2	H654M1AA	9H654M10	6164451
		B1J967	J6F090386-2	H654M1AC	9H654M10	6164429
		B1J967	J6F090386-2	H654M1AE	9H654M10	6164422
		B1J967	J6F090386-2	H654M1AF	9H654M10	6164427
		B1J967	J6F090386-2	H654M1AG	9H654M10	6164424
		B1J967	J6F090386-2	H654M1AH	9H654M10	6164426

Comments:

Report Nbr: 32825

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04941	S06-006	B1J967	J6F090386-2	H654M1AJ	9H654M10	6164416
		B1J967	J6F090386-2	H654M2AD	9H654M20	6205508
		B1J973	J6F090386-3	H65451AA	9H654510	6164428
		B1J973	J6F090386-3	H65451AC	9H654510	6164451
		B1J973	J6F090386-3	H65451AD	9H654510	6164429
		B1J973	J6F090386-3	H65451AF	9H654510	6164425
		B1J973	J6F090386-3	H65451AG	9H654510	6164422
		B1J973	J6F090386-3	H65451AH	9H654510	6164424
		B1J973	J6F090386-3	H65451AJ	9H654510	6164426
		B1J973	J6F090386-3	H65452AE	9H654520	6205508
		B1J973	J6F090386-3	H65452AK	9H654520	6205150
		B1J974	J6F090386-4	H65471AA	9H654710	6164428
		B1J974	J6F090386-4	H65471AC	9H654710	6164451
		B1J974	J6F090386-4	H65471AD	9H654710	6164429
		B1J974	J6F090386-4	H65471AF	9H654710	6164425
		B1J974	J6F090386-4	H65471AG	9H654710	6164422
		B1J974	J6F090386-4	H65471AH	9H654710	6164424
		B1J974	J6F090386-4	H65471AJ	9H654710	6164426
		B1J974	J6F090386-4	H65472AE	9H654720	6205508
		B1J974	J6F090386-4	H65472AK	9H654720	6205150
	A06-006	B1JCM1	J6F090394-1	H65511AA	9H655110	6164451
		B1JCM1	J6F090394-1	H65511AC	9H655110	6164427
		B1JCM1	J6F090394-1	H65511AD	9H655110	6164416
		B1JCM1	J6F090394-1	H65512AE	9H655120	6205150
	W06-006	B1J9F8	J6F090398-1	H656A1AC	9H656A10	6164419
		B1J9F8	J6F090398-1	H656A2AA	9H656A20	6205508

Comments:

Report Nbr: 32825

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04941	S06-006	B1J983	J6F090401-1	H656N1AA	9H656N10	6164422
		B1J983	J6F090401-1	H656N1AC	9H656N10	6164424
		B1J983	J6F090401-1	H656N1AD	9H656N10	6164426
		B1J983	J6F090401-1	H656N2AE	9H656N20	6205150
	W06-006	B1JBL9	J6F120198-1	H68TA1AA	9H68TA10	6164451
		B1JBL9	J6F120198-1	H68TA1AC	9H68TA10	6164429
		B1JBL9	J6F120198-1	H68TA1AE	9H68TA10	6164422
		B1JBL9	J6F120198-1	H68TA1AF	9H68TA10	6164416
		B1JBL9	J6F120198-1	H68TA2AD	9H68TA20	6205508
		B1JBL9	J6F120198-1	H68TA2AG	9H68TA20	6205150

Comments:

Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

July 27, 2005

Attention: Dot Stewart

SAF Number	:	W06-006, G06-006, S06-006, A06-006,
Date SDG Closed	:	June 12, 2006
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W04941
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between June 7, 2006 and June 12, 2006, twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

PGW ID#	STLR ID#	MATRIX	DATE OF RECEIPT
B1J9X5	H62FF	WATER	6/08/06
B1J9W4	H62F2	WATER	6/08/06
B1J9T2	H62F6	WATER	6/08/06
B1JDT1	H64W0	WATER	6/07/06
B1JDT3	H64XA	WATER	6/07/06
B1JDT7	H64XD	WATER	6/07/06
B1JBP1	H65FC	WATER	6/08/06
B1JBN0	H65F2	WATER	6/08/06
B1JBT3	H65F8	WATER	6/08/06
B 1JB73	H65HG	WATER	6/08/06
B1JB62	H65G9	WATER	6/08/06
B1JB51	H65GW	WATER	6/08/06
B1J973	H6545	WATER	6/09/06
B1J969	H654H	WATER	6/09/06

B1J967	H654M	WATER	6/09/06
B1J974	H6547	WATER	6/09/06
B1JCM1	H6551	WATER	6/09/06
B1J9F8	H656A	WATER	6/09/06
B1J983	H656N	WATER	6/09/06
B1JBL9	H68TA	WATER	6/12/06

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
Plutonium-238, -239/240 by method RICH-RC-5010
Americium 241 by method RICH-RC-5072
Neptunium-237 by method RICH-RC-5009
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
Technetium-99 by method RICH-RC-5078
Tritium by method RICH-RC-5007
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058
Chemical Analysis
Total Coliform by method 9223

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Plutonium-238, -239/240 by method RICH-RC-5010

The LCS, batch blank, samples and sample duplicate (B1J983) results are within contractual requirements.

Americium by method RICH-RC-5072

The LCS, batch blank, samples and sample duplicate (B1J974) results are within contractual requirements.

Neptunium by method RICH-RC-5064

The LCS, batch blank, samples and sample duplicate (B1J974) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

The achieved MDA for sample B1JBL9 is greater than the CRDL due to sample matrix effects; reduced volumes were analyzed based on elevated screen results. The LCS, batch blank, samples and sample duplicate (B1JBL9) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

On the first analysis and its recount the LCS had a low recovery. The batch was reanalyzed with good results. On the reanalysis the achieved MDAs for samples B1J9W4, B1JBT3 and B1JBL9 are greater than the CRDL due to sample matrix effects; reduced volumes were analyzed based on an elevated screen results. The detected activities exceed the achieved MDAs. The LCS, batch blank, samples and sample duplicate (B1JDT1) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1F9D9) results are within contractual requirements.

Gamma Spectroscopy

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

The LCS, batch blank, samples and sample duplicate (B1D6K3) results are within contractual requirements.

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

The LCS, batch blank, samples and sample duplicate (B1JCM1) results are within contractual requirements.

Pacific Northwest National Laboratories
July 27, 2006

Liquid Scintillation Counting

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

The LCS, batch blank, samples, sample duplicate (B1J9X5), and sample matrix spike (B1J9W4) results are within contractual requirements.

Technetium-99 by method RICH-RC-5078:

The LCS, batch blank, samples, sample duplicate (B1J9F8), and sample matrix spike (B1J9F8) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1JCM1) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The initial analysis had a high blank. It was reanalyzed with good results. Except as noted, the LCS, batch blank, samples, sample duplicate (B1JBP1), and sample matrix spike (B1J9W4) results are within contractual requirements.

Chemical Analysis

Total Coliform by method 9223

The LCS, batch blank, samples and sample duplicate (B1J9X5) results are within contractual requirements.

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

Reviewed and approved:

Sherryl A. Adam
Project Manager

Drinking Water Method Cross References

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

Uncertainty Estimation

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

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

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

Report Definitions

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

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 32825 File Name: h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.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:
9H62F210	B1J9W4		MW6-SBB-A1	W06-006	W04941					06/08/2006 11:38

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164416	TC-99	14133-76-7	7.74E+03	pCi/L	4.8E+01	5.3E+02		9.84E+00	100.0	TC99_ETVDSK_LS	1.252E-01	L	07/20/200 10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H62F220	B1J9W4		MW6-SBB-A1	W06-006	W04941					06/08/2006 11:38

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	2.02E+03	pCi/L	2.6E+01	2.6E+02		4.29E+00	100.0	9310_ALPHABETA	1.307E-01	L	07/26/200 11:50	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:
9H62F610	B1J9T2		MW6-SBB-A1	W06-006	W04941					06/08/2006 13:12

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164416	TC-99	14133-76-7	1.09E+01	pCi/L	4.4E+00	6.5E+00		9.82E+00	100.0	TC99_ETVDSK_LS	1.258E-01	L	07/20/200 10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H62F620	B1J9T2		MW6-SBB-A1	W06-006	W04941					06/08/2006 13:12

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	7.71E+00	pCi/L	2.4E+00	2.6E+00		4.05E+00	100.0	9310_ALPHABETA	1.413E-01	L	07/26/200 11:50	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:
9H62FF10	B1J9X5		MW6-SBB-A1	W06-006	W04941					06/08/2006 10:23

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164416	TC-99	14133-76-7	4.88E+02	pCi/L	1.3E+01	3.9E+01		9.88E+00	100.0	TC99_ETVDSK_LS	1.248E-01	L	07/20/200 10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H62FF20	B1J9X5		MW6-SBB-A1	W06-006	W04941					06/08/2006 10:23

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	1.39E+02	pCi/L	6.6E+00	1.9E+01		3.74E+00	100.0	9310_ALPHABETA	1.511E-01	L	07/26/200 11:50	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:
9H64W020	B1JDT1		MW6-SBB-A1	G06-006	W04941					06/06/2006 09:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	2.81E+02	pCi/L	7.9E+00	4.6E+01		2.88E+00	100.0	9310_ALPHABETA	1.851E-01	L	07/26/200 11:50	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: 32825 File Name: h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.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:
9H64XA20	B1JDT3		MW6-SBB-A1	G06-006	W04941					06/06/2006 09:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	2.68E+02	pCi/L	7.6E+00	3.5E+01		2.81E+00	100.0	9310_ALPHABETA	1.998E-01	L	07/26/200 11:50	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:
9H64XD20	B1JDT7		MW6-SBB-A1	G06-006	W04941					06/06/2006 10:06

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	4.27E+03	pCi/L	3.1E+01	5.4E+02		3.01E+00	100.0	9310_ALPHABETA	2.003E-01	L	07/26/200 11:50	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:
9H654510	B1J973		MW6-SBB-A1	S06-006	W04941				05/12/2006 10:30	06/09/2006 09:53

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164451	H-3	10028-17-8	9.85E+03	pCi/L	3.5E+02	5.7E+02		3.21E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/13/200 05:02	I
6164429	ALPHA	12587-46-1	1.13E+01	pCi/L	3.0E+00	3.7E+00		2.14E+00	100.0	9310_ALPHABETA	8.30E-02	L	07/21/200 15:47	I
6164425	AM-241	14596-10-2	4.95E-01	pCi/L	3.5E-01	3.6E-01		1.68E-01	66.4	AMCMISO_EIE_PL	1.99E-01	L	07/15/200 17:15	I
6164422	BE-7	13966-02-4	-1.67E+00	pCi/L	3.4E+01	3.4E+01	U	6.06E+01		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164422	CO-60	10198-40-0	6.42E-01	pCi/L	2.8E+00	2.8E+00	U	5.61E+00		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164422	CS-134	13967-70-9	-9.59E-01	pCi/L	2.8E+00	2.8E+00	U	4.88E+00		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164422	CS-137	10045-97-3	8.41E+01	pCi/L	1.3E+01	1.3E+01		4.76E+00		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164422	EU-152	14683-23-9	1.44E+00	pCi/L	6.6E+00	6.6E+00	U	1.19E+01		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164422	EU-154	15585-10-1	3.28E-01	pCi/L	7.8E+00	7.8E+00	U	1.49E+01		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164422	EU-155	14391-16-3	3.26E+00	pCi/L	4.1E+00	4.1E+00	U	7.82E+00		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164422	K-40	13966-00-2	-2.93E+01	pCi/L	5.1E+01	5.1E+01	U	1.12E+02		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164422	RU-106	13967-48-1	-1.66E+00	pCi/L	1.9E+01	1.9E+01	U	3.48E+01		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164422	SB-125	14234-35-6	2.79E+00	pCi/L	7.4E+00	7.4E+00	U	1.36E+01		GAMMALL_GS	1.9997E+00	L	07/21/200 09:56	I
6164428	NP-237	13994-20-2	2.80E-02	pCi/L	9.7E-02	9.7E-02	U	2.64E-01	87.6	NP237_LLE_PLAT	2.00E-01	L	07/24/200 22:56	I
6164424	PU-238	13981-16-3	0.00E+00	pCi/L	9.4E-02	9.4E-02	U	1.04E-01	89.7	PUISO_PLATE_AE	2.012E-01	L	07/12/200 22:03	I
6164424	PU-239	PU-239/240	2.93E+00	pCi/L	6.7E-01	7.8E-01		2.42E-01	89.7	PUISO_PLATE_AE	2.012E-01	L	07/12/200 22:03	I
6164426	SR-90	10098-97-2	7.07E+01	pCi/L	1.5E+00	1.0E+01		4.97E-01	88.2	SRISO_SEP_PRE	1.0042E+00	L	07/24/200 06:12	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:
9H654520	B1J973		MW6-SBB-A1	S06-006	W04941					06/09/2006 09:53

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: 32825 File Name: h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	2.34E+02	pCi/L	8.1E+00	3.0E+01		3.61E+00	100.0	9310_ALPHABETA	1.66E-01	L	07/26/200 13:36	I
6205150	Uranium	7440-61-1	2.02E+01	ug/L	2.4E+00	2.4E+00		8.28E-02		UTOT_KPA	2.53E-02	ML	07/24/200 14:52	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:
9H654710	B1J974		MW6-SBB-A1	S06-006	W04941				05/12/2006 10:30	06/09/2006 08:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164451	H-3	10028-17-8	6.86E+01	pCi/L	1.3E+02	1.5E+02	U	3.20E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/13/200 06:25	I
6164429	ALPHA	12587-46-1	1.56E-01	pCi/L	5.3E-01	5.3E-01	U	1.29E+00	100.0	9310_ALPHABETA	1.041E-01	L	07/21/200 15:47	I
6164425	AM-241	14596-10-2	-1.81E-02	pCi/L	3.6E-02	3.6E-02	U	4.35E-01	43.9	AMCMISO_EIE_PL	1.997E-01	L	07/15/200 17:15	I
6164422	BE-7	13966-02-4	-9.86E+00	pCi/L	2.8E+01	2.8E+01	U	4.80E+01		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164422	CO-60	10198-40-0	-1.38E+00	pCi/L	2.3E+00	2.3E+00	U	3.85E+00		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164422	CS-134	13967-70-9	1.93E+00	pCi/L	2.7E+00	2.7E+00	U	5.58E+00		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164422	CS-137	10045-97-3	1.42E+00	pCi/L	2.1E+00	2.1E+00	U	4.38E+00		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164422	EU-152	14683-23-9	1.97E+00	pCi/L	5.8E+00	5.8E+00	U	1.09E+01		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164422	EU-154	15585-10-1	1.53E+00	pCi/L	6.1E+00	6.1E+00	U	1.28E+01		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164422	EU-155	14391-16-3	-9.71E-01	pCi/L	4.9E+00	4.9E+00	U	8.53E+00		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164422	K-40	13966-00-2	4.87E+01	pCi/L	4.9E+01	4.9E+01	U	4.72E+01		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164422	RU-106	13967-48-1	4.85E+00	pCi/L	2.0E+01	2.0E+01	U	3.81E+01		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164422	SB-125	14234-35-6	5.66E+00	pCi/L	5.7E+00	5.7E+00	U	1.15E+01		GAMMALL_GS	2.0036E+00	L	07/21/200 09:57	I
6164428	NP-237	13994-20-2	5.03E-02	pCi/L	1.0E-01	1.0E-01	U	1.36E-01	78.9	NP237_LLE_PLAT	2.002E-01	L	07/24/200 22:56	I
6164424	PU-238	13981-16-3	0.00E+00	pCi/L	9.2E-02	9.2E-02	U	1.02E-01	95.8	PUISO_PLATE_AE	1.995E-01	L	07/12/200 22:03	I
6164424	PU-239	PU-239/240	1.50E-02	pCi/L	7.9E-02	7.9E-02	U	2.37E-01	95.8	PUISO_PLATE_AE	1.995E-01	L	07/12/200 22:03	I
6164426	SR-90	10098-97-2	2.14E-01	pCi/L	2.7E-01	3.1E-01	U	6.33E-01	78.6	SRISO_SEP_PRE	1.0001E+00	L	07/24/200 06:12	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:
9H654720	B1J974		MW6-SBB-A1	S06-006	W04941					06/09/2006 08:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	1.34E+00	pCi/L	1.9E+00	1.9E+00	U	3.91E+00	100.0	9310_ALPHABETA	1.31E-01	L	07/26/200 13:36	I
6205150	Uranium	7440-61-1	1.13E-02	ug/L	1.7E-03	1.7E-03	U	8.19E-02		UTOT_KPA	2.56E-02	ML	07/24/200 14:54	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H654H20	B1J969		MW6-SBB-A1	S06-006	W04941					06/09/2006 12:18

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: 32825 File Name: h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205150	Uranium	7440-61-1	1.33E+01	ug/L	1.6E+00	1.6E+00		8.06E-02		UTOT_KPA	2.60E-02	ML	07/24/200 14:51	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H654M10	B1J967		MW6-SBB-A1	S06-006	W04941				05/12/2006 10:30	06/09/2006 11:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164451	H-3	10028-17-8	1.06E+04	pCi/L	3.6E+02	6.0E+02		3.20E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/13/200 03:40	I
6164429	ALPHA	12587-46-1	4.76E+00	pCi/L	2.1E+00	2.3E+00		2.40E+00	100.0	9310_ALPHABETA	7.72E-02	L	07/21/200 15:47	I
6164422	BE-7	13966-02-4	-3.80E+00	pCi/L	2.5E+01	2.5E+01	U	4.57E+01		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164422	CO-60	10198-40-0	9.21E-01	pCi/L	1.8E+00	1.8E+00	U	4.19E+00		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164422	CS-134	13967-70-9	-7.66E-01	pCi/L	2.4E+00	2.4E+00	U	4.23E+00		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164422	CS-137	10045-97-3	1.42E-01	pCi/L	2.4E+00	2.4E+00	U	4.46E+00		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164422	EU-152	14683-23-9	2.88E+00	pCi/L	5.4E+00	5.4E+00	U	1.04E+01		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164422	EU-154	15585-10-1	-3.86E+00	pCi/L	6.4E+00	6.4E+00	U	1.11E+01		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164422	EU-155	14391-16-3	2.31E-01	pCi/L	4.1E+00	4.1E+00	U	7.23E+00		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164422	K-40	13966-00-2	5.73E+00	pCi/L	4.6E+01	4.6E+01	U	1.01E+02		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164422	RU-106	13967-48-1	-9.05E-01	pCi/L	2.2E+01	2.2E+01	U	4.13E+01		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164422	SB-125	14234-35-6	3.81E+00	pCi/L	4.8E+00	4.8E+00	U	9.81E+00		GAMMALL_GS	2.0017E+00	L	07/21/200 09:56	I
6164427	I-129L	15046-84-1	2.45E+00	pCi/L	5.2E-01	5.2E-01	U	7.71E-01	94.6	I129LL_SEP_LEPS	3.9203E+00	L	07/14/200 13:43	I
6164424	PU-238	13981-16-3	0.00E+00	pCi/L	8.7E-02	8.7E-02	U	9.67E-02	98.9	PUISO_PLATE_AE	1.993E-01	L	07/12/200 22:02	I
6164424	PU-239	PU-239/240	7.12E-03	pCi/L	7.7E-02	7.7E-02	U	2.45E-01	98.9	PUISO_PLATE_AE	1.993E-01	L	07/12/200 22:02	I
6164426	SR-90	10098-97-2	1.83E+02	pCi/L	2.5E+00	2.6E+01		5.27E-01	86.3	SRISO_SEP_PRE	1.0016E+00	L	07/24/200 06:12	I
6164416	TC-99	14133-76-7	4.34E+01	pCi/L	5.3E+00	8.6E+00		9.71E+00	100.0	TC99_ETVDSK_LS	1.267E-01	L	07/20/200 10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H654M20	B1J967		MW6-SBB-A1	S06-006	W04941				05/12/2006 10:30	06/09/2006 11:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	3.72E+02	pCi/L	1.1E+01	4.7E+01		3.87E+00	100.0	9310_ALPHABETA	1.506E-01	L	07/26/200 13:36	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H655110	B1JCM1		MW6-SBB-A1	A06-006	W04941				05/12/2006 10:30	06/09/2006 11:43

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164451	H-3	10028-17-8	1.44E+04	pCi/L	4.1E+02	7.5E+02		3.16E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/13/200 07:48	I
6164427	I-129L	15046-84-1	3.73E+00	pCi/L	6.2E-01	6.2E-01		3.59E-01	97.8	I129LL_SEP_LEPS	3.8383E+00	L	07/14/200 13:45	I

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

6164416	TC-99	14133-76-7	2.41E+03	pCi/L	2.7E+01	1.7E+02		9.86E+00	100.0	TC99_ETVDSK_LS	1.247E-01	L	07/20/200	10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H655120	B1JCM1		MW6-SBB-A1	A06-006	W04941					06/09/2006 11:43

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205150	Uranium	7440-61-1	2.51E+01	ug/L	3.0E+00	3.0E+00		8.03E-02		UTOT_KPA	2.61E-02	ML	07/24/200 14:59	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H656A10	B1J9F8		MW6-SBB-A1	W06-006	W04941				05/12/2006 10:30	06/09/2006 10:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164419	TC-99	14133-76-7	3.12E+01	pCi/L	5.0E+00	7.5E+00		9.81E+00	100.0	TC99_SEP_LSC	1.254E-01	L	07/11/200 14:20	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:
9H656A20	B1J9F8		MW6-SBB-A1	W06-006	W04941				05/12/2006 10:30	06/09/2006 10:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	3.29E+01	pCi/L	3.7E+00	5.6E+00		4.06E+00	100.0	9310_ALPHABETA	1.418E-01	L	07/26/200 13:36	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H656N10	B1J983		MW6-SBB-A1	S06-006	W04941				05/12/2006 10:30	06/09/2006 10:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164422	BE-7	13966-02-4	2.17E+01	pCi/L	2.4E+01	2.4E+01	U	4.88E+01		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164422	CO-60	10198-40-0	8.93E-01	pCi/L	2.5E+00	2.5E+00	U	5.17E+00		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164422	CS-134	13967-70-9	5.18E-01	pCi/L	1.9E+00	1.9E+00	U	3.91E+00		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164422	CS-137	10045-97-3	-7.06E-01	pCi/L	1.7E+00	1.7E+00	U	2.97E+00		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164422	EU-152	14683-23-9	-5.54E+00	pCi/L	5.5E+00	5.5E+00	U	8.62E+00		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164422	EU-154	15585-10-1	-1.66E+00	pCi/L	6.0E+00	6.0E+00	U	1.14E+01		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164422	EU-155	14391-16-3	-2.63E+00	pCi/L	3.4E+00	3.4E+00	U	5.52E+00		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164422	K-40	13966-00-2	-1.48E+01	pCi/L	2.9E+01	2.9E+01	U	6.18E+01		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164422	RU-106	13967-48-1	-1.04E-01	pCi/L	1.7E+01	1.7E+01	U	3.12E+01		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164422	SB-125	14234-35-6	2.13E+00	pCi/L	4.2E+00	4.2E+00	U	8.36E+00		GAMMALL_GS	2.0002E+00	L	07/21/200 09:57	I
6164424	PU-238	13981-16-3	3.56E-02	pCi/L	7.1E-02	7.1E-02	U	9.64E-02	95.5	PUISO_PLATE_AE	1.989E-01	L	07/12/200 22:04	I
6164424	PU-239	PU-239/240	0.00E+00	pCi/L	8.7E-02	8.7E-02	U	9.63E-02	95.5	PUISO_PLATE_AE	1.989E-01	L	07/12/200 22:04	I
6164426	SR-90	10098-97-2	1.84E-01	pCi/L	2.1E-01	2.2E-01	U	4.56E-01	91.8	SRISO_SEP_PRE	1.0004E+00	L	07/24/200 06:12	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: 32825 File Name: h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.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:
9H656N20	B1J983		MW6-SBB-A1	S06-006	W04941					06/09/2006 10:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205150	Uranium	7440-61-1	3.70E+01	ug/L	4.4E+00	4.4E+00		8.15E-02		UTOT_KPA	2.57E-02	ML	07/24/200 15:01	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:
9H65F210	B1JBN0		MW6-SBB-A1	W06-006	W04941					06/08/2006 09:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164422	BE-7	13966-02-4	1.10E+01	pCi/L	2.9E+01	2.9E+01	U	5.55E+01		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164422	CO-60	10198-40-0	8.84E-01	pCi/L	1.6E+00	1.6E+00	U	3.95E+00		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164422	CS-134	13967-70-9	2.93E-01	pCi/L	2.2E+00	2.2E+00	U	4.43E+00		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164422	CS-137	10045-97-3	-8.49E-01	pCi/L	2.1E+00	2.1E+00	U	3.63E+00		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164422	EU-152	14683-23-9	-5.14E+00	pCi/L	6.1E+00	6.1E+00	U	9.96E+00		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164422	EU-154	15585-10-1	7.96E+00	pCi/L	9.0E+00	9.0E+00	U	1.91E+01		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164422	EU-155	14391-16-3	-2.66E+00	pCi/L	4.7E+00	4.7E+00	U	7.90E+00		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164422	K-40	13966-00-2	3.29E-01	pCi/L	4.2E+01	4.2E+01	U	9.34E+01		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164422	RU-106	13967-48-1	-1.17E+01	pCi/L	2.0E+01	2.0E+01	U	3.46E+01		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164422	SB-125	14234-35-6	2.02E+00	pCi/L	5.9E+00	5.9E+00	U	1.11E+01		GAMMALL_GS	1.9998E+00	L	07/21/200 08:10	I
6164416	TC-99	14133-76-7	7.07E+01	pCi/L	6.1E+00	1.0E+01		9.83E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	07/20/200 10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H65F220	B1JBN0		MW6-SBB-A1	W06-006	W04941					06/08/2006 09:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	2.80E+01	pCi/L	3.0E+00	5.7E+00		3.29E+00	100.0	9310_ALPHABETA	1.657E-01	L	07/26/200 11:50	I
6205150	Uranium	7440-61-1	2.90E+00	ug/L	3.0E-01	3.0E-01		8.35E-02		UTOT_KPA	2.51E-02	ML	07/24/200 14:37	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:
9H65F810	B1JBT3		MW6-SBB-A1	W06-006	W04941					06/08/2006 10:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164422	BE-7	13966-02-4	6.40E+00	pCi/L	2.2E+01	2.2E+01	U	4.28E+01		GAMMALL_GS	2.0023E+00	L	07/21/200 08:11	I
6164422	CO-60	10198-40-0	6.10E-01	pCi/L	2.3E+00	2.3E+00	U	4.78E+00		GAMMALL_GS	2.0023E+00	L	07/21/200 08:11	I
6164422	CS-134	13967-70-9	-1.49E+00	pCi/L	2.1E+00	2.1E+00	U	3.46E+00		GAMMALL_GS	2.0023E+00	L	07/21/200 08:11	I
6164422	CS-137	10045-97-3	-3.31E-01	pCi/L	1.8E+00	1.8E+00	U	3.34E+00		GAMMALL_GS	2.0023E+00	L	07/21/200 08:11	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.

6164422	EU-152	14683-23-9	-1.63E+00	pCi/L	4.5E+00	4.5E+00	U	7.88E+00		GAMMALL_GS	2.0023E+00	L	07/21/200	08:11	I
6164422	EU-154	15585-10-1	-1.97E+00	pCi/L	5.6E+00	5.6E+00	U	1.04E+01		GAMMALL_GS	2.0023E+00	L	07/21/200	08:11	I
6164422	EU-155	14391-16-3	2.06E+00	pCi/L	3.7E+00	3.7E+00	U	6.82E+00		GAMMALL_GS	2.0023E+00	L	07/21/200	08:11	I
6164422	K-40	13966-00-2	-1.04E+00	pCi/L	2.7E+01	2.7E+01	U	6.32E+01		GAMMALL_GS	2.0023E+00	L	07/21/200	08:11	I
6164422	RU-106	13967-48-1	1.40E+00	pCi/L	1.7E+01	1.7E+01	U	3.30E+01		GAMMALL_GS	2.0023E+00	L	07/21/200	08:11	I
6164422	SB-125	14234-35-6	-1.07E+00	pCi/L	4.4E+00	4.4E+00	U	7.82E+00		GAMMALL_GS	2.0023E+00	L	07/21/200	08:11	I
6164416	TC-99	14133-76-7	2.04E+02	pCi/L	8.8E+00	2.0E+01		9.88E+00	100.0	TC99_ETVDSK_LS	1.245E-01	L	07/20/200	10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H65F820	B1JBT3		MW6-SBB-A1	W06-006	W04941					06/08/2006 10:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6205508	BETA	12587-47-2	5.52E+01	pCi/L	5.4E+00	9.1E+00		5.84E+00	100.0	9310_ALPHABETA	1.066E-01	L	07/26/200	11:50	I
6205150	Uranium	7440-61-1	2.97E+00	ug/L	3.0E-01	3.0E-01		8.22E-02		UTOT_KPA	2.55E-02	ML	07/24/200	14:42	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H65FC10	B1JBP1		MW6-SBB-A1	W06-006	W04941					06/08/2006 08:59

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6164422	BE-7	13966-02-4	-1.26E+01	pCi/L	2.6E+01	2.6E+01	U	4.44E+01		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164422	CO-60	10198-40-0	-2.50E-01	pCi/L	2.6E+00	2.6E+00	U	5.03E+00		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164422	CS-134	13967-70-9	1.32E+00	pCi/L	2.6E+00	2.6E+00	U	5.17E+00		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164422	CS-137	10045-97-3	-1.70E+00	pCi/L	2.5E+00	2.5E+00	U	4.21E+00		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164422	EU-152	14683-23-9	7.97E-01	pCi/L	5.1E+00	5.1E+00	U	9.32E+00		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164422	EU-154	15585-10-1	-4.78E+00	pCi/L	7.5E+00	7.5E+00	U	1.25E+01		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164422	EU-155	14391-16-3	-4.15E+00	pCi/L	3.9E+00	3.9E+00	U	6.21E+00		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164422	K-40	13966-00-2	-2.65E+01	pCi/L	5.1E+01	5.1E+01	U	1.12E+02		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164422	RU-106	13967-48-1	7.83E+00	pCi/L	2.0E+01	2.0E+01	U	3.97E+01		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164422	SB-125	14234-35-6	1.46E+00	pCi/L	5.8E+00	5.8E+00	U	1.07E+01		GAMMALL_GS	1.9994E+00	L	07/21/200	08:10	I
6164416	TC-99	14133-76-7	2.49E+03	pCi/L	2.7E+01	1.7E+02		9.76E+00	100.0	TC99_ETVDSK_LS	1.261E-01	L	07/20/200	10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H65FC20	B1JBP1		MW6-SBB-A1	W06-006	W04941					06/08/2006 08:59

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6205508	BETA	12587-47-2	6.41E+02	pCi/L	1.2E+01	8.2E+01		2.91E+00	100.0	9310_ALPHABETA	1.994E-01	L	07/26/200	11:50	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.

6205150	Uranium	7440-61-1	2.16E+00	ug/L	2.2E-01	2.2E-01		8.12E-02		UTOT_KPA	2.58E-02	ML	07/24/200 14:33 I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H65G910	B1JB62		MW6-SBB-A1	W06-006	W04941					06/08/2006 11:32

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164422	BE-7	13966-02-4	1.21E+01	pCi/L	2.7E+01	2.7E+01	U	4.94E+01		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164422	CO-60	10198-40-0	9.29E-01	pCi/L	2.8E+00	2.8E+00	U	5.38E+00		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164422	CS-134	13967-70-9	1.84E+00	pCi/L	2.9E+00	2.9E+00	U	5.43E+00		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164422	CS-137	10045-97-3	1.47E+00	pCi/L	2.3E+00	2.3E+00	U	4.28E+00		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164422	EU-152	14683-23-9	-1.52E+00	pCi/L	5.9E+00	5.9E+00	U	1.00E+01		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164422	EU-154	15585-10-1	2.69E+00	pCi/L	6.9E+00	6.9E+00	U	1.36E+01		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164422	EU-155	14391-16-3	-2.52E+00	pCi/L	6.2E+00	6.2E+00	U	1.04E+01		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164422	K-40	13966-00-2	5.86E+01	pCi/L	6.8E+01	6.8E+01	U	2.81E+01		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164422	RU-106	13967-48-1	-6.79E-01	pCi/L	2.0E+01	2.0E+01	U	3.53E+01		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164422	SB-125	14234-35-6	-2.99E+00	pCi/L	5.9E+00	5.9E+00	U	9.89E+00		GAMMALL_GS	2.0021E+00	L	07/21/200 08:12	I
6164416	TC-99	14133-76-7	3.43E+03	pCi/L	3.2E+01	2.4E+02		9.91E+00	100.0	TC99_ETVDSK_LS	1.244E-01	L	07/20/200 10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H65G920	B1JB62		MW6-SBB-A1	W06-006	W04941					06/08/2006 11:32

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	8.27E+02	pCi/L	1.5E+01	1.1E+02		3.42E+00	100.0	9310_ALPHABETA	1.711E-01	L	07/26/200 13:36	I
6205150	Uranium	7440-61-1	2.08E+00	ug/L	2.1E-01	2.1E-01		8.38E-02		UTOT_KPA	2.50E-02	ML	07/24/200 14:45	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:
9H65GW10	B1JB51		MW6-SBB-A1	W06-006	W04941					06/08/2006 09:41

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164422	BE-7	13966-02-4	-3.94E+00	pCi/L	2.1E+01	2.1E+01	U	3.77E+01		GAMMALL_GS	2.0003E+00	L	07/21/200 08:11	I
6164422	CO-60	10198-40-0	-6.75E-02	pCi/L	2.1E+00	2.1E+00	U	3.99E+00		GAMMALL_GS	2.0003E+00	L	07/21/200 08:11	I
6164422	CS-134	13967-70-9	-1.64E+00	pCi/L	1.8E+00	1.8E+00	U	2.74E+00		GAMMALL_GS	2.0003E+00	L	07/21/200 08:11	I
6164422	CS-137	10045-97-3	2.36E-01	pCi/L	1.5E+00	1.5E+00	U	2.82E+00		GAMMALL_GS	2.0003E+00	L	07/21/200 08:11	I
6164422	EU-152	14683-23-9	2.35E-02	pCi/L	4.3E+00	4.3E+00	U	7.70E+00		GAMMALL_GS	2.0003E+00	L	07/21/200 08:11	I
6164422	EU-154	15585-10-1	-5.99E-01	pCi/L	4.8E+00	4.8E+00	U	9.05E+00		GAMMALL_GS	2.0003E+00	L	07/21/200 08:11	I
6164422	EU-155	14391-16-3	-7.17E-02	pCi/L	4.0E+00	4.0E+00	U	7.18E+00		GAMMALL_GS	2.0003E+00	L	07/21/200 08:11	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.

6164422	K-40	13966-00-2	1.42E+01	pCi/L	2.6E+01	2.6E+01	U	5.78E+01		GAMMALL_GS	2.0003E+00	L	07/21/200	08:11	I
6164422	RU-106	13967-48-1	3.38E+00	pCi/L	1.5E+01	1.5E+01	U	2.85E+01		GAMMALL_GS	2.0003E+00	L	07/21/200	08:11	I
6164422	SB-125	14234-35-6	8.74E-01	pCi/L	4.6E+00	4.6E+00	U	8.33E+00		GAMMALL_GS	2.0003E+00	L	07/21/200	08:11	I
6164416	TC-99	14133-76-7	3.22E+01	pCi/L	5.1E+00	7.9E+00		9.89E+00	100.0	TC99_ETVDSK_LS	1.247E-01	L	07/20/200	10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H65GW20	B1JB51		MW6-SBB-A1	W06-006	W04941					06/08/2006 09:41

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	1.94E+01	pCi/L	2.8E+00	3.9E+00		3.78E+00	100.0	9310_ALPHABETA	1.719E-01	L	07/26/200 13:36	I
6205150	Uranium	7440-61-1	2.96E+00	ug/L	3.0E-01	3.0E-01		8.12E-02		UTOT_KPA	2.58E-02	ML	07/24/200 14:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H65HG10	B1JB73		MW6-SBB-A1	W06-006	W04941					06/08/2006 10:35

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164422	BE-7	13966-02-4	1.28E+01	pCi/L	2.7E+01	2.7E+01	U	5.24E+01		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164422	CO-60	10198-40-0	2.89E+00	pCi/L	2.8E+00	2.8E+00	U	6.23E+00		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164422	CS-134	13967-70-9	-2.19E-01	pCi/L	2.6E+00	2.6E+00	U	4.84E+00		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164422	CS-137	10045-97-3	-6.99E-01	pCi/L	2.4E+00	2.4E+00	U	4.33E+00		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164422	EU-152	14683-23-9	-1.35E+00	pCi/L	5.5E+00	5.5E+00	U	9.63E+00		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164422	EU-154	15585-10-1	-1.52E+00	pCi/L	5.4E+00	5.4E+00	U	1.03E+01		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164422	EU-155	14391-16-3	7.95E-01	pCi/L	4.2E+00	4.2E+00	U	7.77E+00		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164422	K-40	13966-00-2	-4.78E+01	pCi/L	5.4E+01	5.4E+01	U	1.18E+02		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164422	RU-106	13967-48-1	4.44E+00	pCi/L	1.8E+01	1.8E+01	U	3.56E+01		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164422	SB-125	14234-35-6	2.02E-01	pCi/L	5.3E+00	5.3E+00	U	9.57E+00		GAMMALL_GS	1.9993E+00	L	07/21/200 09:56	I
6164416	TC-99	14133-76-7	4.39E+03	pCi/L	3.6E+01	3.0E+02		9.94E+00	100.0	TC99_ETVDSK_LS	1.239E-01	L	07/20/200 10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H65HG20	B1JB73		MW6-SBB-A1	W06-006	W04941					06/08/2006 10:35

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	1.11E+03	pCi/L	1.8E+01	1.4E+02		3.73E+00	100.0	9310_ALPHABETA	1.601E-01	L	07/26/200 13:36	I
6205150	Uranium	7440-61-1	2.55E+00	ug/L	2.6E-01	2.6E-01		8.28E-02		UTOT_KPA	2.53E-02	ML	07/24/200 14:47	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:

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

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 32825 File Name: h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.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:
9H68TA10	B1JBL9		MW6-SBB-A1	W06-006	W04941					06/12/2006 10:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6164451	H-3	10028-17-8	7.07E+03	pCi/L	3.1E+02	4.5E+02		3.20E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/13/200 10:33	I
6164429	ALPHA	12587-46-1	3.69E+02	pCi/L	2.0E+01	7.6E+01		3.59E+00	100.0	9310_ALPHABETA	5.15E-02	L	07/21/200 15:47	I
6164422	BE-7	13966-02-4	2.85E+01	pCi/L	2.1E+01	2.1E+01	U	4.31E+01		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164422	CO-60	10198-40-0	1.49E+01	pCi/L	4.4E+00	4.4E+00		3.52E+00		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164422	CS-134	13967-70-9	-9.00E-01	pCi/L	2.0E+00	2.0E+00	U	3.35E+00		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164422	CS-137	10045-97-3	1.41E-02	pCi/L	1.7E+00	1.7E+00	U	3.14E+00		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164422	EU-152	14683-23-9	-7.42E-01	pCi/L	4.4E+00	4.4E+00	U	7.77E+00		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164422	EU-154	15585-10-1	-8.81E-01	pCi/L	4.7E+00	4.7E+00	U	8.82E+00		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164422	EU-155	14391-16-3	-3.13E+00	pCi/L	4.7E+00	4.7E+00	U	7.84E+00		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164422	K-40	13966-00-2	-6.90E+00	pCi/L	2.4E+01	2.4E+01	U	5.06E+01		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164422	RU-106	13967-48-1	1.49E+01	pCi/L	1.7E+01	1.7E+01	U	3.32E+01		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164422	SB-125	14234-35-6	1.82E+00	pCi/L	4.0E+00	4.0E+00	U	7.61E+00		GAMMALL_GS	2.0019E+00	L	07/21/200 09:57	I
6164416	TC-99	14133-76-7	6.88E+03	pCi/L	4.5E+01	4.7E+02		9.80E+00	100.0	TC99_ETVDSK_LS	1.255E-01	L	07/20/200 10:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H68TA20	B1JBL9		MW6-SBB-A1	W06-006	W04941					06/12/2006 10:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6205508	BETA	12587-47-2	1.71E+03	pCi/L	2.9E+01	2.2E+02		6.66E+00	100.0	9310_ALPHABETA	8.88E-02	L	07/26/200 13:36	I
6205150	Uranium	7440-61-1	8.04E+02	ug/L	9.5E+01	9.5E+01		8.22E-02		UTOT_KPA	2.55E-02	ML	07/24/200 15:06	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.

Thursday, July 27, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AH41AB	**Sdg/Rept Nbr:**	W04941 32825	**Collection Date:**	06/08/2006 10:23
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	06/08/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164416	TC-99	-2.26E+00	pCi/L	5.7E+00	U	9.95E+00	100.0		TC99_ETVDSK	1.24E-01	07/20/2006				D
BLK	14133-76-7			4.0E+00						L	10:32				

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\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H7AJ01AB **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/08/2006 09:41
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 06/08/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164422	BE-7	2.53E+00	pCi/L	1.8E+01	U	3.38E+01			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	13966-02-4			1.8E+01						L	09:57				
6164422	CO-60	6.44E-01	pCi/L	1.6E+00	U	3.43E+00			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	10198-40-0			1.6E+00						L	09:57				
6164422	CS-134	5.54E-01	pCi/L	1.7E+00	U	3.31E+00			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	13967-70-9			1.7E+00						L	09:57				
6164422	CS-137	-8.23E-02	pCi/L	1.4E+00	U	2.55E+00			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	10045-97-3			1.4E+00						L	09:57				
6164422	EU-152	-5.51E-01	pCi/L	3.2E+00	U	5.77E+00			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	14683-23-9			3.2E+00						L	09:57				
6164422	EU-154	-5.17E-01	pCi/L	4.8E+00	U	8.96E+00			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	15585-10-1			4.8E+00						L	09:57				
6164422	EU-155	-5.91E-01	pCi/L	2.8E+00	U	5.09E+00			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	14391-16-3			2.8E+00						L	09:57				
6164422	K-40	-1.70E+00	pCi/L	3.3E+01	U	7.16E+01			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	13966-00-2			3.3E+01						L	09:57				
6164422	RU-106	-7.65E-01	pCi/L	1.5E+01	U	2.67E+01			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	13967-48-1			1.5E+01						L	09:57				
6164422	SB-125	-2.99E+00	pCi/L	3.6E+00	U	5.91E+00			GAMMALL_GS	1.9999E+00	07/21/2006				D
BLK	14234-35-6			3.6E+00						L	09:57				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H7AJ71AB **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/09/2006 10:56

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164424	PU-238	0.00E+00	pCi/L	8.6E-02	U	9.53E-02	96.4		PUISO_PLATE	2.011E-01	07/12/2006				D
BLK	13981-16-3			8.6E-02						L	22:04				
6164424	PU-239	0.00E+00	pCi/L	8.6E-02	U	9.52E-02	96.4		PUISO_PLATE	2.011E-01	07/12/2006				D
BLK	PU-239/240			8.6E-02						L	22:04				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AJH1AB	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 10:56
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164419	TC-99	7.23E-01	pCi/L	5.8E+00	U	9.92E+00	100.0		TC99_SEP_LS	1.244E-01	07/11/2006				D
BLK	14133-76-7			4.1E+00						L	14:20				

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\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H7AKD1AB **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/09/2006 08:00
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	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
6164425	AM-241	2.50E-01	pCi/L	3.6E-01	U	3.38E-01	34.2		AMCMISO_EIE	2.003E-01	07/15/2006				D
BLK	14596-10-2			3.5E-01						L	17:16				

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\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AKG1AB	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 10:56
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164426	SR-90	-1.28E-01	pCi/L	2.1E-01	U	4.74E-01	88.0		SRISO_SEP_P	9.996E-01	07/24/2006				D
BLK	10098-97-2			2.0E-01						L	06:12				

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\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AKK1AB	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 11:43
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164427	I-129L	2.43E-02	pCi/L	1.2E-01	U	2.32E-01	96.8		I129LL_SEP_L	4.0136E+00	07/14/2006				D
BLK	15046-84-1			1.2E-01						L	16:03				

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\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AKN1AB	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 08:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164428	NP-237	-1.92E-02	pCi/L	2.7E-02	U	2.71E-01	89.0		NP237_LLE_P	2.003E-01	07/24/2006				D
BLK	13994-20-2			2.7E-02						L	22:57				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H7AKV1AB **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/12/2006 10:04

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 06/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
6164429	ALPHA	2.85E-01	pCi/L	3.8E-01	U	7.47E-01	100.0		9310_ALPHAB	1.996E-01	07/21/2006				D
BLK	12587-46-1			3.8E-01						L	17:38				

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\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7ALM1AB	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 11:43
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CR	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
6164451	H-3	-3.59E+01	pCi/L	1.5E+02	U	3.21E+02	100.0		906.0_H3_LSC	5.00E-03	07/12/2006				D
BLK	10028-17-8			1.3E+02						L	22:09				

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\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7ALM1DX	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 11:43
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CT	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
6164451	H-3	1.74E+01	pCi/L	1.5E+02	U	3.18E+02	100.0		906.0_H3_LSC	5.00E-03	07/13/2006				D
BLK	10028-17-8			1.3E+02						L	00:54				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H9VRM1AB	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/08/2006 08:59
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CV	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
6205150	Uranium	3.41E-02	ug/L	3.7E-03	U	8.42E-02			UTOT_KPA	2.49E-02	07/24/2006				D
BLK	7440-61-1			3.7E-03						ML	14:24				

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\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H9WPJ1AB	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/08/2006 10:23
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CY	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
6205508	BETA	1.73E+00	pCi/L	1.4E+00	U	2.65E+00	100.0		9310_ALPHAB	2.02E-01	07/26/2006				D
BLK	12587-47-2			1.3E+00						L	13:36				

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

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AH41CS	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/08/2006 10:23
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 06/08/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164416	TC-99	5.25E+02	pCi/L	4.1E+01		9.94E+00	100.0	5.63E+02	TC99_ETVDSK	1.243E-01	07/20/2006			70	D
BS	14133-76-7			1.3E+01				93.2		L	10:32			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

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AJ01CS	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/08/2006 09:41
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 06/08/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164422	CO-60	4.18E+01	pCi/L	8.9E+00		4.47E+00		3.92E+01	GAMMALL_GS	2.0001E+00	07/21/2006			70	D
BS	10198-40-0			8.9E+00				106.7		L	09:58			130	
6164422	CS-137	2.87E+01	pCi/L	7.3E+00		4.50E+00		2.49E+01	GAMMALL_GS	2.0001E+00	07/21/2006			70	D
BS	10045-97-3			7.3E+00				115.0		L	09:58			130	
6164422	EU-152	8.42E+01	pCi/L	1.9E+01		1.06E+01		7.68E+01	GAMMALL_GS	2.0001E+00	07/21/2006			70	D
BS	14683-23-9			1.9E+01				109.6		L	09:58			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AJ71CS	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 10:56
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164424	PU-239	4.67E+00	pCi/L	1.0E+00		1.64E-01	104.3	4.31E+00	PUISO_PLATE	1.995E-01	07/13/2006			70	D
BS	PU-239/240			8.0E-01				108.3		L	10:02			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

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AJH1CS	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:**	06/09/2006 10:56
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:**	06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164419	TC-99	4.55E+02	pCi/L	3.2E+01		9.88E+00	100.0	5.48E+02	TC99_SEP_LS	1.251E-01	07/11/2006			70	D
BS	14133-76-7			1.2E+01				83.1		L	14:20			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

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AKD1CS	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:**	06/09/2006 08:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:**	06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CI	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
6164425	AM-241	2.14E+01	pCi/L	5.5E+00		3.39E-01	32.8	2.32E+01	AMCMISO_EIE	2.003E-01	07/15/2006			70	D
BS	14596-10-2			3.3E+00				92.2		L	17:16			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AKG1CS	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 10:56
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164426	SR-90	1.50E+01	pCi/L	2.3E+00		5.17E-01	80.5	1.36E+01	SRISO_SEP_P	1.0001E+00	07/24/2006			70	D
BS	10098-97-2			7.7E-01				110.7		L	06:12			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

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H7AKK1CS **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/09/2006 11:43
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164427	I-129L	8.87E+00	pCi/L	1.1E+00		3.84E-01	95.6	9.55E+00	I129LL_SEP_L	4.0008E+00	07/14/2006			70	D
BS	15046-84-1			1.1E+00				92.9		L	16:04			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7AKN1CS	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 08:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 06/09/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164428	NP-237	1.12E+01	pCi/L	2.2E+00		1.34E-01	83.1	9.03E+00	NP237_LLE_P	2.003E-01	07/24/2006			70	D
BS	13994-20-2			1.5E+00				124.5		L	22:58			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H7AKV1CS **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/12/2006 10:04
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 06/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CQ	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
6164429	ALPHA	1.91E+01	pCi/L	4.4E+00		6.64E-01	100.0	2.29E+01	9310_ALPHAB	1.99E-01	07/21/2006			70	D
BS	12587-46-1			2.1E+00				83.6		L	17:38			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

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H7ALM1CS	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 11:43
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CS	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
6164451	H-3	2.66E+03	pCi/L	2.6E+02		3.20E+02	100.0	2.73E+03	906.0_H3_LSC	5.00E-03	07/12/2006			70	D
BS	10028-17-8			2.1E+02				97.7		L	23:32			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

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H7ALM1EM **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/09/2006 11:43
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CU	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
6164451	H-3	2.34E+03	pCi/L	2.5E+02		3.18E+02	100.0	2.73E+03	906.0_H3_LSC	5.00E-03	07/13/2006			70	D
BS	10028-17-8			2.1E+02				86.0		L	02:17			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

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H9VRM1CS **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/08/2006 08:59
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CW	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
6205150	Uranium	3.30E+00	ug/L	3.4E-01		8.28E-02		3.64E+00	UTOT_KPA	2.53E-02	07/24/2006			70	D
BS	7440-61-1			3.4E-01				90.7		ML	14:29			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H9VRM1DS	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/08/2006 08:59
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CX	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
6205150	Uranium	3.42E+01	ug/L	4.0E+00		8.12E-02		3.49E+01	UTOT_KPA	2.58E-02	07/24/2006			70	D
BS	7440-61-1			4.0E+00				98.0		ML	14:31			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

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H9WPJ1CS **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/08/2006 10:23
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CZ	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
6205508	BETA	2.23E+01	pCi/L	3.7E+00		2.72E+00	100.0	2.31E+01	9310_ALPHAB	1.995E-01	07/26/2006			70	D
BS	12587-47-2			2.5E+00				96.4		L	13:36			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 Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H62FF1ER	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/08/2006 10:23
Client Id:	B1J9X5	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-006	MW6-SBB-A19981								BL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164416	TC-99	4.71E+02	pCi/L	3.8E+01		9.77E+00	100.0		TC99_ETVDSK	1.258E-01	07/20/2006	3.6	0.6		D
DUP	14133-76-7	4.88E+02		1.2E+01						L	10:32	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H64W02CR	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/06/2006 09:50
Client Id:	B1JDT1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 06/07/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
G06-006	MW6-SBB-A19981								BM	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6205508	BETA	3.07E+02	pCi/L	3.9E+01		3.03E+00	100.0		9310_ALPHAB	1.848E-01	07/26/2006	8.7	0.9		D
DUP	12587-47-2	2.81E+02		8.5E+00						L	11:50	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H65471LR	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:**	06/09/2006 08:00
Client Id:	B1J974	**Matrix:**	WATER	WATER	**Sample On Date:**	05/12/2006 10:30
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:**	06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-006	MW6-SBB-A19981								BN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164425	AM-241	-1.41E-02	pCi/L	2.8E-02	U	3.39E-01	57.8		AMCMISO_EIE	2.011E-01	07/15/2006	0.0	0.2		D
DUP	14596-10-2	-1.81E-02		2.8E-02						L	17:15	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H65471MR	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:**	06/09/2006 08:00
Client Id:	B1J974	**Matrix:**	WATER	WATER	**Sample On Date:**	05/12/2006 10:30
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:**	06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-006	MW6-SBB-A19981								BO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164428	NP-237	-1.93E-02	pCi/L	2.7E-02	U	2.72E-01	85.4		NP237_LLE_P	1.997E-01	07/24/2006	448.6	3.6		D
DUP	13994-20-2	5.03E-02		2.7E-02						L	22:57	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H65511FR	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:**	06/09/2006 11:43
Client Id:	B1JCM1	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	**DUP**		**Received Date:**	06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
A06-006	MW6-SBB-A19981								BP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164427	I-129L	3.65E+00	pCi/L	6.7E-01		2.67E-01	98.4		I129LL_SEP_L	4.0136E+00	07/14/2006	2.2	0.2		D
DUP	15046-84-1	3.73E+00		6.7E-01						L	13:46	20.0	3		

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

Thursday, July 27, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H65511GR	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 11:43
Client Id:	B1JCM1	**Matrix:**	WATER	WATER	**Sample On Date:** 05/12/2006 10:30
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
A06-006	MW6-SBB-A19981								BQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164451	H-3	1.47E+04	pCi/L	7.7E+02		3.17E+02	100.0		906.0_H3_LSC	5.00E-03	07/13/2006	2.2	0.6		D
DUP	10028-17-8	1.44E+04		4.2E+02						L	09:11	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H656A1ER	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 10:56
Client Id:	B1J9F8	**Matrix:**	WATER	WATER	**Sample On Date:** 05/12/2006 10:30
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-006	MW6-SBB-A19981								BS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164419	TC-99	3.17E+01	pCi/L	7.5E+00		9.92E+00	100.0		TC99_SEP_LS	1.252E-01	07/11/2006	1.5	0.1		D
DUP	14133-76-7	3.12E+01		5.1E+00						L	14:20	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H656N1FR	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/09/2006 10:56
Client Id:	B1J983	**Matrix:**	WATER	WATER	**Sample On Date:** 05/12/2006 10:30
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-006	MW6-SBB-A19981								BT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164424	PU-238	0.00E+00	pCi/L	8.3E-02	U	9.20E-02	107.0		PUISO_PLATE	2.015E-01	07/12/2006	200.0	0.6		D
DUP	13981-16-3	3.56E-02		8.3E-02						L	22:04	20.0	3		
6164424	PU-239	2.71E-02	pCi/L	6.9E-02	U	1.62E-01	107.0		PUISO_PLATE	2.015E-01	07/12/2006	200.0	0.6		D
DUP	PU-239/240	0.00E+00		6.9E-02						L	22:04	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H656N1GR	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:**	06/09/2006 10:56
Client Id:	B1J983	**Matrix:**	WATER	WATER	**Sample On Date:**	05/12/2006 10:30
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:**	06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-006	MW6-SBB-A19981								BU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164426	SR-90	1.19E-01	pCi/L	2.2E-01	U	4.66E-01	89.4		SRISO_SEP_P	1.0046E+00	07/24/2006	43.0	0.4		D
DUP	10098-97-2	1.84E-01		2.2E-01						L	06:12	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H65FC2FR	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/08/2006 08:59
Client Id:	B1JBP1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-006	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
6205150	Uranium	2.24E+00	ug/L	2.3E-01		8.52E-02			UTOT_KPA	2.46E-02	07/24/2006	3.8	0.5		D
DUP	7440-61-1	2.16E+00		2.3E-01						ML	14:36	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H65GW1FR **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/08/2006 09:41
Client Id: B1JB51 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-006	MW6-SBB-A19981								BX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164422	BE-7	1.22E+00	pCi/L	1.8E+01	U	3.37E+01			GAMMALL_GS	2.0005E+00	07/21/2006	0.0	0.4		D
DUP	13966-02-4	-3.94E+00		1.8E+01						L	08:11	20.0	3		
6164422	CO-60	1.49E-01	pCi/L	1.7E+00	U	3.46E+00			GAMMALL_GS	2.0005E+00	07/21/2006	533.1	0.2		D
DUP	10198-40-0	-6.75E-02		1.7E+00						L	08:11	20.0	3		
6164422	CS-134	-9.41E-01	pCi/L	1.8E+00	U	3.16E+00			GAMMALL_GS	2.0005E+00	07/21/2006	0.0	0.5		D
DUP	13967-70-9	-1.64E+00		1.8E+00						L	08:11	20.0	3		
6164422	CS-137	-2.43E-01	pCi/L	1.5E+00	U	2.72E+00			GAMMALL_GS	2.0005E+00	07/21/2006	0.0	0.4		D
DUP	10045-97-3	2.36E-01		1.5E+00						L	08:11	20.0	3		
6164422	EU-152	-2.66E+00	pCi/L	3.3E+00	U	5.57E+00			GAMMALL_GS	2.0005E+00	07/21/2006	0.0	1.1		D
DUP	14683-23-9	2.35E-02		3.3E+00						L	08:11	20.0	3		
6164422	EU-154	1.17E+00	pCi/L	4.9E+00	U	9.75E+00			GAMMALL_GS	2.0005E+00	07/21/2006	622.4	0.5		D
DUP	15585-10-1	-5.99E-01		4.9E+00						L	08:11	20.0	3		
6164422	EU-155	-7.29E-01	pCi/L	2.9E+00	U	5.23E+00			GAMMALL_GS	2.0005E+00	07/21/2006	0.0	0.3		D
DUP	14391-16-3	-7.17E-02		2.9E+00						L	08:11	20.0	3		
6164422	K-40	-1.74E+01	pCi/L	3.4E+01	U	7.08E+01			GAMMALL_GS	2.0005E+00	07/21/2006	0.0	1.3		D
DUP	13966-00-2	1.42E+01		3.4E+01						L	08:11	20.0	3		
6164422	RU-106	-2.25E-01	pCi/L	1.6E+01	U	2.83E+01			GAMMALL_GS	2.0005E+00	07/21/2006	228.5	0.3		D
DUP	13967-48-1	3.38E+00		1.6E+01						L	08:11	20.0	3		
6164422	SB-125	-1.32E+00	pCi/L	3.7E+00	U	6.36E+00			GAMMALL_GS	2.0005E+00	07/21/2006	0.0	0.8		D
DUP	14234-35-6	8.74E-01		3.7E+00						L	08:11	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.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H68TA1HR	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/12/2006 10:04
Client Id:	B1JBL9	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 06/12/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-006	MW6-SBB-A19981								BY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164429	ALPHA	3.39E+02	pCi/L	7.0E+01		2.48E+00	100.0		9310_ALPHAB	5.19E-02	07/21/2006	8.5	0.6		D
DUP	12587-46-1	3.69E+02		2.0E+01						L	15:47	20.0	3		

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

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id: H62F21DW **Sdg/Rept Nbr:** W04941 32825 **Collection Date:** 06/08/2006 11:38
Client Id: B1J9W4 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** MS **Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-006	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
6164416	TC-99	1.08E+04	pCi/L	7.4E+02		9.89E+00	100.0	3.60E+03	TC99_ETVDSK	1.252E-01	07/20/2006			60	D
MS	14133-76-7			5.7E+01				300.8		L	10:32			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.

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H656A1DW	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:**	06/09/2006 10:56
Client Id:	B1J9F8	**Matrix:**	WATER	WATER	**Sample On Date:**	05/12/2006 10:30
Moisture/Solids%*:		**QC Type:**	**MS**		**Received Date:**	06/09/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-006	MW6-SBB-A19981								BR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6164419	TC-99	2.66E+03	pCi/L	1.6E+02		9.95E+00	100.0	3.65E+03	TC99_SEP_LS	1.24E-01	07/11/2006			60	D
MS	14133-76-7			2.8E+01				73.1		L	14:20			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.

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04941.Edd, h:\Reportdb\edd\FeadIV\Rad\32825.Edd

Lab Sample Id:	H65F22FW	**Sdg/Rept Nbr:**	W04941	32825	**Collection Date:** 06/08/2006 09:56
Client Id:	B1JBN0	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**MS**		**Received Date:** 06/08/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-006	MW6-SBB-A19981								BV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6205150	Uranium	3.61E+01	ug/L	4.6E+00		8.32E-02		3.60E+01	UTOT_KPA	2.52E-02	07/24/2006			60	D
MS	7440-61-1			4.6E+00				100.3		ML	14:39			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.

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/14/2006 11:41:36 AM

Lot No., Due Date: J6F090386,J6F090401; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6164424; RPUISO Pulso by ALP

SDG, Matrix: W04941; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> H656N1AF PU-238 200.0 H656N1AF PU-239 200.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. Tracers Exceeds Control Limit => => H656N1AF PU-242 107 L:20|105 Q:S2		✓	
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => H65451AH PU-239 2.9E+00 L:2.4E-01		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => PU-238 PU-239 OK; No Callin Level Found => PU-238 PU-239	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		

8.25 Counting Spectrum are within FWHM Limits. FWHM > maxFWHM => H65451AH PU-239 59>0 H7AJ71AC PU-239 48.58>0 Q:V1	Yes	No ✓	N/A
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. Library Not Specified => H654M1AG I:[NUC_LIBR]AR_PU Q: H65451AH I:[NUC_LIBR]AR_PU Q: H65471AH I:[NUC_LIBR]AR_PU Q: H656N1AC I:[NUC_LIBR]AR_PU Q: H656N1AF I:[NUC_LIBR]AR_PU Q: H7AJ71AA I:[NUC_LIBR]AR_PU Q: H7AJ71AC I:[NUC_LIBR]AR_PU Q:	Yes	No	N/A
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 ✓	No	N/A

First Level Review Pam Anderson **Date** 7-14-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6164424
W04941

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: Sherryl A Adam Date: 7-14-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/17/2006 3:16:12 PM

Lot No., Due Date: J6F090386; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6164425; RAMISO AmIso by ALP

SDG, Matrix: W04941; WATER

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

6.0 Comments on any No response:

First Level Review GER **Date** 7/17/06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6164425
W04941

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: Sherryl A Adam Date: 7-17-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/26/2006 12:09:25 PM

Lot No., Due Date: J6F090386; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6164428; RNP237 Np-237 w/tracer

SDG, Matrix: W04941; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> H65471AM NP-237 450.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => NP-237 OK; No Callin Level Found => NP-237	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. FWHM > maxFWHM => H7AKN1AC NP-237 81.7>0 Q:V1		✓	

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. Library Not Specified => H65451AA I:[NUC_LIBR]ALPHA Q: H65471AA I:[NUC_LIBR]ALPHA Q: H65471AM I:[NUC_LIBR]ALPHA Q: H7AKN1AA I:[NUC_LIBR]ALPHA Q: H7AKN1AC I:[NUC_LIBR]ALPHA Q:	Yes	No	N/A
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 ✓	No	N/A

First Level Review Pam Anderson **Date** 7.26.06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6164428
W04941

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

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 7-26-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/27/2006 8:15:02 AM

Lot No., Due Date: J6F080350,J6F090255,J6F090386,J6F090398,J6F090295,J6F090321,J6F120198; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6205508; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W04941; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => H62FF2AC 151.10<200.00 H62F22AA 130.70<200.00 H62F62AA 141.30<200.00 H64W02AA 185.10<200.00 H65F22AA 165.70<200.00 H65F82AA 106.60<200.00 H65GW2AA 171.90<200.00 H65G92AA 171.10<200.00 H65HG2AA 160.10<200.00 H654M2AD 150.60<200.00 H65452AE 166.00<200.00 H65472AE 131.00<200.00 H656A2AA 141.80<200.00 H68TA2AD 88.80<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. MDC/MDA > CRDL => H62F22AA BETA 4.3E+00>4.0E+00 H62F62AA BETA 4.1E+00>4.0E+00 H65F82AA BETA 5.8E+00>4.0E+00 H656A2AA BETA 4.1E+00>4.0E+00 H68TA2AD BETA 6.7E+00>4.0E+00 Q:C1		✓	

8.2 Comments:

NCM # 10-08400

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. Batch Positive Result => H62FF2AC BETA 1.4E+02 L:3.7E+00 H62F22AA BETA 2.0E+03 L:4.3E+00 H62F62AA BETA 7.7E+00 L:4.1E+00 H64W02AA BETA 2.8E+02 L:2.9E+00 H64XA2AA BETA 2.7E+02 L:2.8E+00 H64XD2AA BETA 4.3E+03 L:3.0E+00 H65FC2AA BETA 6.4E+02 L:2.9E+00 H65F22AA BETA 2.8E+01 L:3.3E+00 H65F82AA BETA 5.5E+01 L:5.8E+00 H65GW2AA BETA 1.9E+01 L:3.8E+00 H65G92AA BETA 8.3E+02 L:3.4E+00 H65HG2AA BETA 1.1E+03 L:3.7E+00 H654M2AD BETA 3.7E+02 L:3.9E+00 H65452AE BETA 2.3E+02 L:3.6E+00 H656A2AA BETA 3.3E+01 L:4.1E+00 H68TA2AD BETA 1.7E+03 L:6.7E+00	Yes	No ✓	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	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. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later 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 ✓	No	N/A

First Level Review Pam Anderson **Date** 7-21-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6L05508
W04941

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: Sherryl R Adam Date: 7-27-06

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-08400**
NCM Initiated By: Pam Anderson
Date Opened: 07/27/2006
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: Beta by GPC-Sr/Y
Lot #'s (Sample #'s): J6F080350 (1,2,3), J6F090255 (1,2,3), J6F090295 (1,2,3), J6F090321 (1,2,3), J6F090386 (2,3,4), J6F090398 (1), J6F120198 (1), J6G240000 (508),
QC Batches: 6205508

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

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	07/27/2006	1 On the first analysis the LCS had a low recovery. A recount did not help. The whole batch was reanalyzed with good QC. 2 On the reanalysis three samples listed below did not meet CRDL but had results MDA>CRDL. They all had high rad screen results and low aliquots were taken. H62F22AA H65F82AA H68TA2AD.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	07/27/2006	The batch was reanalyzed.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Lot No., Due Date: J6F090386,J6F090401; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6164426; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W04941; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> H656N1AG SR-90 64.0 H656N1AG SR-90 28.0 H656N1AG SR-90 45.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => H654M1AH SR-90 1.8E+02 L:6.6E-01 H654M1AH SR-90 1.8E+02 L:8.3E-01 H654M1AH SR-90 1.8E+02 L:5.3E-01 H65451AJ SR-90 7.2E+01 L:6.1E-01 H65451AJ SR-90 7.0E+01 L:8.0E-01 H65451AJ SR-90 7.1E+01 L:5.0E-01		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => SR-90	✓		

OK; No Callin Level Found => SR-90

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

OK

8.25 Counting Spectrum are within FWHM Limits. Yes No N/A ✓

No FWHM found in Batch Data!

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓

No Count Library found in Batch Data!

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

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

8.3 Comments:

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

OK

First Level Review Pam Anderson **Date** 7-24-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6 164426
W04941

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

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 7-24-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/21/2006 2:55:30 PM

Lot No., Due Date: J6F090386,J6F090401,J6F090295,J6F090321,J6F120198; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6164422; RGAMMA Gamma by GER

SDG, Matrix: W04941; WATER

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

6.0 Comments on any No response:

First Level Review [signature] **Date** 7/21/06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: U164422
W04941

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: Sherryl R Adam Date: 7-24-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/17/2006 3:53:29 PM

Lot No., Due Date: J6F090386,J6F090394; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6164427; RGAMLEPS Gamma by LEPS

SDG, Matrix: W04941; 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 _____ **Date** 7/17/06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6164427
W04941

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: Sherry A Wilson Date: 7-17-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/21/2006 11:07:09 AM

Lot No., Due Date: J6F080350,J6F090386,J6F090394,J6F090295,J6F090321,J6F120198; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6164416; RTC99 Tc-99 by LSC

SDG, Matrix: W04941; WATER

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

6.0 Comments on any No response:

First Level Review [signature] **Date** 7/21/06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: W164416
W04941

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

Comments on any "No" response:

Second Level Review: Sheryl A Adam Date: 7-21-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/12/2006 2:49:20 PM

Lot No., Due Date: J6F090398; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6164419; RTC99 Tc-99 by LSC

SDG, Matrix: W04941; 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 => H656A1AD TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later 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 ✓	No	N/A

First Level Review Pam Anderson **Date** 7-12-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6164419
W04941

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

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 7-13-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/14/2006 11:47:00 AM

Lot No., Due Date: J6F090386,J6F090394,J6F120198; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6164451; RTRITIUM H-3 by LSC

SDG, Matrix: W04941; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => H654M1AA 5.00<10.00 H65451AC 5.00<10.00 H65471AC 5.00<10.00 H65511AA 5.00<10.00 H68TA1AA 5.00<10.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => H7ALM1AF SVP15/5<>SVP10/10 H7ALM1AG SVP15/5<>SVP10/10 H7ALM1AA SVP15/5<>SVP10/10 H7ALM1AC SVP15/5<>SVP10/10 H7ALM1AD SVP15/5<>SVP10/10 H7ALM1AE SVP15/5<>SVP10/10 H654M1AA SVP15/5<>SVP10/10 H65451AC SVP15/5<>SVP10/10 H65471AC SVP15/5<>SVP10/10 H65511AA SVP15/5<>SVP10/10 H65511AG SVP15/5<>SVP10/10 H68TA1AA SVP15/5<>SVP10/10 Q:VC		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. OK	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. 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!	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 => H-3 OK; No Callin Level Found => H-3	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. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later 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 ✓	No	N/A

First Level Review Pam Anderson **Date** 7-18-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6164451
W04941

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: Sherryl R Adam Date: 7-14-06

STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/25/2006 8:46:07 AM

Lot No., Due Date: J6F090386,J6F090394,J6F090401,J6F090295,J6F090321,J6F120198; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6205150; RUNAT UNat by KPA

SDG, Matrix: W04941; 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 => H9VRM1AC UNSC<>UNSF 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 No Count Analysis Size found in Batch Data!			✓
8.07 The Correct Count Geometry was Used. No Count Geometry found in Batch Data!			✓
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. No Count Duration Field Found in Batch Data!			✓
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments: See NCM			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => H65452AK Uranium 2.0E+01 L:8.3E-02 H654H2AA Uranium 1.3E+01 L:8.1E-02 H65512AE Uranium 2.5E+01 L:8.0E-02 H656N2AE Uranium 3.7E+01 L:8.2E-02 H65F22AE Uranium 2.9E+00 L:8.3E-02 H65F82AE Uranium 3.0E+00 L:8.2E-02 H65FC2AE Uranium 2.2E+00 L:8.1E-02 H65G92AE Uranium 2.1E+00 L:8.4E-02 H65GW2AE Uranium 3.0E+00 L:8.1E-02 H65HG2AE Uranium 2.6E+00 L:8.3E-02 H68TA2AG Uranium 8.0E+02 L:8.2E-02		✓	

8.23 Result <= Action Level. when Defined. Yes ✓ No N/A

OK; No Action Level Found => Uranium

OK; No Callin Level Found => Uranium

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

OK

8.25 Counting Spectrum are within FWHM Limits. Yes No N/A ✓

No FWHM found in Batch Data!

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A ✓

No Count Library found in Batch Data!

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

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

8.3 Comments:

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

OK

First Level Review Pam Anderson Date 7-25-04

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6205150
W04941

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: Sherryl A Adam Date: 7-25-06

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-08379**
NCM Initiated By: Pam Anderson
Date Opened: 07/25/2006
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: UNat by KPA
Lot #'s (Sample #'s): J6F090295 (1,2,3), J6F090321 (1,2,3), J6F090386 (1,3,4), J6F090394 (1), J6F090401 (1), J6F120198 (1), J6G240000 (150),
QC Batches: 6205150

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

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	07/25/2006	The first analysis had a high blank. The batch was reanalyzed with good QC. Reanalysis data accepted.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	07/25/2006	The batch was reanalyzed.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
	Response	Response Note			

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/27/2006 8:15:48 AM

Lot No., Due Date: J6F080350; 07/27/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6181202;

SDG, Matrix: W04941; WATER

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

6.0 Comments on any No response:

First Level Review Pam Anderson **Date** 7.27.06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6181202

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

Comments on any "No" response:

Second Level Review: Sheryl A Adam Date: 7-27-06

PNNL J6F080350
W04941
Due

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-006-38

Collector K.J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, JUNE 2006	DTS- SAWS H 104	**Ice Chest No.** SML442 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J9X5		W	6-8-06	1023	1x20-mL P	Activity Scan H62FF	None
B1J9X5		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1J9X5		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1J9X5		W			1x500-mL P	9223_COLIFORM: Coliform (1)	Na2S2O3 Cool 4C

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
K.J. YOUNG	[signature]	15:00 JUN 08 2006	S. Welch	S. Welch	15:00 JUN 08 2006
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

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

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

PNNL J6F080350 W04941	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W06-006-35
		Page 1 of 1

Collector K.J. YOUNG	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W06-006	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, JUNE 2006	DTS- SAWS H 104	Ice Chest No. SMC 442 Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J9W4		W	6-8-06	1138	1x20-mL P	Activity Scan H62F2	None
B1J9W4		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1J9W4		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Received By
Print K.J. YOUNG Sign K.J. Young Date/Time 15:00 JUN 08 2006	Print S. Welch Sign S. Welch Date/Time 15:00 JUN 08 2006
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

Matrix *

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

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

PNNL J6F080350 W04941

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-006-29

Collector K.J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, JUNE 2006	DTS SAWS 14104	**Ice Chest No.** SWL 442 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J9T2		W	6-8-06	1312	1x20-mL P	Activity Scan H62F6	None
B1J9T2		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1J9T2		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Received By
Print K.J. YOUNG Sign Ken Young Date/Time 15:00 JUN 08 2006	Print S. Welch Sign S. Welch Date/Time 15:00 JUN 08 2006
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6-8-06 15:00

Client: PGW SDG #: W04941 NA [ ] SAF #: W06-006 NA [ ]

Work Order Number: J6F080350 Chain of Custody # W06-006-38,35,29

Shipping Container ID: SML 442 Air Bill # N/A

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

Sample Custodian: S. Welch Date: 6-8-06 15:00

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL J6F090255
W04941
Due 7-21-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G06-006-115

Collector Bob Fulton / Jennifer Panther	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, JUNE 2006		**Ice Chest No.** **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JDT1		W	6/6/06	0950	1x20-mL P	Activity Scan	None
B1JDT1		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1) H64W0	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Jennifer Panther		[signature]	6/6/06 1530	SIG 5 LOCKED STORAGE			6/6/06 1530
SIG 5 LOCKED STORAGE			6/7/06 1000	R.W. FULTON		[signature]	6/7/06 1000
R.W. FULTON		[signature]	6/7/06 1210	S. Welch		S. Welch	6-7-06 1500
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL JLF090255

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G06-006-116

Collector: Douglas McFarland / Jennifer Panther	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: G06-006	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: 1NR2-RB, JUNE 2006		Ice Chest No. Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JDT3		W	6/6/06	0955	1x20-mL P	Activity Scan	None
B1JDT3		W	6/6/06	0955	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1) H64XA	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Jennifer Panther	6/6/06 1530	SIG 5 LOCKED STORAGE	6/6/06 15:30
SIG 5 LOCKED STORAGE	6/7/06 10:00	R.W. FULTON	6/7/06 10:00
R.W. FULTON	6/7/06 12:30	S. Welch	6-7-06 15:00

Matrix *

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

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

PNNL J6F090255

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G06-006-118

Page 1 of 1

Collector Douglas McFarland / Jennifer Panther	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, JUNE 2006		**Ice Chest No.** **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JDT7		W	6/6/06	1006	1x20-mL P	Activity Scan	None
B1JDT7		W	6/6/06	1006	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1) HG4XD	HNO3 to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Jennifer Panther	6/6/06 1530	SIG 5 LOCKED STORAGE	6/6/06 15:30
SIG 5 LOCKED STORAGE	6/7/06 10:00	R.W. FULTON	6/7/06 1000
R.W. FULTON	6/7/06 12:20	S. Welch	6.7.06 15:00

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6-7-06 15:00

Client: PGW SDG #: W04941 NA [ ] SAF #: G06-006 NA [ ]

Work Order Number: J6F090255 Chain of Custody # G06-006-115,116,118

Shipping Container ID: N/A Air Bill # N/A

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

Sample Custodian: S. Welch Date: 6-7-06 15:00

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL J6F090295
W04941
Due 7-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-006-44

Collector ~~DURATEK~~ D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, JUNE 2006	Logbook: DTS-SAWS-H103B	**Ice Chest No.** SML-31 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JBP1		W	6/8/06	0859	1x20-mL P	Activity Scan	None
B1JBP1		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1) H65FC	HNO3 to pH <2
B1JBP1		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1JBP1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1JBP1		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
				R. Wall 6/8/06			

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~DURATEK~~ D. E. PARCHEN			JUN 08 2006 13:05	S. Welch		S. Welch	JUN 08 2006 13:00
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J6F090295
W04941
Due 7-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-006-41

Collector DURATEK D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, JUNE 2006	Logbook: DTS-SAWS-H103B	**Ice Chest No.** SML-311 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JBN0		W	6/8/06	0956	1x20-mL P	Activity Scan	None
B1JBN0		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1) H65F2	HNO3 to pH <2
B1JBN0		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1JBN0		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1JBN0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

S. Welch 6/8/06

Relinquished By	Received By
Print: DURATEK D. E. PARCHEN Sign: [signature] Date/Time: JUN 08 2006 13:05	Print: S. Welch Sign: S. Welch Date/Time: JUN 08 2006 13:05
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

Matrix *

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

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

PNNL J6F090295
W04941 Due 7-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-006-50

Collector DURATEK D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, JUNE 2006	Logbook: DTS-SAWS-H103D	**Ice Chest No.** SML-311 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JBT3		W	6/8/06	1055	1x20-mL P	Activity Scan	None
B1JBT3		W			1x500-mL G/P	UTOT_KPA: Uranium (1) H65F8	HNO3 to pH <2
B1JBT3		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1JBT3		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1JBT3		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

L. Wall 6/8/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. E. PARCHEN			JUN 08 2006 13:05	S. Welch	S. Welch		JUN 08 2006 13:05
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6-8-06 13:00

Client: PGW SDG #: W04941 NA [ ] SAF #: W06-006 NA [ ]

Work Order Number: J6F090295 Chain of Custody # W06-006-44,41,50

Shipping Container ID: SML-311 Air Bill # N/A

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

Sample Custodian: S. Welch Date: 6-8-06 13:00

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on_____ by_____ Person contacted_____

[ ] No action necessary; process as is.

Project Manager_____ Date_____

LS-023, 12/05, Rev. 6

PNNL J6F090321 W04941

Due 7.24.06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-006-62

Collector DURATEK D.P. CONNOLLY	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W06-006	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, JUNE 2006	DTS-SAWS-H100	Ice Chest No. SAWS-119 Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JB73		W	6-8-06	1035	1x20-mL P	Activity Scan	None
B1JB73		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1) H65HG	HNO3 to pH <2
B1JB73		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1JB73		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1JB73		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D.P. CONNOLLY	QS		JUN 08 2006 1450	S. Welch	S. Welch		JUN 08 2006 1450
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J6F090321 W04941

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-006-59

Collector DURATEK D. P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, JUNE 2006	DTS-SAWS-H106	**Ice Chest No.** SAWS-113 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JB62		W	6-8-06	1132	1x20-mL P	Activity Scan	None
B1JB62		W			1x500-mL G/P	UTOT_KPA: Uranium (1) H65G9	HNO3 to pH <2
B1JB62		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1JB62		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1JB62		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. P. CONNOLLY			JUN 08 2006 1450	S. Welch		S. Welch	JUN 08 2006 1450
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J6F090321
W044941
Due 7.24.06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-006-56

Collector DURATEK D.R. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, JUNE 2006	DTS-SAW5-H106	**Ice Chest No.** SAW5-119 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JB51		W	6-8-06	0941	1x20-mL P	Activity Scan	None
B1JB51		W			1x500-mL G/P	UTOT_KPA: Uranium (1) H65GW	HNO3 to pH <2
B1JB51		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1JB51		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1JB51		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D.R. CONNOLLY			JUN 08 2006 1450	S. Welch	S. Welch		JUN 08 2006 1450
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6-8-06 1450

Client: PGW SDG #: W04941 NA [ ] SAF #: W06-006 NA [ ]

Work Order Number: J6F090321 Chain of Custody # W06-006-62,59,56

Shipping Container ID: SAWS-119,113 Air Bill # N/A

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

Sample Custodian: S. Welch Date: 6-8-06 14:50

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on_____ by_____ Person contacted_____

[ ] No action necessary; process as is.

Project Manager_____ Date_____

LS-023, 12/05, Rev. 6

PNNL J6F090386 W04941

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S06-006-38

Collector DURATEK ~~F. M. HALL~~	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, JUNE 2006	DTS - SAWS - H105	**Ice Chest No.** GRP-03-021 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J973		W	6-9-06	0952	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J973		W			1x20-mL P	Activity Scan H6545	None
B1J973		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1J973		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1J973		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1J973		W			1x1000-mL G/P	PUISO_PLATE_AEA: Pu-238 + 239/240 (2)	HNO3 to pH <2
B1J973		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1J973		W			1x1000-mL G/P	AMCMISO_EIE_PLT_AEA: Am-241 (1)	HNO3 to pH <2
B1J973		W			1x1000-mL G/P	NP237_LLE_PLATE_AEA:Np-237(1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK ~~F. M. HALL~~			JUN 09 2006 13:3		S. Welch	S. Welch	JUN 09 2006 13:30
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J6F090386 W04941 due 7.24.06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S06-006-32

Collector DURATEK F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV. JUNE 2006	DTS-SAWS-H105	**Ice Chest No.** GRP-03-021 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J969		W	6-9-06	1218	1x20-mL P	Activity Scan	None
B1J969		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1) H654H	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK F. M. HALL			JUN 09 2006 13:30		S. Welch	S. Welch	JUN 09 2006 13:30
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J6F090386
W04941

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S06-006-29

Page 1 of 1

Collector DURATEK F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, JUNE 2006	DB · SAWS-H105	**Ice Chest No.** GRP-03-021 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J967		W	6-9-06	1136	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J967		W			1x20-mL P	Activity Scan H654M	None
B1J967		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1J967		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1J967		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1J967		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1J967		W			1x1000-mL G/P	PUISO_PLATE_AEA: Pu-238 + 239/240 (2)	HNO3 to pH <2
B1J967		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK F. M. HALL			13:30 JUN 09 2006		S. Welch	S. Welch	13:30 JUN 09 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J6F090386 W04941

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S06-006-39

Page 1 of 1

Collector DURATEK ~~F. M. HALL~~	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S06-006	**Sampling Origin** Hanford Site 06-9-06	**Purchase Order/Charge Code**
Project Title SURV, JUNE 2006	DTS-SAWS H10~~6~~5	**Ice Chest No.** GRP-03-021 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J974		W	6-9-06	0700	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J974		W			1x20-mL P	Activity Scan H6547	None
B1J974		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1J974		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1J974		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1J974		W			1x1000-mL G/P	PUISO_PLATE_AEA: Pu-238 + 239/240 (2)	HNO3 to pH <2
B1J974		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1J974		W			1x1000-mL G/P	AMCMISO_EIE_PLT_AEA: Am-241 (1)	HNO3 to pH <2
B1J974		W			1x1000-mL G/P	NP237_LLE_PLATE_AEA:Np-237(1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK ~~F. M. HALL~~			JUN 09 2006 13:30	S. Welch	S. Welch		JUN 09 2006 13:30
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6·9·06 13:30

Client: PGW SDG #: W04941 NA [ ] SAF #: S06-006 NA [ ]

Work Order Number: J6F090386 Chain of Custody #: S06-006-38, 32, 29, 39

Shipping Container ID: GRP-03-021 Air Bill # N/A

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: 4
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____ broken
   _____ leaking
   _____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Welch Date: 6-9-06 13:30

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL J6F090394 W04941 Due 7-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # A06-006-4

Page 1 of 1

Collector K.J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. A06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title LLWMA(1)-PA, JUNE 2006	DTS- SALES H104	**Ice Chest No.** SWL 442 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol Other	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JCM1		W	6-9-06	1143	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1JCM1		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1) H6551	None
B1JCM1		W			1x20-mL P	Activity Scan	None
B1JCM1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1JCM1		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG			JUN 09 2006 1405	S. Welch		S. Welch	JUN 09 2006 1405
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6-9-06 14:05

Client: PGW SDG #: W04941 NA [ ] SAF #: A06-006 NA [ ]

Work Order Number: J6F090394 Chain of Custody # A06-006-4

Shipping Container ID: SML 442 Air Bill # N/A

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: ~~8~~ 1 SW 6-9-06
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____ broken
   _____ leaking
   _____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Welch Date: 6-9-06 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 _____

LS-023, 12/05, Rev. 6

PNNL J6F090398 W04941 Due 7-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-006-83

Collector R.J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, JUNE 2006	DOT - SAWS H104	**Ice Chest No.** SML 442 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J9F8		W	6-9-06	1056	1x20-mL P	Activity Scan	None
B1J9F8		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1) H656A	HNO3 to pH <2
B1J9F8		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
R.J. YOUNG [signature]	JUN 09 2006 1405	S. Welch S. Welch	JUN 09 2006 1405
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6-9-06 14:05

Client: PGW SDG #: W04941 NA [ ] SAF #: W06-006 NA [ ]

Work Order Number: J6F090398 Chain of Custody # W06-006-83

Shipping Container ID: SML-442 Air Bill # N/A

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: ~~8~~ 1 SW 6-9-06
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Welch Date: 6-9-06 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 _____

LS-023, 12/05, Rev. 6

PNNL J6F090401, W04947 due 7-24-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S06-006-52

Collector W. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, JUNE 2006	DTS- SAWS H104	**Ice Chest No.** SMC 442 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J983		W	6-9-06	1056	1x20-mL P	Activity Scan	None
B1J983		W			1x500-mL G/P	UTOT_KPA: Uranium (1) H656N	HNO3 to pH <2
B1J983		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1J983		W			1x1000-mL G/P	PUISO_PLATE_AEA: Pu-238 + 239/240 (2)	HNO3 to pH <2
B1J983		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	W. YOUNG	[signature]	JUN 09 2006 1405		S. Welch	S. Welch	JUN 09 2006 1405
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6·9·06 14:05

Client: PGW SDG #: W04941 NA [ ] SAF #: 506-006 NA [ ]

Work Order Number: J6F090401 Chain of Custody # 506-006-52

Shipping Container ID: SML-442 Air Bill # N/A

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

Sample Custodian: S. Welch Date: 6·9·06 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 _____

LS-023, 12/05, Rev. 6

PNNL W04941 JGF120198 Due 7-27-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W06-006-117**

Page 1 of 1

Collector DURATEK K. B. HULSE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, JUNE 2006	DTS-SAWS-H105	**Ice Chest No.** GRP-03-021 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.** N/A
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.** N/A

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "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	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1JBL9		W	6-12-06	0004	1x20-mL P	Activity Scan	None
B1JBL9		W			1x500-mL G/P	UTOT_KPA: Uranium (1) H68TA	HNO3 to pH <2
B1JBL9		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1JBL9		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1JBL9		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1JBL9		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK K. B. HULSE			6-12-06 1320	DURATEK J. G. HOGAN			6-12-06 1320
DURATEK J. G. HOGAN			6-12-06	S. Welch		S. Welch	6-12-06 13:20

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6.12.06 13:20

Client: PGW SDG #: W04941 NA [ ] SAF #: W06-006 NA [ ]

Work Order Number: J6F120198 Chain of Custody # W06-006-117

Shipping Container ID: GRP-03-021 Air Bill # N/A

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

Sample Custodian: S. Welch Date: 6.12.06 13:20

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

6/30/2006 4:12:41 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

6D Pu PrpRC5016, SepRC5010(5039)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/24/2006 W04941

Sep1 DT/Tm Tech:

Batch: 6164424 WATER pCi/L PM, Quote: HC , 57671

Sep2 DT/Tm Tech: 7-11-06 [illegible]

SEQ Batch, Test: None

Prep Tech: ,RutherfordJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H654M-1-AG J6F090386-2-SAMP 06/09/2006 11:36	Mid Pnt: 05/25/06 23:30	199.30g,in AmtRec: 20ML,500ML,6XLP,3X4LP	PUTC10211 06/26/06,pd 06/07/94,r #Containers: 11	200		Scr:	Alpha: 4.21E-03 uCi/Sa	Beta: -1.00E-03 uCi/Sa
2 H6545-1-AH J6F090386-3-SAMP 06/09/2006 09:53	Mid Pnt: 05/25/06 23:30	201.20g,in AmtRec: 20ML,500ML,6XLP,3X4LP	PUTC10212 06/26/06,pd 06/07/94,r #Containers: 11	200		Scr:	Alpha: -1.25E-03 uCi/Sa	Beta: 1.28E-03 uCi/Sa
3 H6547-1-AH J6F090386-4-SAMP 06/09/2006 08:00	Mid Pnt: 05/25/06 23:30	199.50g,in AmtRec: 20ML,500ML,6XLP,3X4LP	PUTC10213 06/26/06,pd 06/07/94,r #Containers: 11	200		Scr:	Alpha: 2.05E-03 uCi/Sa	Beta: -2.44E-03 uCi/Sa
4 H656N-1-AC J6F090401-1-SAMP 06/09/2006 10:56	Mid Pnt: 05/25/06 23:30	198.90g,in AmtRec: 20ML,500ML,4XLP,4LP	PUTC10244 06/30/06,pd 06/07/94,r #Containers: 7	200		Scr:	Alpha: 9.99E-04 uCi/Sa	Beta: -1.56E-03 uCi/Sa
5 H656N-1-AF-X J6F090401-1-DUP 06/09/2006 10:56	Mid Pnt: 05/25/06 23:30	201.50g,in AmtRec: 20ML,500ML,4XLP,4LP	PUTC10245 06/30/06,pd 06/07/94,r #Containers: 7	200		Scr:	Alpha: 9.99E-04 uCi/Sa	Beta: -1.56E-03 uCi/Sa
6 H7AJ7-1-AA-B J6F130000-424-BLK 06/09/2006 10:56		201.10g,in AmtRec:	PUTC10246 06/30/06,pd 06/07/94,r #Containers: 1	200		Scr:	Alpha:	Beta:
7 H7AJ7-1-AC-C J6F130000-424-LCS 06/09/2006 10:56		199.50g,in AmtRec:	PUSG0849 06/26/06,pd 06/07/94,r #Containers: 1	200		Scr:	Alpha:	Beta:

6/30/2006 4:12:43 PM

Sample Preparation/Analysis

6D Pu PrpRC5016, SepRC5010(5039)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 07/24/2006

Sep1 DT/Tm Tech:

Batch: 6164424 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,RutherfordJ

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

Comments: pH<2.0 JHR 6/30/06

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

H654M1AG-SAMP Constituent List:

PU-238	RDL:1	pCi/L	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20
Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20						

H7AJ71AA-BLK:

PU-238	RDL:1	pCi/L	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/L	LCL:	UCL:	RPD:
Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20						

H7AJ71AC-LCS:

PU-239	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20	Pu-242	RDL:	pCi/L	LCL:20	UCL:105	RPD:20

H654M1AG-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

H7AJ71AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

H7AJ71AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

7/14/2006 11:08:05 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/14/2005, 7/19/2006, Batch: '6164424', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6164424						
AC		**CalcC**	**RutherfordJ**	6/30/2006 3:25:44 PM		
SC			wagarr	IsBatched	6/13/2006 1:54:33 PM	ICOC_RADCALC v4.8.24
SC			RutherfordJ	InPrep	6/30/2006 3:25:44 PM	RICH-RC-5016 REVISION 6
SC			RutherfordJ	Prep1C	6/30/2006 3:39:34 PM	RICH-RC-5016 REVISION 6
SC			RutherfordJ	InPrep	6/30/2006 3:51:26 PM	RICH-RC-5016 REVISION 6
SC			RutherfordJ	Prep1C	6/30/2006 4:12:53 PM	RICH-RC-5016 REVISION 6
SC			AntonsonL	Sep1C	7/12/2006 8:55:47 AM	RICH-RC-5010 REV4
SC			FABREM	Sep2C	7/12/2006 3:32:13 PM	RICH-RC-5039 REV 6
SC			DAWKINSO	InCnt1	7/12/2006 7:53:05 PM	RICH-RD-0008 REVISION 4
SC			StringerR	CalcC	7/13/2006 2:33:05 PM	RICH-RD-0008 REVISION 4
AC			**RutherfordJ**	6/30/2006 3:39:34 PM		
AC			**RutherfordJ**	6/30/2006 3:51:26 PM		
AC			**RutherfordJ**	6/30/2006 4:12:53 PM		
AC			**AntonsonL**	7/12/2006 8:55:47		
AC			**FABREM**	7/12/2006 3:32:13 PM		
AC			**DAWKINSO**	7/12/2006 7:53:05 PM		
AC			**StringerR**	7/13/2006 2:33:05 PM		

AC: Accepting Entry; SC: Status Change

6/30/2006 3:02:22 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

8I Am PrpRC5016/5086, SepRC5072(5003)
SX Americium-241 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/24/2006 W04944

Sep1 DT/Tm Tech:

Batch: 6164425 WATER pCi/L PM, Quote: HC , 57671

Sep2 DT/Tm Tech: 7-15-06 [illegible]

SEQ Batch, Test: None

Prep Tech: ,RutherfordJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
37 **1 H6545-1-AF** J6F090386-3-SAMP		199.00g,in	AMTC2495 06/22/06,pd 06/01/01,r	200				
06/09/2006 09:53	Mid Pnt: 05/25/06 23:30	AmtRec: 20ML,500ML,6XLP,3X4LP	#Containers: 11			Scr:	Alpha: -1.25E-03 uCi/Sa	Beta: 1.28E-03 uCi/Sa
39 **2 H6547-1-AF** J6F090386-4-SAMP		199.70g,in	AMTC2496 06/22/06,pd 06/01/01,r	200				
06/09/2006 08:00	Mid Pnt: 05/25/06 23:30	AmtRec: 20ML,500ML,6XLP,3X4LP	#Containers: 11			Scr:	Alpha: 2.05E-03 uCi/Sa	Beta: -2.44E-03 uCi/Sa
40 **3 H6547-1-AL-X** J6F090386-4-DUP		201.10g,in	AMTC2497 06/22/06,pd 06/01/01,r	200				
06/09/2006 08:00	Mid Pnt: 05/25/06 23:30	AmtRec: 20ML,500ML,6XLP,3X4LP	#Containers: 11			Scr:	Alpha: 2.05E-03 uCi/Sa	Beta: -2.44E-03 uCi/Sa
41 **4 H7AKD-1-AA-B** J6F130000-425-BLK		200.30g,in	AMTC2498 06/22/06,pd 06/01/01,r	200				
06/09/2006 08:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
42 **5 H7AKD-1-AC-C** J6F130000-425-LCS		200.30g,in	AMSK0277 06/30/06,pd 02/09/06,r	200				
06/09/2006 08:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments: pH<2.0 JHR 6/30/06

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

H65451AF-SAMP Constituent List:

Am-241	RDL:1.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	AM-243	RDL:	pCi/L	LCL:20	UCL:105	RPD:20

Sample Preparation/Analysis

8I Am PrpRC5016/5086, SepRC5072(5003)
SX Americium-241 by Alpha Spec
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 07/24/2006

Sep1 DT/Tm Tech:

Batch: 6164425 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,RutherfordJ

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

```
H7AKD1AA-BLK:
  Am-241      RDL:1.00E+00    pCi/L    LCL:       UCL:       RPD:       AM-243    RDL:       pCi/L    LCL:20    UCL:105    RPD:20

H7AKD1AC-LCS:
  Am-241      RDL:1           pCi/L    LCL:70     UCL:130    RPD:20     AM-243    RDL:       pCi/L    LCL:20    UCL:105    RPD:20

H65451AF-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H7AKD1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H7AKD1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____