Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 32769

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04932	I06-038	B1J5C1	J6E190202-1	H5RD61AA	9H5RD610	6156413
		B1J5C1	J6E190202-1	H5RD61AC	9H5RD610	6156416
		B1J5C1	J6E190202-1	H5RD61AD	9H5RD610	6156411
		B1J5C2	J6E190202-2	H5REA1AA	9H5REA10	6156413
		B1J5C2	J6E190202-2	H5REA1AC	9H5REA10	6156416
		B1J5C2	J6E190202-2	H5REA1AD	9H5REA10	6156411
	W06-005	B1J3V3	J6E190208-1	H5RFH1AA	9H5RFH10	6156413
		B1J3V3	J6E190208-1	H5RFH1AC	9H5RFH10	6156416
		B1J3V3	J6E190208-1	H5RFH1AD	9H5RFH10	6156411
		B1J3T9	J6E190208-2	H5RF31AA	9H5RF310	6156413
		B1J3T9	J6E190208-2	H5RF31AC	9H5RF310	6156420
		B1J3T9	J6E190208-2	H5RF31AE	9H5RF310	6156416
		B1J3T9	J6E190208-2	H5RF31AF	9H5RF310	6156411
		B1J3T9	J6E190208-2	H5RF32AD	9H5RF320	6195493
	G06-005	B1J386	J6E190210-1	H5RGV2AA	9H5RGV20	6195493

Comments:

Report Nbr: 32769

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04932	G06-005	B1J384	J6E190210-2	H5RG22AA	9H5RG220	6195493
	I06-036	B1J558	J6E190277-1	H5TA11AA	9H5TA110	6156413
		B1J558	J6E190277-1	H5TA11AD	9H5TA110	6156423
		B1J558	J6E190277-1	H5TA12AC	9H5TA120	6195493
	W06-005	B1J3P2	J6E230281-1	H51RV1AA	9H51RV10	6156413
		B1J3P2	J6E230281-1	H51RV1AC	9H51RV10	6156411
		B1J457	J6E230281-2	H51R11AA	9H51R110	6156413
		B1J457	J6E230281-2	H51R11AE	9H51R110	6156424
		B1J457	J6E230281-2	H51R11AF	9H51R110	6156411
		B1J457	J6E230281-2	H51R12AC	9H51R120	6192282
		B1J457	J6E230281-2	H51R12AD	9H51R120	6195493
		B1J461	J6E230281-3	H51TK1AA	9H51TK10	6156413
		B1J461	J6E230281-3	H51TK1AC	9H51TK10	6156420
		B1J461	J6E230281-3	H51TK1AE	9H51TK10	6156424
		B1J461	J6E230281-3	H51TK1AF	9H51TK10	6156411
		B1J461	J6E230281-3	H51TK2AD	9H51TK20	6195493
		B1J3R0	J6E230281-4	H51TP1AA	9H51TP10	6156413
		B1J3R0	J6E230281-4	H51TP1AC	9H51TP10	6156420
		B1J3R0	J6E230281-4	H51TP1AE	9H51TP10	6156424
		B1J3R0	J6E230281-4	H51TP1AG	9H51TP10	6156411
		B1J3R0	J6E230281-4	H51TP2AD	9H51TP20	6195493
		B1J3R0	J6E230281-4	H51TP2AF	9H51TP20	6187280
		B1J3W1	J6E230281-5	H51201AA	9H512010	6156413
		B1J3W1	J6E230281-5	H51201AC	9H512010	6156411
	I06-038	B1J5H7	J6E230318-1	H51371AA	9H513710	6156413
		B1J5H7	J6E230318-1	H51371AC	9H513710	6156416

Comments:

Report Nbr: 32769

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04932	I06-038	B1J5H7	J6E230318-1	H51371AD	9H513710	6156423
		B1J5H7	J6E230318-1	H51371AE	9H513710	6156411
		B1J5C9	J6E230318-2	H514A1AA	9H514A10	6156413
		B1J5C9	J6E230318-2	H514A1AC	9H514A10	6156416
		B1J5C9	J6E230318-2	H514A1AD	9H514A10	6156423
		B1J5F9	J6E240155-1	H523R1AA	9H523R10	6156413
		B1J5F9	J6E240155-1	H523R1AC	9H523R10	6156416
		B1J5F9	J6E240155-1	H523R1AD	9H523R10	6156423
		B1J5F9	J6E240155-1	H523R1AE	9H523R10	6156411
		B1J5F1	J6E240155-2	H52371AA	9H523710	6156413
		B1J5F1	J6E240155-2	H52371AC	9H523710	6156416
		B1J5F1	J6E240155-2	H52371AD	9H523710	6156411
		B1J5D7	J6E240155-3	H524K1AA	9H524K10	6156413
		B1J5D7	J6E240155-3	H524K1AC	9H524K10	6156416
		B1J5D7	J6E240155-3	H524K1AD	9H524K10	6156411
		B1J5D3	J6E240155-4	H524V1AA	9H524V10	6156413
		B1J5D3	J6E240155-4	H524V1AC	9H524V10	6156416
		B1J5D3	J6E240155-4	H524V1AD	9H524V10	6156411
		B1J5J9	J6E240382-1	H542P1AA	9H542P10	6156413
		B1J5J9	J6E240382-1	H542P1AC	9H542P10	6156416
		B1J5J9	J6E240382-1	H542P1AD	9H542P10	6156411
		B1J5J5	J6E240382-2	H542T1AA	9H542T10	6156413
		B1J5J5	J6E240382-2	H542T1AC	9H542T10	6156416
		B1J5J5	J6E240382-2	H542T1AD	9H542T10	6156411

Comments:

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

Tel: 509 375 3131 Fax: 509 375 5590
www.stl-inc.com

Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

July 21, 2006

Attention: Dot Stewart

SAF Number	:	I06-038, W06-005, G06-005, I06-036,
Date SDG Closed	:	May 24, 2006
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W04932
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between May 18, 2006 and May 24, 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
B1J5C1	H5RD6	WATER	5/18/06
B1J5C2	H5REA	WATER	5/18/06
B1J3V3	H5RFH	WATER	5/18/06
B1J3T9	H5RF3	WATER	5/18/06
B1J386	H5RGV	WATER	5/18/06
B1J384	H5RG2	WATER	5/18/06
B1J558	H5TA1	WATER	5/18/06
B1J3P2	H51RV	WATER	5/22/06
B1J457	H51R1	WATER	5/22/06
B1J461	H51TK	WATER	5/22/06
B1J3R0	H51TP	WATER	5/22/06
B1J3W1	H5120	WATER	5/22/06
B1J5H7	H5137	WATER	5/22/06
B1J5C9	H514A	WATER	5/22/06
B1J5F9	H523R	WATER	5/23/06
B1J5F1	H5237	WATER	5/23/06

B1J5D7	H524K	WATER	5/23/06
B1J5D3	H524V	WATER	5/23/06
B1J5J9	H542P	WATER	5/23/06
B1J5J5	H542T	WATER	5/23/06

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:

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
Iodine-129 (LL) by TEVA method RICH-RC-5025
Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065
Tritium by method RICH-RC-5007

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
Samples B1J461, B1J3R0, B1J3T9 and B1J3R0 DUP were analyzed with reduced volumes based on elevated screen results. Sample B1J457 had a precipitate weight too heavy for the calibration curve. The sample was reanalyzed with a smaller aliquot and meet requirements. The LCS, batch blank, samples and sample duplicate (B1J3R0) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The samples were reanalyzed due to an initial LCS of 132%. During the first analysis the sample and its duplicate matched very closely at around 100 pCi/L. The reanalysis LCS was acceptable at 99%, however the duplicate (using the same sample) did not match. The results were 69.9 and 93.6.
The reanalysis results are being reported as per client instructions. The LCS, batch blank and samples results are within contractual requirements.

Strontium-90 by method RICH-RC-5006:
The LCS, batch blank, samples and sample duplicate (B1J5F9) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017:
The LCS, batch blank, samples and sample duplicate (B1J461) results are within contractual requirements.

Iodine-129 (LL) by TEVA method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1J3R0) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1J5H7) results are within contractual requirements.

Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065:
The LCS, batch blank, samples, sample duplicate (B1J5J9), and sample matrix spike (B1J5J5) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1J3P2) results are within contractual requirements.

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

Reviewed and approved:

Sandra Seger
Sherryl A. Adam
for Project Manager

Drinking Water Method Cross References

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

Uncertainty Estimation

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

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

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

Report Definitions

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

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 32769 File Name: h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.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:
9H512010	B1J3W1		MW6-SBB-A1	W06-005	W04932					05/22/2006 11:05

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	1.26E+03	pCi/L	1.7E+02	1.9E+02		2.99E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200 09:45	I
6156411	TC-99	14133-76-7	2.61E+02	pCi/L	9.7E+00	2.1E+01		1.01E+01	100.0	TC99_ETVDSK_LS	1.262E-01	L	07/06/200 08:10	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H513710	B1J5H7		MW6-SBB-A1	I06-038	W04932					05/22/2006 11:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	1.26E+03	pCi/L	1.6E+02	1.9E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200 11:06	I
6156416	I-129L	15046-84-1	1.36E-01	pCi/L	2.3E-01	2.3E-01	U	2.71E-01	92.2	I129LL_SEP_LEPS	3.9469E+00	L	07/05/200 13:23	I
6156423	SR-90	10098-97-2	8.69E-03	pCi/L	1.5E-01	1.5E-01	U	3.34E-01	87.6	SRISO_SEP_PRE	1.0071E+00	L	06/30/200 07:24	I
6156411	TC-99	14133-76-7	9.13E+01	pCi/L	6.7E+00	1.1E+01		1.01E+01	100.0	TC99_ETVDSK_LS	1.248E-01	L	07/06/200 09:12	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:
9H514A10	B1J5C9		MW6-SBB-A1	I06-038	W04932					05/22/2006 09:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	1.53E+03	pCi/L	1.7E+02	2.0E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200 12:28	I
6156416	I-129L	15046-84-1	-2.68E-03	pCi/L	1.2E-01	1.2E-01	U	2.25E-01	93.8	I129LL_SEP_LEPS	3.9367E+00	L	07/05/200 15:12	I
6156423	SR-90	10098-97-2	-1.19E-01	pCi/L	1.4E-01	1.6E-01	U	4.01E-01	79.6	SRISO_SEP_PRE	1.0024E+00	L	06/30/200 07:24	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:
9H51R110	B1J457		MW6-SBB-A1	W06-005	W04932					05/22/2006 09:54

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	5.64E+03	pCi/L	2.6E+02	3.7E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200 01:34	I
6156424	BE-7	13966-02-4	-6.03E+00	pCi/L	2.6E+01	2.6E+01	U	4.76E+01		GAMMALL_GS	2.0002E+00	L	07/10/200 08:36	I
6156424	CO-60	10198-40-0	1.95E+01	pCi/L	6.8E+00	6.8E+00		5.47E+00		GAMMALL_GS	2.0002E+00	L	07/10/200 08:36	I
6156424	CS-134	13967-70-9	-1.13E-01	pCi/L	3.1E+00	3.1E+00	U	5.68E+00		GAMMALL_GS	2.0002E+00	L	07/10/200 08:36	I
6156424	CS-137	10045-97-3	-5.39E-01	pCi/L	2.2E+00	2.2E+00	U	3.93E+00		GAMMALL_GS	2.0002E+00	L	07/10/200 08:36	I
6156424	EU-152	14683-23-9	5.32E+00	pCi/L	6.1E+00	6.1E+00	U	1.17E+01		GAMMALL_GS	2.0002E+00	L	07/10/200 08:36	I
6156424	EU-154	15585-10-1	1.24E-01	pCi/L	7.6E+00	7.6E+00	U	1.46E+01		GAMMALL_GS	2.0002E+00	L	07/10/200 08:36	I
6156424	EU-155	14391-16-3	1.24E+00	pCi/L	5.0E+00	5.0E+00	U	8.90E+00		GAMMALL_GS	2.0002E+00	L	07/10/200 08:36	I
6156424	K-40	13966-00-2	-1.12E+01	pCi/L	5.0E+01	5.0E+01	U	1.10E+02		GAMMALL_GS	2.0002E+00	L	07/10/200 08:36	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.

6156424	RU-106	13967-48-1	-6.78E+00	pCi/L	2.2E+01	2.2E+01	U	3.87E+01		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	SB-125	14234-35-6	1.79E+00	pCi/L	5.4E+00	5.4E+00	U	1.01E+01		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156411	TC-99	14133-76-7	6.32E+04	pCi/L	1.4E+02	3.8E+03		1.02E+01	100.0	TC99_ETVDSK_LS	1.253E-01	L	07/06/200	05:03	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:
9H51R120	B1J457		MW6-SBB-A1	W06-005	W04932					05/22/2006 09:54

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6192282	ALPHA	12587-46-1	2.74E+00	pCi/L	2.9E+00	2.9E+00	U	4.21E+00	100.0	9310_ALPHABETA	5.90E-02	L	07/13/200	17:02	I
6195493	BETA	12587-47-2	2.29E+04	pCi/L	3.1E+02	3.1E+03		5.44E+01	100.0	9310_ALPHABETA	1.01E-02	L	07/16/200	11:48	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H51RV10	B1J3P2		MW6-SBB-A1	W06-005	W04932					05/22/2006 10:53

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6156413	H-3	10028-17-8	6.52E+03	pCi/L	2.8E+02	4.1E+02		2.89E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/09/200	22:50	I
6156411	TC-99	14133-76-7	2.77E+02	pCi/L	1.0E+01	2.2E+01		1.02E+01	100.0	TC99_ETVDSK_LS	1.251E-01	L	07/06/200	04:00	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H51TK10	B1J461		MW6-SBB-A1	W06-005	W04932					05/22/2006 09:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6156413	H-3	10028-17-8	1.23E+04	pCi/L	3.7E+02	6.5E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200	07:01	I
6156420	ALPHA	12587-46-1	2.06E+00	pCi/L	3.9E+00	3.9E+00	U	8.29E+00	100.0	9310_ALPHABETA	3.80E-02	L	07/08/200	12:19	I
6156424	BE-7	13966-02-4	-2.02E+01	pCi/L	2.5E+01	2.5E+01	U	4.15E+01		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	CO-60	10198-40-0	1.92E+00	pCi/L	1.7E+00	1.7E+00	U	4.37E+00		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	CS-134	13967-70-9	4.50E-03	pCi/L	1.8E+00	1.8E+00	U	3.54E+00		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	CS-137	10045-97-3	3.49E+00	pCi/L	2.0E+00	2.0E+00	U	4.53E+00		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	EU-152	14683-23-9	7.52E-01	pCi/L	4.8E+00	4.8E+00	U	8.91E+00		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	EU-154	15585-10-1	-1.70E+00	pCi/L	6.0E+00	6.0E+00	U	1.11E+01		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	EU-155	14391-16-3	2.52E+00	pCi/L	3.7E+00	3.7E+00	U	6.90E+00		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	K-40	13966-00-2	1.92E+01	pCi/L	2.8E+01	2.8E+01	U	6.47E+01		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	RU-106	13967-48-1	-9.07E+00	pCi/L	2.0E+01	2.0E+01	U	3.49E+01		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156424	SB-125	14234-35-6	-1.83E-01	pCi/L	4.7E+00	4.7E+00	U	8.47E+00		GAMMALL_GS	2.0002E+00	L	07/10/200	08:36	I
6156411	TC-99	14133-76-7	2.90E+03	pCi/L	2.9E+01	1.8E+02		1.01E+01	100.0	TC99_ETVDSK_LS	1.248E-01	L	07/06/200	06:05	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: 32769 File Name: h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.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:
9H51TK20	B1J461		MW6-SBB-A1	W06-005	W04932					05/22/2006 09:04

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6195493	BETA	12587-47-2	6.86E+02	pCi/L	1.8E+01	8.8E+01		5.84E+00	100.0	9310_ALPHABETA	1.00E-01	L	07/16/200 11:48	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H51TP10	B1J3R0		MW6-SBB-A1	W06-005	W04932					05/22/2006 12:05

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	2.47E+05	pCi/L	1.5E+03	1.0E+04		2.83E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200 08:23	I
6156420	ALPHA	12587-46-1	8.83E-01	pCi/L	1.6E+00	1.6E+00	U	3.25E+00	100.0	9310_ALPHABETA	6.68E-02	L	07/08/200 12:19	I
6156424	BE-7	13966-02-4	6.71E+00	pCi/L	1.7E+01	1.7E+01	U	3.38E+01		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156424	CO-60	10198-40-0	2.02E+00	pCi/L	2.4E+00	2.4E+00	U	4.87E+00		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156424	CS-134	13967-70-9	-8.14E-01	pCi/L	1.6E+00	1.6E+00	U	2.67E+00		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156424	CS-137	10045-97-3	-1.40E+00	pCi/L	2.2E+00	2.2E+00	U	4.37E+00		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156424	EU-152	14683-23-9	1.77E+00	pCi/L	3.6E+00	3.6E+00	U	6.90E+00		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156424	EU-154	15585-10-1	-4.28E+00	pCi/L	4.9E+00	4.9E+00	U	7.68E+00		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156424	EU-155	14391-16-3	-8.31E-01	pCi/L	3.0E+00	3.0E+00	U	5.43E+00		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156424	K-40	13966-00-2	-2.62E+01	pCi/L	3.1E+01	3.1E+01	U	6.46E+01		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156424	RU-106	13967-48-1	-1.57E+01	pCi/L	1.4E+01	1.4E+01	U	2.17E+01		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156424	SB-125	14234-35-6	-7.74E-01	pCi/L	3.7E+00	3.7E+00	U	6.50E+00		GAMMALL_GS	2.0035E+00	L	07/10/200 08:37	I
6156411	TC-99	14133-76-7	2.87E+03	pCi/L	2.9E+01	1.8E+02		1.03E+01	100.0	TC99_ETVDSK_LS	1.241E-01	L	07/06/200 07:07	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H51TP20	B1J3R0		MW6-SBB-A1	W06-005	W04932					05/22/2006 12:05

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6195493	BETA	12587-47-2	7.87E+02	pCi/L	1.9E+01	1.0E+02		5.55E+00	100.0	9310_ALPHABETA	1.001E-01	L	07/16/200 11:48	I
6187280	I-129L	15046-84-1	6.04E+00	pCi/L	1.9E+00	1.9E+00	U	2.97E+00	38.1	I129LL_ETVDSK_S	1.9009E+00	L	07/12/200 14:26	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H523710	B1J5F1		MW6-SBB-A1	I06-038	W04932					05/23/2006 10:21

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	5.38E+03	pCi/L	2.6E+02	3.6E+02		2.94E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200 15:12	I
6156416	I-129L	15046-84-1	8.24E-02	pCi/L	1.2E-01	1.2E-01	U	2.49E-01	96.2	I129LL_SEP_LEPS	3.9673E+00	L	07/05/200 15:13	I

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

6156411	TC-99	14133-76-7	9.32E+02	pCi/L	1.7E+01	6.2E+01		1.02E+01	100.0	TC99_ETVDSK_LS	1.249E-01	L	07/06/200	12:19	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H523R10	B1J5F9		MW6-SBB-A1	I06-038	W04932					05/23/2006 10:05

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6156413	H-3	10028-17-8	5.55E+02	pCi/L	1.4E+02	1.6E+02		2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200	13:50	I
6156416	I-129L	15046-84-1	2.67E-02	pCi/L	1.5E-01	1.5E-01	U	2.44E-01	97.8	I129LL_SEP_LEPS	3.9221E+00	L	07/05/200	15:13	I
6156423	SR-90	10098-97-2	3.22E-01	pCi/L	2.0E-01	2.0E-01	U	3.57E-01	80.7	SRISO_SEP_PRE	1.0107E+00	L	06/30/200	07:24	I
6156411	TC-99	14133-76-7	2.02E+02	pCi/L	8.8E+00	1.8E+01		1.02E+01	100.0	TC99_ETVDSK_LS	1.245E-01	L	07/06/200	10:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H524K10	B1J5D7		MW6-SBB-A1	I06-038	W04932					05/23/2006 11:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6156413	H-3	10028-17-8	1.89E+03	pCi/L	1.8E+02	2.2E+02		2.94E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200	16:33	I
6156416	I-129L	15046-84-1	-3.14E-02	pCi/L	1.2E-01	1.2E-01	U	2.17E-01	94.6	I129LL_SEP_LEPS	3.9525E+00	L	07/05/200	17:40	I
6156411	TC-99	14133-76-7	2.12E+01	pCi/L	4.9E+00	7.1E+00		1.03E+01	100.0	TC99_ETVDSK_LS	1.245E-01	L	07/06/200	13:22	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:
9H524V10	B1J5D3		MW6-SBB-A1	I06-038	W04932					05/23/2006 09:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6156413	H-3	10028-17-8	3.95E+03	pCi/L	2.3E+02	3.0E+02		2.95E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200	17:55	I
6156416	I-129L	15046-84-1	1.16E-01	pCi/L	1.4E-01	1.4E-01	U	2.86E-01	95.7	I129LL_SEP_LEPS	3.9216E+00	L	07/05/200	17:41	I
6156411	TC-99	14133-76-7	1.02E+02	pCi/L	6.9E+00	1.2E+01		1.01E+01	100.0	TC99_ETVDSK_LS	1.261E-01	L	07/06/200	14:24	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:
9H542P10	B1J5J9		MW6-SBB-A1	I06-038	W04932					05/24/2006 11:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6156413	H-3	10028-17-8	4.88E+03	pCi/L	2.5E+02	3.4E+02		2.92E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200	20:39	I
6156416	I-129L	15046-84-1	-1.05E-02	pCi/L	1.2E-01	1.2E-01	U	2.28E-01	93.5	I129LL_SEP_LEPS	3.8728E+00	L	07/05/200	17:41	I
6156411	TC-99	14133-76-7	2.29E+03	pCi/L	2.6E+01	1.4E+02		1.02E+01	100.0	TC99_ETVDSK_LS	1.251E-01	L	07/06/200	15:27	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H542T10	B1J5J5		MW6-SBB-A1	I06-038	W04932					05/24/2006 09:26

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

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 32769 File Name: h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	4.91E+03	pCi/L	2.5E+02	3.4E+02		2.91E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/10/200 22:01	I
6156416	I-129L	15046-84-1	2.62E-02	pCi/L	1.4E-01	1.4E-01	U	2.69E-01	95.4	I129LL_SEP_LEPS	3.9113E+00	L	07/05/200 19:23	I
6156411	TC-99	14133-76-7	4.61E+03	pCi/L	3.7E+01	2.8E+02		1.03E+01	100.0	TC99_ETVDSK_LS	1.243E-01	L	07/06/200 17:31	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:
9H5RD610	B1J5C1		MW6-SBB-A1	I06-038	W04932					05/18/2006 10:44

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	4.46E+03	pCi/L	2.4E+02	3.2E+02		2.90E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/09/200 16:01	I
6156416	I-129L	15046-84-1	8.69E-02	pCi/L	1.3E-01	1.3E-01	U	2.61E-01	95.1	I129LL_SEP_LEPS	3.8475E+00	L	07/05/200 11:40	I
6156411	TC-99	14133-76-7	1.62E+02	pCi/L	8.0E+00	1.5E+01		1.01E+01	100.0	TC99_ETVDSK_LS	1.264E-01	L	07/05/200 23:50	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H5REA10	B1J5C2		MW6-SBB-A1	I06-038	W04932					05/18/2006 10:44

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	4.62E+03	pCi/L	2.4E+02	3.3E+02		2.90E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/09/200 17:23	I
6156416	I-129L	15046-84-1	-7.46E-02	pCi/L	1.4E-01	1.4E-01	U	2.39E-01	97.0	I129LL_SEP_LEPS	3.8398E+00	L	07/05/200 11:40	I
6156411	TC-99	14133-76-7	1.62E+02	pCi/L	8.0E+00	1.5E+01		1.00E+01	100.0	TC99_ETVDSK_LS	1.269E-01	L	07/06/200 00:53	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H5RF310	B1J3T9		MW6-SBB-A1	W06-005	W04932					05/18/2006 12:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	2.59E+03	pCi/L	2.0E+02	2.4E+02		2.89E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/09/200 20:07	I
6156420	ALPHA	12587-46-1	4.42E+00	pCi/L	2.9E+00	3.0E+00		3.76E+00	100.0	9310_ALPHABETA	7.26E-02	L	07/08/200 12:19	I
6156416	I-129L	15046-84-1	1.01E-01	pCi/L	1.5E-01	1.5E-01	U	2.92E-01	92.2	I129LL_SEP_LEPS	3.8198E+00	L	07/05/200 13:22	I
6156411	TC-99	14133-76-7	3.52E+02	pCi/L	1.1E+01	2.7E+01		1.02E+01	100.0	TC99_ETVDSK_LS	1.254E-01	L	07/06/200 02:57	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H5RF320	B1J3T9		MW6-SBB-A1	W06-005	W04932					05/18/2006 12:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6195493	BETA	12587-47-2	6.99E+01	pCi/L	4.2E+00	9.8E+00		2.92E+00	100.0	9310_ALPHABETA	2.025E-01	L	07/16/200 11:47	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:
9H5RFH10	B1J3V3		MW6-SBB-A1	W06-005	W04932					05/18/2006 09:23

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: 32769 File Name: h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	7.06E+03	pCi/L	2.9E+02	4.3E+02		2.89E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/09/200 18:45	I
6156416	I-129L	15046-84-1	3.26E-01	pCi/L	1.6E-01	1.6E-01	U	3.54E-01	94.1	I129LL_SEP_LEPS	3.8912E+00	L	07/05/200 11:40	I
6156411	TC-99	14133-76-7	6.53E+02	pCi/L	1.5E+01	4.5E+01		1.03E+01	100.0	TC99_ETVDSK_LS	1.24E-01	L	07/06/200 01:55	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:
9H5RG220	B1J384		MW6-SBB-A1	G06-005	W04932					05/18/2006 09:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6195493	BETA	12587-47-2	3.61E+03	pCi/L	1.2E+02	6.1E+02		4.84E+01	100.0	9310_ALPHABETA	1.02E-02	L	07/16/200 11:48	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H5RGV20	B1J386		MW6-SBB-A1	G06-005	W04932					05/18/2006 08:33

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6195493	BETA	12587-47-2	2.19E+04	pCi/L	3.0E+02	3.0E+03		5.47E+01	100.0	9310_ALPHABETA	1.00E-02	L	07/16/200 11:48	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H5TA110	B1J558		MW6-SBB-A1	I06-036	W04932					05/18/2006 11:25

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6156413	H-3	10028-17-8	2.42E+02	pCi/L	1.3E+02	1.4E+02	U	2.92E+02	100.0	906.0_H3_LSC	5.00E-03	L	07/09/200 21:29	I
6156423	SR-90	10098-97-2	7.24E+02	pCi/L	5.5E+00	1.1E+02		3.82E-01	79.2	SRISO_SEP_PRE	9.604E-01	L	06/30/200 07:24	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:
9H5TA120	B1J558		MW6-SBB-A1	I06-036	W04932					05/18/2006 11:25

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6195493	BETA	12587-47-2	1.31E+03	pCi/L	7.6E+01	1.9E+02		5.13E+01	100.0	9310_ALPHABETA	1.03E-02	L	07/16/200 11:48	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 QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H6P731AB	**Sdg/Rept Nbr:**	W04932 32769	**Collection Date:**	05/22/2006 11:55
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156416	I-129L	1.15E-01	pCi/L	8.2E-02	U	2.49E-01	96.5		I129LL_SEP_L	4.0012E+00	07/05/2006				D
BLK	15046-84-1			8.2E-02						L	19:24				

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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H6P7G1AB **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/24/2006 11:20

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 05/24/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156411	TC-99	-3.29E-01	pCi/L	5.7E+00	U	1.01E+01	100.0		TC99_ETVDSK	1.257E-01	07/06/2006				D
BLK	14133-76-7			4.2E+00						L	19:36				

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 Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H6P7V1AB	**Sdg/Rept Nbr:**	W04932 32769	**Collection Date:**	05/22/2006 10:53
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156413	H-3	8.02E+01	pCi/L	1.3E+02	U	2.90E+02	100.0		906.0_H3_LSC	5.00E-03	07/09/2006				D
BLK	10028-17-8			1.2E+02						L	13:18				

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 QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H6P7V1DX	**Sdg/Rept Nbr:**	W04932 32769	**Collection Date:**	05/22/2006 10:53
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156413	H-3	3.07E+01	pCi/L	1.3E+02	U	2.91E+02	100.0		906.0_H3_LSC	5.00E-03	07/10/2006				D
BLK	10028-17-8			1.2E+02						L	04:17				

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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H6P8G1AB	**Sdg/Rept Nbr:**	W04932	32769	**Collection Date:** 05/22/2006 12:05
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156420	ALPHA	1.45E-01	pCi/L	3.4E-01	U	7.81E-01	100.0		9310_ALPHAB	2.006E-01	07/08/2006				D
BLK	12587-46-1			3.4E-01						L	13:23				

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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H6P8L1AB **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/23/2006 10:05

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 05/23/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156423	SR-90	8.56E-02	pCi/L	1.8E-01	U	3.97E-01	75.3		SRISO_SEP_P	1.0077E+00	06/30/2006				D
BLK	10098-97-2			1.8E-01						L	07:24				

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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H6P8M1AB **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 09:04
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156424	BE-7	6.17E+00	pCi/L	2.9E+01	U	5.28E+01			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	13966-02-4			2.9E+01						L	08:37				
6156424	CO-60	-2.33E-01	pCi/L	2.3E+00	U	4.29E+00			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	10198-40-0			2.3E+00						L	08:37				
6156424	CS-134	-5.61E-01	pCi/L	2.5E+00	U	4.41E+00			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	13967-70-9			2.5E+00						L	08:37				
6156424	CS-137	-1.83E+00	pCi/L	2.4E+00	U	3.96E+00			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	10045-97-3			2.4E+00						L	08:37				
6156424	EU-152	-4.84E-01	pCi/L	6.1E+00	U	1.05E+01			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	14683-23-9			6.1E+00						L	08:37				
6156424	EU-154	4.89E+00	pCi/L	6.9E+00	U	1.41E+01			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	15585-10-1			6.9E+00						L	08:37				
6156424	EU-155	5.16E+00	pCi/L	6.1E+00	U	1.11E+01			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	14391-16-3			6.1E+00						L	08:37				
6156424	K-40	-7.61E+01	pCi/L	6.4E+01	U	1.38E+02			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	13966-00-2			6.4E+01						L	08:37				
6156424	RU-106	-8.18E+00	pCi/L	2.1E+01	U	3.54E+01			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	13967-48-1			2.1E+01						L	08:37				
6156424	SB-125	-6.16E-01	pCi/L	5.4E+00	U	9.43E+00			GAMMALL_GS	1.9995E+00	07/10/2006				D
BLK	14234-35-6			5.4E+00						L	08:37				

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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H80RM1AB	**Sdg/Rept Nbr:**	W04932 32769	**Collection Date:**	05/22/2006 09:54
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	**BLK**	**Received Date:**	05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6192282	ALPHA	8.08E-02	pCi/L	4.2E-01	U	1.13E+00	100.0		9310_ALPHAB	2.007E-01	07/13/2006				D
BLK	12587-46-1			4.2E-01						L	17:02				

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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H8QFD1AB	**Sdg/Rept Nbr:**	W04932	32769	**Collection Date:** 05/22/2006 12:05
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6187280	I-129L	-1.32E+00	pCi/L	4.9E+00	U	8.75E+00	5.1		I129LL_ETVDS	2.0046E+00	07/12/2006				D
BLK	15046-84-1			4.9E+00						L	14:27				

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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H8QFD1DB	**Sdg/Rept Nbr:**	W04932 32769	**Collection Date:**	05/22/2006 12:05
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	05/22/2006

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
6187280	I-129L	4.38E-01	pCi/L	2.4E-01	U	5.49E-01	91.4		I129LL_ETVDS	2.0112E+00	07/12/2006				D
BLK	15046-84-1			2.4E-01						L	16:11				

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H6P731CS **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 11:55

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156416	I-129L	7.84E+00	pCi/L	1.1E+00		3.10E-01	94.0	9.73E+00	I129LL_SEP_L	3.9635E+00	07/05/2006			70	D
BS	15046-84-1			1.1E+00				80.6		L	19:24			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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H6P7G1CS **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/24/2006 11:20

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/24/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156411	TC-99	5.05E+02	pCi/L	3.6E+01		1.01E+01	100.0	5.41E+02	TC99_ETVDSK	1.263E-01	07/06/2006			70	D
BS	14133-76-7			1.3E+01				93.2		L	20:38			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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H6P7V1CS **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 10:53

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156413	H-3	2.55E+03	pCi/L	2.4E+02		2.90E+02	100.0	2.73E+03	906.0_H3_LSC	5.00E-03	07/09/2006			70	D
BS	10028-17-8			2.0E+02				93.3		L	14:40			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H6P7V1EM	**Sdg/Rept Nbr:**	W04932	32769	**Collection Date:** 05/22/2006 10:53
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156413	H-3	2.65E+03	pCi/L	2.5E+02		2.93E+02	100.0	2.73E+03	906.0_H3_LSC	5.00E-03	07/10/2006			70	D
BS	10028-17-8			2.0E+02				96.9		L	05:39			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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H6P8G1CS **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 12:05

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/22/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	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
6156420	ALPHA	2.25E+01	pCi/L	5.4E+00		1.11E+00	100.0	2.34E+01	9310_ALPHAB	1.991E-01	07/08/2006			70	D
BS	12587-46-1			3.2E+00				95.9		L	13:23			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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H6P8L1CS **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/23/2006 10:05

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/23/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156423	SR-90	1.52E+01	pCi/L	2.3E+00		3.82E-01	78.5	1.38E+01	SRISO_SEP_P	1.0003E+00	06/30/2006			70	D
BS	10098-97-2			8.1E-01				110.2		L	07:24			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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H6P8M1CS **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 09:04

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156424	CO-60	3.85E+01	pCi/L	8.1E+00		4.37E+00		3.79E+01	GAMMALL_GS	2.0001E+00	07/10/2006			70	D
BS	10198-40-0			8.1E+00				101.4		L	10:21			130	
6156424	CS-137	2.74E+01	pCi/L	6.6E+00		4.49E+00		2.46E+01	GAMMALL_GS	2.0001E+00	07/10/2006			70	D
BS	10045-97-3			6.6E+00				111.3		L	10:21			130	
6156424	EU-152	6.80E+01	pCi/L	1.8E+01		1.07E+01		7.65E+01	GAMMALL_GS	2.0001E+00	07/10/2006			70	D
BS	14683-23-9			1.8E+01				89.0		L	10:21			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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H80RM1CS **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 09:54

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/22/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6192282	ALPHA	2.29E+01	pCi/L	5.5E+00		9.70E-01	100.0	2.26E+01	9310_ALPHAB	2.007E-01	07/13/2006			70	D
BS	12587-46-1			3.2E+00				101.4		L	17:02			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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H8QFD1CS **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 12:05

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/22/2006

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
6187280	I-129L	2.28E+00	pCi/L	1.7E+01	U	2.72E+01	2.0	1.91E+01	I129LL_ETVDS	2.0024E+00	07/12/2006			70	D
BS	15046-84-1			1.7E+01				12.0		L	16:10			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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H8QFD1ES **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 12:05

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/22/2006

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
6187280	I-129L	1.72E+01	pCi/L	2.2E+00		6.62E-01	94.0	1.95E+01	I129LL_ETVDS	2.0005E+00	07/12/2006			70	D
BS	15046-84-1			2.2E+00				88.2		L	16:12			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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H9A2M1CS **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/18/2006 12:08

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/18/2006

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
6195493	BETA	2.25E+01	pCi/L	4.5E+00		2.54E+00	100.0	2.27E+01	9310_ALPHAB	2.011E-01	07/16/2006			70	D
BS	12587-47-2			2.4E+00				99.2		L	11:48			130	

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H51371FR **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 11:55

Client Id: B1J5H7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/22/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I06-038	MW6-SBB-A19981								AZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156416	I-129L	1.00E-02	pCi/L	1.1E-01	U	2.17E-01	93.0		I129LL_SEP_L	3.8835E+00	07/05/2006	172.5	1.6		D
DUP	15046-84-1	1.36E-01		1.1E-01						L	13:23	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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H51RV1DR **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 10:53

Client Id: B1J3P2 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/22/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-005	MW6-SBB-A19981								BA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156413	H-3	5.84E+03	pCi/L	3.8E+02		2.87E+02	100.0		906.0_H3_LSC	5.00E-03	07/10/2006	11.0	2.5		D
DUP	10028-17-8	6.52E+03		2.7E+02						L	00:12	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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H51TK1GR **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/22/2006 09:04
Client Id: B1J461 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/22/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-005	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156424	BE-7	1.06E-02	pCi/L	2.5E+01	U	4.51E+01			GAMMALL_GS	1.9995E+00	07/10/2006	0.0	1.1		D
DUP	13966-02-4	-2.02E+01		2.5E+01						L	08:37	20.0	3		
6156424	CO-60	4.28E-01	pCi/L	1.9E+00	U	3.76E+00			GAMMALL_GS	1.9995E+00	07/10/2006	127.1	1.1		D
DUP	10198-40-0	1.92E+00		1.9E+00						L	08:37	20.0	3		
6156424	CS-134	-8.84E-02	pCi/L	2.1E+00	U	3.75E+00			GAMMALL_GS	1.9995E+00	07/10/2006	0.0	0.1		D
DUP	13967-70-9	4.50E-03		2.1E+00						L	08:37	20.0	3		
6156424	CS-137	7.63E-01	pCi/L	1.5E+00	U	3.03E+00			GAMMALL_GS	1.9995E+00	07/10/2006	128.2	2.5		D
DUP	10045-97-3	3.49E+00		1.5E+00						L	08:37	20.0	3		
6156424	EU-152	2.03E-01	pCi/L	4.7E+00	U	8.31E+00			GAMMALL_GS	1.9995E+00	07/10/2006	115.0	0.2		D
DUP	14683-23-9	7.52E-01		4.7E+00						L	08:37	20.0	3		
6156424	EU-154	2.48E+00	pCi/L	4.4E+00	U	9.63E+00			GAMMALL_GS	1.9995E+00	07/10/2006	1082.3	1.3		D
DUP	15585-10-1	-1.70E+00		4.4E+00						L	08:37	20.0	3		
6156424	EU-155	1.15E-01	pCi/L	3.7E+00	U	6.66E+00			GAMMALL_GS	1.9995E+00	07/10/2006	182.5	0.9		D
DUP	14391-16-3	2.52E+00		3.7E+00						L	08:37	20.0	3		
6156424	K-40	1.50E+01	pCi/L	3.0E+01	U	6.36E+01			GAMMALL_GS	1.9995E+00	07/10/2006	25.0	0.2		D
DUP	13966-00-2	1.92E+01		3.0E+01						L	08:37	20.0	3		
6156424	RU-106	3.23E+00	pCi/L	1.6E+01	U	3.06E+01			GAMMALL_GS	1.9995E+00	07/10/2006	0.0	1.1		D
DUP	13967-48-1	-9.07E+00		1.6E+01						L	08:37	20.0	3		
6156424	SB-125	-1.92E+00	pCi/L	4.5E+00	U	7.67E+00			GAMMALL_GS	1.9995E+00	07/10/2006	0.0	0.6		D
DUP	14234-35-6	-1.83E-01		4.5E+00						L	08:37	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H51TP1JR	**Sdg/Rept Nbr:**	W04932	32769	**Collection Date:** 05/22/2006 12:05
Client Id:	B1J3R0	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/22/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-005	MW6-SBB-A19981								BC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156420	ALPHA	2.77E+00	pCi/L	2.8E+00	U	4.63E+00	100.0		9310_ALPHAB	6.66E-02	07/08/2006	103.4	0.9		D
DUP	12587-46-1	8.83E-01		2.8E+00						L	13:23	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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id:	H51TP2HR	**Sdg/Rept Nbr:**	W04932 32769	**Collection Date:**	05/22/2006 12:05
Client Id:	B1J3R0	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	05/22/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-005	MW6-SBB-A19981								BD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6187280	I-129L	6.44E+00	pCi/L	1.3E+00		1.52E+00	37.8		I129LL_ETVDS	1.9119E+00	07/12/2006	6.4	0.4		D
DUP	15046-84-1	6.04E+00		1.3E+00						L	14:26	20.0	3		

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

Friday, July 21, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H523R1FR **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/23/2006 10:05

Client Id: B1J5F9 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/23/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I06-038	MW6-SBB-A19981								BE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156423	SR-90	2.89E-01	pCi/L	2.2E-01	U	4.23E-01	72.5		SRISO_SEP_P	1.0094E+00	06/30/2006	10.8	0.2		D
DUP	10098-97-2	3.22E-01		2.1E-01						L	07:24	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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H542P1ER **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/24/2006 11:20

Client Id: B1J5J9 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I06-038	MW6-SBB-A19981								BF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156411	TC-99	2.34E+03	pCi/L	1.5E+02		1.02E+01	100.0		TC99_ETVDSK	1.259E-01	07/06/2006	2.0	0.5		D
DUP	14133-76-7	2.29E+03		2.7E+01						L	16:29	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H5RF32GR **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/18/2006 12:08

Client Id: B1J3T9 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/18/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-005	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6195493	BETA	9.36E+01	pCi/L	1.3E+01		2.87E+00	100.0		9310_ALPHAB	2.00E-01	07/16/2006	29.0	2.7		D
DUP	12587-47-2	6.99E+01		4.8E+00						L	11:47	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\W04932.Edd, h:\Reportdb\edd\FeadIV\Rad\32769.Edd

Lab Sample Id: H542T1EW **Sdg/Rept Nbr:** W04932 32769 **Collection Date:** 05/24/2006 09:26

Client Id: B1J5J5 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** MS **Received Date:** 05/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I06-038	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6156411	TC-99	3.20E+03	pCi/L	5.5E+02		1.03E+01	100.0	3.63E+03	TC99_ETVDSK	1.246E-01	07/06/2006			60	D
MS	14133-76-7			4.8E+01				88.0		L	18:34			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

7/7/2006 8:17:37 AM

Lot No., Due Date: J6E230318,J6E240155,J6E240382,J6E190202,J6E190208; 07/10/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6156416; RGAMLEPS Gamma by LEPS

SDG, Matrix: W04932; 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** 7-7-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: W156416
W04932

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: 7-7-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/10/2006 3:01:30 PM

Lot No., Due Date: J6E230281; 07/10/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6156424; RGAMMA Gamma by GER

SDG, Matrix: W04932; 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** 7/10/06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 615424
W04932

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: 7-11-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/13/2006 1:53:28 PM

Lot No., Due Date: J6E230281; 07/10/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6187280; RGAMLEPS Gamma by LEPS

SDG, Matrix: W04932; 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:
See NCM. 1008324

First Level Review Pam Anderson **Date** 7-13-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6187280
W04932

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: 7-14-06

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-08324**
NCM Initiated By: Pam Anderson
Date Opened: 07/13/2006
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: Gamma by LEPS
Lot #'s (Sample #'s): J6E230281 (4), J6G060000 (280),
QC Batches: 6187280

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

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	07/13/2006	The first analysis of the I 129 procedure that must go through a TEVA column all failed with very low yields, even the QC. The samples were repoured and reanalyzed with acceptable results. The reanalysis batch had a blank and LCS that went through the TEVA disk and a blank and LCS that did not. The blank and spike that went through the TEVA disk failed again. The QC that did not go through is acceptable.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	07/13/2006	An investigation is starting to see what comes through the TEVA disk that caused problems.

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

7/14/2006 11:35:29 AM

Lot No., Due Date: J6E230281,J6E190208; 07/10/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6156420; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W04932; 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 => H5RF31AC 72.60<200.00 H51TK1AC 38.00<200.00 H51TP1AC 66.80<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. RPD > UCL : 20.0=> H51TP1AJ ALPHA 100.0 (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. MDC/MDA > CRDL => H5RF31AC ALPHA 3.8E+00>3.0E+00 H51TK1AC ALPHA 8.3E+00>3.0E+00 H51TP1AC ALPHA 3.3E+00>3.0E+00 H51TP1AJ ALPHA 4.6E+00>3.0E+00 Q:C1		✓	
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 => H5RF31AC ALPHA 4.4E+00 L:3.8E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		

N cm w/ batch C192282

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** 7-14-04

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: W156420
WO 4932

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: 7-17-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/14/2006 11:34:46 AM

Lot No., Due Date: J6E230281; 07/10/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6192282; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W04932; 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 => H51R12AC 59.00<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. No Samples Found in Batch! 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 => H51R12AC ALPHA 4.2E+00>3.0E+00 Q:C1		✓	
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 => ALPHA OK; No Callin Level Found => ALPHA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data! 10.08337			✓

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** 7-14-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6192282
W04932

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

Comments on any "No" response: See NCM

Second Level Review: Sheryl A. Adam Date: 7-17-06

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-08337**
NCM Initiated By: Pam Anderson
Date Opened: 07/14/2006
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: Alpha by GPC-Am
Lot #'s (Sample #'s): J6E230281 (2),
QC Batches: 6192282

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

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	07/14/2006	Sample H51R11AC had a ppt weight too heavy for the calibration curve. It was reanalyzed with a smaller aliquot and meet requirements.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	07/14/2006	The sample 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

7/19/2006 3:35:47 PM

Lot No., Due Date: J6E230281,J6E190208,J6E190210,J6E190277; 07/10/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6195493; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W04932; 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:

Reanalysis due to high LCS. Rerun LCS was OK
however the duplicates did not match. see NCM

First Level Review _____ **Date** 7/19/06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 195493
W0493L

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: 7-21-06

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-08357**
NCM Initiated By: Steven Wheland
Date Opened: 07/19/2006
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Beta by GPC-Sr/Y
Lot #'s (Sample #'s): J6E190208 (2), J6E190210 (1,2), J6E190277 (1), J6E230281 (2,3,4), J6G140000 (493),
QC Batches: 6195493

Nonconformance: Dups not within acceptance limits
Subcategory: Inhomogenity of the Sample

Problem Description / Root Cause

Name	Date	Description
Steven Wheland	07/19/2006	Samples were reanalyzed due to an initial LCS at 132%. During the first analysis the sample and its duplicate matched very closely at around 100 pCi/L. The reanalysis LCS was acceptable at 99%, however the duplicate (using the same sample) did not match. The results were 69.9 and 93.6.

Corrective Action

Name	Date	Corrective Action
Steven Wheland	07/19/2006	Repor the reanalysis data as per the client.

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

7/3/2006 11:31:06 AM

Lot No., Due Date: J6E230318,J6E240155,J6E190277; 07/10/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6156423; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W04932; 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=> H523R1AF SR-90 49.0 H523R1AF SR-90 32.0 (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 => H5TA11AD SR-90 7.2E+02 L:5.2E-01 H5TA11AD SR-90 7.3E+02 L:5.6E-01 H5TA11AD SR-90 7.2E+02 L:3.8E-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. OK	✓		

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/7/2006 3:02:31 PM

Lot No., Due Date: J6E230281,J6E230318,J6E240155,J6E240382,J6E190202,J6E190208; 07/10/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6156411; RTC99 Tc-99 by LSC

SDG, Matrix: W04932; 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 => H542T1AE 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** 7-7-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

7/11/2006 3:55:05 PM

Lot No., Due Date: J6E230281,J6E230318,J6E240155,J6E240382,J6E190202,J6E190208,J6E190277; 07/10/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6156413; RTRITIUM H-3 by LSC

SDG, Matrix: W04932; 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 => H542P1AA 5.00<10.00 H542T1AA 5.00<10.00 H5RD61AA 5.00<10.00 H5REA1AA 5.00<10.00 H5RFH1AA 5.00<10.00 H5RF31AA 5.00<10.00 H5TA11AA 5.00<10.00 H51RV1AA 5.00<10.00 H51R11AA 5.00<10.00 H51TK1AA 5.00<10.00 H51TP1AA 5.00<10.00 H51201AA 5.00<10.00 H51371AA 5.00<10.00 H514A1AA 5.00<10.00 H523R1AA 5.00<10.00 H52371AA 5.00<10.00 H524K1AA 5.00<10.00 H524V1AA 5.00<10.00 Q:VB ok PA 7-11-06		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => H6P7V1AF SVP15/5<>SVP10/10 H6P7V1AG SVP15/5<>SVP10/10 H6P7V1AJ SVP15/5<>SVP10/10 H542P1AA SVP15/5<>SVP10/10 H542T1AA SVP15/5<>SVP10/10 H6P7V1AA SVP15/5<>SVP10/10 H6P7V1AC SVP15/5<>SVP10/10 H5RD61AA SVP15/5<>SVP10/10 H5REA1AA SVP15/5<>SVP10/10 H5RFH1AA SVP15/5<>SVP10/10 H5RF31AA SVP15/5<>SVP10/10 H5TA11AA SVP15/5<>SVP10/10 H51RV1AA SVP15/5<>SVP10/10 H51RV1AD SVP15/5<>SVP10/10 H51R11AA SVP15/5<>SVP10/10 H6P7V1AH SVP15/5<>SVP10/10 H6P7V1AD SVP15/5<>SVP10/10 H6P7V1AE SVP15/5<>SVP10/10 H51TK1AA SVP15/5<>SVP10/10 H51TP1AA SVP15/5<>SVP10/10 H51201AA SVP15/5<>SVP10/10 H51371AA SVP15/5<>SVP10/10 H514A1AA SVP15/5<>SVP10/10 H523R1AA SVP15/5<>SVP10/10 H52371AA SVP15/5<>SVP10/10 H524K1AA SVP15/5<>SVP10/10 H524V1AA SVP15/5<>SVP10/10 Q:VC ok PA 7-11-06		✓	
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	✓		

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6156413
W04932

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

Comments on any "No" response:

Second Level Review: Cheryl A. Adam Date: 7-13-06

PNNL J6E190202 W04932 Due 1.3.06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I06-038-8**

Page 1 of 1

Collector R. Fox	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-038	**Sampling Origin** Hanford site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOL MAY 2006	Logbook: 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 CERCLA	**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
B1J5C1		W	5/18/06	1044	1x20-mL P	Activity Scan	None
B1J5C1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1) H5RDL	None
B1J5C1		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J5C1		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
			R. Wall	5/18/00			

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Fox			MAY 18 2006 15:05	S. Welch		S. Welch	MAY 18 2006 15:05
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 JCE190202 W04932

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I06-038-9

Page 1 of 1

Collector R. Fox	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-038	**Sampling Origin** Hanford site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI MAY 2006	Logbook: 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 CERCLA	**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
B1J5C2		W	5/18/06	1044	1x20-mL P	Activity Scan	None
B1J5C2		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1) H5REA	None
B1J5C2		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J5C2		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Fox			MAY 18 2006 15:05	S. Welch		S. Welch	MAY 18 2006 15:05
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: 5.18.06 15:05

Client: PGW SDG #: W04932 NA [ ] SAF #: I06-038 NA [ ]

Work Order Number: V6E190202 Chain of Custody # I06-038-8

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

Sample Custodian: S. Welch Date: 5.18.06 15:05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL J6E190208 W04932 due 7-3-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W06-005-342**

Page 1 of 1

Collector R. FOX	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2006	Logbook: 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 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
B1J3V3		W	5/18/06	0923	1x20-mL P	Activity Scan	None
B1J3V3		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1) H5RFH	None
B1J3V3		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1J3V3		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
				L. Wall	5/18/06		

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. FOX			MAY 18 2006 15:05	S. Welch	S. Welch		MAY 18 2006 15:05
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 W04932

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W06-005-336**

Page 1 of 1

Collector R. Fox	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2006	Logbook: 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 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
B1J3T9		W	5/18/06	1208	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1J3T9		W			1x20-mL P	Activity Scan H5RF3	None
B1J3T9		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J3T9		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1J3T9		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
				R. Wall 5/18/06			

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
R. Fox			MAY 18 2006 15:05	S. Welch		S. Welch	MAY 18 2006 15:05
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: 5-18-06 15:05

Client: PGW SDG #: W04932 NA [ ] SAF #: W06-005 NA [ ]

Work Order Number: J6E790208 Chain of Custody # W06-005-342, 336

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

Sample Custodian: S. Walsh Date: 5-15-06 15:05

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL JGE790210
W04932
DURATEK Due 7-3-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **G06-005-16**

Page 1 of 1

Collector DURATEK F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G06-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, MAY 2006	SAWS-14102	**Ice Chest No.** GWS-106 **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
B1J386		W	5-18-06	0833	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1) H5R6V	HNO3 to pH <2
B1J386		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK F. M. HALL			MAY 18 2006 1420	S. Welch	S. Welch		MAY 18 2006 1420
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J6E790210
W04932
Due 7-3-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # G06-005-12

Collector DUPATEX F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. G06-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 1NR2-RB, MAY 2006	SAWS-H 102	**Ice Chest No.** GWS-106 **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
B1J384		W	5-18-06	0950	1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1) H5RG2	HNO3 to pH <2
B1J384		W	↓	↓	1x20-mL P	Activity Scan	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DUPATEX F. M. HALL			MAY 18 2006 1420	S. Welch		S. Welch	MAY 18 2006 1420
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J6E2302801 W04932 due 7-6-06

SW 5-23-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W06-005-224**

Page 1 of 1

Collector DURATEK R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2006	Logbook: OTS-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 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
B1J3P2		W	5/22/06	1053	1x20-mL P	Activity Scan	None
B1J3P2		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1) H51RV	None
B1J3P2		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

R. Wall 5/22/06

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
DURATEK R. T. SICKLE	MAY 22 2006 1455	S. Welch S. Welch	MAY 22 2006 1455
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum 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 U6ED30281
W04932

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W06-005-308**

Page 1 of 1

Collector DURATEK R.T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2006	Logbook: 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 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
B1J3R0		W	5/22/06	1205	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1J3R0		W			1x20-mL P	Activity Scan H5ITP	None
B1J3R0		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J3R0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1J3R0		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1J3R0		W			2x4000-mL G/P	I129LL_ETVDSK_SEP_GS: I-129_ETVDSK (1)	None

R. Wells 5/22/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK R.T. SICKLE			MAY 22 2006 1455	S. Welch		S. Welch	MAY 22 2006 1455
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum 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: 5-22-06 14:55

Client: PGW SDG #: W04932 NA [ ] SAF #: W06-005 NA [ ]

Work Order Number: J6E230281 Chain of Custody # W06-005-224, 290, 296, 308, 354

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: 5
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   _____ custody seals
   _____ hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____ broken
   _____ leaking
   _____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed. Yes [✓] No [ ]
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: S. Welch Date: 5-22-06 14:55

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 J6E240155
W04932
Due 7-7-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I06-038-44**

Collector DYNRATEK D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-038	**Sampling Origin** Hanford site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, MAY 2006	DTS-SAW S - H 10d	**Ice Chest No.** SML-4420 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

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
B1J5F9		W	5-23-06	1005	1x20-mL P	Activity Scan	None
B1J5F9		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1) H523R	None
B1J5F9		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J5F9		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1J5F9		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DYNRATEK D. E. PARCHEN			MAY 23 2006 1220	S. Welch		S. Welch	MAY 23 2006 1220
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 J6E240155
W04932
Due 7.7.06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I06-038-32**

Page 1 of 1

Collector DORATEK D. R. BREWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-038	**Sampling Origin** Hanford site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOL MAY 2006	2TS- SAMP H 105	**Ice Chest No.** GRP03 021 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

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
B1J5F1		W	5-23-06	1021	1x20-mL P	Activity Scan	None
B1J5F1		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1) H5237	None
B1J5F1		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J5F1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DORATEK D. R. BREWINGTON	D.R. Brewington	D.R. Brewington	MAY 23 2006 1520	S. Welch	S. Welch	S. Welch	MAY 23 2006 1520
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 J6F240155
W04932

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I06-038-26

Page 1 of 1

Collector DURATEK D. R. BRESWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-038	**Sampling Origin** Hanford site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, MAY 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 CERCLA	**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
B1J5D7		W	5-23-06	1100	1x20-mL P	Activity Scan	None
B1J5D7		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1) H524K	None
B1J5D7		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J5D7		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. R. BRESWINGTON	D.R. Breswington		MAY 23 2006 1220	Sarah S. Welch			MAY 23 2006 1220
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 J6E240155 W04932

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I06-038-20

Page 1 of 1

Collector DURATEK D. R. BRENNINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-038	**Sampling Origin** Hanford site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOL MAY 2006	DTS - SHW 8 H 105	**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 CERCLA	**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
B1J5D3		W	5-23-06	0915	1x20-mL P	Activity Scan	None
B1J5D3		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1) H524V	None
B1J5D3		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J5D3		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. R. BRENNINGTON	D R Brennington		MAY 23 2006 1200	S. Welch	S Welch		MAY 23 2006 1200
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: 5.23.06 12:30

Client: PGW SDG #: W04932 NA [ ] SAF #: I06-038 NA [ ]

Work Order Number: J6F240155 Chain of Custody # I06-038-44, 38, 26, 20

Shipping Container ID: SML-4420 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. Walsh Date: 5.23.06 12:30

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

SW5.24.06

PNNL ~~J6E240382~~ W04932 Due 7.7.06

J6E240382

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I06-038-74**

Collector DUHATEK D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-038	**Sampling Origin** Hanford site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, MAY 2006	Logbook: 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 CERCLA	**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
B1J5J9		W	5/24/06	1120	1x20-mL P	Activity Scan H542P	None
B1J5J9		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1J5J9		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J5J9		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DUHATEK D. E. PARCHEN			MAY 24 2006 1435	S. Welch		Summer Welch	MAY 24 2006 1435
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J6E240382
W04932
due 7.7.06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I06-038-68**

Page 1 of 1

Collector DGRATEK D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-038	**Sampling Origin** Hanford site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, MAY 2006	Logbook: 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 CERCLA	**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
B1J5J5		W	5/24/06	0926	1x20-mL P	Activity Scan H542T	None
B1J5J5		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1J5J5		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1J5J5		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

S. Wall 5/24/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DGRATEK D. E. PARCHEN			MAY 24 2006 1435	S. Welch	S. Welch		MAY 24 2006 1435
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 5-24-06 14:35

Client: PGW SDG #: W04932 NA [ ] SAF #: I06-038 NA [ ]

Work Order Number: J6E240382 Chain of Custody # I06-038-68, 74

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

Sample Custodian: S. Welch Date: 5-24-06 14:35

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

6/29/2006 2:31:59 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:2113224201

Pipet #: _____

AnalyDueDate: 07/03/2006 W04932

Sep1 DT/Tm Tech:

Batch: 6156416 WATER pCi/L PM, Quote: HC , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6156411 FPS5, 6156413 ARS6, 6156416 BNTB,

Prep Tech: NortonJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H5RD6-1-AC J6E190202-1-SAMP		3847.50g,in	ITA5434 06/20/06	IFA	35.2	100	L2	1320	7/5 [illegible]	
05/18/2006 10:44		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: 5.67E-04 uCi/Sa		Beta: -4.50E-04 uCi/Sa
2 H5REA-1-AC J6E190202-2-SAMP		3839.80g,in	ITA5435 06/20/06		35.9	100	L4 7/5 [illegible]	1300		
05/18/2006 10:44		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: 2.27E-03 uCi/Sa		Beta: -2.24E-03 uCi/Sa
3 H5RFH-1-AC J6E190208-1-SAMP		3891.20g,in	ITA5436 06/20/06		34.8	100	L5	1300		
05/18/2006 09:23		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: 1.07E-03 uCi/Sa		Beta: -2.25E-04 uCi/Sa
4 H5RF3-1-AE J6E190208-2-SAMP		3819.80g,in	ITA5437 06/20/06		34.1	100	L2	1502	7/5 [illegible]	
05/18/2006 12:08		AmtRec: 20ML,500ML,2XLP,2X4LP	#Containers: 6				Scr:	Alpha: -1.15E-03 uCi/Sa		Beta: -6.25E-04 uCi/Sa
5 H5137-1-AC J6E230318-1-SAMP		3946.90g,in	ITA5438 06/20/06		34.1	100	L4	1503		
05/22/2006 11:55		AmtRec: 20ML,500ML,4XLP,2X4LP	#Containers: 8				Scr:	Alpha: 3.22E-04 uCi/Sa		Beta: -2.03E-03 uCi/Sa
6 H5137-1-AF-X J6E230318-1-DUP		3883.50g,in	ITA5439 06/20/06		34.4	100	L5	1503		
05/22/2006 11:55		AmtRec: 20ML,500ML,4XLP,2X4LP	#Containers: 8				Scr:	Alpha: 3.22E-04 uCi/Sa		Beta: -2.03E-03 uCi/Sa
7 H514A-1-AC J6E230318-2-SAMP		3936.70g,in	ITA5440 06/20/06		34.7	100	L2	1652	7/5/06 [illegible]	
05/22/2006 09:30		AmtRec: 20ML,4XLP,2X4LP	#Containers: 7				Scr:	Alpha: 1.45E-03 uCi/Sa		Beta: -1.95E-03 uCi/Sa

6/29/2006 2:32:01 PM

Sample Preparation/Analysis

Balance Id:2113224201

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 07/03/2006

Sep1 DT/Tm Tech:

Batch: 6156416 WATER pCi/L PM, Quote: HC , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,NortonJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 H523R-1-AC J6E240155-1-SAMP 05/23/2006 10:05	AmtRec: 20ML,500ML,4XLP,2X4LP	3922.10g,in	ITA5441 06/20/06	IFA	36.2	100	L 4	1653	7/5/06 DD	#Containers: 8 Scr: Alpha: 1.45E-03 uCi/Sa Beta: -1.48E-04 uCi/Sa
9 H5237-1-AC J6E240155-2-SAMP 05/23/2006 10:21	AmtRec: 20ML,500ML,LP,2X4LP	3967.30g,in	ITA5442 06/20/06		35.6	100	L 5	1633	7/5/06 DD	#Containers: 5 Scr: Alpha: 1.16E-03 uCi/Sa Beta: -3.40E-04 uCi/Sa
10 H524K-1-AC J6E240155-3-SAMP 05/23/2006 11:00	AmtRec: 20ML,500ML,LP,2X4LP	3952.50g,in	ITA5443 06/20/06		35.0	100	L2	1920	7/5/06 DD	#Containers: 5 Scr: Alpha: -6.28E-04 uCi/Sa Beta: 6.77E-04 uCi/Sa
11 H524V-1-AC J6E240155-4-SAMP 05/23/2006 09:15	AmtRec: 20ML,500ML,LP,2X4LP	3921.60g,in	ITA5444 06/20/06		35.4	100	L4	1921		#Containers: 5 Scr: Alpha: -1.83E-03 uCi/Sa Beta: 2.26E-03 uCi/Sa
12 H542P-1-AC J6E240382-1-SAMP 05/24/2006 11:20	AmtRec: 20ML,500ML,LP,2X4LP	3872.80g,in	ITA5445 06/20/06		34.6	100	L5	1921		#Containers: 5 Scr: Alpha: -9.01E-04 uCi/Sa Beta: 1.93E-03 uCi/Sa
13 H542T-1-AC J6E240382-2-SAMP 05/24/2006 09:26	AmtRec: 20ML,500ML,LP,2X4LP	3911.30g,in	ITA5446 06/20/06		35.3	100	L2	2103		#Containers: 5 Scr: Alpha: -1.13E-03 uCi/Sa Beta: 1.93E-03 uCi/Sa
14 H6P73-1-AA-B J6F050000-416-BLK 05/22/2006 11:55	AmtRec:	4001.20g,in	ITA5447 06/20/06		35.7	100	L4	2104		#Containers: 1 Scr: Alpha: Beta:

6/29/2006 2:32:02 PM

Sample Preparation/Analysis

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

Balance Id:2113224201

Pipet #: _____

AnalyDueDate: 07/03/2006

Sep1 DT/Tm Tech:

Batch: 6156416 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,NortonJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15H6P73-1-AC-C J6F050000-416-LCS		3963.50g,in	ISD0659 05/10/06	IFA	mg 375	100	L5	2105	7/6/06	
05/22/2006 11:55		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

Comments: Ph APPX 7 JW 6-29-6

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

H5RD61AC-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
H6P731AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
H6P731AC-LCS:					
I-129	RDL:5	pCi/L	LCL:70	UCL:130	RPD:20

H5RD61AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P731AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P731AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

7/7/2006 8:07:53 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/7/2005, 7/12/2006, Batch: '6156416', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
6156416							
AC			**CalcC**	**NortonJ**	6/29/2006 11:17:47		
SC				wagarr	IsBatched	6/5/2006 3:16:46 PM	ICOC_RADCALC v4.8.24
SC				NortonJ	InPrep	6/29/2006 11:17:47 AM	RICHRC5025 REV3
SC				NortonJ	InSep1	6/29/2006 2:29:32 PM	richrc5025 rev3
SC				NortonJ	Sep1C	7/5/2006 11:33:38 AM	RICHRC5025 REV3
SC				BlackCL	InCnt1	7/5/2006 11:37:34 AM	RICH-RD-0007 REVISION 5
SC				DAWKINSO	CalcC	7/5/2006 9:20:46 PM	RICH-RD-0007 REVISION 5
AC				**NortonJ**	6/29/2006 2:29:32 PM		
AC				**NortonJ**	7/5/2006 11:33:38		
AC				**BlackCL**	7/5/2006 11:37:34		
AC				**DAWKINSO**	7/5/2006 9:20:46 PM		

AC: Accepting Entry; SC: Status Change

7/7/2006 12:09:52 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: N/A

AnalyDueDate: 07/06/2006 WO4932

Sep1 DT/Tm Tech:

Batch: 6156424 **WATER** **pCi/L** **PM, Quote: HC , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: RutherfordJ JS 10 11

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H51R1-1-AE J6E230281-2-SAMP 05/22/2006 09:54		2000.20g,in AmtRec: 20ML,500ML,2XLP,4LP		#Containers: 5	100	100	66	1016	7/10/06	Scr: Alpha: 9.88E-03 uCi/Sa 1.2E-01L Beta: 3.28E-04 uCi/Sa
2 H51TK-1-AE J6E230281-3-SAMP 05/22/2006 09:04		2000.20g,in AmtRec: 20ML,500ML,2XLP,4LP		#Containers: 5			68	1016		Scr: Alpha: 1.09E-03 uCi/Sa Beta: -8.33E-04 uCi/Sa
3 H51TK-1-AG-X J6E230281-3-DUP 05/22/2006 09:04		1999.50g,in AmtRec: 20ML,500ML,2XLP,4LP		#Containers: 5			610	1017		Scr: Alpha: 1.09E-03 uCi/Sa Beta: -8.33E-04 uCi/Sa
4 H51TP-1-AE J6E230281-4-SAMP 05/22/2006 12:05		2003.50g,in AmtRec: 20ML,500ML,2XLP,4LP		#Containers: 7			611	1017		Scr: Alpha: 1.69E-03 uCi/Sa Beta: -1.33E-03 uCi/Sa
5 H6P8M-1-AA-B J6F050000-424-BLK 05/22/2006 09:04		1999.50g,in AmtRec:		#Containers: 1			613	1017		Scr: Alpha: Beta:
6 H6P8M-1-AC-C J6F050000-424-LCS 05/22/2006 09:04		2000.10g,in AmtRec:	QCAG1225 06/14/06,pd 06/08/05,r #Containers: 1				68	1201	7/10/06	Scr: Alpha: Beta:

7/7/2006 12:09:54 PM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 07/06/2006

Sep1 DT/Tm Tech:

Batch: 6156424 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	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: H51R1-SAMP "Comments: " PH C2.0 SHR 7/7/06
H51TK-SAMP "Comments: "
H51TP-SAMP "Comments: "

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

H51R11AE-SAMP Constituent List:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

H6P8M1AA-BLK:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

H6P8M1AC-LCS:

Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
K-40	RDL:6	pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
RA-228	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
U-238	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20						

H51R11AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

H6P8M1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

H6P8M1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

7/10/2006 3:00:59 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/10/2005, 7/15/2006, Batch: '6156424', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6156424						
AC		**CalcC**	**RutherfordJ**	7/7/2006 11:51:17		
SC			wagarr	IsBatched	6/5/2006 3:16:46 PM	ICOC_RADCALC v4.8.24
SC			RutherfordJ	InPrep	7/7/2006 11:51:17 AM	RICH-RC-5017 REVISION 5
SC			ScottM	Prep2C	7/10/2006 8:10:50 AM	RICH-RC-5017 REVISION 4
SC			BlackCL	InCnt1	7/10/2006 8:33:39 AM	RICH-RD-0007 REVISION 5
SC			BlackCL	CalcC	7/10/2006 12:06:13 PM	RICH-RD-0007 REVISION 5
AC			**ScottM**	7/10/2006 8:10:50		
AC			**BlackCL**	7/10/2006 8:33:39		
AC			**BlackCL**	7/10/2006 12:06:13		

AC: Accepting Entry; SC: Status Change

SEVERN TRENT STL

*** RE-ANALYSIS REQUEST ***

DUE DATE 7-6-06

CUSTOMER PGW

ANALYSIS I 129

MATRIX water

LOT NUMBER J6E230281

SAMPLE DELIVERY GROUP WO 4932

OLD BATCH NUMBER 6156418

NEW BATCH NUMBER 6187280

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) all	low yields due to TOVA disk
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	
LAB QC ID	Assigned with new batch.

7/10/2006 8:22:03 AM

Sample Preparation/Analysis

Balance Id:2113224201

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

H3 I-129 PrpRC5065, SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 07/06/2006 W04932

Sep1 DT/Tm Tech:

Batch: 6187280 **WATER** **pCi/L** **PM, Quote: HC , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6156411 FPS5, 6156413 ARS6, 6156418 H3TB, 6156420 AZS7, 6156422 BCS8, 6156424 AWTA, 6187280
H3TB,

Prep Tech: NortonJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H51TP-2-AF J6E230281-4-SAMP 05/22/2006 12:05	AmtRec: 20ML,500ML,2XLP,4LP	1900.90g,in	ITA5472 06/29/06	IFA #Containers: 7	14.1	100	L5	1606 Scr:	7/12/06 OP Alpha: 1.69E-03 uCi/Sa	Beta: -1.33E-03 uCi/Sa
2 H51TP-2-AH-X J6E230281-4-DUP 05/22/2006 12:05	AmtRec: 20ML,500ML,2XLP,4LP	1911.90g,in	ITA5473 06/29/06	#Containers: 7	14.0	100	L4	1606 Scr:	Alpha: 1.69E-03 uCi/Sa	Beta: -1.33E-03 uCi/Sa
3 H8QFD-1-AA-B J6G060000-280-BLK 05/22/2006 12:05	AmtRec:	2004.60g,in	ITA5474 06/29/06	#Containers: 1	1.9	100	L2	1607 Scr:	Alpha:	Beta:
4 H8QFD-1-AC-C J6G060000-280-LCS 05/22/2006 12:05	AmtRec:	2002.40g,in	ISD0664 06/16/06	#Containers: 1	0.8	100	L2	1750 Scr:	Alpha:	Beta:
5 H8QFD-1-AD-B J6G060000-280-BLK 05/22/2006 12:05	AmtRec:	2011.20g,in	ITA5475 06/29/06	#Containers: 1	33.8	100	L5	1751 Scr:	Alpha:	Beta:
6 H8QFD-1-AE-C J6G060000-280-LCS 05/22/2006 12:05	AmtRec:	2000.50g,in	ISD0665 06/16/06	#Containers: 1	36.8	100	L4	1752 Scr:	Alpha:	Beta:

7/10/2006 8:22:48 AM

Sample Preparation/Analysis

H3 I-129 PrpRC5065, SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Balance Id:2113224201

Pipet #: _____

AnalyDueDate: 07/06/2006

Sep1 DT/Tm Tech:

Batch: 6187280 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,NortonJ

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

Comments: H51TP-SAMP "Comments: " SAMPLE & DUP & BLK SPK - MEASURED VOLUME, ADDED TRACER, FILTERED WITH TEVA.
BLNK & SPK #5 & 6 - NOT PUT THROUGH TEVA
lal N2014

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

H51TP2AF-SAMP Constituent List:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
H8QFD1AA-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
H8QFD1AC-LCS:					
I-129	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20
H8QFD1AD-BLK:					
I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
H8QFD1AE-LCS:					
I-129	RDL:1	pCi/L	LCL:70	UCL:130	RPD:20

H51TP2AF-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
H8QFD1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
H8QFD1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
H8QFD1AD-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
H8QFD1AE-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By _____ Date: _____

7/13/2006 2:33:08 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/13/2005, 7/18/2006, Batch: '6187280', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6187280						
AC		**CalcC**	**NortonJ**	7/10/2006 8:15:11		
SC			andersonp	IsBatched	7/6/2006 10:36:23 AM	ICOC_RADCALC v4.8.24
SC			NortonJ	InPrep	7/10/2006 8:15:11 AM	richrc5025 rev3
SC			NortonJ	InSep1	7/10/2006 8:21:29 AM	richrc5025 rev3
SC			NortonJ	Prep1C	7/12/2006 2:07:17 PM	RICHRC5025 REV3
SC			DAWKINSO	CalcC	7/12/2006 7:43:32 PM	RICH-RD-0007 REVISION 5
AC			**NortonJ**	7/10/2006 8:21:29		
AC			**NortonJ**	7/12/2006 2:07:17 PM		
AC			**DAWKINSO**	7/12/2006 7:43:32 PM		

AC: Accepting Entry; SC: Status Change

7/7/2006 10:47:25 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:2113224201,1120482733
Pipet #: 229

AnalyDueDate: 07/03/2006 W04932

Sep1 DT/Tm Tech:

Batch: 6156420 WATER pCi/L PM, Quote: HC , 57671
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	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H5RF3-1-AC J6E190208-2-SAMP 05/18/2006 12:08		72.60g,in AmtRec: 20ML,500ML,2XLP,2X4LP	#Containers: 6	1.5	17.5	~~100~~ NH 7-8-06 50	DA Scr:	1244 Alpha: -1.15E-03 uCi/Sa	7/8/06 Beta: -6.25E-04 uCi/Sa	
2 H51R1-1-AC J6E230281-2-SAMP 05/22/2006 09:54		120.00g,in AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 5		98.1		DC Scr:	Alpha: 9.88E-03 uCi/Sa	1.2E-01L Beta: 3.28E-04 uCi/Sa	
3 H51TK-1-AC J6E230281-3-SAMP 05/22/2006 09:04		38.00g,in AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 5		35.3		DD Scr:	Alpha: 1.09E-03 uCi/Sa	Beta: -8.33E-04 uCi/Sa	
4 H51TP-1-AC J6E230281-4-SAMP 05/22/2006 12:05		66.80g,in AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 7		25.5		DE Scr:	Alpha: 1.69E-03 uCi/Sa	Beta: -1.33E-03 uCi/Sa	
5 H51TP-1-AJ-X J6E230281-4-DUP 05/22/2006 12:05		66.60g,in AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 7		27.2		DA Scr:	1349 Alpha: 1.69E-03 uCi/Sa	7/8/06 Beta: -1.33E-03 uCi/Sa	
6 H6P8G-1-AA-B J6F050000-420-BLK 05/22/2006 12:05		200.60g,in AmtRec:	#Containers: 1		1.0		DC Scr:	Alpha:	Beta:	
7 H6P8G-1-AC-C J6F050000-420-LCS 05/22/2006 12:05		199.10g,in AmtRec:	ASD3894 06/26/06,pd 02/09/06,r #Containers: 1		1.3		DD Scr:	Alpha:	Beta:	

7/7/2006 10:47:27 AM

Sample Preparation/Analysis

Balance Id:2113224201,1120482733

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

Pipet #: _____

AnalyDueDate: 07/03/2006

Sep1 DT/Tm Tech:

Batch: 6156420 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	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments: H5RF3-SAMP "Comments: Reduced aliquots on sample H5RF3 due to weight screen activity. jhr 07/07/06"
H51R1-SAMP "Comments: Reduced aliquots on sample H51R1 due to weight screen activity. jhr 07/07/06"
H51TK-SAMP "Comments: Reduced aliquots on sample H51TK due to weight screen activity. jhr 07/07/06"
H51TP-SAMP "Comments: Reduced aliquots on sample H51TP due to weight screen activity. jhr 07/07/06"
pH < 2.0 JHR 7/7/06

Hard flamed, 1% collodian MH 7-8-06

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

H5RF31AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
H6P8G1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
H6P8G1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

H5RF31AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P8G1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P8G1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

SEVERN TRENT STL

*** RE-ANALYSIS REQUEST ***

DUE DATE 7-10-06

CUSTOMER PGW

ANALYSIS alpha

MATRIX water

LOT NUMBER JGE 230281, JGE 190208

SAMPLE DELIVERY GROUP W04932

OLD BATCH NUMBER 6156420

NEW BATCH NUMBER 6192282

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) H5IR1AC	ppt wt too heavy use ~60 ml on ana
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	
LAB QC ID	Assigned with new batch.

7/12/2006 6:14:21 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 229

AnalyDueDate: 07/06/2006 WC4132

Sep1 DT/Tm Tech:

Batch: 6192282 **WATER** **pCi/L** **PM, Quote: HC , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6156411 FPS5, 6156413 ARS6, 6156418 H3TB, 6156420 AZS7, 6156422 BCS8, 6156424 AWTA, 6187280 H3TB, 6192282 AZS7,

Prep Tech: RutherfordJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H51R1-2-AC J6E230281-2-SAMP 05/22/2006 09:54		59.00g,in AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 5	1.5	43.150		10B	1728	7/13/06	Scr: Alpha: 9.88E-03 uCi/Sa 1.2E-01L Beta: 3.28E-04 uCi/Sa
2 H80RM-1-AA-B J6G110000-282-BLK 05/22/2006 09:54		200.70g,in AmtRec:	#Containers: 1		0.1		10C			Scr: Alpha: Beta:
3 H80RM-1-AC-C J6G110000-282-LCS 05/22/2006 09:54		200.70g,in AmtRec:	ASD3910 07/06/06,pd 02/09/06,r #Containers: 1		0.3		10D			Scr: Alpha: Beta:

Comments: H51R1-SAMP "Comments: "

ASD allowed to Go Dry. Reported. Original Batch Sheet with notes from JHR attached. (MS 07/12/06)

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

H51R12AC-SAMP Constituent List:
  ALPHA       RDL:3          pCi/L     LCL:        UCL:        RPD:
H80RM1AA-BLK Constituent List:
  ALPHA       RDL:3          pCi/L     LCL:        UCL:        RPD:
H80RM1AC-LCS:
  Am-241      RDL:           pCi/L     LCL:70      UCL:130     RPD:20

H51R12AC-SAMP Calc Info:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H80RM1AA-BLK Calc Info:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H80RM1AC-LCS:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

7/14/2006 11:03:14 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/14/2005, 7/19/2006, Batch: '6192282', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6192282						
AC		**CalcC**	**RutherfordJ**	7/11/2006 11:28:36		
SC			andersonp	IsBatched	7/11/2006 10:47:06 AM	ICOC_RADCALC v4.8.24
SC			RutherfordJ	InPrep	7/11/2006 11:28:36 AM	RICH-RC-5014 REVISION 6
SC			ScottM	Prep2C	7/11/2006 2:07:34 PM	RICH-RC-5014 REVISION 6
SC			ScottM	Prep2C	7/13/2006 8:16:25 AM	RICH-RC-5014 REVISION 6
SC			StringerR	InCnt1	7/13/2006 8:29:58 AM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	7/13/2006 9:42:49 PM	RICH-RD-0003 REVISION 4
AC			**ScottM**	7/11/2006 2:07:34 PM		
AC			**ScottM**	7/13/2006 8:16:25		
AC			**StringerR**	7/13/2006 8:29:58		
AC			**DAWKINSO**	7/13/2006 9:42:49 PM		

AC: Accepting Entry; SC: Status Change

SEVERN TRENT STL

*** RE-ANALYSIS REQUEST ***

DUE DATE 7/3/06

CUSTOMER PGW

ANALYSIS Beta

MATRIX water

LOT NUMBER JLE190208

SAMPLE DELIVERY GROUP W04932

OLD BATCH NUMBER W1SE422

NEW BATCH NUMBER W19SE193

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) all	132% LCS
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	
LAB QC ID	Assigned with new batch.

7/15/2006 7:30:21 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 229 (RA)

AnalyDueDate: 07/03/2006

Sep1 DT/Tm Tech:

Batch: 6195493 **WATER** **pCi/L** **PM, Quote: HC , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6156411 FPS5, 6156413 ARS6, 6156416 BNTB, 6156420 AZS7, 6156422 BCS8, 6195493 BCS8,

Prep Tech: RutherfordJ,ScottM

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H5RF3-2-AD J6E190208-2-SAMP 05/18/2006 12:08		202.50g,in AmtRec: 20ML,500ML,2XLP,2X4LP #Containers: 6			1.3	99.0100	26C	1237	7/16/06 OW Scr: Alpha: -1.15E-03 uCi/Sa Beta: -6.25E-04 uCi/Sa	
2 H5RF3-2-AG-X J6E190208-2-DUP 05/18/2006 12:08		200.00g,in AmtRec: 20ML,500ML,2XLP,2X4LP #Containers: 6			94.1		26D		Scr: Alpha: -1.15E-03 uCi/Sa Beta: -6.25E-04 uCi/Sa	
3 H5RGV-2-AA J6E190210-1-SAMP 05/18/2006 08:33		10.00g,in AmtRec: 20LP,LP #Containers: 2			10.0		31A		Scr: Alpha: 2.80E-03 uCi/Sa 6.4E-02L Beta: 5.42E-03 uCi/Sa 1.7E-02L	
4 H5RG2-2-AA J6E190210-2-SAMP 05/18/2006 09:50		10.20g,in AmtRec: 20LP,LP #Containers: 2			4.0		31B		Scr: Alpha: 2.93E-04 uCi/Sa Beta: 4.30E-04 uCi/Sa	
5 H5TA1-2-AC J6E190277-1-SAMP 05/18/2006 11:25		10.30g,in AmtRec: 20ML,5XLP #Containers: 6			2.6		31C		Scr: Alpha: -3.00E-07 uCi/Sa Beta: 1.92E-06 uCi/Sa	
6 H51R1-2-AD J6E230281-2-SAMP 05/22/2006 09:54		10.10g,in AmtRec: 20ML,500ML,2XLP,4LP #Containers: 5			12.8		31D		Scr: Alpha: 9.88E-03 uCi/Sa 1.2E-01L Beta: 3.28E-04 uCi/Sa	
7 H51TK-2-AD J6E230281-3-SAMP 05/22/2006 09:04		100.00g,in AmtRec: 20ML,500ML,2XLP,4LP #Containers: 5			112.4		32A		Scr: Alpha: 1.09E-03 uCi/Sa Beta: -8.33E-04 uCi/Sa	

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 07/03/2006

Sep1 DT/Tm Tech:

Batch: 6195493 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,ScottM

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

H9A2M1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H9A2M1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

7/17/2006 3:21:52 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/17/2005, 7/22/2006, Batch: '6195493', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6195493						
AC		**CalcC**	**ScottM**	7/15/2006 7:14:54		
SC			antonsonl	IsBatched	7/14/2006 3:53:23 PM	ICOC_RADCALC v4.8.24
SC			ScottM	InPrep	7/15/2006 7:14:54 AM	RICH-RC-5014 REVISION 6
SC			ScottM	Prep2C	7/15/2006 10:57:23 AM	RICH-RC-5014 REVISION 6
SC			DAWKINSO	CalcC	7/16/2006 3:07:55 PM	RICH-RD-0003 REVISION 4
AC			**ScottM**	7/15/2006 10:57:23		
AC			**DAWKINSO**	7/16/2006 3:07:55 PM		

AC: Accepting Entry; SC: Status Change

6/21/2006 5:06:42 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 07/03/2006 W04932

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

Balance Id:1120482733 ,01

Pipet #: NA

Sep1 DT/Tm Tech: 6-20-06 10:20 [illegible]

Sep2 DT/Tm Tech: 6-28-06 11:16 [illegible]

Prep Tech: ,RutherfordJ

Batch: 6156423 **pCi/L** **PM, Quote: HC , 57671**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H5TA1-1-AD J6E190277-1-SAMP		960.40g,in	SRTB13748 06/05/06,pd 03/28/06,r YTA15887 Ex:3/28/2007	1.761 / 2.0460 / .8524		23.6	30 / 100	9" / 3A / 3A	1900 / 0803 / 0803	6/21/06 OP / 6/29/06 / 6/30/06	
05/18/2006 11:25		AmtRec: 20ML,5XLP	#Containers: 6					Scr:	Alpha: -3.00E-07 uCi/Sa	Beta: 1.92E-06 uCi/Sa	
2 H5137-1-AD J6E230318-1-SAMP		1007.10g,in	SRTB13749 06/05/06,pd 03/28/06,r YTA15888 Ex:3/28/2007	1.982 / 2.0660 / .9593		23.2		3" / 3B / 3B	1900 / 0803 / 0803	6/21/06 OP / 6/29/06 / 6/30/06	
05/22/2006 11:55		AmtRec: 20ML,500ML,4XLP,2X4LP	#Containers: 8					Scr:	Alpha: 3.22E-04 uCi/Sa	Beta: -2.03E-03 uCi/Sa	
3 H514A-1-AD J6E230318-2-SAMP		1002.40g,in	SRTB13750 06/05/06,pd 03/28/06,r YTA15889 Ex:3/28/2007	1.720 / 2.0597 / .8351		24.2		9" / 3C / 3C	1935 / 0803 / 0803	6/21/06 OP / 6/29/06 / 6/30/06	
05/22/2006 09:30		AmtRec: 20ML,4XLP,2X4LP	#Containers: 7					Scr:	Alpha: 1.45E-03 uCi/Sa	Beta: -1.95E-03 uCi/Sa	
4 H523R-1-AD J6E240155-1-SAMP		1010.70g,in	SRTB13751 06/05/06,pd 03/28/06,r YTA15890 Ex:3/28/2007	1.719 / 2.0723 / .8295		24.7		3" / 3D / 3D	1935 / 0803 / 0803	6/21/06 OP / 6/29/06 / 6/30/06	
05/23/2006 10:05		AmtRec: 20ML,500ML,4XLP,2X4LP	#Containers: 8					Scr:	Alpha: 1.45E-03 uCi/Sa	Beta: -1.48E-04 uCi/Sa	

6/21/2006 5:14:17 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 07/03/2006

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

Batch: 6156423 WATER pCi/L PM, Quote: HC , 57671
SEQ Batch, Test: None

Balance Id:1120482733

Pipet #: NA

Sep1 DT/Tm Tech: 6-20-06 10:20

Sep2 DT/Tm Tech: 6-28-06 11:16

Prep Tech: ,RutherfordJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 H523R-1-AF-X J6E240155-1-DUP		1009.40g,in	SRTB13752 06/05/06,pd 03/28/06,r	1.626				9"	2010	6/21/06	
				2.0754			30				
			YTA15891	.7835				4A	0803	6/29/06	
			Ex:3/28/2007			23.5	100	4A	0813	6/30/06	
05/23/2006 10:05		AmtRec: 20ML,500ML,4XLP,2X4LP	#Containers: 8					Scr:	Alpha: 1.45E-03 uCi/Sa	Beta: -1.48E-04 uCi/Sa	
6 H6P8L-1-AA-B J6F050000-423-BLK		1007.70g,in	SRTB13753 06/05/06,pd 03/28/06,r	1.754				3"	2010	6/21/06	
				2.0912							
			YTA15892	.8388				4B	0803	6/29/06	
			Ex:3/28/2007			228		4B	0813	6/30/06	
05/23/2006 10:05		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
7 H6P8L-1-AC-C J6F050000-423-LCS		1000.30g,in	SRSG1228 05/05/06,pd 11/09/05,r	1.766				9"	2051	6/21/06	
				2.0728							
			YTA15893	.8520				4C	0800	6/29/06	
			Ex:3/28/2007			23.4		4C	0813	6/30/06	
05/23/2006 10:05		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

Comments: pH<2.0
JAR
6/21/06

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

H5TA11AD-SAMP Constituent List:
Sr-85 RDL: pCi/L LCL:20 UCL:105 RPD:20 Sr-90 RDL:2 pCi/L LCL:70 UCL:130 RPD:20

7/3/2006 11:17:30 AM

ICOC Fraction Transfer/Status Report

ByDate: 7/3/2005, 7/8/2006, Batch: '6156423', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6156423						
AC		**CalcC**	**RutherfordJ**	6/16/2006 2:04:18 PM		
SC			wagarr	IsBatched	6/5/2006 3:16:46 PM	ICOC_RADCALC v4.8.24
SC			RutherfordJ	InPrep	6/16/2006 2:04:18 PM	RICH-RC-5016 REVISION 6
SC			RutherfordJ	Prep1C	6/16/2006 2:37:26 PM	RICH-RC-5016 REVISION 6
SC			FABREM	InSep1	6/16/2006 4:25:23 PM	RICH-RC-5006 REVISION 6
SC			FABREM	Sep1C	6/21/2006 4:58:35 PM	RICH-RC-5006 REVISION 6
SC			DAWKINSO	InCnt1	6/21/2006 5:20:57 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	Cnt1C	6/21/2006 9:10:28 PM	RICH-RD-0007 REVISION 5
SC			FABREM	InSep2	6/23/2006 11:55:27 AM	RICH-RC-5071 REVISION 4
SC			FABREM	Sep2C	6/28/2006 7:23:45 PM	RICH-RC-5071 REVISION 4
SC			DAWKINSO	InCnt2	6/28/2006 10:02:32 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	6/30/2006 8:25:46 AM	RICH-RD-0003 REVISION 4
AC			**RutherfordJ**	6/16/2006 2:37:26 PM		
AC			**FABREM**	6/16/2006 4:25:23 PM		
AC			**FABREM**	6/21/2006 4:58:35 PM		
AC			**DAWKINSO**	6/21/2006 5:20:57 PM		
AC			**DAWKINSO**	6/21/2006 9:10:28 PM		
AC			**FABREM**	6/23/2006 11:55:27		
AC			**FABREM**	6/28/2006 7:23:45 PM		
AC			**DAWKINSO**	6/28/2006 10:02:32		
AC			**BlackCL**	6/30/2006 8:25:46		

AC: Accepting Entry; SC: Status Change

7/3/2006 5:10:14 PM

Sample Preparation/Analysis

Balance Id:2113224201,1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 07/03/2006 W04932

Sep1 DT/Tm Tech:

Batch: 6156411 WATER pCi/L PM, Quote: HC , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: NortonJ,RutherfordJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H5RD6-1-AD J6E190202-1-SAMP 05/18/2006 10:44			126.40g,in	126.40g		60				
	AmtRec: 20ML,500ML,LP,2X4LP		#Containers: 5					Scr:	Alpha: 5.67E-04 uCi/Sa	Beta: -4.50E-04 uCi/Sa
2 H5REA-1-AD J6E190202-2-SAMP 05/18/2006 10:44			126.90g,in	126.90g		60				
	AmtRec: 20ML,500ML,LP,2X4LP		#Containers: 5					Scr:	Alpha: 2.27E-03 uCi/Sa	Beta: -2.24E-03 uCi/Sa
3 H5RFH-1-AD J6E190208-1-SAMP 05/18/2006 09:23			124.00g,in	124.00g		60				
	AmtRec: 20ML,500ML,LP,2X4LP		#Containers: 5					Scr:	Alpha: 1.07E-03 uCi/Sa	Beta: -2.25E-04 uCi/Sa
4 H5RF3-1-AF J6E190208-2-SAMP 05/18/2006 12:08			125.40g,in	125.40g		60				
	AmtRec: 20ML,500ML,2XLP,2X4LP		#Containers: 6					Scr:	Alpha: -1.15E-03 uCi/Sa	Beta: -6.25E-04 uCi/Sa
5 H51RV-1-AC J6E230281-1-SAMP 05/22/2006 10:53			125.10g,in	125.10g		60				
	AmtRec: 20ML,500ML,LP		#Containers: 3					Scr:	Alpha: 8.54E-05 uCi/Sa	Beta: -1.34E-05 uCi/Sa
6 H51R1-1-AF J6E230281-2-SAMP 05/22/2006 09:54			125.30g,in	125.30g		60				
	AmtRec: 20ML,500ML,2XLP,4LP		#Containers: 5					Scr:	Alpha: 9.88E-03 uCi/Sa 1.2E-01L	Beta: 3.28E-04 uCi/Sa
7 H51TK-1-AF J6E230281-3-SAMP 05/22/2006 09:04			124.80g,in	124.80g		60				
	AmtRec: 20ML,500ML,2XLP,4LP		#Containers: 5					Scr:	Alpha: 1.09E-03 uCi/Sa	Beta: -8.33E-04 uCi/Sa

7/3/2006 5:10:16 PM

Sample Preparation/Analysis

Balance Id:2113224201,1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 07/03/2006

Sep1 DT/Tm Tech:

Batch: 6156411 WATER pCi/L PM, Quote: HC , 57671
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: NortonJ,RutherfordJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 H51TP-1-AG J6E230281-4-SAMP 05/22/2006 12:05			124.10g,in	124.10g		60				
AmtRec: 20ML,500ML,2XLP,4LP #Containers: 7							Scr:	Alpha: 1.69E-03 uCi/Sa	Beta: -1.33E-03 uCi/Sa	
9 H5120-1-AC J6E230281-5-SAMP 05/22/2006 11:05			126.20g,in	126.20g		60				
AmtRec: 20ML,500ML,LP #Containers: 3							Scr:	Alpha: 1.01E-04 uCi/Sa	Beta: -8.45E-05 uCi/Sa	
10 H5137-1-AE J6E230318-1-SAMP 05/22/2006 11:55			124.80g,in	124.80g		60				
AmtRec: 20ML,500ML,4XLP,2X4LP #Containers: 8							Scr:	Alpha: 3.22E-04 uCi/Sa	Beta: -2.03E-03 uCi/Sa	
11 H523R-1-AE J6E240155-1-SAMP 05/23/2006 10:05			124.50g,in	124.50g		60				
AmtRec: 20ML,500ML,4XLP,2X4LP #Containers: 8							Scr:	Alpha: 1.45E-03 uCi/Sa	Beta: -1.48E-04 uCi/Sa	
12 H5237-1-AD J6E240155-2-SAMP 05/23/2006 10:21			124.90g,in	124.90g		60				
AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5							Scr:	Alpha: 1.16E-03 uCi/Sa	Beta: -3.40E-04 uCi/Sa	
13 H524K-1-AD J6E240155-3-SAMP 05/23/2006 11:00			124.50g,in	124.50g		60				
AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5							Scr:	Alpha: -6.28E-04 uCi/Sa	Beta: 6.77E-04 uCi/Sa	
14 H524V-1-AD J6E240155-4-SAMP 05/23/2006 09:15			126.10g,in	126.10g		60				
AmtRec: 20ML,500ML,LP,2X4LP #Containers: 5							Scr:	Alpha: -1.83E-03 uCi/Sa	Beta: 2.26E-03 uCi/Sa	

7/3/2006 5:10:16 PM

Sample Preparation/Analysis

Balance Id:2113224201,1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 07/03/2006

Sep1 DT/Tm Tech:

Batch: 6156411 WATER pCi/L PM, Quote: HC , 57671

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,RutherfordJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 H542P-1-AD J6E240382-1-SAMP			125.10g,in	125.10g		60				
05/24/2006 11:20		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: -9.01E-04 uCi/Sa	Beta: 1.93E-03 uCi/Sa	
16 H542P-1-AE-X J6E240382-1-DUP			125.90g,in	125.90g		60				
05/24/2006 11:20		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: -9.01E-04 uCi/Sa	Beta: 1.93E-03 uCi/Sa	
17 H542T-1-AD J6E240382-2-SAMP			124.30g,in	124.30g		60				
05/24/2006 09:26		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: -1.13E-03 uCi/Sa	Beta: 1.93E-03 uCi/Sa	
18 H542T-1-AE-S J6E240382-2-MS			124.60g,in	124.60g	TCSG1654 06/30/06,pd 01/10/06,r	60				
05/24/2006 09:26		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: -1.13E-03 uCi/Sa	Beta: 1.93E-03 uCi/Sa	
19 H6P7G-1-AA-B J6F050000-411-BLK			125.70g,in	125.70g		60				
05/24/2006 11:20		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
20 H6P7G-1-AC-C J6F050000-411-LCS			126.30g,in	126.30g	TCSE1968 06/02/06,pd 01/10/06,r	60				
05/24/2006 11:20		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
21 H6P7G-1-AD-BN J6F050000-411-IBLK						60				
05/24/2006 11:20		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	

7/3/2006 5:10:18 PM

Sample Preparation/Analysis

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

Balance Id:

Pipet #: _____

AnalyDueDate: 07/03/2006

Sep1 DT/Tm Tech:

Batch: 6156411 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
22H6P7G-1-AE-BN J6F050000-411-IBLK 05/24/2006 11:20	AmtRec:		#Containers: 1			60		Scr:	Alpha:	Beta:

Comments: pH<2.0 JHR 7/3/06

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

H5RD61AD-SAMP Constituent List:
  Tc-99       RDL:15          pCi/L     LCL:70      UCL:130     RPD:20
H542T1AE-MS:

H6P7G1AA-BLK:
  Tc-99       RDL:15          pCi/L     LCL:        UCL:        RPD:
H6P7G1AC-LCS:
  Tc-99       RDL:15          pCi/L     LCL:70      UCL:130     RPD:20
H6P7G1AD-IBLK:
  Tc-99       RDL:15          pCi/L     LCL:        UCL:        RPD:
H6P7G1AE-IBLK:
  Tc-99       RDL:15          pCi/L     LCL:        UCL:        RPD:
H5RD61AD-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H542T1AE-MS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H6P7G1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H6P7G1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H6P7G1AD-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H6P7G1AE-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

7/7/2006 2:37:19 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/7/2005, 7/12/2006, Batch: '6156411', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6156411						
AC		**CalcC**	**RutherfordJ**	7/3/2006 4:23:40 PM		
SC			wagarr	IsBatched	6/5/2006 3:16:46 PM	ICOC_RADCALC v4.8.24
SC			RutherfordJ	InPrep	7/3/2006 4:23:40 PM	RICH-RC-5016 REVISION 6
SC			ManisD	InPrep	7/5/2006 4:51:10 PM	rich-rc-5065 rev6
SC			DAWKINSO	InCnt1	7/5/2006 6:32:40 PM	RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	7/7/2006 9:07:24 AM	RICH-RD-0001 REVISION 3
AC			**ManisD**	7/5/2006 4:51:10 PM		
AC			**DAWKINSO**	7/5/2006 6:32:40 PM		
AC			**BlackCL**	7/7/2006 9:07:24 AM		

AC: Accepting Entry; SC: Status Change

6/5/2006 3:07:01 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 07/03/2006 W04932

Batch: 6156413 **WATER** **pCi/L** **PM, Quote: HC , 57671**
SEQ Batch, Test: None

Balance Id: 17445
Pipet #:
Sep1 DT/Tm Tech: 7-7-06
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H5RD6-1-AA J6E190202-1-SAMP 05/18/2006 10:44	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: 5.67E-04 uCi/Sa	Beta: -4.50E-04 uCi/Sa
2 H5REA-1-AA J6E190202-2-SAMP 05/18/2006 10:44	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: 2.27E-03 uCi/Sa	Beta: -2.24E-03 uCi/Sa
3 H5RFH-1-AA J6E190208-1-SAMP 05/18/2006 09:23	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha: 1.07E-03 uCi/Sa	Beta: -2.25E-04 uCi/Sa
4 H5RF3-1-AA J6E190208-2-SAMP 05/18/2006 12:08	AmtRec: 20ML,500ML,2XLP,2X4LP	#Containers: 6				Scr:	Alpha: -1.15E-03 uCi/Sa	Beta: -6.25E-04 uCi/Sa
5 H5TA1-1-AA J6E190277-1-SAMP 05/18/2006 11:25	AmtRec: 20ML,5XLP	#Containers: 6				Scr:	Alpha: -3.00E-07 uCi/Sa	Beta: 1.92E-06 uCi/Sa
6 H51RV-1-AA J6E230281-1-SAMP 05/22/2006 10:53	AmtRec: 20ML,500ML,LP	#Containers: 3				Scr:	Alpha: 8.54E-05 uCi/Sa	Beta: -1.34E-05 uCi/Sa
7 H51RV-1-AD-X J6E230281-1-DUP 05/22/2006 10:53	AmtRec: 20ML,500ML,LP	#Containers: 3				Scr:	Alpha: 8.54E-05 uCi/Sa	Beta: -1.34E-05 uCi/Sa

6/5/2006 3:07:02 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 07/03/2006

Balance Id: D445
Pipet #:
Sep1 DT/Tm Tech: 7-7-06 bm
Sep2 DT/Tm Tech:
Prep Tech:

Batch: 6156413 **WATER** **pCi/L** **PM, Quote: HC , 57671**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 H51R1-1-AA J6E230281-2-SAMP 05/22/2006 09:54	AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 5				Scr:	Alpha: 9.88E-03 uCi/Sa 1.2E-01L	Beta: 3.28E-04 uCi/Sa
9 H51TK-1-AA J6E230281-3-SAMP 05/22/2006 09:04	AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 5				Scr:	Alpha: 1.09E-03 uCi/Sa	Beta: -8.33E-04 uCi/Sa
10 H51TP-1-AA J6E230281-4-SAMP 05/22/2006 12:05	AmtRec: 20ML,500ML,2XLP,4LP	#Containers: 7				Scr:	Alpha: 1.69E-03 uCi/Sa	Beta: -1.33E-03 uCi/Sa
11 H5120-1-AA J6E230281-5-SAMP 05/22/2006 11:05	AmtRec: 20ML,500ML,LP	#Containers: 3				Scr:	Alpha: 1.01E-04 uCi/Sa	Beta: -8.45E-05 uCi/Sa
12 H5137-1-AA J6E230318-1-SAMP 05/22/2006 11:55	AmtRec: 20ML,500ML,4XLP,2X4LP	#Containers: 8				Scr:	Alpha: 3.22E-04 uCi/Sa	Beta: -2.03E-03 uCi/Sa
13 H514A-1-AA J6E230318-2-SAMP 05/22/2006 09:30	AmtRec: 20ML,4XLP,2X4LP	#Containers: 7				Scr:	Alpha: 1.45E-03 uCi/Sa	Beta: -1.95E-03 uCi/Sa
14 H523R-1-AA J6E240155-1-SAMP 05/23/2006 10:05	AmtRec: 20ML,500ML,4XLP,2X4LP	#Containers: 8				Scr:	Alpha: 1.45E-03 uCi/Sa	Beta: -1.48E-04 uCi/Sa

6/5/2006 3:07:03 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 07/03/2006

Balance Id: 13445
Pipet #:
Sep1 DT/Tm Tech: 7-7-06 am
Sep2 DT/Tm Tech:
Prep Tech:

Batch: 6156413 **WATER** **pCi/L** **PM, Quote: HC , 57671**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 H5237-1-AA J6E240155-2-SAMP 05/23/2006 10:21		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: 1.16E-03 uCi/Sa	Beta: -3.40E-04 uCi/Sa
16 H524K-1-AA J6E240155-3-SAMP 05/23/2006 11:00		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: -6.28E-04 uCi/Sa	Beta: 6.77E-04 uCi/Sa
17 H524V-1-AA J6E240155-4-SAMP 05/23/2006 09:15		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: -1.83E-03 uCi/Sa	Beta: 2.26E-03 uCi/Sa
18 H542P-1-AA J6E240382-1-SAMP 05/24/2006 11:20		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: -9.01E-04 uCi/Sa	Beta: 1.93E-03 uCi/Sa
19 H542T-1-AA J6E240382-2-SAMP 05/24/2006 09:26		AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: -1.13E-03 uCi/Sa	Beta: 1.93E-03 uCi/Sa
20 H6P7V-1-AA-B J6F050000-413-BLK 05/22/2006 10:53		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
21 H6P7V-1-AC-C J6F050000-413-LCS 05/22/2006 10:53		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

6/5/2006 3:07:03 PM

Sample Preparation/Analysis

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

AnalyDueDate: 07/03/2006

Batch: 6156413 pCi/L
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 7-7-06 DW
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
22 H6P7V-1-AD-BX J6F050000-413-MBLK 05/22/2006 10:53		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
23 H6P7V-1-AE-CM J6F050000-413-MLCS 05/22/2006 10:53		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
24 H6P7V-1-AF-BN J6F050000-413-IBLK 05/22/2006 10:53		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
25 H6P7V-1-AG-BN J6F050000-413-IBLK 05/22/2006 10:53		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
26 H6P7V-1-AH-BN J6F050000-413-IBLK 05/22/2006 10:53		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
27 H6P7V-1-AJ-BN J6F050000-413-IBLK 05/22/2006 10:53		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

6/5/2006 3:07:05 PM

Sample Preparation/Analysis

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

AnalyDueDate: 07/03/2006

Batch: 6156413 pCi/L
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 7-7-06 DM
Sep2 DT/Tm Tech:
Prep Tech:

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

Comments:

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

H5RD61AA-SAMP Constituent List:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
H6P7V1AA-BLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
H6P7V1AC-LCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
H6P7V1AD-MBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
H6P7V1AE-MLCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
H6P7V1AF-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
H6P7V1AG-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
H6P7V1AH-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
H6P7V1AJ-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:

H5RD61AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P7V1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P7V1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P7V1AD-MBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P7V1AE-MLCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P7V1AF-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P7V1AG-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

6/5/2006 3:07:05 PM

Sample Preparation/Analysis

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

AnalyDueDate: 07/03/2006

Batch: 6156413 pCi/L
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 7-7-06 am
Sep2 DT/Tm Tech:
Prep Tech:

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

H6P7V1AH-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H6P7V1AJ-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

7/11/2006 3:26:23 PM

ICOC Fraction Transfer/Status Report

ByDate: 7/11/2005, 7/16/2006, Batch: '6156413', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6156413						
AC		**CalcC**	**McDowellD**	7/7/2006 10:58:06		
SC			wagarr	IsBatched	6/5/2006 3:16:46 PM	ICOC_RADCALC v4.8.24
SC			McDowellD	InSep1	7/7/2006 10:58:06 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	7/7/2006 1:29:15 PM	RICH-RC-5007 REVISION 6
SC			DAWKINSO	InCnt1	7/7/2006 2:32:52 PM	RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	7/11/2006 8:17:06 AM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	7/7/2006 1:29:15 PM		
AC			**McDowellD**	7/7/2006 2:14:51 PM		
AC			**DAWKINSO**	7/7/2006 2:32:52 PM		
AC			**BlackCL**	7/11/2006 8:17:06		

AC: Accepting Entry; SC: Status Change