Analytical Data Package Prepared For

Pacific Northwest National Lab

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Radiochemical Analysis By

STL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 31828

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04867	W06-002	B1HD77	J6B150151-1	HXGJ11AA	9HXGJ110	6052459
		B1HD77	J6B150151-1	HXGJ11AC	9HXGJ110	6052454
		B1HD73	J6B150151-2	HXGJ41AA	9HXGJ410	6052459
		B1HD73	J6B150151-2	HXGJ41AC	9HXGJ410	6052454
		B1HD53	J6B150151-3	HXGJ61AA	9HXGJ610	6052459
		B1HD53	J6B150151-3	HXGJ61AC	9HXGJ610	6052454
	I06-022	B1HHV5	J6B150154-1	HXGKH1AA	9HXGKH10	6052459
		B1HHV5	J6B150154-1	HXGKH1AC	9HXGKH10	6052460
		B1HHV5	J6B150154-1	HXGKH2AD	9HXGKH20	6093476
		B1HHT0	J6B150154-2	HXGKN1AA	9HXGKN10	6052459
		B1HHT0	J6B150154-2	HXGKN1AC	9HXGKN10	6052460
		B1HHT0	J6B150154-2	HXGKN1AD	9HXGKN10	6052454
		B1HHV8	J6B150154-3	HXGKR1AA	9HXGKR10	6052460
		B1HHV8	J6B150154-3	HXGKR2AC	9HXGKR20	6093476
		B1HHW7	J6B150407-1	HXJNA1AA	9HXJNA10	6052459

Comments:

1217010

Report Nbr: 31828

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04867	I06-022	B1HHW7	J6B150407-1	HXJNA1AC	9HXJNA10	6052454
	W06-002	B1HD39	J6B150408-1	HXJNC1AA	9HXJNC10	6052459
		B1HD39	J6B150408-1	HXJNC1AC	9HXJNC10	6052454
		B1HDD1	J6B150408-2	HXJND1AA	9HXJND10	6052459
		B1HDD1	J6B150408-2	HXJND1AD	9HXJND10	6052454
		B1HDD1	J6B150408-2	HXJND2AC	9HXJND20	6052462
		B1HDD5	J6B150408-3	HXJNE1AA	9HXJNE10	6052459
		B1HDD5	J6B150408-3	HXJNE1AC	9HXJNE10	6052454
		B1HDD5	J6B150408-3	HXJNE2AD	9HXJNE20	6088469
		B1HDF2	J6B150408-4	HXJNF1AA	9HXJNF10	6052459
		B1HDF2	J6B150408-4	HXJNF1AC	9HXJNF10	6052454
		B1HDB2	J6B150409-1	HXJNH1AA	9HXJNH10	6052459
		B1HDB2	J6B150409-1	HXJNH1AC	9HXJNH10	6052460
		B1HDB2	J6B150409-1	HXJNH1AD	9HXJNH10	6052454
		B1HJX0	J6B150409-2	HXJNJ1AA	9HXJNJ10	6052459
		B1HJX0	J6B150409-2	HXJNJ1AC	9HXJNJ10	6052454
		B1HJX1	J6B150409-3	HXJNK1AA	9HXJNK10	6052459
		B1HJX1	J6B150409-3	HXJNK1AC	9HXJNK10	6052454
	I06-022	B1HJ42	J6B170150-1	HXMKM1A	9HXMKM10	6052459
		B1HJ42	J6B170150-1	HXMKM1A	9HXMKM10	6052460
		B1HJ42	J6B170150-1	HXMKM1A	9HXMKM10	6052454
		B1HJ31	J6B170153-1	HXMLD1AA	9HXMLD10	6052459
		B1HJ31	J6B170153-1	HXMLD1AC	9HXMLD10	6052460
		B1HJ31	J6B170153-1	HXMLD1AD	9HXMLD10	6052467
		B1HJ31	J6B170153-1	HXMLD1AE	9HXMLD10	6052454
		B1HJ27	J6B170153-2	HXML81AA	9HXML810	6052459

Comments:

Report Nbr: 31828

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04867	I06-022	B1HJ27	J6B170153-2	HXML81AC	9HXML810	6052460
		B1HJ27	J6B170153-2	HXML81AD	9HXML810	6052467
		B1HJ27	J6B170153-2	HXML81AE	9HXML810	6052454
		B1HJ19	J6B170153-3	HXMMH1A	9HXMMH10	6052459
		B1HJ19	J6B170153-3	HXMMH1A	9HXMMH10	6052460
		B1HJ19	J6B170153-3	HXMMH1A	9HXMMH10	6052467
		B1HJ19	J6B170153-3	HXMMH1A	9HXMMH10	6052454
		B1HJ46	J6B170153-4	HXMMP1AA	9HXMMP10	6052459
		B1HJ46	J6B170153-4	HXMMP1AC	9HXMMP10	6052460
		B1HJ46	J6B170153-4	HXMMP1AD	9HXMMP10	6052454
		B1HJ15	J6B170153-5	HXMM81AA	9HXMM810	6052459
		B1HJ15	J6B170153-5	HXMM81AC	9HXMM810	6052460
		B1HJ15	J6B170153-5	HXMM81AD	9HXMM810	6052454

Comments:

Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

April 5, 2006

Attention: Dot Stewart

SAF Number	:	I06-022, W06-002
Date SDG Closed	:	February 16, 2006
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W04867
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between February 14, 2006 and February 16, 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
B1HHV5	HXGKH	WATER	2/14/06
B1HHT0	HXGKN	WATER	2/14/06
B1HHV8	HXGKR	WATER	2/14/06
B1HD77	HXGJ1	WATER	2/14/06
B1HD73	HXGJ4	WATER	2/14/06
B1HD53	HXGJ6	WATER	2/14/06
B1HD39	HXJNC	WATER	2/15/06
B1HDD1	HXJND	WATER	2/15/06
B1HDD5	HXJNE	WATER	2/15/06
B1HDF2	HXJNF	WATER	2/15/06
B1HHW7	HXJNA	WATER	2/15/06
B1HDB2	HXJNH	WATER	2/15/06
B1HJX0	HXJNJ	WATER	2/15/06

B1HJX1	HXJNK	WATER	2/15/06
B1HJ42	HXMKM	WATER	2/16/06
B1HJ31	HXMLD	WATER	2/16/06
B1HJ27	HXML8	WATER	2/16/06
B1HJ19	HXMMH	WATER	2/16/06
B1HJ46	HXMMP	WATER	2/16/06
B1HJ15	HXMM8	WATER	2/16/06

II. Sample Receipt

The chain of custodies for lot J6B150408 did not have relinquished times listed. Other than as noted, 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
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Technetium-99 by TEVA method RICH-RC-5065
Tritium by method RICH-RC-5007
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting
Strontium-90 by method RICH-RC-5006:
The LCS, batch blank, samples and sample duplicate (B1HJ31) results are within contractual requirements.

Pacific Northwest National Laboratories
April 5, 2006

Gamma Spectroscopy

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

The sample B1HHT0 was inadvertently spiked twice and the expected value of the spike was changed for calculation. Other than as noted, the LCS, batch blank, samples and sample duplicate (B1HJ15) results are within contractual requirements.

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

The yields for the sample B1HDD1 and its duplicate were low but within acceptance criteria. Due to the low yields the samples were counted for a longer duration in order to meet the CRDL. The sample B1HDD5 was reanalyzed due to a low yield and counted for a longer duration on the reanalysis which resulted in an acceptable yield. The LCS, batch blank, samples and sample duplicate (B1HDD1) results are within contractual requirements.

Liquid Scintillation Counting

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

The LCS, batch blank, samples, sample duplicate (BHDD1), and sample matrix spike (B1HD39) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1HHW7) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The initial batch of this analysis had a high blank and the batch was rerun. The reanalysis is accepted. The LCS, batch blank, samples, sample duplicate (B1HHV5), and sample matrix spike (B1HHV8) 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:

Hans Carman
Project Manager

Drinking Water Method Cross References

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

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = 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: 31828 File Name: h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.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:
9HXGJ110	B1HD77		MW6-SBB-A1	W06-002	W04867					02/14/2006 11:46

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	5.34E+03	pCi/L	2.8E+02	3.8E+02		3.35E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 04:15	I
6052454	TC-99	14133-76-7	1.13E+02	pCi/L	6.9E+00	1.3E+01		9.64E+00	100.0	TC99_ETVDSK_LS	1.28E-01	L	04/01/200 22:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXGJ410	B1HD73		MW6-SBB-A1	W06-002	W04867					02/14/2006 09:33

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	4.89E+03	pCi/L	2.7E+02	3.6E+02		3.38E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 05:38	I
6052454	TC-99	14133-76-7	2.32E+04	pCi/L	8.1E+01	1.6E+03		9.43E+00	100.0	TC99_ETVDSK_LS	1.308E-01	L	04/01/200 22:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXGJ610	B1HD53		MW6-SBB-A1	W06-002	W04867					02/14/2006 10:19

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	1.01E+04	pCi/L	3.6E+02	5.8E+02		3.38E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 07:00	I
6052454	TC-99	14133-76-7	5.67E+04	pCi/L	1.3E+02	3.8E+03		9.51E+00	100.0	TC99_ETVDSK_LS	1.297E-01	L	04/01/200 22:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXGKH10	B1HHV5		MW6-SBB-A1	I06-022	W04867					02/14/2006 13:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	1.28E+04	pCi/L	4.0E+02	6.9E+02		3.37E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 08:22	I
6052460	I-129L	15046-84-1	2.19E+00	pCi/L	4.3E-01	4.3E-01	U	7.27E-01	95.4	I129LL_SEP_LEPS	3.9384E+00	L	03/31/200 05:56	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXGKH20	B1HHV5		MW6-SBB-A1	I06-022	W04867					02/14/2006 13:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6093476	Uranium	7440-61-1	9.79E+01	ug/L	1.2E+01	1.2E+01		7.33E-02		UTOT_KPA	2.86E-02	ML	04/05/200 08:24	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:
9HXGKN10	B1HHT0		MW6-SBB-A1	I06-022	W04867					02/14/2006 09:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	4.01E+03	pCi/L	2.5E+02	3.3E+02		3.36E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 09:44	I
6052460	I-129L	15046-84-1	1.05E+00	pCi/L	1.4E-01	2.7E-01	U	5.35E-01	89.7	I129LL_SEP_LEPS	3.9029E+00	L	03/31/200 05:57	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.

6052454	TC-99	14133-76-7	9.31E+02	pCi/L	1.7E+01	6.9E+01		9.70E+00	100.0	TC99_ETVDSK_LS	1.271E-01	L	04/01/200	22:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXGKR10	B1HHV8		MW6-SBB-A1	I06-022	W04867					02/14/2006 11:31

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052460	I-129L	15046-84-1	4.39E-01	pCi/L	2.4E-01	2.4E-01	U	4.64E-01	95.1	I129LL_SEP_LEPS	3.9271E+00	L	03/31/200 07:40	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXGKR20	B1HHV8		MW6-SBB-A1	I06-022	W04867					02/14/2006 11:31

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6093476	Uranium	7440-61-1	1.41E+00	ug/L	1.4E-01	1.4E-01		7.23E-02		UTOT_KPA	2.90E-02	ML	04/05/200 08:28	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXJNA10	B1HHW7		MW6-SBB-A1	I06-022	W04867					02/15/2006 10:32

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	1.75E+02	pCi/L	1.5E+02	1.6E+02	U	3.38E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 11:06	I
6052454	TC-99	14133-76-7	2.15E+01	pCi/L	4.7E+00	7.1E+00		9.69E+00	100.0	TC99_ETVDSK_LS	1.272E-01	L	04/01/200 22:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXJNC10	B1HD39		MW6-SBB-A1	W06-002	W04867					02/15/2006 10:03

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	7.07E+03	pCi/L	3.1E+02	4.5E+02		3.36E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 13:51	I
6052454	TC-99	14133-76-7	9.85E+01	pCi/L	6.7E+00	1.2E+01		9.86E+00	100.0	TC99_ETVDSK_LS	1.251E-01	L	04/01/200 22:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXJND10	B1HDD1		MW6-SBB-A1	W06-002	W04867					02/15/2006 12:34

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	1.61E+06	pCi/L	4.2E+03	6.6E+04		3.38E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 19:20	I
6052454	TC-99	14133-76-7	7.59E+03	pCi/L	4.7E+01	5.2E+02		9.64E+00	100.0	TC99_ETVDSK_LS	1.28E-01	L	04/01/200 22:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXJND20	B1HDD1		MW6-SBB-A1	W06-002	W04867					02/15/2006 12:34

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052462	I-129L	15046-84-1	2.45E+01	pCi/L	3.0E+00	3.0E+00		9.84E-01	36.8	I129LL_ETVDSK_S	2.0106E+00	L	03/30/200 22:32	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: 31828 File Name: h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.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:
9HXJNE10	B1HDD5		MW6-SBB-A1	W06-002	W04867					02/15/2006 11:41

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	1.55E+05	pCi/L	1.3E+03	6.5E+03		3.36E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 20:42	I
6052454	TC-99	14133-76-7	1.72E+03	pCi/L	2.3E+01	1.2E+02		9.93E+00	100.0	TC99_ETVDSK_LS	1.243E-01	L	04/01/200 22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXJNE20	B1HDD5		MW6-SBB-A1	W06-002	W04867					02/15/2006 11:41

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6088469	I-129L	15046-84-1	1.50E+00	pCi/L	6.8E-01	6.8E-01	U	9.86E-01	31.1	I129LL_ETVDSK_S	1.8027E+00	L	04/01/200 17:08	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXJNF10	B1HDF2		MW6-SBB-A1	W06-002	W04867					02/15/2006 11:01

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	6.38E+03	pCi/L	3.0E+02	4.3E+02		3.36E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 22:05	I
6052454	TC-99	14133-76-7	2.71E+02	pCi/L	9.6E+00	2.4E+01		9.61E+00	100.0	TC99_ETVDSK_LS	1.284E-01	L	04/01/200 22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXJNH10	B1HDB2		MW6-SBB-A1	W06-002	W04867					02/15/2006 13:39

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	6.97E+03	pCi/L	3.1E+02	4.5E+02		3.36E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/04/200 23:27	I
6052460	I-129L	15046-84-1	2.83E-01	pCi/L	1.7E-01	1.7E-01	U	3.59E-01	94.9	I129LL_SEP_LEPS	3.9445E+00	L	03/31/200 07:40	I
6052454	TC-99	14133-76-7	5.95E+02	pCi/L	1.4E+01	4.6E+01		9.46E+00	100.0	TC99_ETVDSK_LS	1.305E-01	L	04/01/200 22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXJNJ10	B1HJX0		MW6-SBB-A1	W06-002	W04867					02/15/2006 12:32

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	3.85E+03	pCi/L	2.5E+02	3.2E+02		3.36E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/05/200 00:49	I
6052454	TC-99	14133-76-7	6.74E+02	pCi/L	1.4E+01	5.1E+01		9.48E+00	100.0	TC99_ETVDSK_LS	1.302E-01	L	04/01/200 22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXJNK10	B1HJX1		MW6-SBB-A1	W06-002	W04867					02/15/2006 11:35

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	8.84E+02	pCi/L	1.7E+02	1.9E+02		3.37E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/05/200 02:11	I

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

6052454	TC-99	14133-76-7	2.48E+02	pCi/L	9.4E+00	2.2E+01		9.73E+00	100.0	TC99_ETVDSK_LS	1.269E-01	L	04/01/200	22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXMKM10	B1HJ42		MW6-SBB-A1	I06-022	W04867					02/16/2006 10:09

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6052459	H-3	10028-17-8	4.80E+03	pCi/L	2.7E+02	3.6E+02		3.41E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/05/200	03:33	I
6052460	I-129L	15046-84-1	9.22E-02	pCi/L	1.4E-01	1.4E-01	U	2.84E-01	97.0	I129LL_SEP_LEPS	3.9515E+00	L	03/31/200	09:22	I
6052454	TC-99	14133-76-7	3.78E+03	pCi/L	3.3E+01	2.6E+02		9.68E+00	100.0	TC99_ETVDSK_LS	1.278E-01	L	04/01/200	22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXML810	B1HJ27		MW6-SBB-A1	I06-022	W04867					02/16/2006 11:08

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6052459	H-3	10028-17-8	2.63E+02	pCi/L	1.5E+02	1.6E+02	U	3.37E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/05/200	06:18	I
6052460	I-129L	15046-84-1	7.62E-02	pCi/L	1.3E-01	1.3E-01	U	2.56E-01	96.8	I129LL_SEP_LEPS	3.913E+00	L	03/31/200	11:04	I
6052467	SR-90	10098-97-2	3.21E-01	pCi/L	3.3E-01	3.4E-01	U	6.88E-01	46.8	SRISO_SEP_PRE	1.0061E+00	L	04/03/200	05:46	I
6052454	TC-99	14133-76-7	1.18E+02	pCi/L	6.9E+00	1.3E+01		9.40E+00	100.0	TC99_ETVDSK_LS	1.312E-01	L	04/01/200	22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXMLD10	B1HJ31		MW6-SBB-A1	I06-022	W04867					02/16/2006 12:24

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6052459	H-3	10028-17-8	1.25E+03	pCi/L	1.8E+02	2.1E+02		3.39E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/05/200	04:56	I
6052460	I-129L	15046-84-1	1.60E-01	pCi/L	1.4E-01	1.4E-01	U	2.87E-01	95.4	I129LL_SEP_LEPS	3.9211E+00	L	03/31/200	09:22	I
6052467	SR-90	10098-97-2	2.29E-03	pCi/L	1.4E-01	2.2E-01	U	5.08E-01	60.2	SRISO_SEP_PRE	1.0094E+00	L	04/03/200	05:46	I
6052454	TC-99	14133-76-7	8.64E+01	pCi/L	6.3E+00	1.1E+01		9.57E+00	100.0	TC99_ETVDSK_LS	1.289E-01	L	04/01/200	22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXMM810	B1HJ15		MW6-SBB-A1	I06-022	W04867					02/16/2006 09:45

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time		Act
6052459	H-3	10028-17-8	5.16E+03	pCi/L	2.8E+02	3.8E+02		3.37E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/05/200	11:47	I
6052460	I-129L	15046-84-1	8.35E-02	pCi/L	1.3E-01	1.3E-01	U	2.67E-01	97.3	I129LL_SEP_LEPS	3.9025E+00	L	03/31/200	12:51	I
6052454	TC-99	14133-76-7	7.53E+02	pCi/L	1.5E+01	5.7E+01		9.80E+00	100.0	TC99_ETVDSK_LS	1.262E-01	L	04/01/200	22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXMMH10	B1HJ19		MW6-SBB-A1	I06-022	W04867					02/16/2006 08:56

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has 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: 31828 File Name: h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	4.99E+02	pCi/L	1.6E+02	1.8E+02		3.36E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/05/200 09:03	I
6052460	I-129L	15046-84-1	2.97E-02	pCi/L	1.4E-01	1.4E-01	U	2.64E-01	97.6	I129LL_SEP_LEPS	3.8992E+00	L	03/31/200 11:04	I
6052467	SR-90	10098-97-2	1.66E-01	pCi/L	3.7E-01	4.2E-01	U	9.27E-01	34.1	SRISO_SEP_PRE	1.0072E+00	L	04/03/200 05:46	I
6052454	TC-99	14133-76-7	3.97E+01	pCi/L	5.3E+00	8.5E+00		9.90E+00	100.0	TC99_ETVDSK_LS	1.246E-01	L	04/01/200 22:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9HXMMP10	B1HJ46		MW6-SBB-A1	I06-022	W04867					02/16/2006 10:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6052459	H-3	10028-17-8	5.95E+03	pCi/L	2.9E+02	4.1E+02		3.37E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/05/200 10:25	I
6052460	I-129L	15046-84-1	-2.96E-02	pCi/L	1.7E-01	1.7E-01	U	3.01E-01	95.1	I129LL_SEP_LEPS	3.7627E+00	L	03/31/200 12:51	I
6052454	TC-99	14133-76-7	1.31E+03	pCi/L	2.0E+01	9.4E+01		9.70E+00	100.0	TC99_ETVDSK_LS	1.274E-01	L	04/01/200 22:44	I

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

Wednesday, April 05, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id:	H170R1AB	**Sdg/Rept Nbr:**	W04867	31828	**Collection Date:** 02/15/2006 11:41
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 02/15/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6088469	I-129L	1.55E-01	pCi/L	3.1E-01	U	5.11E-01	94.6		I129LL_ETVDS	2.0461E+00	04/03/2006				D
BLK	15046-84-1			3.1E-01						L	05:04				

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

Wednesday, April 05, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: H2H151AB **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/14/2006 13:00

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 02/14/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6093476	Uranium	7.86E-04	ug/L	8.3E-05	U	8.38E-02			UTOT_KPA	2.50E-02	04/05/2006				D
BLK	7440-61-1			8.3E-05						ML	08:16				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id:	HXT871AB	**Sdg/Rept Nbr:**	W04867	31828	**Collection Date:** 02/15/2006 10:03
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 02/15/2006

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
6052454	TC-99	4.64E+00	pCi/L	6.1E+00	U	9.84E+00	100.0		TC99_ETVDSK	1.257E-01	04/01/2006				D
BLK	14133-76-7			4.2E+00						L	22:44				

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

Wednesday, April 05, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXT961AB **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 10:32

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 02/15/2006

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
6052459	H-3	3.24E+00	pCi/L	1.5E+02	U	3.37E+02	100.0		906.0_H3_LSC	5.00E-03	03/04/2006				D
BLK	10028-17-8			1.4E+02						L	01:31				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXT961DX **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 10:32

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 02/15/2006

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
6052459	H-3	8.58E+01	pCi/L	1.6E+02	U	3.37E+02	100.0		906.0_H3_LSC	5.00E-03	03/04/2006				D
BLK	10028-17-8			1.4E+02						L	16:35				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXVAH1AB **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/16/2006 09:45

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 02/16/2006

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
6052460	I-129L	-2.32E-02	pCi/L	9.4E-02	U	1.74E-01	97.0		I129LL_SEP_L	4.00E+00	03/31/2006				D
BLK	15046-84-1			9.4E-02						L	14:36				

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\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXVAR1AB **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 12:34
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BLK **Received Date:** 02/15/2006

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
6052462	I-129L	1.11E-01	pCi/L	3.0E-01	U	5.44E-01	95.1		I129LL_ETVDS	2.0015E+00	03/29/2006				D
BLK	15046-84-1			3.0E-01						L	20:30				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXVCH1AB **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/16/2006 12:24

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 02/16/2006

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
6052467	SR-90	-1.29E-01	pCi/L	2.9E-01	U	7.02E-01	42.2		SRISO_SEP_P	1.0024E+00	04/03/2006				D
BLK	10098-97-2			2.2E-01						L	05:46				

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: H170R1CS **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 11:41

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/15/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6088469	I-129L	1.67E+01	pCi/L	2.1E+00		7.14E-01	94.5		I129LL_ETVDS	2.0175E+00	04/03/2006				D
BS	15046-84-1			2.1E+00						L	05:04				

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id:	H2H151CS	**Sdg/Rept Nbr:**	W04867	31828	**Collection Date:** 02/14/2006 13:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 02/14/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6093476	Uranium	3.20E+01	ug/L	3.8E+00		8.09E-02		3.46E+01	UTOT_KPA	2.59E-02	04/05/2006			75	D
BS	7440-61-1			3.8E+00				92.3		ML	08:20			125	

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

Wednesday, April 05, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: H2H151DS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W04867 31828
Matrix: WATER WATER
QC Type: BS

Collection Date: 02/14/2006 13:00
Sample On Date:
Received Date: 02/14/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6093476	Uranium	3.07E+00	ug/L	3.1E-01		8.03E-02		3.45E+00	UTOT_KPA	2.61E-02	04/05/2006			75	D
BS	7440-61-1			3.1E-01				88.8		ML	08:22			125	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has 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\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXT871CS **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 10:03

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/15/2006

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
6052454	TC-99	5.11E+02	pCi/L	4.0E+01		9.78E+00	100.0	5.37E+02	TC99_ETVDSK	1.261E-01	04/01/2006			70	D
BS	14133-76-7			1.3E+01				95.1		L	22:44			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXT961CS **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 10:32

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/15/2006

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
6052459	H-3	2.69E+03	pCi/L	2.7E+02		3.37E+02	100.0	2.80E+03	906.0_H3_LSC	5.00E-03	03/04/2006			70	D
BS	10028-17-8			2.2E+02				96.3		L	02:53			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\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXT961EM **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 10:32

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/15/2006

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
6052459	H-3	2.51E+03	pCi/L	2.6E+02		3.42E+02	100.0	2.80E+03	906.0_H3_LSC	5.00E-03	03/04/2006			70	D
BS	10028-17-8			2.2E+02				89.6		L	17:58			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXVAH1CS **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/16/2006 09:45
Client Id: NA **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/16/2006

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
6052460	I-129L	9.27E+00	pCi/L	1.2E+00		3.72E-01	95.9	9.52E+00	I129LL_SEP_L	4.00E+00	03/31/2006			70	D
BS	15046-84-1			1.2E+00				97.3		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\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXVAR1CS **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 12:34

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/15/2006

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
6052462	I-129L	1.81E+01	pCi/L	2.4E+00		6.94E-01	94.6		I129LL_ETVDS	2.0022E+00	03/29/2006				D
BS	15046-84-1			2.4E+00						L	20:31				

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXVCH1CS **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/16/2006 12:24

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 02/16/2006

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
6052467	SR-90	1.48E+01	pCi/L	2.3E+00		4.20E-01	75.6	1.41E+01	SRISO_SEP_P	1.001E+00	04/03/2006			70	D
BS	10098-97-2			8.2E-01				105.4		L	05:46			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\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id:	HXGKH2ER	**Sdg/Rept Nbr:**	W04867	31828	**Collection Date:** 02/14/2006 13:00
Client Id:	B1HHV5	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 02/14/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I06-022	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
6093476	Uranium	9.99E+01	ug/L	1.2E+01		7.41E-02			UTOT_KPA	2.83E-02	04/05/2006	1.9	0.2		D
DUP	7440-61-1	9.79E+01		1.2E+01						ML	08:26	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXJNA1DR
Client Id: B1HHW7
Moisture/Solids%*:

Sdg/Rept Nbr: W04867 31828
Matrix: WATER WATER
QC Type: DUP

Collection Date: 02/15/2006 10:32
Sample On Date:
Received Date: 02/15/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I06-022	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
6052459	H-3	3.97E+02	pCi/L	1.7E+02		3.37E+02	100.0		906.0_H3_LSC	5.00E-03	03/04/2006	77.7	1.8		D
DUP	10028-17-8	1.75E+02		1.5E+02						L	12:29	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\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXJND1GR **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 12:34

Client Id: B1HDD1 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 02/15/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-002	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
6052454	TC-99	7.59E+03	pCi/L	5.2E+02		9.71E+00	100.0		TC99_ETVDSK	1.27E-01	04/01/2006	.0	0.		D
DUP	14133-76-7	7.59E+03		4.7E+01						L	22:44	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id:	HXJND2FR	**Sdg/Rept Nbr:**	W04867	31828	**Collection Date:** 02/15/2006 12:34
Client Id:	B1HDD1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 02/15/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-002	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
6052462	I-129L	2.83E+01	pCi/L	3.4E+00		9.41E-01	32.4		I129LL_ETVDS	2.0027E+00	03/30/2006	14.5	1.6		D
DUP	15046-84-1	2.45E+01		3.4E+00						L	22:32	20.0	3		

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

Wednesday, April 05, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXMLD1FR **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/16/2006 12:24

Client Id: B1HJ31 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 02/16/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I06-022	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
6052467	SR-90	-3.72E-02	pCi/L	2.2E-01	U	5.10E-01	61.5		SRISO_SEP_P	1.0088E+00	04/03/2006	0.0	0.3		D
DUP	10098-97-2	2.29E-03		1.3E-01						L	05:46	20.0	3		

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id:	HXMM81ER	**Sdg/Rept Nbr:**	W04867	31828	**Collection Date:** 02/16/2006 09:45
Client Id:	B1HJ15	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 02/16/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I06-022	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
6052460	I-129L	1.06E-01	pCi/L	2.3E-01	U	2.80E-01	98.6		I129LL_SEP_L	3.8959E+00	03/31/2006	24.0	0.1		D
DUP	15046-84-1	8.35E-02		2.3E-01						L	14:36	20.0	3		

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

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXGKR2DW **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/14/2006 11:31
Client Id: B1HHV8 **Matrix:** WATER WATER **Sample On Date:**
Moisture/Solids%*: **QC Type:** MS **Received Date:** 02/14/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I06-022	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
6093476	Uranium	3.15E+01	ug/L	3.9E+00		7.85E-02		3.38E+01	UTOT_KPA	2.67E-02	04/05/2006			60	D
MS	7440-61-1			3.9E+00				93.3		ML	08:31			140	

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

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04867.Edd, h:\Reportdb\edd\FeadIV\Rad\31828.Edd

Lab Sample Id: HXJNC1EW **Sdg/Rept Nbr:** W04867 31828 **Collection Date:** 02/15/2006 10:03

Client Id: B1HD39 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** MS **Received Date:** 02/15/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W06-002	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
6052454	TC-99	3.36E+03	pCi/L	2.4E+02		9.80E+00	100.0	3.58E+03	TC99_ETVDSK	1.259E-01	04/01/2006			60	D
MS	14133-76-7			3.2E+01				93.8		L	22:43			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

4/3/2006 10:37:43 AM

Lot No., Due Date: J6B170153; 04/03/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6052467; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W04867; 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=> HXMLD1AF SR-90 170.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => SR-90 OK; No Callin Level Found => SR-90	✓		
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** 4-3-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6052467

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

Comments on any "No" response: _____

Second Level Review: [signature] Date: 4-5-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/3/2006 10:29:49 AM

Lot No., Due Date: J6B150154,J6B150409,J6B170150,J6B170153; 04/03/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6052460; RGAMLEPS Gamma by LEPS

SDG, Matrix: W04867; 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: 10-07807

First Level Review Pam Anderson **Date** 4-3-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6052460

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: [signature] Date: 4-5-00

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-07807**
NCM Initiated By: Pam Anderson
Date Opened: 04/03/2006
Date Closed:

Classification: **Deficiency**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Gamma by LEPS
Lot #'s (Sample #'s): J6B150154 (2),
QC Batches: 6052460

Nonconformance: Technician Error
Subcategory: Laboratory error: prep error

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	04/03/2006	Sample HXGKN1AC was double traced in prep. The amount of tracer expected was fixed in rad calc. Data accepted.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	04/03/2006	Tech is aware of the error and will be more careful.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/31/2006 10:10:41 AM

Lot No., Due Date: J6B150408; 04/03/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6052462; RGAMLEPS Gamma by LEPS

SDG, Matrix: W04867; WATER

1.0 COC

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

2.0 QC Batch

	Yes	No	N/A
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

	Yes	No	N/A
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

	Yes	No	N/A
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

	Yes	No	N/A
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:

HXJNE1AD being rerun. It fails in this batch.

First Level Review Pam Anderson **Date** 4-3-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6052462

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: One sample being reanalyzed in batch 6058469 and samples in this batch recounted.

Second Level Review: [signature] Date: 4-5-06

SEVERN TRENT STL

*** RE-COUNT REQUEST ***

DUE DATE 4-3-6

CUSTOMER PGW

ANALYSIS I 129

MATRIX WATER

LOT NUMBER J6B150408

SAMPLE DELIVERY GROUP WO4867

OLD BATCH NUMBER 6052462

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) HXJND1AC	RDL NOT MET - RE-CNT FOR 300 min
2) HXJND1AF X	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/3/2006 10:29:18 AM

Lot No., Due Date: J6B150408; 04/03/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6088469; RGAMLEPS Gamma by LEPS

SDG, Matrix: W04867; WATER

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

6.0 Comments on any No response:
See NCM. C-07806

First Level Review Pam Anderson **Date** 4-3-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 60884669

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 WCM

Second Level Review: [signature] Date: HMC 4-5-00

SEVERN TRENT STL

*** RE-ANALYSIS REQUEST ***

DUE DATE 4-3-6

CUSTOMER PGW

ANALYSIS I129

MATRIX WATER

LOT NUMBER J6B150408

SAMPLE DELIVERY GROUP WO 4867

OLD BATCH NUMBER 6052462

NEW BATCH NUMBER 6088469

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

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-07806**
NCM Initiated By: Pam Anderson
Date Opened: 04/03/2006
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: Gamma by LEPS
Lot #'s (Sample #'s): J6B150408 (3),
QC Batches: 6088469

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

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	04/03/2006	Sample HXJ9E on first analysis failed with a very low yield. The tech noted it had matrix problems. It was reanalyzed. The reanalysis also had a low yield but acceptable. Due to the low yield it was counted for a longer time to meet CRDL. Data accepted.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	04/03/2006	The sample was reanalyzed with good results.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/3/2006 10:30:12 AM

Lot No., Due Date: J6B150151,J6B150154,J6B150407,J6B150408,J6B150409,J6B170150,J6B170153; 04/03/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6052454; RTC99 Tc-99 by LSC

SDG, Matrix: W04867; 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 => HXJNC1AE TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments:

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

First Level Review Pam Anderson **Date** 4-3-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6052454

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

Comments on any "No" response: _____

Second Level Review: [signature] Date: 4-5-06

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/7/2006 3:31:10 PM

Lot No., Due Date: J6B150151,J6B150154,J6B150407,J6B150408,J6B150409,J6B170150,J6B170153; 04/03/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6052459; RTRITIUM H-3 by LSC

SDG, Matrix: W04867; WATER

8.0 Correction Calculation Protocol Used. — Yes ✓ No N/A
OK

8.01 The Appropriate Methods Were Used To Analyze the Samples — Yes ✓ No N/A
OK

8.02 Final Results Are in the Appropriate Activity Units — Yes ✓ No N/A
OK

8.03 Batch Contains the Required QC Appropriate for the Method — Yes ✓ No N/A
OK

8.04 The Correct Tracer and QC Vials Where Used in the Samples — Yes ✓ No N/A
OK

8.05 Sample was Appropriately Traced Before or After Fractionating the Sample — Yes ✓ No N/A
OK

8.06 At Least the Minimum Sample Volume Was Used — Yes No ✓ N/A

Analysis Volume => HXGJ11AA 5.00<10.00
HXGJ41AA 5.00<10.00
HXGJ61AA 5.00<10.00
HXGKH1AA 5.00<10.00
HXGKN1AA 5.00<10.00
HXJNA1AA 5.00<10.00
HXJNC1AA 5.00<10.00
HXJND1AA 5.00<10.00
HXJNE1AA 5.00<10.00
HXJNF1AA 5.00<10.00
HXJNH1AA 5.00<10.00
HXJNJ1AA 5.00<10.00
HXJNK1AA 5.00<10.00
HXMKM1AA 5.00<10.00
HXMLD1AA 5.00<10.00
HXML81AA 5.00<10.00
HXMMH1AA 5.00<10.00
HXMMP1AA 5.00<10.00
HXMM81AA 5.00<10.00 Q:VB

ok
D.+ 3-7-06

8.07 The Correct Count Geometry was Used. — Yes No ✓ N/A

Count Geometry => HXT961AF SVP15/5<>SVP10/10
HXT961AG SVP15/5<>SVP10/10
HXT961AA SVP15/5<>SVP10/10
HXT961AC SVP15/5<>SVP10/10
HXGJ11AA SVP15/5<>SVP10/10
HXGJ41AA SVP15/5<>SVP10/10
HXGJ61AA SVP15/5<>SVP10/10
HXGKH1AA SVP15/5<>SVP10/10
HXGKN1AA SVP15/5<>SVP10/10
HXJNA1AA SVP15/5<>SVP10/10
HXJNA1AD SVP15/5<>SVP10/10
HXJNC1AA SVP15/5<>SVP10/10
HXT961AH SVP15/5<>SVP10/10
HXT961AD SVP15/5<>SVP10/10
HXT961AE SVP15/5<>SVP10/10
HXJND1AA SVP15/5<>SVP10/10
HXJNE1AA SVP15/5<>SVP10/10
HXJNF1AA SVP15/5<>SVP10/10
HXJNH1AA SVP15/5<>SVP10/10
HXJNJ1AA SVP15/5<>SVP10/10
HXJNK1AA SVP15/5<>SVP10/10
HXMKM1AA SVP15/5<>SVP10/10
HXMLD1AA SVP15/5<>SVP10/10
HXML81AA SVP15/5<>SVP10/10
HXT961AJ SVP15/5<>SVP10/10
HXMMH1AA SVP15/5<>SVP10/10
HXMMP1AA SVP15/5<>SVP10/10
HXMM81AA SVP15/5<>SVP10/10 Q:VC

ok
PA 3-7-06

8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. — Yes ✓ No N/A
OK

8.09 Method Blank is within Control Limits. OK	Yes ✓	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	Yes ✓	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes ✓	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes ✓	No	N/A
8.14 LCS within Control Limits. OK	Yes ✓	No	N/A
8.15 MLCS within Control Limits. OK	Yes ✓	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A ✓
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A ✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A ✓
8.19 Sample Specific MDC <= CRDL. OK	Yes ✓	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A ✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes ✓	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3 OK; No Callin Level Found => H-3	Yes ✓	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Pam Anderson **Date** 3-7-08

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/5/2006 12:16:47 PM

Lot No., Due Date: J6B150154; 04/03/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6093476; RUNAT UNat by KPA

SDG, Matrix: W04867; 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 => H2H151AD UNSC<>UNSF Q:V9 OK DA 4-5-06		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used No Count Analysis Size found in Batch Data!			✓
8.07 The Correct Count Geometry was Used. No Count Geometry found in Batch Data!			✓
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. No Count Duration Field Found in Batch Data!			✓
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => HXGKH2AD Uranium 9.8E+01 L:7.3E-02 HXGKR2AC Uranium 1.4E+00 L:7.2E-02		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => Uranium OK; No Callin Level Found => Uranium	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data! NCM # 10-07827			✓

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments:

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

First Level Review Pam Anderson **Date** 4-5-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6043476

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 WCM

Second Level Review: [signature] Date: 4-5-06

SEVERN TRENT STL

*** RE-ANALYSIS REQUEST ***

DUE DATE 4-3-06

CUSTOMER P&W

ANALYSIS Uranium

MATRIX water

LOT NUMBER (W04867) JLB 150154

SAMPLE DELIVERY GROUP W04867

OLD BATCH NUMBER 6052463

NEW BATCH NUMBER 6093476

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1)	high Blank.
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.

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-07827**
NCM Initiated By: Pam Anderson
Date Opened: 04/05/2006
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Sep
Tests: UNat by KPA
Lot #'s (Sample #'s): J6B150154 (1,3), J6D030000 (476),
QC Batches: 6093476

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

Problem Description / Root Cause

Name	Date	Description
Pam Anderson	04/05/2006	The first analyssi had a blank that was above CRDL but below the sample results. The batch was reanalyized. The QC on the reanalysis is acceptable.

Corrective Action

Name	Date	Corrective Action
Pam Anderson	04/05/2006	Batch is 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

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W06-002-168
		Page 1 of 1

Collector DURATEK J.M. MYERS	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, February 2006	DTS-SAWS-H102	**Ice Chest No.** DANS **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
** **
WO 4967
J6B150151
Due 03 31 06

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
B1HD77		W	2/14/06	1146	1x20-mL P	Activity Scan HXGJ1	None
B1HD77		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HD77		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 J.M. MYERS			2/14/06 1500		Jeff Jensen		2/14/06 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-002-180

Page 1 of 1

Collector DURATEK R. T. SICKLE	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W06-002	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, February 2006	DTS - SAWS H 98	Ice Chest No. SAWS 2009 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
** ** WO 4867

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
B1HD73		W	2-14-06	0933	1x20-mL P	Activity Scan HX6J4	None
B1HD73		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HD73		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By DURATEK R. T. SICKLE Print Sign Date/Time 1500 FEB 14 2006	Received By Jeff Jensen Print Sign Date/Time 1500 FEB 14 2006	<100 CPM
Relinquished By Date/Time	Received By Date/Time	Matrix *
Relinquished By Date/Time	Received By Date/Time	S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air; DS = Drum Solid; DL = Drum Liqui; T = Tissue; WI = Wine; L = Liquid; V = Vegetation; X = Other
Relinquished By Date/Time	Received By Date/Time	

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

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-002-210

Page 1 of 1

Collector: DURATEK R. T. SICKLE	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: W06-002	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: RCRA, February 2006	DTL SHWS H918	Ice Chest No.: SHWS 209 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
** ** WO 4167

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
B1HD53		W	2-14-06	1019	1x20-mL P	Activity Scan HXGJ6	None
B1HD53		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HD53		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Date/Time	Received By	Date/Time
Print: DURATEK R. T. SICKLE Sign:	FEB 14 2006 1500	Print: Jeff Jensen Sign:	FEB 14 2006 1500
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

<100 CPM

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: 02 14 06 1500

X06-005
X06-021
W06-002

Client: PAW SDG #: W04967 NA [ ] SAF #: X06-022 NA [ ]

Work Order Number: J6B150151 Chain of Custody # X06-005-15, X06-021-2, W06-002-210, 180, 168, X06-022-2, 16, 19

Shipping Container ID: SAWS 205, DANS Air Bill #

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 34
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____ tape
   X custody seals
   _____ hazard labels
   X appropriate samples labels
9. Samples are:
   X 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: [signature] Date: 02 14 06

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	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I06-022-16
		Page 1 of 1

Collector DURATEK D. P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2006	Logbook: DTS-SAWS-H103A	**Ice Chest No.** DANS **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
** **

W04867
J6B150154
Due 03 31 06

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
B1HHV5		W	2/14/06	1700	1x1000-mL P	906.0_H3_LSC: Tritium (1) HXGKH	None
B1HHV5		W	↓	↓	1x20-mL P	Activity Scan	None
B1HHV5		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1HHV5		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

L. Wall 2/14/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. P. CONNOLLY			FEB 14 2006 1500		Jeff Jensen		FEB 14 2006 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I06-022-2

Page 1 of 1

Collector DURATEK J.M. MYERS	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2006	DTS SAWS 1H102	**Ice Chest No.** DAWS ~~SAWS~~ LW. 2/14/06 **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
** **
W04867

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
B1HHT0		W	2-14-06	0950	1x1000-mL P	906.0_H3_LSC: Tritium (1) HXGKN	None
B1HHT0		W			1x20-mL P	Activity Scan	None
B1HHT0		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1HHT0		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

L. Wall 2/14/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	DURATEK J.M. MYERS		1500 FEB 14 2006		Jeff Jensen		1500 FEB 14 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

Matrix *

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

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

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I06-022-19

Collector DURATEK R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2006	DTS- SAWS H98	**Ice Chest No.** SAWS 209 **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
** **
W04867

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
B1HHV8		W	2-14-06	1131	1x20-mL P	Activity Scan HXGKR	None
B1HHV8		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1HHV8		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK R. T. SICKLE			1500 FEB 14 2006		Jeff Jensen		1500 FEB 14 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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: 02 14 06 1500

X06-005
X06-021
W06-002

Client: PAW SDG #: W04867 NA [ ] SAF #: I06-022 NA [ ]

Work Order Number: J6B150154 Chain of Custody # X06-005-15, X06-021-2, W06-002-210, 180, 168, I06-022-2, 16, 19

Shipping Container ID: SAWS 205, DANS Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 34
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - X custody seals
   - ____ hazard labels
   - X appropriate samples labels
9. Samples are:
   - X 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: [signature] Date: 02 14 06

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	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I06-022-87
		Page 1 of 1

Collector DURATEK D. P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2006	LOG BOOK: DTS-SAWS-H103A	**Ice Chest No.** DANS **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
** **

W04867
J6B170153
Due 04 03 06

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1HJ31		W	2/16/06	1224	1x1000-mL P	906.0_H3_LSC: Tritium (1) HXMLD	None
B1HJ31		W	↓	↓	1x20-mL P	Activity Scan	None
B1HJ31		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1HJ31		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1HJ31		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
				R. Wall 2/16/06			

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. P. CONNOLLY			FEB 16 2006	Hans Carman			FEB 16 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I06-022-81
		Page 1 of 1

Collector SOMATEK D. P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2006	Logbook: DTS-SAWS-H103A	**Ice Chest No.** NAWS **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
** ** W0467

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
B1HJ27		W	2/16/06	1108	1x1000-mL P	906.0_H3_LSC: Tritium (1) HXML8	None
B1HJ27		W	↓	↓	1x20-mL P	Activity Scan	None
B1HJ27		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1HJ27		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1HJ27		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
			R. Wood 2/16/06				

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
SOMATEK D. P. CONNOLLY			FEB 16 2006	Hans Larman			FEB 16 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I06-022-69
		Page 1 of 1

Collector DURATEK D.P CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2006	Logbook: DTS-SAWS-H103A	**Ice Chest No.** DAWS **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
** **
W0467

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
B1HJ19		W	2/16/06	0856	1x1000-mL P	906.0_H3_LSC: Tritium (1) HXMMH	None
B1HJ19		W	↓	↓	1x20-mL P	Activity Scan	None
B1HJ19		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1HJ19		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1HJ19		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D.P CONNOLLY			FEB 16 2006	Hans Cordman			FEB 16 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I06-022-111
		Page 1 of 1

Collector DUR-TEK D. P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2006	Logbook: DTS-SAWS-H103A	**Ice Chest No.** DANS **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
** **

WO 4467

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
B1HJ46		W	2/16/06	1020	1x1000-mL P	906.0_H3_LSC: Tritium (1) HX MM P	None
B1HJ46		W	↓	↓	1x20-mL P	Activity Scan	None
B1HJ46		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1HJ46		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

R. Wall 2/16/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DUR-TEK D. P. CONNOLLY			FEB 16 2006	Hans Carman			FEB 16 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I06-022-63
		Page 1 of 1

Collector DURATEK D. P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2006	Logbook: DTS-SAWS-H103A	**Ice Chest No.** DANS **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
** **
W04867

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
B1HJ15		W	2/16/06	0945	1x1000-mL P	906.0_H3_LSC: Tritium (1) HXMM8	None
B1HJ15		W	↓	↓	1x20-mL P	Activity Scan	None
B1HJ15		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1HJ15		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

R. Wall 2/16/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. P. CONNOLLY			FEB 16 2006	Hans Carman			FEB 16 2006
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 02 16 06

Client: PLW SDG #: W04867 NA [ ] SAF #: I06-022 NA [ ]

Work Order Number: JB170153 Chain of Custody # I06-022-87, 81, 111, 69, 63

Shipping Container ID: DANS Air Bill # _____

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

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

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

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

6. Number of samples in shipping container: 34

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

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

9. Samples are:
   - X 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: [signature] Date: 02 16 06

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

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PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I06-022-105
		Page 1 of 1

Collector DURATEK J. B. BOTEWINGTON	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2006	DTS - SAWS 198	**Ice Chest No.** SAWS 209 **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
** **
W04867 5
J68170150
Due 04 03 06

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
B1HJ42		W	2-16-06	1009	1x1000-mL P	906.0_H3_LSC: Tritium (1) HXMKM	None
B1HJ42		W	↓	↓	1x20-mL P	Activity Scan	None
B1HJ42		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1HJ42		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 J. B. BOTEWINGTON	D. H. Brewer		FEB 16 2006 1510		Jeff Jensen		FEB 16 2006 1510
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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: 02 16 06 1510

Client: PGW SDG #: W04967 NA [ ] SAF #: I06-022 NA [ ]

Work Order Number: J6B170150 Chain of Custody # I06-022-105

Shipping Container ID: SMWS 209 Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 5
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - X custody seals
   - ____ hazard labels
   - X appropriate samples labels
9. Samples are:
   - X 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: [signature] Date: 02 16 06

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	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W06-002-250
		Page 1 of 1

Collector DURATEK D. P. CONNOLLY	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W06-002	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, February 2006	Logbook: DTS-SAWS-H103A	Ice Chest No. DANS 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
** **

W14867
JGB150409
Due 03 31 06

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
B1HDB2		W	2/15/06	1339	1x20-mL P	Activity Scan HXJNH	None
B1HDB2		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HDB2		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1HDB2		W			2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

L. Wall 2/15/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. P. CONNOLLY			FEB 15 2006 1450	Jeff Jensen			FEB 15 2006 1450
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W06-002-496
		Page 1 of 1

Collector DURATEK D. P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, February 2006	Logbook: DTS-SAWS-H103A	**Ice Chest No.** DANS **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
** **
W04867

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
B1HJX0		W	2/15/06	1232	1x20-mL P	Activity Scan HXJNJ	None
B1HJX0		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HJX0		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
			R. Wall 2/15/06				

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. P. CONNOLLY			FEB 15 2006 1450	Jeff Jensen			FEB 15 2006 1450
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W06-002-497
DURATEK		Page 1 of 1

Collector D. P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, February 2006	Logbook: DTS-SAWS-H103A	**Ice Chest No.** DANS **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
** **
W04667

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
B1HJX1		W	2/15/06	1135	1x20-mL P	Activity Scan HXJNK	None
B1HJX1		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HJX1		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

L. Wall 2/15/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D. P. CONNOLLY			FEB 15 2006 1450	Jeff Jensen			FEB 15 2006 1450
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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: 02 15 06 1450

Client: PWW SDG #: W04867 NA [ ] SAF #: I06-022 W06-002 NA [ ]

Work Order Number: J6B150409 Chain of Custody # W06-002-250, 996, 997

Shipping Container ID: DANS Air Bill # I06-022-27

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: 14
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - X custody seals
   - ____ hazard labels
   - X appropriate samples labels
9. Samples are:
   - X 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: [signature] Date: 02 15 06

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

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PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # I06-022-27
		Page 1 of 1

Collector DURATEK D.P. CONNOLLY	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-022	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOL FEBRUARY 2006	Logbook: DTS-SAWS-H103A	**Ice Chest No.** DANS **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
** **

WO 9467 14
J6B150407
Due 03 31 06

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
B1HHW7		W	2/15/06	1032	1x1000-mL P	906.0_H3_LSC: Tritium (1) HXJNA	None
B1HHW7		W	↓	↓	1x20-mL P	Activity Scan	None
B1HHW7		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

L. Wall 2/15/06

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK D.P. CONNOLLY			FEB 15 2006 1450	Jeff Jensen			FEB 15 2006 1450
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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: 02 15 06 1450

Client: Pace SDG #: W04867 NA [ ] SAF #: F06-022 W06-002 NA [ ]

Work Order Number: J6B150407 Chain of Custody # W06-002-250, 996, 997

Shipping Container ID: DAVIS Air Bill # F06-022-27

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: 14
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ____ tape
   - X custody seals
   - ____ hazard labels
   - X appropriate samples labels
9. Samples are:
   - X 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: [signature] Date: 02 15 06

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

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PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # W06-002-136
		Page 1 of 1

Collector DURATEK R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, February 2006	DTT- SAWS 198	**Ice Chest No.** SAWS 209 **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
** **

W04467 20
J6B150408
Due 03 31 06

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
B1HD39		W	2-15-06	1003	1x20-mL P	Activity Scan HXJNC	None
B1HD39		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HD39		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

Relinquished By	Received By
Print: DURATEK R. T. SICKLE Sign: Date/Time: FEB 15 2006	Print: Jeff Jensen Sign: Date/Time: FEB 15 2006 1500
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time
Relinquished By Date/Time	Received By Date/Time

<100 CPM

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-002-222

Page 1 of 1

Collector DURATEK R. T. SICKLE	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W06-002	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, February 2006	DTJ - SAWS 1-198	Ice Chest No. SAWS 209 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
** **
W04867

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
B1HDD1		W	2-15-06	1234	1x20-mL P	Activity Scan HXJND	None
B1HDD1		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HDD1		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1HDD1		W			2x4000-mL G/P	I129LL_ETVDSK_SEP_GS: I-129_ETVDSK (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK R. T. SICKLE			FEB 15 2006	Jeff Jensen			FEB 15 2006 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W06-002-216

Page 1 of 1

Collector DURATEK R.T. SICKLE	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. W06-002	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title RCRA, February 2006	DTS- SAWS H98	Ice Chest No. SAWS 209 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
** **

W04867

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
B1HDD5		W	2-15-06	1141	1x20-mL P	Activity Scan HXJNE	None
B1HDD5		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HDD5		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1HDD5		W			2x4000-mL G/P	I129LL_ETVDSK_SEP_GS: I-129_ETVDSK (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK R.T. SICKLE			FEB 15 2006	Jeff Jensen			FEB 15 2006 1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

<100 CPM

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W06-002-148**

Page 1 of 1

Collector DURATEK R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W06-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, February 2006	DTS - SAWS 1498	**Ice Chest No.** SAWS 209 **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
** **

W14867

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
B1HDF2		W	2-15-06	1101	1x20-mL P	Activity Scan HxJNF	None
B1HDF2		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1HDF2		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 R. T. SICKLE			FEB 15 2006		Jeff Jensen		FEB 15 2006 1500
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 *
<100 CPM

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: 02 15 06 1500

Client: PACW SDG #: W04867 NA [ ] SAF #: X06-005 W06-002 NA [ ]

Work Order Number: J6B150408 Chain of Custody # X06-005-8 W06-002-136, 222, 216, 148

Shipping Container ID: SAWS 209 Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5.Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 20
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   ____ tape ____ hazard labels
   _✓_ custody seals _✓_ appropriate samples labels
9. Samples are:
   _✓_ in good condition ____ leaking
   ____ broken ____ have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] 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: [signature] Date: 02 15 06

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

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3/24/2006 1:54:46 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

Report Due: 04/03/2006 W041867

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 101

Pipet #: NA

Sep1 DT/Tm Tech: 3-25-06 1:58 PM

Sep2 DT/Tm Tech: 4-1-06 10:35 AM

Batch: 6052467 WATER pCi/L **PM, Quote: HC , 57671**
SEQ Batch, Test: None

Prep Tech: ,WAGNERJ

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 HXMLD-1-AD J6B170153-1-SAMP		1009.40g,in	SRTB13265 02/21/06,pd 09/06/05,r	1.300				9"	1744	3/21/06 DD	
				2.0569			30				
			YTA15378	.6320		24.2	100	2a	0818	4/2/06 K	
			Ex:11/13/200					2a	0636	4/3/06	
02/16/2006 12:24		AmtRec: 20ML,500P,4XLP,2X4LP	#Containers: 8					Scr:	Alpha: -3.22E-04 uCi/Sa	Beta: -4.44E-04 uCi/Sa	
2 HXMLD-1-AF-X J6B170153-1-DUP		1008.80g,in	SRTB13266 02/21/06,pd 09/06/05,r	1.326				3"	1744	3/27/06 DD	
				2.0540							
			YTA15379	.6456				2b	0818	4/2/06 K	
			Ex:11/13/200			24.2		2b	0636	4/3/06	
02/16/2006 12:24		AmtRec: 20ML,500P,4XLP,2X4LP	#Containers: 8					Scr:	Alpha: -3.22E-04 uCi/Sa	Beta: -4.44E-04 uCi/Sa	
3 HXML8-1-AD J6B170153-2-SAMP		1006.10g,in	SRTB13267 02/21/06,pd 09/06/05,r	.987				9"	1817	3/27/06 DD	
				2.0439							
			YTA15380	.4814				2c	0818	4/2/06 K	
			Ex:11/13/2006			24.7		2c	0636	4/3/06	
02/16/2006 11:08		AmtRec: 20ML,500P,4XLP,2X4LP	#Containers: 8					Scr:	Alpha: -1.13E-03 uCi/Sa	Beta: 8.89E-04 uCi/Sa	
4 HXMMH-1-AD J6B170153-3-SAMP		1007.20g,in	SRTB13268 02/21/06,pd 09/06/05,r	.708				3"	1817	3/27/06 DD	
				2.0583							
			YTA15381	.3440				2d	0818	4/2/06 K	
			Ex:11/13/200			25.2		2d	0636	4/3/06	
02/16/2006 08:56		AmtRec: 20ML,500P,4XLP,2X4LP	#Containers: 8					Scr:	Alpha: -1.60E-03 uCi/Sa	Beta: 3.12E-03 uCi/Sa	

3/24/2006 1:54:47 PM

Sample Preparation/Analysis

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

Balance Id:1120482733 ,01
Pipet #: N/A
Sep1 DT/Tm Tech: 3-25-06 1:58 PM
Sep2 DT/Tm Tech: 4-1-06 10:35 AM
Prep Tech: ,WAGNERJ

Report Due: 04/03/2006

Batch: 6052467 pCi/L
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:
5 HXVCH-1-AA-B J6B210000-467-BLK		1002.40g,in	SRTB13269 02/21/06,pd 09/06/05,r	.913 20424 .4470			30	9"	1858 3a 0818	3/27/06 AD 4/2/06 K	
			YTA15382 Ex:11/13/200			240	100	3a	0634	4/3/06	
02/16/2006 12:24		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:
6 HXVCH-1-AC-C J6B210000-467-LCS		1001.00g,in	SRSG1203 03/13/06,pd 09/06/05,r	1.549 20008 .7742				3"	1858 3b 0818	3/27/06 AD 4/2/06 K	
			YTA15383 Ex:11/13/200			248		3b	0634	4/3/06	
02/16/2006 12:24		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:

Comments:

PH<2 - 3-29-06

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

HXMLD1AD-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

HXVCH1AA-BLK:

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

HXVCH1AC-LCS:

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

HXMLD1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
HXVCH1AA-BLK:

4/3/2006 9:46:42 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/3/2005, 4/8/2006, Batch: '6052467', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6052467						
AC		**CalcC**	**WAGNERJ**	3/24/2006 1:40:53 PM		
SC			wagarr	IsBatched	2/21/2006 2:36:58 PM	ICOC_RADCALC v4.8.18
SC			WAGNERJ	InPrep	3/24/2006 1:40:53 PM	RICH-RC-5016 REVISION 6
SC			WAGNERJ	Prep1C	3/24/2006 1:56:30 PM	RICH-RC-5016 REVISION 6
SC			FABREM	InSep1	3/24/2006 4:55:14 PM	RICH-RC-5006 REVISION 6
SC			FABREM	Sep1C	3/27/2006 4:24:43 PM	RICH-RC-5006 REVISION 6
SC			DAWKINSO	InCnt1	3/27/2006 5:14:50 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	Cnt1C	3/27/2006 7:46:07 PM	RICH-RD-0007 REVISION 5
SC			FABREM	InSep2	3/28/2006 5:07:39 PM	RICH-RC-5071 REVISION 4
SC			FABREM	Sep2C	4/1/2006 2:59:10 PM	RICH-RC-5071 REVISION 4
SC			StringerR	InCnt1	4/2/2006 6:24:38 AM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	4/3/2006 7:42:46 AM	RICH-RD-0003 REVISION 4
AC			**WAGNERJ**	3/24/2006 1:56:30 PM		
AC			**FABREM**	3/24/2006 4:55:14 PM		
AC			**FABREM**	3/27/2006 4:24:43 PM		
AC			**DAWKINSO**	3/27/2006 5:14:50 PM		
AC			**DAWKINSO**	3/27/2006 7:46:07 PM		
AC			**FABREM**	3/28/2006 5:07:39 PM		
AC			**FABREM**	4/1/2006 2:59:10 PM		
AC			**StringerR**	4/2/2006 6:24:38 AM		
AC			**BlackCL**	4/3/2006 7:42:46 AM		

AC: Accepting Entry; SC: Status Change

3/30/2006 10:20:32 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

Report Due: 04/03/2006

Sep1 DT/Tm Tech:

Batch: 6052460 **WATER** **pCi/L** **PM, Quote: HC , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6052454 FPS5, 6052459 ARS6, 6052460 BNTB, 6052463 DHSS,

Prep Tech: ,WAGNERJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppor Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 HXGKH-1-AC J6B150154-1-SAMP 02/14/2006 13:00	AmtRec: 20ML,500P,LP,2X4LP	3938.40g,in	ITA5077 02/06/06	IFA #Containers: 5	35.3	100	L4	0737 Scr:	3/31/ks Alpha: 2.03E-03 uCi/Sa	Beta: 1.50E-04 uCi/Sa
2 HXGKN-1-AC J6B150154-2-SAMP 02/14/2006 09:50	AmtRec: 20ML,500P,LP,2X4LP	3902.90g,in	ITA5078 02/06/06	#Containers: 5	66.4	100	L5	0737 Scr:	Alpha: 1.25E-03 uCi/Sa	Beta: 1.97E-03 uCi/Sa
3 HXGKR-1-AA J6B150154-3-SAMP 02/14/2006 11:31	AmtRec: 20ML,500P,2X4LP	3927.10g,in	ITA5079 02/06/06	#Containers: 4	35.2	100	L4	0721 Scr:	Alpha: 1.01E-06 uCi/Sa	Beta: -1.58E-07 uCi/Sa
4 HXJNH-1-AC J6B150409-1-SAMP 02/15/2006 13:39	AmtRec: 20ML,500P,LP,2X4LP	3944.50g,in	ITA5080 02/06/06	#Containers: 5	35.1	100	L5	0721 Scr:	Alpha: 9.12E-04 uCi/Sa	Beta: 1.30E-03 uCi/Sa
5 HXMKM-1-AC J6B170150-1-SAMP 02/16/2006 10:09	AmtRec: 20ML,500P,LP,2X4LP	3951.50g,in	ITA5081 03/16/06	#Containers: 5	35.9	100	L4	1102 Scr:	3/31/ks Alpha: 2.09E-04 uCi/Sa	Beta: 1.69E-03 uCi/Sa
6 HXMLD-1-AC J6B170153-1-SAMP 02/16/2006 12:24	AmtRec: 20ML,500P,4XLP,2X4LP	3921.10g,in	ITA5082 03/16/06	#Containers: 8	35.3	100	L5	1102 Scr:	Alpha: -3.22E-04 uCi/Sa	Beta: -4.44E-04 uCi/Sa
7 HXML8-1-AC J6B170153-2-SAMP 02/16/2006 11:08	AmtRec: 20ML,500P,4XLP,2X4LP	3913.00g,in	ITA5083 03/16/06	#Containers: 8	35.8	100	L4	1244 Scr:	3/31/ks Alpha: -1.13E-03 uCi/Sa	Beta: 8.89E-04 uCi/Sa

3/30/2006 10:20:34 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #:

Report Due: 04/03/2006

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Batch: 6052460 WATER pCi/L PM, Quote: HC , 57671

SEQ Batch, Test: None

Prep Tech: ,WAGNERJ

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 HXMMH-1-AC J6B170153-3-SAMP 02/16/2006 08:56		3899.20g,in AmtRec: 20ML,500P,4XLP,2X4LP	ITA5084 03/16/06 #Containers: 8	IFA	36.1	100	L5	1244 Scr: Alpha: -1.60E-03 uCi/Sa	3/31/06	Beta: 3.12E-03 uCi/Sa
9 HXMMP-1-AC J6B170153-4-SAMP 02/16/2006 10:20		3762.70g,in AmtRec: 20ML,500P,LP,2X4LP	ITA5085 03/16/06 #Containers: 5		35.2	100	L4	1431 Scr: Alpha: -2.86E-04 uCi/Sa		Beta: 1.58E-03 uCi/Sa
10HXMM8-1-AC J6B170153-5-SAMP 02/16/2006 09:45		3902.50g,in AmtRec: 20ML,500P,LP,2X4LP	ITA5086 03/16/06 #Containers: 5		36.0	100	L5	1431 Scr: Alpha: -1.86E-03 uCi/Sa		Beta: 1.58E-03 uCi/Sa
11HXMM8-1-AE-X J6B170153-5-DUP 02/16/2006 09:45		3895.90g,in AmtRec: 20ML,500P,LP,2X4LP	ITA5087 03/16/06 #Containers: 5		36.5	100	L4	1616 Scr: Alpha: -1.86E-03 uCi/Sa	3/31/06	Beta: 1.58E-03 uCi/Sa
12HXVAH-1-AA-B J6B210000-460-BLK 02/16/2006 09:45		4000.00g,in AmtRec:	ITA5088 03/16/06 #Containers: 1		35.9	100	L5	1616 Scr: Alpha:		Beta:
13HXVAH-1-AC-C J6B210000-460-LCS 02/16/2006 09:45		4000.00g,in AmtRec:	ISD0624 02/16/06,pd 11/24/04,r #Containers: 1		38.2	100	L4	1842 Scr: Alpha:	3/31/06	Beta:

4/3/2006 10:25:14 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/3/2005, 4/8/2006, Batch: '6052460', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6052460						
AC		**CalcC**	**WAGNERJ**	3/27/2006 3:48:37 PM		
SC			wagarr	IsBatched	2/21/2006 2:36:57 PM	ICOC_RADCALC v4.8.18
SC			WAGNERJ	InPrep	3/27/2006 3:48:37 PM	RICH-RC-5016 REVISION 6
SC			WAGNERJ	InPrep	3/27/2006 4:21:57 PM	RICH-RC-5016 REVISION 6
SC			WAGNERJ	Prep1C	3/27/2006 4:22:07 PM	RICH-RC-5016 REVISION 6
SC			NortonJ	InSep1	3/28/2006 8:18:49 AM	RICH-RC-5025 REVISION3
SC			NortonJ	Sep1C	3/30/2006 2:39:50 PM	RICH-RC-5025 REVISION3
SC			DAWKINSO	InCnt1	3/30/2006 4:01:53 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	CalcC	3/31/2006 8:24:21 PM	RICH-RD-0007 REVISION 5
AC			**WAGNERJ**	3/27/2006 4:21:57 PM		
AC			**WAGNERJ**	3/27/2006 4:22:07 PM		
AC			**NortonJ**	3/28/2006 8:18:49		
AC			**NortonJ**	3/30/2006 2:39:50 PM		
AC			**DAWKINSO**	3/30/2006 4:01:53 PM		
AC			**DAWKINSO**	3/31/2006 8:24:21 PM		

AC: Accepting Entry; SC: Status Change

3/30/2006 3:26:04 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

Report Due: 04/03/2006

Sep1 DT/Tm Tech:

Batch: 6052462 **WATER** **pCi/L** **PM, Quote: HC , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6052454 FPS5, 6052459 ARS6, 6052462 H3TB, 6088469 H3TB,

Prep Tech: ,WAGNERJ

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 HXJND-1-AC J6B150408-2-SAMP 02/15/2006 12:34		2010.60g,in	ITA5073 02/06/06			100				
		AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha: 2.15E-03 uCi/Sa		Beta: 2.78E-03 uCi/Sa
2 HXJND-1-AF-X J6B150408-2-DUP 02/15/2006 12:34		2002.70g,in	ITA5074 02/06/06			100				
		AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha: 2.15E-03 uCi/Sa		Beta: 2.78E-03 uCi/Sa
3 HXJND-2-AC J6B150408-2-SAMP 02/15/2006 12:34	15% RPD	2010,6	ITA5073	IFA	13.6	300	L4	0332	3/30/06	
		AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha: 2.15E-03 uCi/Sa		Beta: 2.78E-03 uCi/Sa
4 HXJND-2-AF-X J6B150408-2-DUP 02/15/2006 12:34		202,7	ITA5074	IFA	12.0	300	L5			
		AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha: 2.15E-03 uCi/Sa		Beta: 2.78E-03 uCi/Sa
5 HXJNE-1-AD J6B150408-3-SAMP 02/15/2006 11:41		2015.50g,in	ITA5075 02/06/06			100				
		AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha: 2.37E-03 uCi/Sa		Beta: 2.81E-04 uCi/Sa
6 HXVAR-1-AA-B J6B210000-462-BLK 02/15/2006 12:34		2001.50g,in	ITA5076 02/06/06			100				
		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:
7 HXVAR-1-AC-C J6B210000-462-LCS 02/15/2006 12:34		2002.20g,in	ISD0622 02/16/06,pd 11/24/04,r			100				
		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:

3/31/2006 9:21:00 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/31/2005, 4/5/2006, Batch: '6052462', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6052462						
AC		**CalcC**	**WAGNERJ**	3/27/2006 10:24:04		
SC			wagarr	IsBatched	2/21/2006 2:36:58 PM	ICOC_RADCALC v4.8.18
SC			WAGNERJ	InPrep	3/27/2006 10:24:04 AM	RICH-RC-5016 REVISION 6
SC			WAGNERJ	Prep1C	3/27/2006 11:32:59 AM	RICH-RC-5016 REVISION 6
SC			NortonJ	InSep1	3/28/2006 8:18:35 AM	RICH-RC-5025 REVISION3
SC			NortonJ	Sep1C	3/29/2006 3:51:20 PM	RICHRC5025 REV3
SC			DAWKINSO	InCnt1	3/29/2006 5:01:08 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	CalcC	3/30/2006 8:13:04 AM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	InCnt1	3/30/2006 4:02:00 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	CalcC	3/31/2006 6:16:53 AM	RICH-RD-0007 REVISION 5
AC			**WAGNERJ**	3/27/2006 11:32:59		
AC			**NortonJ**	3/28/2006 8:18:35		
AC			**NortonJ**	3/29/2006 3:51:20 PM		
AC			**DAWKINSO**	3/29/2006 5:01:08 PM		
AC			**BlackCL**	3/30/2006 8:13:04		
AC			**DAWKINSO**	3/30/2006 4:02:00 PM		
AC			**BlackCL**	3/31/2006 6:16:53		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 8

ICOCFractions v4.8.18

3/30/2006 8:55:56 AM

Sample Preparation/Analysis

Balance Id:na

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

Report Due: 04/03/2006

Sep1 DT/Tm Tech:

Batch: 6088469 **WATER** **pCi/L** **PM, Quote: HC , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 6052454 FPS5, 6052459 ARS6, 6052462 H3TB, 6088469 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 HXJNE-2-AD J6B150408-3-SAMP		1802.70g,in	ITA5097 03/16/06	IFA	11.5	400	L5	2348	4/1/06DR	
02/15/2006 11:41		AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha: 2.37E-03 uCi/Sa	Beta: 2.81E-04 uCi/Sa	
2 H170R-1-AA-B J6C290000-469-BLK		2046.10g,in	ITA5098 03/16/06		35.0	100	L4	0644	4/3/06	
02/15/2006 11:41		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
3 H170R-1-AC-C J6C290000-469-LCS		2017.50g,in	ISD0626 02/16/06,pd 11/24/04,r		37.7	100	L5	0644		
02/15/2006 11:41		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	

Comments:

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

HXJNE2AD-SAMP Constituent List:
  I-129        RDL:1.00E+00    pCi/L     LCL:        UCL:        RPD:
H170R1AA-BLK Constituent List:
  I-129        RDL:1.00E+00    pCi/L     LCL:        UCL:        RPD:
H170R1AC-LCS:
  I-129        RDL:1           pCi/L     LCL:70      UCL:130     RPD:20

HXJNE2AD-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H170R1AA-BLK Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H170R1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

4/3/2006 9:50:45 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/3/2005, 4/8/2006, Batch: '6088469', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6088469						
AC		**CalcC**	**NortonJ**	3/30/2006 8:53:07		
SC			nortonj	IsBatched	3/29/2006 4:18:35 PM	ICOC_RADCALC v4.8.20
SC			NortonJ	InPrep	3/30/2006 8:53:07 AM	RICH-RC-5025 REVISION3
SC			NortonJ	Prep1C	3/30/2006 8:53:24 AM	RICH-RC-5025 REVISION3
SC			NortonJ	InSep1	3/30/2006 8:53:46 AM	RICH-RC-5025 REVISION3
SC			BlackCL	InCnt1	3/31/2006 1:14:37 PM	RICH-RD-0007 REVISION 5
SC			BlackCL	CalcC	4/3/2006 7:24:34 AM	RICH-RD-0007 REVISION 5
AC			**NortonJ**	3/30/2006 8:53:24		
AC			**NortonJ**	3/30/2006 8:53:46		
AC			**BlackCL**	3/31/2006 1:14:37 PM		
AC			**BlackCL**	4/3/2006 7:24:34 AM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.18

3/31/2006 10:55:28 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

Report Due: 04/03/2006 WO4867

Sep1 DT/Tm Tech:

Batch: 6052454 WATER pCi/L PM, Quote: HC , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WAGNERJ

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 HXGJ1-1-AC J6B150151-1-SAMP 02/14/2006 11:46			128.00g,in AmtRec: 20ML,500P,LP	128.00g #Containers: 3		60		Scr:	Alpha: 2.76E-04 uCi/Sa	Beta: -8.30E-05 uCi/Sa
2 HXGJ4-1-AC J6B150151-2-SAMP 02/14/2006 09:33			130.80g,in AmtRec: 20ML,500P,LP	130.80g #Containers: 3		60		Scr:	Alpha: 1.22E-03 uCi/Sa 2.2E-01L	Beta: 4.16E-05 uCi/Sa
3 HXGJ6-1-AC J6B150151-3-SAMP 02/14/2006 10:19			129.70g,in AmtRec: 20ML,500P,LP	129.70g #Containers: 3		60		Scr:	Alpha: 1.28E-03 uCi/Sa 2.1E-01L	Beta: 2.37E-04 uCi/Sa
4 HXGKN-1-AD J6B150154-2-SAMP 02/14/2006 09:50			127.10g,in AmtRec: 20ML,500P,LP,2X4LP	127.10g #Containers: 5		60		Scr:	Alpha: 1.25E-03 uCi/Sa	Beta: 1.97E-03 uCi/Sa
5 HXJNA-1-AC J6B150407-1-SAMP 02/15/2006 10:32			127.20g,in AmtRec: 20ML,500P,LP	127.20g #Containers: 3		60		Scr:	Alpha: 4.68E-04 uCi/Sa	Beta: 6.24E-05 uCi/Sa
6 HXJNC-1-AC J6B150408-1-SAMP 02/15/2006 10:03			125.10g,in AmtRec: 20ML,500P,LP	125.10g #Containers: 3		60		Scr:	Alpha: 1.06E-04 uCi/Sa	Beta: -4.47E-05 uCi/Sa
7 HXJNC-1-AE-S J6B150408-1-MS 02/15/2006 10:03			125.90g,in AmtRec: 20ML,500P,LP	125.90g #Containers: 3	TCSG1565 02/09/06,pd 01/10/06,r	60		Scr:	Alpha: 1.06E-04 uCi/Sa	Beta: -4.47E-05 uCi/Sa

3/31/2006 10:55:30 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

Report Due: 04/03/2006

Sep1 DT/Tm Tech:

Batch: 6052454 WATER pCi/L PM, Quote: HC , 57671
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WAGNERJ

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 HXJND-1-AD J6B150408-2-SAMP 02/15/2006 12:34			128.00g,in	128.00g		60				
AmtRec: 20ML,500P,LP,2X4LP #Containers: 5							Scr:	Alpha: 2.15E-03 uCi/Sa	Beta: 2.78E-03 uCi/Sa	
9 HXJND-1-AG-X J6B150408-2-DUP 02/15/2006 12:34			127.00g,in	127.00g		60				
AmtRec: 20ML,500P,LP,2X4LP #Containers: 5							Scr:	Alpha: 2.15E-03 uCi/Sa	Beta: 2.78E-03 uCi/Sa	
10 HXJNE-1-AC J6B150408-3-SAMP 02/15/2006 11:41			124.30g,in	124.30g		60				
AmtRec: 20ML,500P,LP,2X4LP #Containers: 5							Scr:	Alpha: 2.37E-03 uCi/Sa	Beta: 2.81E-04 uCi/Sa	
11 HXJNF-1-AC J6B150408-4-SAMP 02/15/2006 11:01			128.40g,in	128.40g		60				
AmtRec: 20ML,500P,LP #Containers: 3							Scr:	Alpha: 4.05E-04 uCi/Sa	Beta: -6.25E-05 uCi/Sa	
12 HXJNH-1-AD J6B150409-1-SAMP 02/15/2006 13:39			130.50g,in	130.50g		60				
AmtRec: 20ML,500P,LP,2X4LP #Containers: 5							Scr:	Alpha: 9.12E-04 uCi/Sa	Beta: 1.30E-03 uCi/Sa	
13 HXJNJ-1-AC J6B150409-2-SAMP 02/15/2006 12:32			130.20g,in	130.20g		60				
AmtRec: 20ML,500P,LP #Containers: 3							Scr:	Alpha: 2.23E-04 uCi/Sa	Beta: -8.02E-05 uCi/Sa	
14 HXJNK-1-AC J6B150409-3-SAMP 02/15/2006 11:35			126.90g,in	126.90g		60				
AmtRec: 20ML,500P,LP #Containers: 3							Scr:	Alpha: -4.82E-05 uCi/Sa	Beta: 2.22E-04 uCi/Sa	

3/31/2006 10:55:31 AM

Sample Preparation/Analysis

Balance Id:na,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 #: _____

Report Due: 04/03/2006

Sep1 DT/Tm Tech:

Batch: 6052454 WATER pCi/L **PM, Quote: HC , 57671**

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WAGNERJ

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:
15HXMKM-1-AD J6B170150-1-SAMP 02/16/2006 10:09			127.80g,in	127.80g		60				
AmtRec: 20ML,500P,LP,2X4LP #Containers: 5							Scr:	Alpha: 2.09E-04 uCi/Sa		Beta: 1.69E-03 uCi/Sa
16HXMLD-1-AE J6B170153-1-SAMP 02/16/2006 12:24			128.90g,in	128.90g		60				
AmtRec: 20ML,500P,4XLP,2X4LP #Containers: 8							Scr:	Alpha: -3.22E-04 uCi/Sa		Beta: -4.44E-04 uCi/Sa
17HXML8-1-AE J6B170153-2-SAMP 02/16/2006 11:08			131.20g,in	131.20g		60				
AmtRec: 20ML,500P,4XLP,2X4LP #Containers: 8							Scr:	Alpha: -1.13E-03 uCi/Sa		Beta: 8.89E-04 uCi/Sa
18HXMMH-1-AE J6B170153-3-SAMP 02/16/2006 08:56			124.60g,in	124.60g		60				
AmtRec: 20ML,500P,4XLP,2X4LP #Containers: 8							Scr:	Alpha: -1.60E-03 uCi/Sa		Beta: 3.12E-03 uCi/Sa
19HXMMP-1-AD J6B170153-4-SAMP 02/16/2006 10:20			127.40g,in	127.40g		60				
AmtRec: 20ML,500P,LP,2X4LP #Containers: 5							Scr:	Alpha: -2.86E-04 uCi/Sa		Beta: 1.58E-03 uCi/Sa
20HXMM8-1-AD J6B170153-5-SAMP 02/16/2006 09:45			126.20g,in	126.20g		60				
AmtRec: 20ML,500P,LP,2X4LP #Containers: 5							Scr:	Alpha: -1.86E-03 uCi/Sa		Beta: 1.58E-03 uCi/Sa
21HXT87-1-AA-B J6B210000-454-BLK 02/15/2006 10:03			125.70g,in	125.70g		60				
AmtRec: #Containers: 1							Scr:	Alpha:		Beta:

3/31/2006 10:55:32 AM

Sample Preparation/Analysis

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

Balance Id:na,1120482733

Pipet #: _____

Report Due: 04/03/2006

Sep1 DT/Tm Tech:

Batch: 6052454 **pCi/L**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WAGNERJ

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:
22HXT87-1-AC-C J6B210000-454-LCS 02/15/2006 10:03			126.10g,in	126.10g	TCSE1914 03/15/06,pd 01/10/06,r	60				
AmtRec:		#Containers: 1					Scr:	Alpha:		Beta:
23HXT87-1-AD-BN J6B210000-454-IBLK 02/15/2006 10:03						60				
AmtRec:		#Containers: 1					Scr:	Alpha:		Beta:
24HXT87-1-AE-BN J6B210000-454-IBLK 02/15/2006 10:03						60				
AmtRec:		#Containers: 1					Scr:	Alpha:		Beta:

Comments: HXGKN-SAMP "Comments In I-129 sample the color change at step 11.4 failed, another carrier was added (see ","procedure), color again failed to change. I added more NaNo2 and more H2S

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

HXGJ11AC-SAMP Constituent List:
  Tc-99        RDL:15          pCi/L     LCL:70      UCL:130     RPD:20
HXJNC1AE-MS:

HXT871AA-BLK:
  Tc-99        RDL:15          pCi/L     LCL:        UCL:        RPD:
HXT871AC-LCS:
  Tc-99        RDL:15          pCi/L     LCL:70      UCL:130     RPD:20
HXT871AD-IBLK:
  Tc-99        RDL:15          pCi/L     LCL:        UCL:        RPD:
HXT871AE-IBLK:
  Tc-99        RDL:15          pCi/L     LCL:        UCL:        RPD:
HXGJ11AC-SAMP Calc Info:
```

4/3/2006 10:26:40 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/3/2005, 4/8/2006, Batch: '6052454', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6052454						
AC		**CalcC**	**WAGNERJ**	3/31/2006 10:05:24		
SC			wagarr	IsBatched	2/21/2006 2:36:57 PM	ICOC_RADCALC v4.8.18
SC			WAGNERJ	InPrep	3/31/2006 10:05:24 AM	RICH-RC-5016 REVISION 6
SC			WAGNERJ	Prep1C	3/31/2006 10:57:07 AM	RICH-RC-5016 REVISION 6
SC			AntonsonL	Sep1C	3/31/2006 3:30:28 PM	RICHRC5065 REVISION 5
SC			DAWKINSO	InCnt1	3/31/2006 3:35:57 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	4/2/2006 11:50:37 AM	RICH-RD-0001 REVISION 3
AC			**WAGNERJ**	3/31/2006 10:57:07		
AC			**AntonsonL**	3/31/2006 3:30:28 PM		
AC			**DAWKINSO**	3/31/2006 3:35:57 PM		
AC			**StringerR**	4/2/2006 11:50:37		

AC: Accepting Entry; SC: Status Change

2/21/2006 2:35:40 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Labortories ,
Pacific Northwest National Lab

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

Report Due: 04/03/2006

Batch: 6052459 **WATER** **pCi/L** **PM, Quote: HC , 57671**
SEQ Batch, Test: None

Balance Id: 12415
Pipet #:
Sep1 DT/Tm Tech: 3-3-06
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:
8 HXJNC-1-AA J6B150408-1-SAMP 02/15/2006 10:03	AmtRec: 20ML,500P,LP	#Containers: 3				Scr:	Alpha:	Beta:
9 HXJND-1-AA J6B150408-2-SAMP 02/15/2006 12:34	AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha:	Beta:
10 HXJNE-1-AA J6B150408-3-SAMP 02/15/2006 11:41	AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha:	Beta:
11 HXJNF-1-AA J6B150408-4-SAMP 02/15/2006 11:01	AmtRec: 20ML,500P,LP	#Containers: 3				Scr:	Alpha:	Beta:
12 HXJNH-1-AA J6B150409-1-SAMP 02/15/2006 13:39	AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha:	Beta:
13 HXJNJ-1-AA J6B150409-2-SAMP 02/15/2006 12:32	AmtRec: 20ML,500P,LP	#Containers: 3				Scr:	Alpha:	Beta:
14 HXJNK-1-AA J6B150409-3-SAMP 02/15/2006 11:35	AmtRec: 20ML,500P,LP	#Containers: 3				Scr:	Alpha:	Beta:

2/21/2006 2:35:39 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Labortories ,
Pacific Northwest National Lab

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

Report Due: 04/03/2006 WO-B67

Batch: 6052459 **WATER** **pCi/L** **PM, Quote: HC , 57671**
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 3-3-06 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:
1 HXGJ1-1-AA J6B150151-1-SAMP 02/14/2006 11:46	AmtRec: 20ML,500P,LP	#Containers: 3				Scr:	Alpha: 2.76E-04 uCi/Sa	Beta: -8.30E-05 uCi/Sa
2 HXGJ4-1-AA J6B150151-2-SAMP 02/14/2006 09:33	AmtRec: 20ML,500P,LP	#Containers: 3				Scr:	Alpha: 1.22E-03 uCi/Sa 2.2E-01L	Beta: 4.16E-05 uCi/Sa
3 HXGJ6-1-AA J6B150151-3-SAMP 02/14/2006 10:19	AmtRec: 20ML,500P,LP	#Containers: 3				Scr:	Alpha: 1.28E-03 uCi/Sa 2.1E-01L	Beta: 2.37E-04 uCi/Sa
4 HXGKH-1-AA J6B150154-1-SAMP 02/14/2006 13:00	AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha: 2.03E-03 uCi/Sa	Beta: 1.50E-04 uCi/Sa
5 HXGKN-1-AA J6B150154-2-SAMP 02/14/2006 09:50	AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha: 1.25E-03 uCi/Sa	Beta: 1.97E-03 uCi/Sa
6 HXJNA-1-AA J6B150407-1-SAMP 02/15/2006 10:32	AmtRec: 20ML,500P,LP	#Containers: 3				Scr:	Alpha:	Beta:
7 HXJNA-1-AD-X J6B150407-1-DUP 02/15/2006 10:32	AmtRec: 20ML,500P,LP	#Containers: 3				Scr:	Alpha:	Beta:

2/21/2006 2:35:40 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Labortories ,
Pacific Northwest National Lab

Report Due: 04/03/2006

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 3-3-06 PM
Sep2 DT/Tm Tech:
Prep Tech:

Batch: 6052459 **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 HXMKM-1-AA J6B170150-1-SAMP 02/16/2006 10:09	AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha:	Beta:
16 HXMLD-1-AA J6B170153-1-SAMP 02/16/2006 12:24	AmtRec: 20ML,500P,4XLP,2X4LP	#Containers: 8				Scr:	Alpha:	Beta:
17 HXML8-1-AA J6B170153-2-SAMP 02/16/2006 11:08	AmtRec: 20ML,500P,4XLP,2X4LP	#Containers: 8				Scr:	Alpha:	Beta:
18 HXMMH-1-AA J6B170153-3-SAMP 02/16/2006 08:56	AmtRec: 20ML,500P,4XLP,2X4LP	#Containers: 8				Scr:	Alpha:	Beta:
19 HXMMP-1-AA J6B170153-4-SAMP 02/16/2006 10:20	AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha:	Beta:
20 HXMM8-1-AA J6B170153-5-SAMP 02/16/2006 09:45	AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5				Scr:	Alpha:	Beta:
21 HXT96-1-AA-B J6B210000-459-BLK 02/15/2006 10:32	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

2/21/2006 2:35:41 PM

Sample Preparation/Analysis

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

Report Due: 04/03/2006

Batch: 6052459 **pCi/L**
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 3-3-06 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:
22 HXT96-1-AC-C J6B210000-459-LCS 02/15/2006 10:32	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
23 HXT96-1-AD-BX J6B210000-459-MBLK 02/15/2006 10:32	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
24 HXT96-1-AE-CM J6B210000-459-MLCS 02/15/2006 10:32	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
25 HXT96-1-AF-BN J6B210000-459-IBLK 02/15/2006 10:32	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
26 HXT96-1-AG-BN J6B210000-459-IBLK 02/15/2006 10:32	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
27 HXT96-1-AH-BN J6B210000-459-IBLK 02/15/2006 10:32	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
28 HXT96-1-AJ-BN J6B210000-459-IBLK 02/15/2006 10:32	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

2/21/2006 2:35:42 PM

Sample Preparation/Analysis

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 3-3-06 am
Sep2 DT/Tm Tech:
Prep Tech:

Report Due: 04/03/2006

Batch: 6052459 pCi/L
SEQ Batch, Test: None

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

Comments:

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

HXGJ11AA-SAMP Constituent List:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
HXT961AA-BLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
HXT961AC-LCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
HXT961AD-MBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
HXT961AE-MLCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
HXT961AF-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
HXT961AG-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
HXT961AH-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
HXT961AJ-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:

HXGJ11AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
HXT961AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
HXT961AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
HXT961AD-MBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
HXT961AE-MLCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
HXT961AF-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
HXT961AG-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

ICOC Fraction Transfer/Status Report

ByDate: 3/7/2005, 3/12/2006, Batch: '6052459', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6052459						
AC		**CalcC**	**McDowellD**	3/2/2006 10:57:05		
SC			wagarr	IsBatched	2/21/2006 2:36:57 PM	ICOC_RADCALC v4.8.18
SC			McDowellD	InSep1	3/2/2006 10:57:05 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	3/3/2006 3:45:47 PM	RICH-RC-5007 REVISION 6
SC			DAWKINSO	CalcC	3/5/2006 5:04:31 PM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	3/3/2006 3:45:47 PM		
AC			**DAWKINSO**	3/5/2006 5:04:31 PM		

AC: Accepting Entry; SC: Status Change

4/3/2006 5:25:43 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 240

Report Due: 04/03/2006 W04867

Sep1 DT/Tm Tech:

Batch: 6093476 WATER ug/L PM, Quote: HC , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WAGNERJ

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 HXGKH-2-AD J6B150154-1-SAMP 02/14/2006 13:00	Final Vol 10.0 ml	28.60g,in AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5			Scr:	Alpha: 2.03E-03 uCi/Sa	Beta: 1.50E-04 uCi/Sa
2 HXGKH-2-AE-X J6B150154-1-DUP 02/14/2006 13:00		28.30g,in AmtRec: 20ML,500P,LP,2X4LP	#Containers: 5			Scr:	Alpha: 2.03E-03 uCi/Sa	Beta: 1.50E-04 uCi/Sa
3 HXGKR-2-AC J6B150154-3-SAMP 02/14/2006 11:31		29.00g,in AmtRec: 20ML,500P,2X4LP	#Containers: 4			Scr:	Alpha: 1.01E-06 uCi/Sa	Beta: -1.58E-07 uCi/Sa
4 HXGKR-2-AD-S J6B150154-3-MS 02/14/2006 11:31		26.70g,in AmtRec: 20ML,500P,2X4LP	UNSF3043 03/08/06,pd 03/22/05,r #Containers: 4			Scr:	Alpha: 1.01E-06 uCi/Sa	Beta: -1.58E-07 uCi/Sa
5 H2H15-1-AA-B J6D030000-476-BLK 02/14/2006 13:00		25.00g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 H2H15-1-AC-C J6D030000-476-LCS 02/14/2006 13:00		25.90g,in AmtRec:	UNSF3044 03/08/06,pd 03/22/05,r #Containers: 1			Scr:	Alpha:	Beta:
7 H2H15-1-AD-C J6D030000-476-LCS 02/14/2006 13:00		26.10g,in AmtRec:	UNSC1059 01/31/06,pd 09/17/04,r #Containers: 1			Scr:	Alpha:	Beta:

4/3/2006 5:25:44 PM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

Report Due: 04/03/2006

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Batch: 6093476 ug/L
SEQ Batch, Test: None

Prep Tech: ,WAGNERJ

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

Comments: PH 2.24.306

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

HXGKH2AD-SAMP Constituent List:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
HXGKR2AD-MS:

H2H151AA-BLK:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
H2H151AC-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20
H2H151AD-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

HXGKH2AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
HXGKR2AD-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H2H151AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H2H151AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H2H151AD-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

4/5/2006 12:16:27 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/5/2005, 4/10/2006, Batch: '6093476', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6093476						
AC		**Cnt1C**	**WAGNERJ**	4/3/2006 5:21:46 PM		
SC			andersonp	IsBatched	4/3/2006 4:03:42 PM	ICOC_RADCALC v4.8.20
SC			WAGNERJ	InPrep	4/3/2006 5:21:46 PM	RICH-RC-5015 REVISION 4
SC			WAGNERJ	Prep1C	4/3/2006 5:27:29 PM	RICH-RC-5015 REVISION 4
SC			ScottM	InPrep2	4/4/2006 10:39:28 AM	RICH-RC-5015 REVISION 4
SC			ScottM	Prep2C	4/4/2006 5:10:53 PM	RICH-RC-5015 REVISION 4
SC			BarbosaH	Cnt1C	4/5/2006 11:03:14 AM	RICH-RC-5058 REVISION 7
AC			**WAGNERJ**	4/3/2006 5:27:29 PM		
AC			**ScottM**	4/4/2006 10:39:28		
AC			**ScottM**	4/4/2006 11:12:34		
AC			**ScottM**	4/4/2006 5:10:53 PM		
AC			**BarbosaH**	4/5/2006 11:03:14		

AC: Accepting Entry; SC: Status Change