Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 32103

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04883	X06-009	B1FRY6	J6C130199-1	H06WM1AA	9H06WM10	6089302
		B1FT27	J6C130199-2	H06WQ1AA	9H06WQ10	6089302
		B1FT27	J6C130199-2	H06WQ1AC	9H06WQ10	6089305
		B1FT27	J6C130199-2	H06WQ1AD	9H06WQ10	6089306
		B1FT27	J6C130199-2	H06WQ1AE	9H06WQ10	6089308
		B1FT07	J6C130199-3	H06W11AA	9H06W110	6089302
		B1FT16	J6C130199-4	H06W21AA	9H06W210	6089302
		B1FT16	J6C130199-4	H06W21AC	9H06W210	6089305
		B1FT16	J6C130199-4	H06W21AD	9H06W210	6089306
		B1FT16	J6C130199-4	H06W21AE	9H06W210	6089308
		B1FT21	J6C130199-5	H06W61AA	9H06W610	6089308
		B1FT32	J6C130199-6	H06W71AA	9H06W710	6089308
		B1FT38	J6C130199-7	H06W81AA	9H06W810	6089302
		B1FT38	J6C130199-7	H06W81AC	9H06W810	6089305
		B1FT38	J6C130199-7	H06W81AD	9H06W810	6089306

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Comments:

1216882

Report Nbr: 32103

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04883	X06-009	B1FT04	J6C130199-8	H06W91AA	9H06W910	6089302
	X06-005	B1FN11	J6C140328-1	H08Q41AA	9H08Q410	6089302
		B1FN11	J6C140328-1	H08Q41AC	9H08Q410	6089310
		B1FN24	J6C190104-1	H1KKN1AA	9H1KKN10	6089302
		B1FN24	J6C190104-1	H1KKN1AC	9H1KKN10	6089310
	X06-003	B1F6T7	J6C240368-1	H10V41AA	9H10V410	6089308
		B1F6T3	J6C240368-2	H10V51AA	9H10V510	6089308
		B1F6R8	J6C240368-3	H10WD1AA	9H10WD10	6089308
		B1F6T1	J6C240368-4	H10WL1AA	9H10WL10	6089308
	X06-009	B1FTJ7	J6C240372-1	H10XA1AA	9H10XA10	6089302
		B1FTJ7	J6C240372-1	H10XA1AC	9H10XA10	6089312
		B1FTJ7	J6C240372-1	H10XA1AD	9H10XA10	6089308

Comments:

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99352

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www.stl-inc.com

Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

May 17, 2006

Attention: Dot Stewart

SAF Number	:	X06-003, X06-005, X06-009
Date SDG Closed	:	March 27, 2006
Number of Samples	:	Fifteen (15)
Sample Type	:	Water
SDG Number	:	W04883
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between March 13, 2006 and March 24, 2006, fifteen 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
B1FRY6	H06WM	WATER	3/13/06
B1FT27	H06WQ	WATER	3/13/06
B1FT07	H06W1	WATER	3/13/06
B1FT16	H06W2	WATER	3/13/06
B1FT21	H06W6	WATER	3/13/06
B1FT32	H06W7	WATER	3/13/06
B1FT38	H06W8	WATER	3/13/06
B1FT04	H06W9	WATER	3/13/06
B1FN11	H08Q4	WATER	3/14/06
B1FN24	H1KKN	WATER	3/17/06
B1F6T7	H10V4	WATER	3/24/06
B1F6T3	H10V5	WATER	3/24/06
B1F6R8	H10WD	WATER	3/24/06
B1F6T1	H10WL	WATER	3/24/06
B1FTJ7	H10XA	WATER	3/24/06

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Gamma Spectroscopy
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Carbon-14 by method RICH-RC-5022
Tritium by method RICH-RC-5007

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1F27) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
The LCS, batch blank, samples and sample duplicate (B1FT16) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006
The LCS, batch blank, samples and sample duplicate (B1F6T7) results are within contractual requirements.

Gamma Spectroscopy

Pacific Northwest National Laboratories
May 17, 2006

Iodine-129 (LL) by method RICH-RC-5025
The LCS, batch blank, samples and sample duplicate (B1FN11) results are within contractual requirements.

Liquid Scintillation Counting
Carbon-14 by method RICH-RC-5022
The LCS, batch blank, samples and sample duplicate (B1FTJ7) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1FN24) results are within contractual requirements.

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

Reviewed and approved:

Sandra Seger
Project Manager

Drinking Water Method Cross References

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

Uncertainty Estimation

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

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

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

Report Definitions

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

5/17/2006 9:41:46 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 32103 File Name: h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.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:
9H06W110	B1FT07		MW6-SBB-A1	X06-009	W04883					03/12/2006 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089302	H-3	10028-17-8	6.06E+03	pCi/L	2.9E+02	4.0E+02		3.19E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/22/200 21:26	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H06W210	B1FT16		MW6-SBB-A1	X06-009	W04883					03/12/2006 11:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089302	H-3	10028-17-8	6.80E+03	pCi/L	3.0E+02	4.3E+02		3.20E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/22/200 22:48	I
6089305	ALPHA	12587-46-1	6.40E-01	pCi/L	6.4E-01	6.5E-01	U	1.15E+00	100.0	9310_ALPHABETA	1.558E-01	L	05/15/200 12:34	I
6089306	BETA	12587-47-2	9.28E+00	pCi/L	1.8E+00	2.3E+00		2.56E+00	100.0	9310_ALPHABETA	2.055E-01	L	05/15/200 13:42	I
6089308	SR-90	10098-97-2	1.12E+00	pCi/L	5.4E-01	5.4E-01		8.70E-01	59.2	SRISO_SEP_PRE	9.517E-01	L	05/12/200 08:34	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:
9H06W610	B1FT21		MW6-SBB-A1	X06-009	W04883					03/12/2006 11:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089308	SR-90	10098-97-2	1.15E+01	pCi/L	1.0E+00	2.0E+00		9.12E-01	48.1	SRISO_SEP_PRE	9.711E-01	L	05/12/200 08:34	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:
9H06W710	B1FT32		MW6-SBB-A1	X06-009	W04883					03/12/2006 12:10

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089308	SR-90	10098-97-2	1.14E+01	pCi/L	8.7E-01	1.9E+00		7.40E-01	55.1	SRISO_SEP_PRE	9.928E-01	L	05/12/200 08:34	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:
9H06W810	B1FT38		MW6-SBB-A1	X06-009	W04883					03/12/2006 13:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089302	H-3	10028-17-8	5.83E+03	pCi/L	2.8E+02	3.9E+02		3.19E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/23/200 00:10	I
6089305	ALPHA	12587-46-1	1.02E+00	pCi/L	6.8E-01	7.1E-01		8.58E-01	100.0	9310_ALPHABETA	2.048E-01	L	05/15/200 12:34	I
6089306	BETA	12587-47-2	1.13E+01	pCi/L	2.0E+00	2.4E+00		2.70E+00	100.0	9310_ALPHABETA	2.085E-01	L	05/15/200 13:42	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9H06W910	B1FT04		MW6-SBB-A1	X06-009	W04883					03/12/2006 13:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089302	H-3	10028-17-8	1.22E+03	pCi/L	1.7E+02	2.0E+02		3.20E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/23/200 01:32	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: 32103 File Name: h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.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:
9H06WM10	B1FRY6		MW6-SBB-A1	X06-009	W04883					03/12/2006 14:25

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089302	H-3	10028-17-8	4.13E+02	pCi/L	1.5E+02	1.6E+02		3.20E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/22/200 18:43	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:
9H06WQ10	B1FT27		MW6-SBB-A1	X06-009	W04883					03/12/2006 11:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089302	H-3	10028-17-8	1.60E+04	pCi/L	4.3E+02	8.1E+02		3.20E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/22/200 20:05	I
6089305	ALPHA	12587-46-1	1.13E+00	pCi/L	7.8E-01	8.2E-01	U	1.19E+00	100.0	9310_ALPHABETA	1.599E-01	L	05/15/200 12:34	I
6089306	BETA	12587-47-2	1.13E+01	pCi/L	2.0E+00	2.5E+00		2.82E+00	100.0	9310_ALPHABETA	2.033E-01	L	05/15/200 13:42	I
6089308	SR-90	10098-97-2	-7.35E-04	pCi/L	1.8E-02	4.7E-01	U	1.02E+00	47.3	SRISO_SEP_PRE	1.0125E+00	L	05/12/200 08:34	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:
9H08Q410	B1FN11		MW6-SBB-A1	X06-005	W04883					03/14/2006 07:38

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089302	H-3	10028-17-8	7.94E+02	pCi/L	1.6E+02	1.8E+02		3.21E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/23/200 02:53	I
6089310	I-129L	15046-84-1	6.50E-02	pCi/L	1.3E-01	1.3E-01	U	2.64E-01	94.1	I129LL_SEP_LEPS	3.7531E+00	L	05/08/200 12:09	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:
9H10V410	B1F6T7		MW6-SBB-A1	X06-003	W04883					03/23/2006 13:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089308	SR-90	10098-97-2	1.71E+00	pCi/L	3.3E-01	4.2E-01		4.59E-01	82.3	SRISO_SEP_PRE	1.0143E+00	L	05/12/200 08:34	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:
9H10V510	B1F6T3		MW6-SBB-A1	X06-003	W04883					03/23/2006 13:05

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089308	SR-90	10098-97-2	7.87E-01	pCi/L	2.3E-01	2.7E-01		3.66E-01	81.9	SRISO_SEP_PRE	1.0179E+00	L	05/12/200 08:35	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:
9H10WD10	B1F6R8		MW6-SBB-A1	X06-003	W04883					03/23/2006 12:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089308	SR-90	10098-97-2	1.56E+00	pCi/L	3.0E-01	3.8E-01		3.66E-01	89.0	SRISO_SEP_PRE	9.893E-01	L	05/12/200 08:35	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: 32103 File Name: h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.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:
9H10WL10	B1F6T1		MW6-SBB-A1	X06-003	W04883					03/23/2006 11:50

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089308	SR-90	10098-97-2	2.50E+00	pCi/L	3.7E-01	5.2E-01		3.97E-01	81.4	SRISO_SEP_PRE	1.013E+00	L	05/12/200 08:35	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:
9H10XA10	B1FTJ7		MW6-SBB-A1	X06-009	W04883					03/23/2006 10:15

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089302	H-3	10028-17-8	3.32E+03	pCi/L	2.3E+02	2.9E+02		3.21E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/23/200 11:04	I
6089312	C-14	14762-75-5	1.27E+01	pCi/L	3.9E+00	4.7E+00		8.31E+00	100.0	C14_LSC	2.00E-01	L	04/05/200 21:09	I
6089308	SR-90	10098-97-2	-2.14E-01	pCi/L	3.0E-01	3.0E-01	U	7.23E-01	51.8	SRISO_SEP_PRE	9.828E-01	L	05/12/200 08:35	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:
9H1KKN10	B1FN24		MW6-SBB-A1	X06-005	W04883					03/16/2006 15:58

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6089302	H-3	10028-17-8	2.52E+03	pCi/L	2.1E+02	2.6E+02		3.21E+02	100.0	906.0_H3_LSC	5.00E-03	L	04/23/200 04:15	I
6089310	I-129L	15046-84-1	1.05E-02	pCi/L	1.4E-01	1.4E-01	U	2.57E-01	93.2	I129LL_SEP_LEPS	3.9015E+00	L	05/08/200 12:09	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, May 17, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id:	H19411AB	**Sdg/Rept Nbr:**	W04883 32103	**Collection Date:**	03/23/2006 13:15
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	03/24/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6089308	SR-90	-1.29E-01	pCi/L	1.8E-01	U	4.42E-01	81.2		SRISO_SEP_P	1.0027E+00	05/12/2006				D
BLK	10098-97-2			1.7E-01						L	08:35				

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\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id:	H194A1AB	**Sdg/Rept Nbr:**	W04883	32103	**Collection Date:** 03/16/2006 15:58
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 03/17/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6089302	H-3	8.76E+01	pCi/L	1.5E+02	U	3.19E+02	100.0		906.0_H3_LSC	5.00E-03	04/22/2006				D
BLK	10028-17-8			1.3E+02						L	15:59				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H194A1DX **Sdg/Rept Nbr:** W04883 32103 **Collection Date:** 03/16/2006 15:58

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 03/17/2006

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
6089302	H-3	-1.28E+02	pCi/L	1.4E+02	U	3.21E+02	100.0		906.0_H3_LSC	5.00E-03	04/23/2006				D
BLK	10028-17-8			1.3E+02						L	06:59				

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

Wednesday, May 17, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id:	H194R1AB	**Sdg/Rept Nbr:**	W04883 32103	**Collection Date:**	03/12/2006 11:55
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	03/13/2006

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
6089305	ALPHA	1.81E-01	pCi/L	3.4E-01	U	7.30E-01	100.0		9310_ALPHAB	2.01E-01	05/15/2006				D
BLK	12587-46-1			3.4E-01						L	17:03				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H194X1AB
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W04883 32103
Matrix: WATER WATER
QC Type: BLK

Collection Date: 03/12/2006 11:00
Sample On Date:
Received Date: 03/13/2006

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
6089306	BETA	8.64E-01	pCi/L	1.3E+00	U	2.71E+00	100.0		9310_ALPHAB	2.01E-01	05/15/2006				
BLK	12587-47-2			1.3E+00						L	13:42				D

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

Wednesday, May 17, 2006

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id:	H195F1AB	**Sdg/Rept Nbr:**	W04883	32103	**Collection Date:** 03/14/2006 07:38
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 03/14/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6089310	I-129L	-1.17E-02	pCi/L	1.5E-01	U	2.63E-01	94.6		I129LL_SEP_L	3.9165E+00	05/08/2006				D
BLK	15046-84-1			1.5E-01						L	13:57				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id:	H195M1AB	**Sdg/Rept Nbr:**	W04883 32103	**Collection Date:**	03/23/2006 10:15
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	03/24/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6089312	C-14	8.93E+00	pCi/L	4.6E+00		8.31E+00	100.0		C14_LSC	2.00E-01	04/05/2006				D
BLK	14762-75-5			3.7E+00						L	19:44				

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, May 17, 2006

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H19411CS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W04883 32103
Matrix: WATER WATER
QC Type: BS

Collection Date: 03/23/2006 13:15
Sample On Date:
Received Date: 03/24/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6089308	SR-90	1.43E+01	pCi/L	2.2E+00		4.05E-01	81.9	1.38E+01	SRISO_SEP_P	1.0013E+00	05/12/2006			70	D
BS	10098-97-2			8.0E-01				103.5		L	08:35			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\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H194A1CS **Sdg/Rept Nbr:** W04883 32103 **Collection Date:** 03/16/2006 15:58

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/17/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6089302	H-3	2.81E+03	pCi/L	2.7E+02		3.19E+02	100.0	2.73E+03	906.0_H3_LSC	5.00E-03	04/22/2006			70	D
BS	10028-17-8			2.2E+02				103.1		L	17:21			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H194A1EM **Sdg/Rept Nbr:** W04883 32103 **Collection Date:** 03/16/2006 15:58

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/17/2006

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
6089302	H-3	2.84E+03	pCi/L	2.7E+02		3.23E+02	100.0	2.73E+03	906.0_H3_LSC	5.00E-03	04/23/2006			70	D
BS	10028-17-8			2.2E+02				104.1		L	08:20			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H194R1CS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W04883 32103
Matrix: WATER WATER
QC Type: BS

Collection Date: 03/12/2006 11:55
Sample On Date:
Received Date: 03/13/2006

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
6089305	ALPHA	2.17E+01	pCi/L	4.8E+00		7.01E-01	100.0	2.27E+01	9310_ALPHAB	2.00E-01	05/15/2006			70	D
BS	12587-46-1			2.2E+00				95.7		L	17:03			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\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H194X1CS **Sdg/Rept Nbr:** W04883 32103 **Collection Date:** 03/12/2006 11:00

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/13/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6089306	BETA	2.41E+01	pCi/L	3.9E+00		2.52E+00	100.0	2.27E+01	9310_ALPHAB	2.027E-01	05/15/2006			70	D
BS	12587-47-2			2.5E+00				106.1		L	13:42			130	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H195F1CS
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W04883 32103
Matrix: WATER WATER
QC Type: BS

Collection Date: 03/14/2006 07:38
Sample On Date:
Received Date: 03/14/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6089310	I-129L	7.59E+00	pCi/L	1.0E+00		4.00E-01	94.3	9.76E+00	I129LL_SEP_L	3.9235E+00	05/08/2006			70	D
BS	15046-84-1			1.0E+00				77.7		L	13:58			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\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H195M1CS **Sdg/Rept Nbr:** W04883 32103 **Collection Date:** 03/23/2006 10:15

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 03/24/2006

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
6089312	C-14	4.37E+01	pCi/L	6.0E+00		8.31E+00	100.0	4.43E+01	C14_LSC	2.00E-01	04/05/2006			70	D
BS	14762-75-5			4.7E+00				98.6		L	20:27			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\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H06W21FR
Client Id: B1FT16
Moisture/Solids%*:

Sdg/Rept Nbr: W04883 32103
Matrix: WATER WATER
QC Type: DUP

Collection Date: 03/12/2006 11:00
Sample On Date:
Received Date: 03/13/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X06-009	MW6-SBB-A19981								AP	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
6089306	BETA	8.93E+00	pCi/L	2.2E+00		2.96E+00	100.0		9310_ALPHAB	2.011E-01	05/15/2006	3.8	0.2		D
DUP	12587-47-2	9.28E+00		1.9E+00						L	13:42	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\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id:	H06WQ1FR	**Sdg/Rept Nbr:**	W04883	32103	**Collection Date:**	03/12/2006 11:55
Client Id:	B1FT27	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:**	03/13/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X06-009	MW6-SBB-A19981								AQ	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
6089305	ALPHA	1.29E+00	pCi/L	8.7E-01		1.19E+00	100.0		9310_ALPHAB	1.602E-01	05/15/2006	13.7	0.3		D
DUP	12587-46-1	1.13E+00		8.3E-01						L	12:34	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\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id:	H08Q41DR	**Sdg/Rept Nbr:**	W04883 32103	**Collection Date:**	03/14/2006 07:38
Client Id:	B1FN11	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	03/14/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X06-005	MW6-SBB-A19981								AR	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
6089310	I-129L	-1.24E-01	pCi/L	1.8E-01	U	2.97E-01	92.7		I129LL_SEP_L	3.5525E+00	05/08/2006	0.0	1.5		D
DUP	15046-84-1	6.50E-02		1.8E-01						L	12:09	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\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id:	H10V41CR	**Sdg/Rept Nbr:**	W04883	32103	**Collection Date:** 03/23/2006 13:15
Client Id:	B1F6T7	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 03/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X06-003	MW6-SBB-A19981								AS	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
6089308	SR-90	1.69E+00	pCi/L	3.9E-01		3.97E-01	91.7		SRISO_SEP_P	1.0154E+00	05/12/2006	1.3	0.1		D
DUP	10098-97-2	1.71E+00		3.0E-01						L	08:35	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, May 17, 2006

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H10XA1ER **Sdg/Rept Nbr:** W04883 32103 **Collection Date:** 03/23/2006 10:15

Client Id: B1FTJ7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 03/24/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X06-009	MW6-SBB-A19981								AT	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
6089312	C-14	1.58E+01	pCi/L	4.9E+00		8.31E+00	100.0		C14_LSC	2.00E-01	04/05/2006	21.5	0.9		D
DUP	14762-75-5	1.27E+01		4.0E+00						L	21:52	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\W04883.Edd, h:\Reportdb\edd\FeadIV\Rad\32103.Edd

Lab Sample Id: H1KKN1DR **Sdg/Rept Nbr:** W04883 32103 **Collection Date:** 03/16/2006 15:58

Client Id: B1FN24 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 03/17/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X06-005	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
6089302	H-3	2.49E+03	pCi/L	2.5E+02		3.21E+02	100.0		906.0_H3_LSC	5.00E-03	04/23/2006	1.4	0.2		D
DUP	10028-17-8	2.52E+03		2.1E+02						L	09:42	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.

Lot No., Due Date: J6C140328,J6C190104; 05/11/2006
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6089310; RGAMLEPS Gamma by LEPS
SDG, Matrix: W04883; WATER

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

6.0 Comments on any No response:

First Level Review Pam Anderson **Date** 5-9-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6089310

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: 5/12/6

Lot No., Due Date: J6C130199; 05/11/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6089305; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W04883; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => H06WQ1AC 159.90<200.00 H06W21AC 155.80<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. 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 => H06W81AC ALPHA 1.0E+00 L:8.6E-01		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments:

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

First Level Review Pam Anderson **Date** 5-17-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: L0089305

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

Comments on any "No" response:

Second Level Review: Erika Jordan Date: 5/17/6

LS-038B Rev. 10, 8/02

Lot No., Due Date: J6C130199; 05/11/2006
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6089306; RBETA-SR Beta by GPC-Sr/Y
SDG, Matrix: W04883; 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. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => H06WQ1AD BETA 1.1E+01 L:2.8E+00 H06W21AD BETA 9.3E+00 L:2.6E+00 H06W81AD BETA 1.1E+01 L:2.7E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		

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

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments:

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

First Level Review Pam Anderson **Date** 5-17-04

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6089306

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

Comments on any "No" response:

Second Level Review: Erika Jorde Date: 5/17/6

LS 038D Rev. 10 8/02

Lot No., Due Date: J6C130199,J6C240368,J6C240372; 05/11/2006
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 6089308; RSR85907 Sr-85/90 by GPC-7
SDG, Matrix: W04883; 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. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag.		✓	

Batch Positive Result =>
H06W21AE SR-90 2.4E+00 L:1.5E+00
H06W21AE SR-90 1.1E+00 L:8.7E-01
H06W61AA SR-90 1.1E+01 L:1.3E+00
H06W61AA SR-90 1.2E+01 L:1.3E+00
H06W61AA SR-90 1.1E+01 L:9.1E-01
H06W71AA SR-90 1.2E+01 L:9.7E-01
H06W71AA SR-90 1.1E+01 L:1.1E+00
H06W71AA SR-90 1.1E+01 L:7.4E-01
H10V41AA SR-90 1.7E+00 L:6.3E-01
H10V41AA SR-90 1.7E+00 L:6.7E-01
H10V41AA SR-90 1.7E+00 L:4.6E-01
H10V51AA SR-90 1.0E+00 L:4.4E-01

H10V51AA SR-90 7.9E-01 L:3.7E-01
H10WD1AA SR-90 1.3E+00 L:4.7E-01
H10WD1AA SR-90 1.8E+00 L:5.6E-01
H10WD1AA SR-90 1.6E+00 L:3.7E-01
H10WL1AA SR-90 2.3E+00 L:5.3E-01
H10WL1AA SR-90 2.7E+00 L:6.0E-01
H10WL1AA SR-90 2.5E+00 L:4.0E-01

8.23 Result <= Action Level, when Defined. Yes ✓ No N/A
OK; No Action Level Found => SR-90

OK; No Callin Level Found => SR-90

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

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

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments:

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

First Level Review Pam Anderson **Date** 5-15-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: U089308

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: 5/16/6

Lot No., Due Date: J6C240372; 05/11/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6089312; RC14 C-14 by LSC

SDG, Matrix: W04883; 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. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. 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 => C-14 OK; No Callin Level Found => C-14	✓		
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** 4-7-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6089312

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

Comments on any "No" response: _____

Second Level Review: Erika Jordan Date: 5/12/16

Lot No., Due Date: J6C130199,J6C140328,J6C240372,J6C190104; 05/11/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6089302; RTRITIUM H-3 by LSC

SDG, Matrix: W04883; 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 => H06WM1AA 5.00<10.00
H06WQ1AA 5.00<10.00
H06W11AA 5.00<10.00
H06W21AA 5.00<10.00
H06W81AA 5.00<10.00
H06W91AA 5.00<10.00
H08Q41AA 5.00<10.00
H1KKN1AA 5.00<10.00
H10XA1AA 5.00<10.00 Q:VB

8.07 The Correct Count Geometry was Used. — Yes No ✓ N/A
Count Geometry => H194A1AF SVP15/5<>SVP10/10
H194A1AG SVP15/5<>SVP10/10
H194A1AA SVP15/5<>SVP10/10
H194A1AC SVP15/5<>SVP10/10
H06WM1AA SVP15/5<>SVP10/10
H06WQ1AA SVP15/5<>SVP10/10
H06W11AA SVP15/5<>SVP10/10
H06W21AA SVP15/5<>SVP10/10
H06W81AA SVP15/5<>SVP10/10
H06W91AA SVP15/5<>SVP10/10
H08Q41AA SVP15/5<>SVP10/10
H1KKN1AA SVP15/5<>SVP10/10
H194A1AH SVP15/5<>SVP10/10
H194A1AD SVP15/5<>SVP10/10
H194A1AE SVP15/5<>SVP10/10
H1KKN1AD SVP15/5<>SVP10/10
H10XA1AA SVP15/5<>SVP10/10 Q:VC

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. — Yes ✓ No N/A
OK

8.1 Comments:

8.11 Matrix Blank is within Control Limits. — Yes ✓ No N/A
OK

8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). — Yes ✓ No N/A
OK

8.13 QAS Specified Duplicate Equation Value within Control Limits. — Yes ✓ No N/A
OK (RPD)

8.14 LCS within Control Limits. — Yes ✓ No N/A
OK

8.15 MLCS within Control Limits. — Yes ✓ No N/A
OK

8.16 MS within Control Limits. — Yes No ✓ N/A
No Matrix Spike Samples (MS) found in Batch!

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

No Tracers found in Batch! ✓

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

8.2 Comments:

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

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

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

OK; No Callin Level Found => H-3

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

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

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments:

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

First Level Review Pam Anderson **Date** 4-24-06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6089302

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

Comments on any "No" response:

Second Level Review: Erika Jude Date: 5/12/10

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X06-009-3
		Page 1 of 1

Collector Hawkes	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. X06-009	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **
JLC130199
W04883
Due: 4/27/06

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL samples submitted under this "X" SAF into one SDG.
Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FRY6		W	3/12/06	14:25	1x1000-mL P	906.0_H3_LSC: Tritium (1) Hdown	None
B1FRY6		W	3/12/06	14:25	1x20-mL P	Activity Scan	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Mike Hawkes / [signature]	3-12-06 1600	SIG 5 LOCKED STORAGE	3-12-06 1600
SIG 5 LOCKED STORAGE	3/13/06 11:00	R.W. FULTON [signature]	3/13/06 11:00
R.W. FULTON [signature]	3/13/06 11:00	DAVID HARBINSON [signature]	3/13/06 15:00

Matrix *

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

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

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X06-009-36
		Page 1 of 1

Collector Hawkes	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. X06-009	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **
JGC 130199
W04 883

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL samples submitted under this "X" SAF into one SDG.
Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FT27		W	3/12/06	11:55	1x1000-mL P	906.0_H3_LSC: Tritium (1) HOLD	None
B1FT27		W	3/12/06	11:55	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1FT27		W	3/12/06	11:55	1x20-mL P	Activity Scan	None
B1FT27		W	3/12/06	11:55	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
	Mital Hallet	MHallet	3-12-06 1600	SIG 5 LOCKED STORAGE			3/12/06 1600
Relinquished By			Date/Time	Received By			Date/Time
SIG 5 LOCKED STORAGE			3/13/06 11:00	R.W. FULTON		R.W. Fulton	3/13/06 11:00
Relinquished By			Date/Time	Received By			Date/Time
R.W. FULTON		R.W. Fulton	3/13/06 3:00	DAVID HARBINSON			3/13/06 15:00
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. # X06-009-32

Collector Hawkes	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. X06-009	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title AQUIFER TUBES		**Ice Chest No.** **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol LTMC	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **
JL6C130199
W04883

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL samples submitted under this "X" SAF into one SDG.
Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FT07		W	3/12/06	10:00	1x1000-mL P	906.0_H3_LSC: Tritium (1) H0W1	None
B1FT07		W	3/12/06	10:00	1x20-mL P	Activity Scan	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Mitch Hawkes / [signature]	3-12-06 1600	SIG 5 LOCKED STORAGE	3-12-06 1600
SIG 5 LOCKED STORAGE	3/13/06 11:00	R.W. FULTON / [signature]	3/13/06 11:00
R.W. FULTON / [signature]	3/13/06 3:00	DAVID HARBINSON / [signature]	3/13/06 15:00

Matrix *

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

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

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X06-009-33

Page 1 of 1

Collector: Hawkes	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X06-009	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **
JCC130199
W04883

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL samples submitted under this "X" SAF into one SDG.
Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FT16		W	3/12/06	11:00	1x1000-mL P	906.0_H3_LSC: Tritium (1) H0W2	None
B1FT16		W	3/12/06	11:00	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1FT16		W	3/12/06	11:00	1x20-mL P	Activity Scan	None
B1FT16		W	3/12/06	11:00	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
Mike Hawkes / [signature]	3-12-06 / 1600	SIG 5 LOCKED STORAGE	3-12-06 / 1600
SIG 5 LOCKED STORAGE	3/13/06 11:00	R.W. FULTON / R.W. Fulton	3/13/06 11:00
R.W. FULTON / R.W. Fulton	3/13/06 3:00	David HARBINSON / [signature]	3/13/06 15:00
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. # X06-009-34

Page 1 of 1

Collector: Hawkes	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X06-009	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **
JGC130199
W04883

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL samples submitted under this "X" SAF into one SDG.
Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FT21		W	3/12/06	11:15	1x20-mL P	Activity Scan Holmes	None
B1FT21		W	3/12/06	11:15	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
Milo Hawkes		Milo Hawkes	3-12-06/1600	SIG 5 LOCKED STORAGE			3-12-06 1600
Relinquished By			Date/Time	Received By			Date/Time
SIG 5 LOCKED STORAGE			3/13/06 11:00	R.W. FULTON		R.W. Fulton	3/13/06 11:00
Relinquished By			Date/Time	Received By			Date/Time
R.W. FULTON		R.W. Fulton	3/13/06 3:00	DAVID HARBISON			3/13/06 15:00
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. # X06-009-37
		Page 1 of 1

Collector Hawkes	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. X06-009	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **
J6C130199
SDG: W04883

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL samples submitted under this "X" SAF into one SDG.
Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FT32		W	3/12/06	12:10	1x20-mL P	Activity Scan HOLD	None
B1FT32		W	3/12/06	12:10	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
Mike Hawkes / [signature]	3-12-06 / 1600	SIG 5 LOCKED STORAGE	3-12-06 / 1600
SIG 5 LOCKED STORAGE	3/13/06 11:00	R.W. FULTON [signature]	3/13/06 11:00
R.W. FULTON [signature]	3/13/06 3:00	DAVID HARBINSON [signature]	3/13/06 1510
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. # X06-009-39
		Page 1 of 1

Collector: Hawkes	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X06-009	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** JLC 130199
W04883

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL samples submitted under this "X" SAF into one SDG.
Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FT38		W	3/12/06	13:00	1x1000-mL P	906.0_H3_LSC: Tritium (1) H06W8	None
B1FT38		W	3/12/06	13:00	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1FT38		W	3/12/06	13:00	1x20-mL P	Activity Scan	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
Mike Hawkes / [signature]	3-12-06/1600	SIG 5 LOCKED STORAGE	3-12-06/1600
SIG 5 LOCKED STORAGE	3/13/06 11:00	R.W. FULTON [signature]	3/13/06 11:00
R.W. FULTON [signature]	3/13/06 3:00	DAVID HARRISON [signature]	3/13/06 15:00

Matrix *

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

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

PNNL	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	C.O.C. # X06-009-31
		Page 1 of 1

Collector Dotters	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. X06-009	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** J6C130199
W04883

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL samples submitted under this "X" SAF into one SDG.
Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FT04		W	3/12/06	13:55	1x1000-mL P	906.0_H3_LSC: Tritium (1) Holding	None
B1FT04		W	3/12/06	13:55	1x20-mL P	Activity Scan	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
M. Hattaway / M. Hattaway	3-12-06 1600	SIG 5 LOCKED STORAGE	3-12-06 / 1600
SIG 5 LOCKED STORAGE	3/13/06 11:00	R.W. FULTON R.W. Fulton	3/13/06 11:00
R.W. FULTON R.W. Fulton	3/13/06 3:00	David MARBIZ-SO-	3/13/06 15:0

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: 3/13/06 15:00

Client: PWL/PGW SDG #: W04883 NA [ ] SAF #: X06-009 NA [ ]

Work Order Number: JGC130199 Chain of Custody # X06-009-3, X06-009-36, X06-009-32, X06-009-33, X06-009-34, X06-009-37, X06-009-39, X06-009-31

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

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 29
7. Sample holding times exceeded? NA [ ] Yes [ ] No [ ]
8. Samples have:
   - ✓ tape
   - ____ custody seals
   - ____ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ____ broken
   - ____ leaking
   - ____ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? yes 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: 3/13/06

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. # X06-005-107

Collector STEVE AIRHART	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. X06-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SST(T) INTERVAL SAMPLING OCTOBER 2005	DTS-SAWS-H101	**Ice Chest No** SAWS221 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt Truck	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **
J6C140328
WO 4883
Due: 4/28/06

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FN11		W	SPA 03/14/06	0738	1x1000-mL P	906.0_H3_LSC: Tritium (1) H08Q4	None
B1FN11		W	3.14.06	0738	1x20-mL P	Activity Scan	None
B1FN11		W	3.14.06	0738	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
STEVE AIRHART			1130 MAR 14 2006	DURATEK	J. G. HOGAN		1130 MAR 14 2006
DURATEK J. G. HOGAN			1330 MAR 14 2006	M-3-14-06 FEDEX	DAVID HARBIRSON		3/14/06 1435
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 3-14-06 14:35

Client: Parl (PGW) SDG #: W04883 NA [ ] SAF #: X06-005 NA [ ]

Work Order Number: J6C40328 Chain of Custody # W06-003-183, I06-027-2, W06-003-169, W06-003-207, W06-003-191, X06-005-107

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

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 24
7. Sample holding times exceeded? NA [ ] Yes [ ] No [ ]
8. Samples have:
   - ✓ tape
   - ___ custody seals
   - ___ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - ___ broken
   - ___ leaking
   - ___ have air bubbles (Only for samples requiring head space)
10. Sample pH taken? YES 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: 3-14-06

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

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PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C4990 299-W11-47

C.O.C. # X06-005-120

Page 1 of 1

Collector: EJ Jensen	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X06-005	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SST(T) INTERVAL SAMPLING OCTOBER 2005	DTS-SAWS-H101	Ice Chest No.: SML443 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt Truck	Bill of Lading/Air Bill No.
Protocol: RCRA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **
JT6C190104
SFS WD4884 WD4883
3/21/06 due: 5/11/06

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FN24		W	3/16/06	1558	1x1000-mL P	906.0_H3_LSC: Tritium (1) HIKKN	None
B1FN24		W	↓	↓	1x20-mL P	Activity Scan	None
B1FN24		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
EJ Jensen			03/16/06 1330	TRAILER # H0-64-4256			03-16-06 1800
TRAILER # H0-64-4256			MAR 17 2006 1330	DURATEK	J. G. HOGAN		MAR 17 2006 1330
DURATEK	J. G. HOGAN		MAR 17 2006 1400	DAVID HARBI			3-17-06 1400
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: 3-17-06 14:00 W04883

Client: PNNL PGW SDG #: ~~W04884~~ SKS 3/21/06 NA [ ] SAF #: X06-005 NA [ ]

Work Order Number: 56C190104 Chain of Custody # X06-005-120

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

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 4
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   - ✓ tape
   - ✓ custody seals
   - ✓ hazard labels
   - ✓ appropriate samples labels
9. Samples are:
   - ✓ in good condition
   - broken
   - leaking
   - have air bubbles (Only for samples requiring head space)
10. Sample pH taken? YES 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: 3-17-06

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 J6C240368 SDG#W04883 Due 5/08/06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X06-003-95

Page 1 of 1

Collector: Radford	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X06-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Truck	Bill of Lading/Air Bill No.
Protocol: LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1F6T7		W	3/23	1315	1x20-mL P	Activity Scan H10V4	None
B1F6T7		W	3/23	1315	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
E.L. RADFORD		E Radford	3/23/06 1500	SIG 5 LOCKED STORAGE			3/23/06 1500
SIG 5 LOCKED STORAGE			3/24/06 11:00	R.W. FULTON		R.W. Fulton	3/24/06 11:00
R.W. FULTON		R.W. Fulton	3/24/06 3:00	Summer Welch			3/24/06 1300
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. # X06-003-94

Collector Radford	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. X06-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title AQUIFER TUBES		**Ice Chest No.** **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Truck	**Bill of Lading/Air Bill No.**
Protocol LTMC	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1F6T3		W	3/23/04	1305	1x20-mL P	Activity Scan H10V5	None
B1F6T3		W	3/23/06	1305	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
E.L. RADFORD E. Radford	3/23/06 1500	SIG 5 LOCKED STORAGE	3/23/06 1500
SIG 5 LOCKED STORAGE	3/24/06 11:00	R.W. FULTON R.W. Fulton	3/24/06 11:00
R.W. FULTON R.W. Fulton	3/24/06 3:00	Summer Welch	3/24/06 13:00

Matrix *

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

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

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X06-003-84

Page 1 of 1

Collector: Radford	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X06-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Truck	Bill of Lading/Air Bill No.
Protocol: LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1F6R8		W	3/23/06	1200	1x20-mL P	Activity Scan H10WD	None
B1F6R8		W	3/23/06	1200	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
G.L. RADFORD E Radford	3/23/06 1500	SIG 5 LOCKED STORAGE	3/23/06 1500
SIG 5 LOCKED STORAGE	3/24/06 11:00	R.W. FULTON R.W. Fulton	3/24/06 11:00
R.W. FULTON R.W. Fulton	3/24/06 13:00	Summer Wells	3/24/06 1300

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. # X06-003-93

Page 1 of 1

Collector: Radford	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X06-003	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: AQUIFER TUBES		Ice Chest No. Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Truck	Bill of Lading/Air Bill No.
Protocol: LTMC	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1F6T1		W	3/23/06	1150	1x20-mL P	Activity Scan HIOWL	None
B1F6T1		W	3/23/06	1150	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
E.L. RADFORD		E Radford	3/23/06 1150	SIG 5 LOCKED STORAGE			3/23/06 1150
SIG 5 LOCKED STORAGE			3/24/06 11:00	R.W. FULTON		R.W. Fulton	3/24/06 11:00
R.W. FULTON		R.W. Fulton	3/24/06 13:00	Summer Welch			3/24/06 1300
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: 3/24/06 13:00

Client: PNNL SDG #: W04883 NA [ ] SAF #: _____ NA [ ]

Work Order Number: J6G240368 Chain of Custody # X06-003-95 X06-003-94 X06-003-84 X06-003-93

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

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

Sample Custodian: Summer Welch Date: 3/24/06 1300

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 J6C240370 SW 3/24/06
SDG# W04883
Due 5/8/06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X06-009-177**

Page 1 of 1

Collector Radford	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. X06-009	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title AQUIFER TUBES		**Ice Chest No.** **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol LTMC	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Batch all PNNL samples submitted under this "X" SAF into one SDG.
Submit invoices & deliverables to DL Stewart, PNNL.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1FTJ7		W	3/23	1015	1x1000-mL P	906.0_H3_LSC: Tritium (1) H10XA	None
B1FTJ7		W	3/23	1015	1x20-mL P	Activity Scan	None
B1FTJ7		W	3/23	1015	2x1000-mL G/P	C14_LSC: C-14 (1)	None
B1FTJ7		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
E.L. RADFORD		E Radford	3/23/06 1500	SIG 5 LOCKED STORAGE			3/23/06 1500
SIG 5 LOCKED STORAGE			3/24/06 11:00	R.W. FULTON		R.W. Fulton	3/24/06 11:00
R.W. FULTON		R.W. Fulton	3/24/06 13:00	Summer Welch			3/24/06 1300
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: 3/24/06 13:00

Client: PNNL SDG #: W04883 NA [ ] SAF #: X06-009 NA [ ]

Work Order Number: JLC240372 Chain of Custody # X06-009-177

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

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

Sample Custodian: Summer Welch Date: 3/24/06 1300

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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5/2/2006 2:06:47 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #:

AnalyDueDate: 04/28/2006 (5-1-06) W04883

Sep1 DT/Tm Tech:

Batch: 6089310 WATER pCi/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	Dish Size	(Ppt or) Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H08Q4-1-AC J6C140328-1-SAMP 03/14/2006 07:38		3753.10g,in AmtRec: 20ML, LP, 2X4000ML	ITA5217 04/19/06 #Containers: 4	IFA	34.8	100	L2	1349 Scr: Alpha: -2.59E-03 uCi/Sa	5/8/06 B Beta: 3.91E-03 uCi/Sa	
2 H08Q4-1-AD-X J6C140328-1-DUP 03/14/2006 07:38		3552.50g,in AmtRec: 20ML, LP, 2X4000ML	ITA5218 04/19/06 #Containers: 4		34.3	100	L4	1349 Scr: Alpha: -2.59E-03 uCi/Sa	Beta: 3.91E-03 uCi/Sa	
3 H1KKN-1-AC J6C190104-1-SAMP 03/16/2006 15:58		3901.50g,in AmtRec: 20ML,LP,2X4000ML	ITA5219 04/19/06 #Containers: 4		34.5	100	L5	1349 Scr: Alpha: -3.29E-04 uCi/Sa	Beta: 7.23E-04 uCi/Sa	
4 H195F-1-AA-B J6C300000-310-BLK 03/14/2006 07:38		3913.50g,in AmtRec:	ITA5220 04/19/06 #Containers: 1		35.0	100	L4	1538 Scr: Alpha:	5/8/06 Beta:	
5 H195F-1-AC-C J6C300000-310-LCS 03/14/2006 07:38		3923.50g,in AmtRec:	ISD0638 05/02/06,pd 11/24/04,r #Containers: 1		37.6	100	L5	1538 Scr: Alpha:	Beta:	

Comments: pH>2. 5-7-06

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

H08Q41AC-SAMP Constituent List:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 04/28/2006

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Batch: 6089310 pCi/L
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:

```
H195F1AA-BLK:
  I-129        RDL:1.00E+00    pCi/L    LCL:        UCL:        RPD:
H195F1AC-LCS:
  I-129        RDL:5           pCi/L    LCL:70      UCL:130     RPD:20
H08Q41AC-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
H195F1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
H195F1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 5/9/2005, 5/14/2006, Batch: '6089310', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6089310						
AC		**CalcC**	**WAGNERJ**	5/2/2006 1:12:58 PM		
SC			wagarr	IsBatched	3/30/2006 11:26:16 AM	ICOC_RADCALC v4.8.20
SC			WAGNERJ	InPrep	5/2/2006 1:12:58 PM	RICH-RC-5016 REVISION 6
SC			WAGNERJ	Prep1C	5/2/2006 2:06:54 PM	RICH-RC-5016 REVISION 6
SC			NortonJ	InSep1	5/4/2006 1:58:40 PM	RICHRC5025 REV4
SC			NortonJ	Sep1C	5/8/2006 11:56:50 AM	RICHRC5025 REV3
SC			BlackCL	InCnt1	5/8/2006 12:06:30 PM	RICH-RD-0007 REVISION 5
SC			DAWKINSO	CalcC	5/8/2006 9:38:17 PM	RICH-RD-0007 REVISION 5
AC			**WAGNERJ**	5/2/2006 2:06:54 PM		
AC			**NortonJ**	5/4/2006 1:58:40 PM		
AC			**NortonJ**	5/8/2006 11:56:50		
AC			**BlackCL**	5/8/2006 12:06:30 PM		
AC			**DAWKINSO**	5/8/2006 9:38:17 PM		

AC: Accepting Entry; SC: Status Change

5/9/2006 3:50:09 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: H229

AnalyDueDate: 04/27/2006 W04883

Sep1 DT/Tm Tech:

Batch: 6089305 **WATER** **pCi/L** **PM, Quote: HC , 57671**
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

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 H06WQ-1-AC J6C130199-2-SAMP 03/12/2006 11:55		159.90g,in AmtRec: 20ML,5X1000ML	#Containers: 6	1.5	~~28.8~~ mH 5-15-06 27.2	~~50~~ 100 5/13/06	NA Scr:	1325 Alpha: 8.74E-08 uCi/Sa	5/15/06 Beta: 9.52E-07 uCi/Sa	
2 H06WQ-1-AF-X J6C130199-2-DUP 03/12/2006 11:55		160.20g,in AmtRec: 20ML,5X1000ML	#Containers: 6		30.8		NB Scr:	Alpha: 8.74E-08 uCi/Sa	Beta: 9.52E-07 uCi/Sa	
3 H06W2-1-AC J6C130199-4-SAMP 03/12/2006 11:00		155.80g,in AmtRec: 20ML,5X1000ML	#Containers: 6		26.9		ND Scr:	Alpha: 1.68E-08 uCi/Sa	Beta: 6.32E-07 uCi/Sa	
4 H06W8-1-AC J6C130199-7-SAMP 03/12/2006 13:00		204.80g,in AmtRec: 20ML,2X1000ML	#Containers: 3		40.5		NE Scr:	Alpha: 3.24E-04 uCi/Sa	Beta: 3.75E-05 uCi/Sa	
5 H194R-1-AA-B J6C300000-305-BLK 03/12/2006 11:55		201.00g,in AmtRec:	#Containers: 1		0.1		~~HA~~ Recd OA Scr:	1754 Alpha:	5/15/06 MP Beta:	
6 H194R-1-AC-C J6C300000-305-LCS 03/12/2006 11:55		200.00g,in AmtRec:	ASD3844 04/18/06,pd 02/09/06,r #Containers: 1		0.2		Recd OD ~~HB~~ Scr:	Alpha:	Beta:	

1% collodion was added, hardflamed α's mH 5-15-06

5/9/2006 3:50:11 PM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 04/27/2006

Sep1 DT/Tm Tech:

Batch: 6089305 pCi/L

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

Comments: H06WQ-SAMP "Comments: Reduced aliquots for Alpha on sample H06WQ due to wt. screen. jw 5-9-06"
H06W2-SAMP "Comments: Reduced aliquots on Alpha for sample H06W2 due to wt. screen. jw 5-9-06"

PH L2 JW 5-9-06

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

H06WQ1AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
H194R1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
H194R1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

H06WQ1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H194R1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H194R1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 5/17/2005, 5/22/2006, Batch: '6089305', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6089305						
AC		**CalcC**	**WAGNERJ**	5/9/2006 3:28:30 PM		
SC			wagarr	IsBatched	3/30/2006 11:26:16 AM	ICOC_RADCALC v4.8.20
SC			WAGNERJ	InPrep	5/9/2006 3:28:30 PM	RICH-RC-5014 REVISION 6
SC			WAGNERJ	Prep1C	5/9/2006 3:36:16 PM	RICH-RC-5014 REVISION 6
SC			ScottM	InPrep2	5/10/2006 9:12:58 AM	RICH-RC-5014 REVISION 6
SC			HansenM	Prep2C	5/15/2006 10:38:23 AM	RICH-RC-5014 REVISION 6
SC			BlackCL	InCnt1	5/15/2006 10:44:44 AM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	5/15/2006 1:31:32 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	InCnt1	5/15/2006 8:35:13 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	5/15/2006 9:25:49 PM	RICH-RD-0003 REVISION 4
AC			**WAGNERJ**	5/9/2006 3:36:16 PM		
AC			**ScottM**	5/10/2006 9:12:58		
AC			**HansenM**	5/15/2006 10:38:23		
AC			**BlackCL**	5/15/2006 10:44:44		
AC			**BlackCL**	5/15/2006 1:31:32 PM		
AC			**DAWKINSO**	5/15/2006 8:35:13 PM		
AC			**DAWKINSO**	5/15/2006 9:25:49 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 8

ICOCFractions v4.8.18

5/9/2006 3:50:11 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: H229

AnalyDueDate: 04/27/2006 W04883

Sep1 DT/Tm Tech:

Batch: 6089306 **WATER** **pCi/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	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H06WQ-1-AD J6C130199-2-SAMP 03/12/2006 11:55		203.30g,in AmtRec: 20ML,5X1000ML	#Containers: 6	1.5	MH 5-15-06 ~~74.7~~ 63.9	100	31A	1437	5/15/06	Scr: Alpha: 8.74E-08 uCi/Sa Beta: 9.52E-07 uCi/Sa
2 H06W2-1-AD J6C130199-4-SAMP 03/12/2006 11:00		205.50g,in AmtRec: 20ML,5X1000ML	#Containers: 6		MH 5-15-06 ~~73.9~~ 74.7		31B			Scr: Alpha: 1.68E-08 uCi/Sa Beta: 6.32E-07 uCi/Sa
3 H06W2-1-AF-X J6C130199-4-DUP 03/12/2006 11:00		201.10g,in AmtRec: 20ML,5X1000ML	#Containers: 6		MH 5-15-06 ~~83.4~~ 73.9		31C			Scr: Alpha: 1.68E-08 uCi/Sa Beta: 6.32E-07 uCi/Sa
4 H06W8-1-AD J6C130199-7-SAMP 03/12/2006 13:00		208.50g,in AmtRec: 20ML,2X1000ML	#Containers: 3		83.4		31D			Scr: Alpha: 3.24E-04 uCi/Sa Beta: 3.75E-05 uCi/Sa
5 H194X-1-AA-B J6C300000-306-BLK 03/12/2006 11:00		201.00g,in AmtRec:	#Containers: 1		0.2		32A			Scr: Alpha: Beta:
6 H194X-1-AC-C J6C300000-306-LCS 03/12/2006 11:00		202.70g,in AmtRec:	BESB2788 05/05/06,pd 12/28/05,r #Containers: 1		0.2		32B			Scr: Alpha: Beta:

10% colloidium was added MH 5-15-06

STL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 6
Prep_SamplePrep v4.8

5/9/2006 3:50:13 PM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 04/27/2006

Sep1 DT/Tm Tech:

Batch: 6089306 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

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:

Comments: H06WQ-SAMP "Comments: Reduced aliquots for Alpha on sample H06WQ due to wt. screen. jw 5-9-06"
H06W2-SAMP "Comments: Reduced aliquots on Alpha for sample H06W2 due to wt. screen. jw 5-9-06"

QWL2 25-9-06

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

H06WQ1AD-SAMP Constituent List:
BETA RDL:4 pCi/L LCL: UCL: RPD:
H194X1AA-BLK:
BETA RDL:4 pCi/L LCL: UCL: RPD:
H194X1AC-LCS:
Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20

H06WQ1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H194X1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
H194X1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 5/17/2005, 5/22/2006, Batch: '6089306', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6089306						
AC		**CalcC**	**WAGNERJ**	5/9/2006 3:28:33 PM		
SC			wagarr	IsBatched	3/30/2006 11:26:16 AM	ICOC_RADCALC v4.8.20
SC			WAGNERJ	InPrep	5/9/2006 3:28:33 PM	RICH-RC-5014 REVISION 6
SC			WAGNERJ	Prep1C	5/9/2006 3:36:19 PM	RICH-RC-5014 REVISION 6
SC			ScottM	InPrep2	5/10/2006 9:13:05 AM	RICH-RC-5014 REVISION 6
SC			HansenM	Prep2C	5/15/2006 10:38:39 AM	RICH-RC-5014 REVISION 6
SC			BlackCL	InCnt1	5/15/2006 10:44:52 AM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	InCnt1	5/15/2006 8:34:48 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	5/15/2006 9:27:21 PM	RICH-RD-0003 REVISION 4
AC			**WAGNERJ**	5/9/2006 3:36:19 PM		
AC			**ScottM**	5/10/2006 9:13:05		
AC			**HansenM**	5/15/2006 10:38:39		
AC			**BlackCL**	5/15/2006 10:44:52		
AC			**DAWKINSO**	5/15/2006 8:34:48 PM		
AC			**DAWKINSO**	5/15/2006 9:27:21 PM		

AC: Accepting Entry; SC: Status Change

5/2/2006 11:48:15 AM

Sample Preparation/Analysis

Balance Id:1120482733 ,01

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: NA

AnalyDueDate: 04/27/2006 WO4883

Sep1 DT/Tm Tech: 5-3-06 1635

Batch: 6089308 **WATER** **pCi/L** **PM, Quote: HC , 57671**

Sep2 DT/Tm Tech: 5-10-06 10:13 AM

SEQ Batch, Test: None All Tests: 6089302 ARS6, 6089305 AZS7, 6089306 BCS8, 6089308 CLTL,

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 H06WQ-1-AE		1012.50g,in	SRTB13448	.981				9"	0823	5/7/06	
J6C130199-2-SAMP			04/05/06,pd								
			03/28/06,r	2.0420			30				
			YTA15600	.4804		25.0	100	7A	0828	5/11/06	
			Ex:3/28/2007					7A	0924	5/12/06	
03/12/2006 11:55		AmtRec: 20ML,5X1000ML	#Containers: 6					Scr:	Alpha: 8.74E-08 uCi/Sa	Beta: 9.52E-07 uCi/Sa	
2 H06W2-1-AE		951.70g,in	SRTB13449	1.205				3"	0823	5/7/06	
J6C130199-4-SAMP			04/05/06,pd								
			03/28/06,r	2.0359							
			YTA15601	.5919				7B	0828	5/11/06	
			Ex:3/28/2007			25.5		7C	0924	5/12/06	
03/12/2006 11:00		AmtRec: 20ML,5X1000ML	#Containers: 6					Scr:	Alpha: 1.68E-08 uCi/Sa	Beta: 6.32E-07 uCi/Sa	
3 H06W6-1-AA		971.10g,in	SRTB13450	1.009				9"	0859	5/7/06	
J6C130199-5-SAMP			04/05/06,pd								
			03/28/06,r	2.0299							
			YTA15602	.4971				7C	0828	5/11/06	
			Ex:3/28/2007			24.6		7A	0924	5/12/06	
03/12/2006 11:15		AmtRec: 20ML,3X1000ML	#Containers: 4					Scr:	Alpha: -3.77E-04 uCi/Sa	Beta: 1.69E-03 uCi/Sa	1.6E-01
4 H06W7-1-AA		992.80g,in	SRTB13451	1.111				3"	0859	5/7/06	
J6C130199-6-SAMP			04/05/06,pd								
			03/28/06,r	2.0178							
			YTA15603	.5506				7A	0828	5/11/06	
			Ex:3/28/2007			25.5		7C	0924	5/12/06	
03/12/2006 12:10		AmtRec: 20ML,3X1000ML	#Containers: 4					Scr:	Alpha: 2.19E-04 uCi/Sa	Beta: 1.53E-04 uCi/Sa	

5/2/2006 11:48:17 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 04/27/2006

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

Batch: 6089308 **WATER** **pCi/L**
SEQ Batch, Test: None

PM, Quote: HC , 57671

Balance Id:1120482733 101

Pipet #: NA

Sep1 DT/Tm Tech: 5-3-06 1635

Sep2 DT/Tm Tech: 5-10-06 10:13

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:
5 H10V4-1-AA J6C240368-1-SAMP		1014.30g,in	SRTB13452 04/05/06,pd 03/28/06,r	1.692				9	0934	5/7/06	
				26238			30				
			YTA15604 Ex:3/28/2007	.8361				1C	0828	5/11/06	
						25.0	100	2D	0924	5/12/06	
03/23/2006 13:15		AmtRec: 20ML,3LP	#Containers: 4					Scr:	Alpha: 3.47E-04 uCi/Sa	Beta: 2.14E-04 uCi/Sa	
6 H10V4-1-AC-X J6C240368-1-DUP		1015.40g,in	SRTB13453 04/05/06,pd 03/28/06,r	1.861				3	0934	5/7/06	
				2.0299							
			YTA15605 Ex:3/28/2007	.9168				1D	0828	5/11/06	
						25.4		3A	0924	5/12/06	
03/23/2006 13:15		AmtRec: 20ML,3LP	#Containers: 4					Scr:	Alpha: 3.47E-04 uCi/Sa	Beta: 2.14E-04 uCi/Sa	
7 H10V5-1-AA J6C240368-2-SAMP		1017.90g,in	SRTB13454 04/05/06,pd 03/28/06,r	1.700				9	1008	5/7/06	
				2.0419							
			YTA15606 Ex:3/28/2007	.8324				2A	0828	5/11/06	
						25.0		3B	0924	5/12/06	
03/23/2006 13:05		AmtRec: 20ML,3LP	#Containers: 4					Scr:	Alpha: -8.24E-05 uCi/Sa	Beta: 7.14E-04 uCi/Sa	
8 H10WD-1-AA J6C240368-3-SAMP		989.30g,in	SRTB13455 04/05/06,pd 03/28/06,r	1.898				3	1008	5/7/06	
				2.0480							
			YTA15607 Ex:3/28/2007	.9268				2B	0828	5/11/06	
						24.4		3C	0924	5/12/06	
03/23/2006 12:00		AmtRec: 20ML,3LP	#Containers: 4					Scr:	Alpha: 4.24E-04 uCi/Sa	Beta: 1.17E-04 uCi/Sa	

5/2/2006 11:48:17 AM

Sample Preparation/Analysis

Balance Id:1120482733,01

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: NA

AnalyDueDate: 04/27/2006

Sep1 DT/Tm Tech: 5-3-06 1635

Batch: 6089308 WATER pCi/L PM, Quote: HC , 57671

Sep2 DT/Tm Tech: 5-10-06 10:13 AM

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:
9 H10WL-1-AA		1013.00g,in	SRTB13456	1.706				9H	1051	5/7/06	
J6C240368-4-SAMP			04/05/06,pd				30				
			03/28/06,r	2.0298							
			YTA15608	.8405				3C	0824		
			Ex:3/28/2007			24.6	100	3D	0524		
03/23/2006 11:50		AmtRec: 20ML,3LP	#Containers: 4					Scr:	Alpha: 3.75E-04 uCi/Sa	Beta: -2.06E-04 uCi/Sa	
10H10XA-1-AD		982.80g,in	SRTB13457	1.042				3H	1051	5/7/06	
J6C240372-1-SAMP			04/05/06,pd								
			03/28/06,r	2.0117							
			YTA15609	.5180				3D	0828		
			Ex:3/28/2007			25.7		4A	0924		
03/23/2006 10:15		AmtRec: 6LP,20ML	#Containers: 7					Scr:	Alpha: 5.05E-04 uCi/Sa	Beta: -6.66E-04 uCi/Sa	
11H1941-1-AA-B		1002.70g,in	SRTB13458	1.689				9H	1128	5/7/06	
J6C300000-308-BLK			04/05/06,pd								
			03/28/06,r	2.0480							
			YTA15610	.8247				3B	0828		
			Ex:3/28/2007			25.0		4B	0924		
03/23/2006 13:15		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
12H1941-1-AC-C		1001.30g,in	SRSG1216	1.678				3H	1128	5/7/06	
J6C300000-308-LCS			03/13/06,pd								
			09/06/05,r	1.9996							
			YTA15611	.8392				3C	0828		
			Ex:3/28/2007			24.8		4C	0924		
03/23/2006 13:15		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

ICOC Fraction Transfer/Status Report

ByDate: 5/15/2005, 5/20/2006, Batch: '6089308', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6089308						
AC		CalcC	WAGNERJ	5/2/2006 11:18:23		
SC			wagarr	IsBatched	3/30/2006 11:26:16 AM	ICOC_RADCALC v4.8.20
SC			WAGNERJ	InPrep	5/2/2006 11:18:23 AM	RICH-RC-5016 REVISION 6
SC			WAGNERJ	Prep1C	5/2/2006 11:48:59 AM	RICH-RC-5016 REVISION 6
SC			FABREM	InSep1	5/2/2006 12:26:23 PM	RICH-RC-5006 REVISION 6
SC			FABREM	Sep1C	5/6/2006 3:02:15 PM	RICH-RC-5006 REVISION 6
SC			StringerR	InCnt1	5/6/2006 3:45:15 PM	RICH-RD-0007 REVISION 5
SC			StringerR	Cnt1C	5/7/2006 11:00:36 AM	RICH-RD-0007 REVISION 5
SC			FABREM	InSep2	5/8/2006 7:15:17 PM	RICH-RC-5071 REVISION 4
SC			FABREM	Sep2C	5/10/2006 3:28:41 PM	RICH-RC-5071 REVISION 4
SC			DAWKINSO	InCnt2	5/10/2006 5:36:12 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	5/12/2006 9:53:22 AM	RICH-RD-0003 REVISION 4
AC			WAGNERJ	5/2/2006 11:48:59		
AC			FABREM	5/2/2006 12:26:23 PM		
AC			FABREM	5/6/2006 3:02:15 PM		
AC			StringerR	5/6/2006 3:45:15 PM		
AC			StringerR	5/7/2006 11:00:36		
AC			FABREM	5/8/2006 7:15:17 PM		
AC			FABREM	5/10/2006 3:28:41 PM		
AC			DAWKINSO	5/10/2006 5:36:12 PM		
AC			BlackCL	5/12/2006 9:53:22		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 10

ICOCFractions v4.8.18

3/30/2006 11:26:30 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

Report Due: 05/11/2006 WD4883

Batch: 6089312 **WATER** **pCi/L**
SEQ Batch, Test: None

PM, Quote: HC , 57671

Balance Id: N/A
Pipet #:
Sep1 DT/Tm Tech: 4-5-06 DW
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 H10XA-1-AC J6C240372-1-SAMP 03/23/2006 10:15	AmtRec: 6LP,20ML	#Containers: 7				Scr:	Alpha: 5.05E-04 uCi/Sa	Beta: -6.66E-04 uCi/Sa
2 H10XA-1-AE-X J6C240372-1-DUP 03/23/2006 10:15	AmtRec: 6LP,20ML	#Containers: 7				Scr:	Alpha: 5.05E-04 uCi/Sa	Beta: -6.66E-04 uCi/Sa
3 H195M-1-AA-B J6C300000-312-BLK 03/23/2006 10:15	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
4 H195M-1-AC-C J6C300000-312-LCS 03/23/2006 10:15	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
5 H195M-1-AD-BN J6C300000-312-IBLK 03/23/2006 10:15	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

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

H10XA1AC-SAMP Constituent List:
C-14 RDL:2.00E+02 pCi/L LCL:70 UCL:130 RPD:20

3/30/2006 11:26:31 AM

Sample Preparation/Analysis

5S C-14 Prp/SepRC5022
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

Balance Id: N/A
Pipet #:
Sep1 DT/Tm Tech: 4-5-06 DM
Sep2 DT/Tm Tech:
Prep Tech:

Report Due: 05/11/2006

Batch: 6089312 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:

```
H195M1AA-BLK:
  C-14        RDL:2.00E+02    pCi/L    LCL:       UCL:       RPD:
H195M1AC-LCS:
  C-14        RDL:200         pCi/L    LCL:70     UCL:130    RPD:20
H195M1AD-IBLK:
  C-14        RDL:2.00E+02    pCi/L    LCL:       UCL:       RPD:

H10XA1AC-SAMP Calc Info:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
H195M1AA-BLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
H195M1AC-LCS:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
H195M1AD-IBLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 4/7/2005, 4/12/2006, Batch: '6089312', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6089312						
AC		**CalcC**	**McDowellD**	4/5/2006 1:20:51 PM		
SC			wagarr	IsBatched	3/30/2006 11:26:16 AM	ICOC_RADCALC v4.8.20
SC			McDowellD	Sep1C	4/5/2006 1:20:51 PM	RICH-RC-5022 REVISION 3
SC			StringerR	CalcC	4/5/2006 1:25:46 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	4/6/2006 10:16:51 AM	RICH-RD-0001 REVISION 3
AC			**StringerR**	4/5/2006 1:25:46 PM		
AC			**StringerR**	4/6/2006 10:16:51		

AC: Accepting Entry; SC: Status Change

3/30/2006 11:26:22 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Report Due: 05/11/2006 W04883

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 4-20-06 cm
Sep2 DT/Tm Tech:
Prep Tech:

Batch: 6089302 **WATER** **pCi/L** **PM, Quote: HC , 57671**
SEQ Batch, Test: None All Tests: ARS6, AZS7, BCS8,
CLTL, CLTL, 6089302 ARS6, 6089305 AZS7, 6089306 BCS8, 6089308

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 H06WM-1-AA J6C130199-1-SAMP 03/12/2006 14:25	AmtRec: 20ML, LP	#Containers: 2				Scr:	Alpha: 7.94E-05 uCi/Sa	Beta: 8.27E-05 uCi/Sa
2 H06WQ-1-AA J6C130199-2-SAMP 03/12/2006 11:55	AmtRec: 20ML,5X1000ML	#Containers: 6				Scr:	Alpha: 8.74E-08 uCi/Sa	Beta: 9.52E-07 uCi/Sa
3 H06W1-1-AA J6C130199-3-SAMP 03/12/2006 10:00	AmtRec: 20ML,LP	#Containers: 2				Scr:	Alpha: 9.72E-05 uCi/Sa	Beta: -3.50E-05 uCi/Sa
4 H06W2-1-AA J6C130199-4-SAMP 03/12/2006 11:00	AmtRec: 20ML,5X1000ML	#Containers: 6				Scr:	Alpha: 1.68E-08 uCi/Sa	Beta: 6.32E-07 uCi/Sa
5 H06W8-1-AA J6C130199-7-SAMP 03/12/2006 13:00	AmtRec: 20ML,2X1000ML	#Containers: 3				Scr:	Alpha: 3.24E-04 uCi/Sa	Beta: 3.75E-05 uCi/Sa
6 H06W9-1-AA J6C130199-8-SAMP 03/12/2006 13:55	AmtRec: 20ML,LP	#Containers: 2				Scr:	Alpha: -2.96E-05 uCi/Sa	Beta: 3.19E-04 uCi/Sa
7 H08Q4-1-AA J6C140328-1-SAMP 03/14/2006 07:38	AmtRec: 20ML, LP, 2X4000ML	#Containers: 4				Scr:	Alpha: -2.59E-03 uCi/Sa	Beta: 3.91E-03 uCi/Sa

3/30/2006 11:26:22 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Report Due: 05/11/2006

Batch: 6089302 **WATER** **pCi/L** **PM, Quote: HC , 57671**
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 4-20-06 pm
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 H1KKN-1-AA J6C190104-1-SAMP 03/16/2006 15:58	AmtRec: 20ML,LP,2X4000ML	#Containers: 4				Scr:	Alpha: -3.29E-04 uCi/Sa	Beta: 7.23E-04 uCi/Sa
9 H1KKN-1-AD-X J6C190104-1-DUP 03/16/2006 15:58	AmtRec: 20ML,LP,2X4000ML	#Containers: 4				Scr:	Alpha: -3.29E-04 uCi/Sa	Beta: 7.23E-04 uCi/Sa
10 H10XA-1-AA J6C240372-1-SAMP 03/23/2006 10:15	AmtRec: 6LP,20ML	#Containers: 7				Scr:	Alpha: 5.05E-04 uCi/Sa	Beta: -6.66E-04 uCi/Sa
11 H194A-1-AA-B J6C300000-302-BLK 03/16/2006 15:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
12 H194A-1-AC-C J6C300000-302-LCS 03/16/2006 15:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
13 H194A-1-AD-BX J6C300000-302-MBLK 03/16/2006 15:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
14 H194A-1-AE-CM J6C300000-302-MLCS 03/16/2006 15:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

3/30/2006 11:26:24 AM

Sample Preparation/Analysis

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 4-20 0:00 am
Sep2 DT/Tm Tech:
Prep Tech:

Report Due: 05/11/2006

Batch: 6089302 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:
15H194A-1-AF-BN J6C300000-302-IBLK 03/16/2006 15:58		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
16H194A-1-AG-BN J6C300000-302-IBLK 03/16/2006 15:58		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
17H194A-1-AH-BN J6C300000-302-IBLK 03/16/2006 15:58		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

H06WM1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
H194A1AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
H194A1AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
H194A1AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
H194A1AE-MLCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
H194A1AF-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
H194A1AG-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

3/30/2006 11:26:25 AM

Sample Preparation/Analysis

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

Report Due: 05/11/2006

Batch: 6089302 pCi/L
SEQ Batch, Test: None

Balance Id: 12415
Pipet #:
Sep1 DT/Tm Tech: 4-20-06 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:

```
H194A1AH-IBLK:
  H-3          RDL:400          pCi/L     LCL:          UCL:          RPD:

H06WM1AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H194A1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H194A1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H194A1AD-MBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H194A1AE-MLCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H194A1AF-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H194A1AG-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
H194A1AH-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 4/24/2005, 4/29/2006, Batch: '6089302', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6089302						
AC		**CalcC**	**McDowellD**	4/19/2006 4:01:25 PM		
SC			wagarr	IsBatched	3/30/2006 11:26:16 AM	ICOC_RADCALC v4.8.20
SC			McDowellD	InSep1	4/19/2006 4:01:25 PM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	4/20/2006 2:23:12 PM	RICH-RC-5007 REVISION 6
SC			DAWKINSO	InCnt1	4/20/2006 6:01:33 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	4/23/2006 1:36:54 PM	RICH-RD-0001 REVISION 3
AC			**McDowellD**	4/20/2006 2:23:12 PM		
AC			**DAWKINSO**	4/20/2006 6:01:33 PM		
AC			**StringerR**	4/23/2006 1:36:54 PM		

AC: Accepting Entry; SC: Status Change