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 126 Pages

Report Nbr: 35423

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05151	X07-013	B1M510	J7D050109-1	J7DPA1AA	9JTDPA10	7095161
		B1M514	J7D050109-2	JTDPC1AA	9JTDPC10	7102382
		B1M514	J7D050109-2	JTDPC1AC	9JTDPC10	7102370
		B1M514	J7D050109-2	JTDPC1AD	9JTDPC10	7102371
		B1M514	J7D050109-2	JTDPC1AF	9JTDPC10	7102374
		B1M514	J7D050109-2	JTDPC1AG	9JTDPC10	7102368
		B1M514	J7D050109-2	JTDPC1AH	9JTDPC10	7102386
		B1M514	J7D050109-2	JTDPC1AJ	9JTDPC10	7102367
		B1M514	J7D050109-2	JTDPC2AE	9JTDPC20	7120579
		B1LX46	J7D110335-1	JTQC61AA	9JTQC610	7102370
		B1LX46	J7D110335-1	JTQC61AC	9JTQC610	7102371
		B1LX59	J7D110335-10	JTQD31AA	9JTQD310	7102382
	X07-013	B1LX60	J7D110335-11	JTQD91AA	9JTQD910	7102382
		B1LX61	J7D110335-12	JTQEF1AA	9JTQEF10	7102386
		B1LX62	J7D110335-13	JTQEH1AA	9JTQEH10	7102386

Comments:

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Report Nbr: 35423

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05151	X07-013	B1LX63	J7D110335-14	JTQEK1AA	9JTQEK10	7102386
		B1LX65	J7D110335-15	JTQEV1AA	9JTQEV10	7102367
		B1LX66	J7D110335-16	JTQEW1AA	9JTQEW10	7102367
		B1LX64	J7D110335-17	JTQE01AA	9JTQE010	7102367
		B1M4Y5	J7D110335-18	JTQE21AA	9JTQE210	7102439
		B1M4Y6	J7D110335-19	JTQE41AA	9JTQE410	7102439
		B1LX47	J7D110335-2	JTQDJ1AA	9JTQDJ10	7102370
		B1LX47	J7D110335-2	JTQDJ1AC	9JTQDJ10	7102371
		B1M4Y7	J7D110335-20	JTQFA1AA	9JTQFA10	7102439
	X07-013	B1LX48	J7D110335-3	JTQDK1AA	9JTQDK10	7102370
		B1LX48	J7D110335-3	JTQDK1AC	9JTQDK10	7102371
		B1LX53	J7D110335-4	JTQDM1AA	9JTQDM10	7102374
		B1LX54	J7D110335-5	JTQDP1AA	9JTQDP10	7102374
		B1LX55	J7D110335-6	JTQDQ1AA	9JTQDQ10	7102368
		B1LX56	J7D110335-7	JTQDT1AA	9JTQDT10	7102368
		B1LX57	J7D110335-8	JTQD01AA	9JTQD010	7102368
		B1LX58	J7D110335-9	JTQD11AA	9JTQD110	7102382

Comments:

SEVERN TRENT STL

STL Richland
2800 George Washington Way
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Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

May 29, 2007

Attention: Dot Stewart

SAF Number	:	X07-013
Date SDG Closed	:	April 11, 2007
Number of Samples	:	Twenty Two (22)
Sample Type	:	Water
SDG Number	:	W05151
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between April 4, 2007 and April 11, 2007 twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1M514	JTDPC	4/4/07	WATER
B1M510	JTDPA	4/4/07	WATER
B1LX46	JTQC6	4/11/07	WATER
B1LX47	JTQDJ	4/11/07	WATER
B1LX48	JTQDK	4/11/07	WATER
B1LX53	JTQDM	4/11/07	WATER
B1LX54	JTQDP	4/11/07	WATER
B1LX55	JTQDQ	4/11/07	WATER
B1LX56	JTQDT	4/11/07	WATER
B1LX57	JTQD0	4/11/07	WATER
B1LX58	JTQD1	4/11/07	WATER
B1LX59	JTQD3	4/11/07	WATER
B1LX60	JTQD9	4/11/07	WATER

B1LX61	JTQEF	4/11/07	WATER
B1LX62	JTQEH	4/11/07	WATER
B1LX63	JTQEK	4/11/07	WATER
B1LX65	JTQEV	4/11/07	WATER
B1LX66	JTQEW	4/11/07	WATER
B1LX64	JTQE0	4/11/07	WATER
B1M4Y5	JTQE2	4/11/07	WATER
B1M4Y6	JTQE4	4/11/07	WATER
B1M4Y7	JTQFA	4/11/07	WATER

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Alpha Spectroscopy
Plutonium-238, -239/240 by method RICH-RC-5010
Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Strontium-90 by method RICH-RC-5006
Liquid Scintillation Counting
Enriched Tritium by method RICH-RC-5024
Technetium-99 by TEVA method RICH-RC-5065
Tritium by method RICH-RC-5007
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

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

No tracer was found in sample B1M514 on the first analysis. The reanalysis results are acceptable. Except as noted, the LCS, batch blank, samples and sample duplicate (B1M514) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

Samples B1M514, B1LX46, B1LX47, B1LX48 and B1LX46 DUP were analyzed with reduced volumes based on an elevated screen results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1LX46) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

Samples B1M514, B1LX46, B1LX47, B1LX48 and B1LX47 DUP were analyzed with reduced volumes based on an elevated screen results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1LX47) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1LX53) results are within contractual requirements.

Liquid Scintillation Counting

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

The LCS, batch blank, samples, sample duplicate (B1M514), and sample matrix spike (B1LX56) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1LX58) results are within contractual requirements.

Enriched Tritium by method RICH-RC-5024

The LCS, batch blank, samples and sample duplicate (B1LX61) results are within contractual requirements.

Total Uranium

Total Uranium by method RICH-RC-5058:

The KPA instrument failed to upload the prep dilution volume for the batch blank (JTTH21AB). The prep dilution factor was hand entered to allow calculation of the blank. Primary cause of the failure is still under investigation. Except as noted, the LCS, batch blank, samples, sample duplicate (B1M514), and sample matrix spike (B1M514) results are within contractual requirements.

Chemical Analysis

Batch 7095161

Hexavalent Chromium by EPA method 7196A

Pacific Northwest National Laboratories
May 29, 2007

The LCS, batch blank, samples, sample duplicate (B1M510), sample matrix spike (B1M510), and matrix spike duplicate results (B1M510) are within contractual requirements.

Batch 7102439
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (B1M4Y5), sample matrix spike (B1M4Y5), and matrix spike duplicate results (B1M4Y5) are within contractual requirements.

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

Reviewed and approved:

Sandra Seger
Sherryl A. Adam
for Project Manager

Drinking Water Method Cross References

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

Uncertainty Estimation

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

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

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

Report Definitions

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

5/29/2007 10:47:15 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35423 File Name: h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.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:
9JTDPC10	B1M514		MW6-SBB-A1	X07-013	W05151					04/04/2007 13:01

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102382	H-3	10028-17-8	-1.35E+02	pCi/L	1.3E+02	1.5E+02	U	3.38E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/09/2007 14:37	I
7102370	ALPHA	12587-46-1	1.97E+00	pCi/L	1.2E+00	1.3E+00		1.77E+00	100.0	9310_ALPHABETA	1.359E-01	L	05/25/2007 12:48	I
7102371	BETA	12587-47-2	6.78E+00	pCi/L	2.0E+00	2.3E+00		3.35E+00	100.0	9310_ALPHABETA	1.754E-01	L	05/23/2007 16:20	I
7102374	SR-90	10098-97-2	2.24E-01	pCi/L	2.1E-01	2.1E-01	U	4.18E-01	73.0	SRISO_SEP_PRE	1.0044E+00	L	05/08/2007 06:54	I
7102368	TC-99	14133-76-7	3.21E+00	pCi/L	4.2E+00	6.3E+00	U	9.64E+00	100.0	TC99_ETVDSK_LS	1.273E-01	L	04/19/2007 12:46	I
7102386	H-3	10028-17-8	8.05E+00	pCi/L	4.4E+00	7.8E+00		5.05E+00	100.0	TRITIUM_ELECT_L	1.50E-01	L	04/30/2007 23:14	I
7102367	Uranium	7440-61-1	2.30E+00	ug/L	2.4E-01	2.4E-01		8.25E-02		UTOT_KPA	2.54E-02	ML	05/24/2007 14:18	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:
9JTDPC20	B1M514		MW6-SBB-A1	X07-013	W05151					04/04/2007 13:01

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7120579	PU-238	13981-16-3	-5.11E-03	pCi/L	6.4E-02	6.4E-02	U	1.46E-01	105.5	PUISO_PLATE_AE	2.013E-01	L	05/04/2007 16:29	I
7120579	PU-239	PU-239/240	-1.28E-02	pCi/L	6.5E-02	6.5E-02	U	1.80E-01	105.5	PUISO_PLATE_AE	2.013E-01	L	05/04/2007 16:29	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:
9JTQC610	B1LX46		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102370	ALPHA	12587-46-1	2.35E+02	pCi/L	1.2E+01	5.4E+01		1.46E+00	100.0	9310_ALPHABETA	1.185E-01	L	05/25/2007 12:48	I
7102371	BETA	12587-47-2	2.74E+01	pCi/L	2.9E+00	6.1E+00		3.13E+00	100.0	9310_ALPHABETA	1.737E-01	L	05/23/2007 16:20	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQD010	B1LX57		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102368	TC-99	14133-76-7	1.12E+03	pCi/L	1.9E+01	8.2E+01		9.80E+00	100.0	TC99_ETVDSK_LS	1.265E-01	L	04/19/2007 12:47	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQD110	B1LX58		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102382	H-3	10028-17-8	2.12E+04	pCi/L	5.0E+02	9.7E+02		3.35E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/09/2007 15:59	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.

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STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35423 File Name: h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.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:
9JTQD310	B1LX59		MW6-SBB-A1		W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102382	H-3	10028-17-8	2.17E+04	pCi/L	5.0E+02	9.8E+02		3.34E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/09/2007 18:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQD910	B1LX60		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102382	H-3	10028-17-8	2.11E+04	pCi/L	5.0E+02	9.6E+02		3.34E+02	100.0	906.0_H3_LSC	5.00E-03	L	05/09/2007 20:06	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQDJ10	B1LX47		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102370	ALPHA	12587-46-1	2.42E+02	pCi/L	1.1E+01	5.7E+01		1.67E+00	100.0	9310_ALPHABETA	1.427E-01	L	05/25/2007 12:48	I
7102371	BETA	12587-47-2	3.19E+01	pCi/L	3.1E+00	5.8E+00		3.09E+00	100.0	9310_ALPHABETA	1.815E-01	L	05/23/2007 16:20	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQDK10	B1LX48		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102370	ALPHA	12587-46-1	2.28E+02	pCi/L	1.1E+01	5.4E+01		1.44E+00	100.0	9310_ALPHABETA	1.333E-01	L	05/25/2007 12:48	I
7102371	BETA	12587-47-2	3.25E+01	pCi/L	3.1E+00	6.5E+00		3.25E+00	100.0	9310_ALPHABETA	1.741E-01	L	05/23/2007 16:20	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQDM10	B1LX53		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102374	SR-90	10098-97-2	2.30E+01	pCi/L	9.9E-01	3.4E+00		3.96E-01	80.4	SRISO_SEP_PRE	1.0058E+00	L	05/08/2007 06:54	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQDP10	B1LX54		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102374	SR-90	10098-97-2	2.39E+01	pCi/L	1.0E+00	3.6E+00		3.87E-01	84.9	SRISO_SEP_PRE	9.833E-01	L	05/08/2007 06:54	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQDQ10	B1LX55		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

STL Richland

rptFeadRadSummaryEdd v3.48

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

5/29/2007 10:47:15 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35423 File Name: h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102368	TC-99	14133-76-7	1.10E+03	pCi/L	1.8E+01	8.1E+01		9.71E+00	100.0	TC99_ETVDSK_LS	1.267E-01	L	04/19/2007 12:47	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQDT10	B1LX56		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102368	TC-99	14133-76-7	1.13E+03	pCi/L	1.8E+01	8.3E+01		9.58E+00	100.0	TC99_ETVDSK_LS	1.288E-01	L	04/19/2007 12:47	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQE010	B1LX64		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102367	Uranium	7440-61-1	1.74E+02	ug/L	2.1E+01	2.1E+01		7.85E-02		UTOT_KPA	2.67E-02	ML	05/24/2007 14:36	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQEF10	B1LX61		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102386	H-3	10028-17-8	2.40E+02	pCi/L	1.3E+01	4.4E+01		5.07E+00	100.0	TRITIUM_ELECT_L	1.50E-01	L	05/01/2007 00:32	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQEH10	B1LX62		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102386	H-3	10028-17-8	2.08E+02	pCi/L	1.2E+01	3.8E+01		5.02E+00	100.0	TRITIUM_ELECT_L	1.50E-01	L	05/01/2007 03:07	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JTQEK10	B1LX63		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102386	H-3	10028-17-8	2.31E+02	pCi/L	1.3E+01	4.2E+01		5.01E+00	100.0	TRITIUM_ELECT_L	1.50E-01	L	05/01/2007 04:25	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:
9JTQEV10	B1LX65		MW6-SBB-A1	X07-013	W05151					04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102367	Uranium	7440-61-1	1.68E+02	ug/L	2.0E+01	2.0E+01		8.25E-02		UTOT_KPA	2.54E-02	ML	05/24/2007 14:26	I

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

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.

5/29/2007 10:47:15 AM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35423 File Name: h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

9JTQEW10 B1LX66 MW6-SBB-A1 X07-013 W05151 04/11/2007 10:00

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7102367	Uranium	7440-61-1	1.73E+02	ug/L	2.0E+01	2.0E+01		8.00E-02		UTOT_KPA	2.62E-02	ML	05/24/2007 14:31	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.

Tuesday, May 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTH21AB	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:**	04/04/2007 13:01
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:**	04/04/2007

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
7102367	Uranium	0.00E+00	ug/L	0.0E+00	U	2.10E-01			UTOT_KPA	2.53E-02	05/24/2007				D
BLK	7440-61-1			0.0E+00						ML	14:10				

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.

I

Tuesday, May 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTH31AB	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/04/2007 13:01
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 04/04/2007

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
7102368	TC-99	-1.31E+00	pCi/L	6.1E+00	U	9.88E+00	100.0		TC99_ETVDSK	1.256E-01	04/19/2007				D
BLK	14133-76-7			4.1E+00						L	12:47				

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

Tuesday, May 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTH51AB	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/11/2007 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102370	ALPHA	-6.20E-02	pCi/L	2.3E-01	U	6.88E-01	100.0		9310_ALPHAB	2.003E-01	05/25/2007				D
BLK	12587-46-1			2.3E-01						L	14:47				

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

Tuesday, May 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTH71AB	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/11/2007 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102371	BETA	3.76E-01	pCi/L	1.2E+00	U	2.57E+00	100.0		9310_ALPHAB	2.006E-01	05/23/2007				D
BLK	12587-47-2			1.2E+00						L	18:15				

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

Tuesday, May 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTJD1AB	**Sdg/Rept Nbr:**	W05151 35423	**Collection Date:**	04/11/2007 10:00
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BLK	**Received Date:**	04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102374	SR-90	1.68E-01	pCi/L	1.7E-01	U	3.28E-01	80.6		SRISO_SEP_P	9.971E-01	05/08/2007				D
BLK	10098-97-2			1.7E-01						L	06:54				

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

Tuesday, May 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id: JTTKL1AB **Sdg/Rept Nbr:** W05151 35423 **Collection Date:** 04/11/2007 10:00

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

Moisture/Solids%*: **QC Type:** BLK **Received Date:** 04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102382	H-3	-1.02E+00	pCi/L	1.5E+02	U	3.33E+02	100.0		906.0_H3_LSC	5.00E-03	05/09/2007				D
BLK	10028-17-8			1.4E+02						L	09:07				

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

Tuesday, May 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTKL1DX	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/11/2007 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102382	H-3	2.87E+01	pCi/L	1.6E+02	U	3.38E+02	100.0		906.0_H3_LSC	5.00E-03	05/09/2007				D
BLK	10028-17-8			1.4E+02						L	11:52				

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

Tuesday, May 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTKT1AB	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/11/2007 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102386	H-3	8.45E+00	pCi/L	8.3E+00		5.01E+00	100.0		TRITIUM_ELE	1.50E-01	04/30/2007				D
BLK	10028-17-8			5.1E+00						L	19:39				

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

Tuesday, May 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JV02A1AB	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/04/2007 13:01
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 04/04/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7120579	PU-238	-1.69E-02	pCi/L	7.2E-02	U	2.09E-01	93.0		PUISO_PLATE	2.013E-01	05/04/2007				D
BLK	13981-16-3			7.2E-02						L	16:30				
7120579	PU-239	-2.82E-03	pCi/L	7.1E-02	U	1.42E-01	93.0		PUISO_PLATE	2.013E-01	05/04/2007				D
BLK	PU-239/240			7.1E-02						L	16:30				

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTH21CS	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:**	04/04/2007 13:01
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:**	04/04/2007

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
7102367	Uranium	3.60E+01	ug/L	4.3E+00		8.25E-02		3.58E+01	UTOT_KPA	2.54E-02	05/24/2007			70	D
BS	7440-61-1			4.3E+00				100.7		ML	14:14			130	

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id: JTTH21DS **Sdg/Rept Nbr:** W05151 35423 **Collection Date:** 04/04/2007 13:01

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/04/2007

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
7102367	Uranium	3.60E+00	ug/L	3.7E-01		8.19E-02		3.57E+00	UTOT_KPA	2.56E-02	05/24/2007			70	D
BS	7440-61-1			3.7E-01				100.7		ML	14:16			130	

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTH31CS	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:**	04/04/2007 13:01
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:**	04/04/2007

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
7102368	TC-99	5.17E+02	pCi/L	4.1E+01		9.85E+00	100.0	5.35E+02	TC99_ETVDSK	1.266E-01	04/19/2007			70	D
BS	14133-76-7			1.3E+01				96.7		L	12:47			130	

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTH51CS	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/11/2007 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102370	ALPHA	1.79E+01	pCi/L	4.5E+00		5.29E-01	100.0	2.29E+01	9310_ALPHAB	1.989E-01	05/25/2007			70	D
BS	12587-46-1			2.0E+00				78.2		L	14:47			130	

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id: JTTH71CS **Sdg/Rept Nbr:** W05151 35423 **Collection Date:** 04/11/2007 10:00

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102371	BETA	2.02E+01	pCi/L	3.5E+00		2.58E+00	100.0	2.25E+01	9310_ALPHAB	2.019E-01	05/23/2007			70	D
BS	12587-47-2			2.3E+00				90.2		L	18:15			130	

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTJD1CS	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:**	04/11/2007 10:00
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:**	04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102374	SR-90	1.41E+01	pCi/L	2.1E+00		3.26E-01	88.9	1.38E+01	SRISO_SEP_P	1.0003E+00	05/08/2007			70	D
BS	10098-97-2			7.2E-01				102.5		L	06:54			130	

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id: JTTKL1CS **Sdg/Rept Nbr:** W05151 35423 **Collection Date:** 04/11/2007 10:00

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

Moisture/Solids%*: **QC Type:** BS **Received Date:** 04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102382	H-3	2.40E+03	pCi/L	2.6E+02		3.33E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	05/09/2007			70	D
BS	10028-17-8			2.1E+02				88.2		L	10:30			130	

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edq\FeadIV\Rad\W05151.Edd, h:\Reportdb\edq\FeadIV\Rad\35423.Edd

Lab Sample Id: JTTKL1EM
Client Id: NA
Moisture/Solids%*:

Sdg/Rept Nbr: W05151 35423
Matrix: WATER WATER
QC Type: BS

Collection Date: 04/11/2007 10:00
Sample On Date:
Received Date: 04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102382	H-3	2.56E+03	pCi/L	2.6E+02		3.37E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	05/09/2007			70	D
BS	10028-17-8			2.2E+02				94.0		L	13:14			130	

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTTKT1CS	**Sdg/Rept Nbr:**	W05151 35423	**Collection Date:**	04/11/2007 10:00
Client Id:	NA	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	BS	**Received Date:**	04/11/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7102386	H-3	3.51E+02	pCi/L	6.3E+01		5.05E+00	100.0	4.50E+02	TRITIUM_ELE	1.50E-01	04/30/2007			70	D
BS	10028-17-8			1.6E+01				78.0		L	21:57			130	

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

Tuesday, May 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JV02A1CS	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/04/2007 13:01
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 04/04/2007

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

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7120579	PU-239	4.48E+00	pCi/L	1.0E+00		2.20E-01	93.1	4.60E+00	PUISO_PLATE	1.994E-01	05/04/2007			75	D
BS	PU-239/240			7.6E-01				97.5		L	16:30			125	

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

Tuesday, May 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTDPC1MR	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/04/2007 13:01
Client Id:	B1M514	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7102367	Uranium	2.31E+00	ug/L	2.4E-01		8.19E-02			UTOT_KPA	2.56E-02	05/24/2007	.5	0.1		D
DUP	7440-61-1	2.30E+00		2.4E-01						ML	14:21	20.0	3		

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

Tuesday, May 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTDPC1NR	**Sdg/Rept Nbr:**	W05151 35423	**Collection Date:**	04/04/2007 13:01
Client Id:	B1M514	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	04/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7102368	TC-99	-2.10E+00	pCi/L	6.0E+00	U	9.73E+00	100.0		TC99_ETVDSK	1.261E-01	04/19/2007	953.5	1.2		D
DUP	14133-76-7	3.21E+00		4.0E+00						L	12:46	20.0	3		

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

Tuesday, May 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTDPC1PR	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/04/2007 13:01
Client Id:	B1M514	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7120579	PU-238	-7.84E-03	pCi/L	6.6E-02	U	1.63E-01	91.6		PUISO_PLATE	2.005E-01	05/04/2007	0.0	0.1		D
DUP	13981-16-3	-5.11E-03		6.6E-02						L	16:28	20.0	3		
7120579	PU-239	-2.61E-03	pCi/L	6.5E-02	U	1.31E-01	91.6		PUISO_PLATE	2.005E-01	05/04/2007	0.0	0.2		D
DUP	PU-239/240	-1.28E-02		6.5E-02						L	16:28	20.0	3		

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

Tuesday, May 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTQC61DR	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:**	04/11/2007 10:00
Client Id:	B1LX46	**Matrix:**	WATER	WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:**	04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7102370	ALPHA	2.48E+02	pCi/L	5.8E+01		1.53E+00	100.0		9310_ALPHAB	1.199E-01	05/25/2007	5.2	0.3		D
DUP	12587-46-1	2.35E+02		1.2E+01						L	12:48	20.0	3		

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

Tuesday, May 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTQD11CR	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/11/2007 10:00
Client Id:	B1LX58	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7102382	H-3	2.13E+04	pCi/L	9.7E+02		3.33E+02	100.0		906.0_H3_LSC	5.00E-03	05/09/2007	.5	0.2		D
DUP	10028-17-8	2.12E+04		5.0E+02						L	17:22	20.0	3		

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

Tuesday, May 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTQDJ1DR	**Sdg/Rept Nbr:**	W05151	35423	**Collection Date:** 04/11/2007 10:00
Client Id:	B1LX47	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7102371	BETA	2.86E+01	pCi/L	4.7E+00		3.05E+00	100.0		9310_ALPHAB	1.823E-01	05/23/2007	11.0	1.		D
DUP	12587-47-2	3.19E+01		2.9E+00						L	16:20	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
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B Qual- Analyte was found in the associated laboratory blank above the MDC.

Tuesday, May 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id:	JTQDM1CR	**Sdg/Rept Nbr:**	W05151 35423	**Collection Date:**	04/11/2007 10:00
Client Id:	B1LX53	**Matrix:**	WATER WATER	**Sample On Date:**	
Moisture/Solids%*:		**QC Type:**	DUP	**Received Date:**	04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7102374	SR-90	2.59E+01	pCi/L	3.9E+00		4.37E-01	75.7		SRISO_SEP_P	9.951E-01	05/08/2007	11.7	1.		D
DUP	10098-97-2	2.30E+01		1.1E+00						L	06:54	20.0	3		

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

Tuesday, May 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id: JTQEF1CR **Sdg/Rept Nbr:** W05151 35423 **Collection Date:** 04/11/2007 10:00

Client Id: B1LX61 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7102386	H-3	2.30E+02	pCi/L	4.2E+01		5.00E+00	100.0		TRITIUM_ELE	1.50E-01	05/01/2007	4.2	0.3		D
DUP	10028-17-8	2.40E+02		1.3E+01						L	01:49	20.0	3		

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

Tuesday, May 29, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id: JTDPC1LW **Sdg/Rept Nbr:** W05151 35423 **Collection Date:** 04/04/2007 13:01

Client Id: B1M514 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** MS **Received Date:** 04/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7102367	Uranium	3.77E+01	ug/L	4.7E+00		8.35E-02		3.66E+01	UTOT_KPA	2.51E-02	05/24/2007			60	D
MS	7440-61-1			4.7E+00				102.8		ML	14:19			140	

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

Tuesday, May 29, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05151.Edd, h:\Reportdb\edd\FeadIV\Rad\35423.Edd

Lab Sample Id: JTQDT1CW **Sdg/Rept Nbr:** W05151 35423 **Collection Date:** 04/11/2007 10:00

Client Id: B1LX56 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** MS **Received Date:** 04/11/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
X07-013	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
7102368	TC-99	3.26E+03	pCi/L	3.2E+02		9.83E+00	100.0	3.56E+03	TC99_ETVDSK	1.251E-01	04/19/2007			60	D
MS	14133-76-7			3.6E+01				91.7		L	12:47			140	

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

SEVERN TRENT STL

STL Richland
Hexavalent Chromium - Water

Analyst:	D. Manis	Calibration Curve Information				SOP Information		BATCH #	7095161
Start Date:	4/5/2007		Amount	Conc.(mg/L)	ABS.	RICH-WC-5003		SDG #	W05151
Start Time:	8:45	Blank	0.000	0.000	0.000	Revision 7		Matrix	Water
End Date:	4/5/2007	Std. 1	0.100	0.050	0.095				
End Time	11:26	Std. 2	0.500	0.250	0.475			Instrument Information	
		Std. 3	0.750	0.375	0.705	MDL (mg/L)	0.002	Instrument:	Hach DR2010
Analyst Signature:	DManis	Std. 4	1.500	0.750	1.402			Wavelength:	540
		Std 5	2.000	1.000	1.844			R Squared	0.99988
Date:	4/5/07	Standard Volume (mL):			100.000			Slope:	1.84784
		Date of Curve:			4/5/2007			Intercept:	0.00666

	Calibration Information:	ICV Information:		LCS Information:		Matrix Spike Information:	
Dilution ID #	CR-07-0033	CR-07-0034		CR-07-0033		CR-07-0033	
Prep Date:	04/05/07	04/05/07		04/05/07		04/05/07	
Concentration (mg/L)	50	50		50		50	
Expiration Date:	04/06/07	04/06/07		04/06/07		04/06/07	
Pipettor(s)	70,190	190		190		190	
Volume Used / Expected Value		1.000	0.50000	1.00	0.50000	0.50	0.26316

Expected values are only amounts added in mg and not final concentrations

Sample ID	Client ID	Type	Sample Volume (mL)	Sample ABS.	Blank ABS.	Corrected ABS.	Dilution Factor	Curve Conc. (mg/L)	Final Conc. (mg/L)	% Rec.
n/a	n/a	ICV	100.000	0.934	0.000	0.934	1	0.5018	0.502	100.37%
n/a	n/a	ICB	100.000	0.000	0.000	0.000	1	<MDL	<MDL	
JTDX0-1AA-B	n/a	Prep Blank	100.000	0.002		0.002	1	-0.0025	<MDL	
JTDX0-1AC-C	n/a	LCS	100.000	0.946		0.946	1	0.5083	0.508	101.67%
JTDPA-1AA	B1M510	Sample	100.000	0.005		0.005	1	-0.0009	<MDL	
JTDPA-1AC-S	B1M510-MS	MS	100.000	0.501		0.501	1	0.2675	0.268	101.66%
JTDPA-1AD-D	B1M510-MSD	MSD	100.000	0.501		0.501	1	0.2675	0.268	101.66%
JTDPA-1AE-X	B1M510-DUP	Duplicate	100.000	0.003		0.003	1	-0.0020	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
n/a	n/a	CCV	100.000	0.934		0.934	1	0.5018	0.502	100.37%
n/a	n/a	CCB	100.000	0.000		0.000	1	<MDL	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

SEVERN TRENT STL

STL Richland
Hexavalent Chromium - Water

Analyst:	**S. Wheland**	**Calibration Curve Information**				**SOP Information**		**BATCH #**	**7102439**
Start Date:	4/12/2007		**Amount**	**Conc.(mg/L)**	**ABS.**	RICH-WC-5003		**SDG #**	**W05151**
Start Time:	6:30	**Blank**	0.000	0.000	0.000	Revision 7		**Matrix**	**Water**
End Date:	4/12/2007	**Std. 1**	0.100	0.050	0.103				
End Time	8:30	**Std. 2**	0.500	0.250	0.487			**Instrument Information**	
		Std. 3	0.750	0.375	0.724	**MDL (mg/L)**	**0.002**	Instrument:	Hach DR2010
Analyst Signature:		**Std. 4**	1.500	0.750	1.412			Wavelength:	540
		Std 5	2.000	1.000	1.855			**R Squared**	**0.99973**
Date:	04/12/07	**Standard Volume (mL):**			100.000			**Slope:**	**1.85390**
		Date of Curve:			4/12/2007			**Intercept:**	**0.01422**

		Calibration Information:	**ICV Information:**		**LCS Information:**		**Matrix Spike Information:**	
Dilution ID #		Cr-07-0037	Cr-07-0038		Cr-07-0037		Cr-07-0037	
Prep Date:		04/12/07	04/12/07		04/12/07		04/12/07	
Concentration (mg/L)		50	50		50		50	
Expiration Date:		04/13/07	04/13/07		04/13/07		04/13/07	
Pipettor(s)		70,190	190		190		190	
Volume Used (	**Expected Value**		1.000	0.50000	1.00	0.50000	0.50	0.26316

Expected values are only amounts added in mg and not final concentrations

Sample ID	**Client ID**	**Type**	**Sample Volume (mL)**	**Sample ABS.**	**Blank ABS.**	**Corrected ABS.**	**Dilution Factor**	**Curve Conc. (mg/L)**	**Final Conc. (mg/L)**	**% Rec.**
n/a	n/a	**ICV**	100.000	0.952	0.000	0.952	1	0.5058	0.506	101.17%
n/a	n/a	**ICB**	100.000	0.001	0.000	0.001	1	-0.0071	<MDL	
JTTTR-1AA-B	n/a	**Prep Blank**	100.000	0.002		0.002	1	-0.0066	<MDL	
JTTTR-1AC-C	n/a	**LCS**	100.000	0.967		0.967	1	0.5139	0.514	102.79%
JTQE2-1AA	B1M4Y5	**Sample**	100.000	0.104		0.104	1	0.0484	0.048	
JTQE2-1AC-S	B1M4Y5-MS	**MS**	100.000	0.611		0.611	1	0.3219 0.274	~~0.322~~ 0.274	103.92%
JTQE2-1AD-D	B1M4Y5-MSD	**MSD**	100.000	0.607		0.607	1	0.3198 0.272	~~0.320~~ 0.272	103.10%
JTQE2-1AE-X	B1M4Y5-DUP	**Duplicate**	100.000	0.103		0.103	1	0.0479	0.048	
JTQE4-1AA	B1M4Y6	**Sample**	100.000	0.101		0.101	1	0.0468	0.047	
JTQFA-1AA	B1M4Y7	**Sample**	100.000	0.101		0.101	1	0.0468	0.047	
			100.000				1			
n/a	n/a	**CCV**	100.000	0.952		0.952	1	0.5058	0.506	101.17%
n/a	n/a	**CCB**	100.000	0.002		0.002	1	-0.0066	<MDL	
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			
			100.000				1			

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/15/2007 2:01:52 PM

Lot No., Due Date: J7D050109; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7120579; RPUISO Pulso by ALP

SDG, Matrix: W05151; 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. Tracers Exceeds Control Limit => => JTDPC2AE PU-242 106 L:20|105 Q:S2		✓	
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => PU-238 PU-239 OK; No Callin Level Found => PU-238 PU-239	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		

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

FWHM > maxFWHM => JV02A1AC PU-239 48.8>0 Q:V1

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A

Library Not Specified => JTDPC1AP I:[NUC_LIBR]AR_PU Q:
JTDPC2AE I:[NUC_LIBR]AR_PU Q:
JV02A1AA I:[NUC_LIBR]AR_PU Q:
JV02A1AC I:[NUC_LIBR]AR_PU Q:

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: NCM# 10-09911

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

OK

First Level Review Lisa Anderson Date 5/15/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7120579

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: Jodie G Date: 5/16/07

LS-038B, Rev. 10, 8/02

STL RICHLAND

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: **10-09911**
NCM Initiated By: Lisa Antonson
Date Opened: 05/15/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Pulso by ALP
Lot #'s (Sample #'s): J7D050109 (2), J7D120000 (366),
QC Batches: 7102366

Nonconformance: Tracer yield out of limits
Subcategory: Unknown

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	05/15/2007	In this Pu batch, no tracer was found in sample JTDPC1AE. The batch was rerun as batch 7120579 with acceptable results.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	05/15/2007	The batch was rerun.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/29/2007 10:32:38 AM

Lot No., Due Date: J7D050109,J7D110335; 05/29/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7102370; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05151; 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 => JTDPC1AC 135.90<200.00 JTQC61AA 118.50<200.00 JTQDJ1AA 142.70<200.00 JTQDK1AA 133.30<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 => JTDPC1AC ALPHA 2.0E+00 L:1.8E+00 JTQC61AA ALPHA 2.4E+02 L:1.5E+00 JTQDJ1AA ALPHA 2.4E+02 L:1.7E+00 JTQDK1AA ALPHA 2.3E+02 L:1.4E+00		✓	
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	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	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 version)	Yes	No	N/A

8.3 Comments:

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

First Level Review Tra Anderson **Date** 5/29/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7102370
W05151

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: 5-29-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/24/2007 1:36:28 PM

Lot No., Due Date: J7D050109,J7D110335; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7102371; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05151; WATER

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

6.0 Comments on any No response:

First Level Review Jeff Norton **Date** 5-24-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7102371
W05151

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

Comments on any "No" response:

Second Level Review: Sheryl R Adam Date: 5-24-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/16/2007 11:50:23 AM

Lot No., Due Date: J7D050109,J7D110335; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7102374; RSR85907 Sr-85/90 by GPC-7

SDG, Matrix: W05151; 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 Matt Hardy **Date** 5-16-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7102374
W05151

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

Comments on any "No" response:

Second Level Review: Cheryl A. Allen Date: 5-17-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/3/2007 7:11:58 AM

Lot No., Due Date: J7D050109,J7D110335; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7102368; RTC99 Tc-99 by LSC

SDG, Matrix: W05151; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JTQDT1AC TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0=> JTDPC1AN TC-99 330.0 (RPD)		✓	
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callir Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations. Yes No N/A

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

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

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

8.3 Comments:

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

First Level Review Lisa Autonson Date 5/3/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7102368
W05151

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

Comments on any "No" response:

Second Level Review: Sheryl R Adam Date: 5-3-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/11/2007 4:58:14 PM

Lot No., Due Date: J7D050109,J7D110335; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7102382; RTRITIUM H-3 by LSC

SDG, Matrix: W05151; 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 => JTDPC1AA 5.00<10.00 JTQD11AA 5.00<10.00 JTQD31AA 5.00<10.00 JTQD91AA 5.00<10.00 Q:VB ok AL 5/11/07		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JTTKL1AF SVP15/5<>SVP10/10 JTTKL1AG SVP15/5<>SVP10/10 JTTKL1AA SVP15/5<>SVP10/10 JTTKL1AC SVP15/5<>SVP10/10 JTTKL1AD SVP15/5<>SVP10/10 JTTKL1AE SVP15/5<>SVP10/10 JTDPC1AA SVP15/5<>SVP10/10 JTQD11AA SVP15/5<>SVP10/10 JTQD11AC SVP15/5<>SVP10/10 JTQD31AA SVP15/5<>SVP10/10 JTQD91AA SVP15/5<>SVP10/10 Q:VC ok AL 5/11/07		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. OK	✓		
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓

8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes ✓	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3 OK; No Callin Level Found => H-3	Yes ✓	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Angela Long **Date** 5/11/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7102382
WO5151

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

Comments on any "No" response: _____

Second Level Review: Sheryl R Adam Date: 5-14-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/1/2007 4:28:39 PM

Lot No., Due Date: J7D050109,J7D110335; 05/28/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7102386; RH3EE H3EE by LSC

SDG, Matrix: W05151; 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 Angela Long **Date** 5/1/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7102386
W05151

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

Comments on any "No" response: _____

Second Level Review: Sheryl R Adam Date: 5-2-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/25/2007 10:05:47 AM

Lot No., Due Date: J7D050109,J7D110335; 05/29/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7102367; RUNAT UNat by KPA

SDG, Matrix: W05151; 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:
NCM# 10-09970

First Level Review Jeff Norton **Date** 5-25-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 710236 7
W05151

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

Comments on any "No" response: See Narr

Second Level Review: Sheryl R. Adam Date: 5-25-07

Clouseau
Nonconformance Memo

SEVERN TRENT SERVICES

NCM #: 10-09970
NCM Initiated By: John Norton
Date Opened: 05/25/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Nona
Tests: UNat by KPA
Lot #'s (Sample #'s): J7D050109 (2), J7D110335 (15,16,17), J7D120000 (367),

QC Batches: 7102367

Nonconformance: Blank result above Contract Limit
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
John Norton	05/25/2007	Total uranium in water. For reasons that are still under investigation, the KPA instrument failed to upload important pieces of data for the batch blank, specifically the prep dilution volume.

Corrective Action

Name	Date	Corrective Action
John Norton	05/25/2007	The primary cause of the failure is still under investigation, the prep dilution factor was hand entered to allow calculation of the blank, which now meets the RDL.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Entered 5/15/07
SKS

SEVERN TRENT STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Work Order Number(s): **JTDPA** J70050109

Lab Sample Numbers or SDG: W05151

Method/Test/Parameter: **Cr+6 in Water / RICH-WC-5003**

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration				
1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient within QC limits?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration	✓			
1. CCV analyzed at required frequency and all parameters within QC limits?				✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis				
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?			✓	✓
2. Were all sample holding times met?	✓			✓
D. QC Samples				
1. All results for the preparation blank below limits?	✓			✓
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?	✓			✓
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?			✓	✓
5. ICP only: One serial dilution performed per SDG?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
E. Other			✓	
1. Are all nonconformances included and noted?				✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response:

Analyst: DMarris Date: 4/5/07

Second-Level Review: [signature] Date: 4/5/07

ENTERED 5/15/07
SKS

SEVERN TRENT STL

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Work Order Number(s): **JTQE2,JTQE4, JTQFA, JTTTR** J7D110335

Lab Sample Numbers or SDG: W05151

Method/Test/Parameter: **Cr+6 in Water / RICH-WC-5003**

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration				
1. Performed at required frequency with required number of levels?	✓			
2. Correlation coefficient within QC limits?	✓			
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			
B. Continuing Calibration				
1. CCV analyzed at required frequency and all parameters within QC limits?	✓			
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			
C. Sample Analysis				
1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?			✓	
2. Were all sample holding times met?	✓			
D. QC Samples				
1. All results for the preparation blank below limits?	✓			
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?	✓			
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			
4. Analytical spikes within QC limits where applicable?			✓	
5. ICP only: One serial dilution performed per SDG?			✓	
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
E. Other			✓	
1. Are all nonconformances included and noted?				✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response:

Analyst: [signature] Date: 4/12/07

Second-Level Review: [signature] Date: 5/29/07

PNNL J7D050109
W05151
Due 05-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-64

Page 1 of 1

Collector: Fluor Hanford F. M. HALL	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-M-506-1	Ice Chest No.: ROSS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1M514		W	4/4/7	1301	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1M514		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1M514		W			1x20-mL P	Activity Scan	None
B1M514		W			1x1000-mL G/P	PUISO_PLATE_AEA: Pu-238 + 239/240 (2)	HNO3 to pH <2
B1M514		W			3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
B1M514		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1M514		W			3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None
B1M514		W			1x500-mL G/P	UTOT_KPA: Uranium (1) JTDPC	HNO3 to pH <2

Relinquished By: Fluor Hanford F. M. HALL	Print:	Sign: APR 04 2007	Date/Time: 1500
Received By:	Print: S Smith	Sign: S Smith APR 04 2007	Date/Time: 1500
Relinquished By			Date/Time
Received By			Date/Time
Relinquished By			Date/Time
Received By			Date/Time
Relinquished By			Date/Time
Received By			Date/Time

Matrix *

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

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

70

PNNL J7D050109
W05751
Due 05-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-60

Page 1 of 1

Collector Fluor Hanford F.M. HALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. X07-013	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SPECIAL SAMPLING, JANUARY 2007	HMF-M-506-1	Ice Chest No. ROSS Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1M510		W	4/4/7	1042	1x20-mL P	Activity Scan	None
B1M510		W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool 4C
						JTDPA	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford F.M. HALL		APR 04 2007	1500		S. Smith	S. Smith APR 04 2007	1500
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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: 04.04.07 1500

Client: PGW SDG #: W05151 NA [ ] SAF #: X07-013 NA [ ]

Work Order Number: J7D050109 Chain of Custody # X07-013-60, 64

Shipping Container ID: _____ Air Bill # _____

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

Sample Custodian: S. Smith Date: 04.04.07 1500

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev. 6

PNNL JTD110335
W05151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-9

Page 1 of 1

Collector K.J. YOUNG	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. X07-013	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No. EDOS Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
✓ B1LX46		W	4/11/7	1000	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
✓ B1LX46		W	↓	↓	1x20-mL P	Activity Scan	None
						JTQC6	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
KJ. YOUNG			APR 11 2007 1345		Eric Dorkly		APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SITE RECEIVED

73

PNNL J7D110335
W05151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-10

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDOS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
✓ B1LX47		W	4/11/7	1000	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
✓ B1LX47		W	↓	↓	1x20-mL P	Activity Scan	None
						J79DJ	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
K.J. YOUNG	Ken Young	APR 11 2007 1345	Eric Darby	Eric Darby	APR 11 2007 1345
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

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

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

PNNL J7D110335
W05151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-11

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDOS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
✓ B1LX48		W	4/11/7	1000	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
✓ B1LX48		W	↓	↓	1x20-mL P	Activity Scan	None
						JTQDK	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG			APR 11 2007 1345	Eric Darby			APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEE RETURN

15

PNNL JTD110335
W05151
Due 05.25.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-16

Page 1 of 1

Collector K.J. YOUNG	Contact/Requester	Telephone No. MSIN FAX
SAF No. X07-013	Sampling Origin	Purchase Order/Charge Code
Project Title SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No. ED05 Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX53		W	4/11/7	1000	1x20-mL P	Activity Scan	None
B1LX53		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JTQDM	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG	K.J. Young		APR 11 2007 1345	Eric Darby	Eric Darby		APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

96

PNNL JTD110335
W05151
Due 05.25.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-17

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDQS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
✓ B1LX54		W	4/11/7	1000	1x20-mL P	Activity Scan	None
✓ B1LX54		W	↓	↓	3x1000-mL G/P	SRISO_SEP_PRECIP_GPC: Sr-90 (1)	HNO3 to pH <2
						JTQDP	

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
K.J. YOUNG	APR 11 2007 1345	Eric Darkby	APR 11 2007 1345
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

SITE RECORDS

PNNL J7D110335 W05151 Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-18

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF - N - 506 - 8	Ice Chest No.: EDO5 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
✓ B1LX55		W	4/11/7	1000	1x20-mL P	Activity Scan	None
✓ B1LX55		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

JTQDQ

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
K.J. YOUNG	K.J. Young	APR 11 2007 1345		Eric Dowdy	APR 11 2007 1345
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

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

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

SITE RECORDS

78

PNNL J7D110335
W05151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **X07-013-19**

Page 1 of 1

Collector K.J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. X07-013	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	**Ice Chest No.** EDOS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
✓ B1LX56		W	4/11/7	1000	1x20-mL P	Activity Scan	None
✓ B1LX56		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JTQDT	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG			APR 11 2007 1345	Eric Darby			APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL JTD110335
WO5151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-20

Page 1 of 1

Collector: KJ. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDOS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX57		W	4/11/7	1000	1x20-mL P	Activity Scan	None
B1LX57		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2

JTQDO

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
KJ. YOUNG	KJ. Young	APR 11 2007 1345	Eric Darby	Eric Darby	APR 11 2007 1345
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

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

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

SITE RECORD
80

PNNL J7D110335
W05151
due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-21

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: 5D05 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX58		W	4/11/7	1000	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1LX58		W	↓	↓	1x20-mL P	Activity Scan	None
						JTQD1	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG	Ken Young		APR 11 2007 1345	Eric Dardy	Eric Dardy		APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SHT RICHLAND

81

PNNL J7D110335
W05151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-22

Collector: KJ. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDOS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX59		W	4/11/7	1000	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1LX59		W	↓	↓	1x20-mL P	Activity Scan	None
						JT&D3	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
KJ. YOUNG			APR 11 2007 1345		Eric Darby		APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

82

PNNL J7D110335
W05151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-23

Collector: R.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDO5 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX60		W	4/11/7	1000	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1LX60		W	↓	↓	1x20-mL P	Activity Scan	None

J7D9

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
R.J. YOUNG	Ken Young	APR 11 2007 1345	Eric Durly	E Durly	APR 11 2007 1345
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

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

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

PNNL JTD110335
WO5151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-24

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF - N - 506 - 8	Ice Chest No.: EDO5 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX61		W	4/11/7	1000	1x20-mL P	Activity Scan	None
B1LX61		W	↓	↓	3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None
						JTQEF	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG	Ken Young		APR 11 2007 1345	Eric Dudley	Eric Dudley		APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SIL RICHLAND

84

PNNL JTD110335
W05151
Due 05.25.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-25

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: E005 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX62		W	4/11/7	1000	1x20-mL P	Activity Scan	None
B1LX62		W	↓	↓	3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None
						JTQEH	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG	K.J. Young		APR 11 2007 1345	Eric Darby	Eric Darby		APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

PNNL J7D110335
W05151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-26

Collector: KJ. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDOS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX63		W	4/11/7	1000	1x20-mL P	Activity Scan	None
B1LX63		W	↓	↓	3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None
						JTQEK	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
KJ. YOUNG	Ken Young	APR 11 2007 1345	Eric Darby	E. Darby	APR 11 2007 1345
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

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

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

STL RICHLAND

PNNL J7D110335
W05151
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-28

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: ED05 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX65		W	4/11/7	1000	1x20-mL P	Activity Scan	None
B1LX65		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

JTQEV

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG	Ken Young		APR 11 2007 1345	Eric Derby	Eric Derby		APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SIL RICHLAND

87

PNNL J7D110335
W05757
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-29

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDOS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX66		W	4/11/7	1000	1x20-mL P	Activity Scan	None
B1LX66		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2

JTQEW

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG	Ken Young	Ken Young	APR 11 2007 1345	Eric Darby	Eric Darby	Eric Darby	APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SIL RICHLAND

88

PNNL J7D110335
W05157
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-27

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: BD05 Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1LX64		W	4/11/7	1000	1x20-mL P	Activity Scan	None
B1LX64		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JTQEC	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG	Ken Young		APR 11 2007 1345	Eric Darby	Eric Darby		APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SFL RICHLAND

89

PNNL J7D110335
W05757
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-48

Page 1 of 1

Collector K.J. YOUNG	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. X07-013	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No. EDOS Temp.
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
✓ B1M4Y5		W	4/11/7	1000	1x20-mL P	Activity Scan	None
✓ B1M4Y5		W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool 4C
						JTQ E2	

Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
K.J. YOUNG	K.J. Young	APR 11 2007 1345	Eric Darby	Eric Darby	APR 11 2007 1345
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time
Relinquished By		Date/Time	Received By		Date/Time

Matrix *

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

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

90

PNNL J7D110335
W05151
Due 05.25.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-49

Page 1 of 1

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
✓ B1M4Y6		W	4/11/7	1000	1x20-mL P	Activity Scan	None
✓ B1M4Y6		W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool 4C
						JTQE4	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG		APR 11 2007	1345	ERIC DARLEY		APR 11 2007	1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

STL RICHLAND

PNNL J7D110335
W05751
Due 05-25-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X07-013-50

Page 1 of 1

STL RICHLAND

Collector: K.J. YOUNG	Contact/Requester: Dot Stewart	Telephone No.: 509-376-5056 MSIN FAX
SAF No.: X07-013	Sampling Origin: Hanford Site	Purchase Order/Charge Code
Project Title: SPECIAL SAMPLING, JANUARY 2007	HNF-N-506-8	Ice Chest No.: EDOS Temp.
Shipped To (Lab): Severn Trent Incorporated, Richland	Method of Shipment: Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol: SURV	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
Do not combine X SAF samples with other sets. Need SDG to be stand alone.
All labs except WSCF: Do not exceed SDG closure of 14 days.
WSCF: SDG will close on a daily basis; X SAF samples into own SDG.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
✓ B1M4Y7		W	4/11/7	1000	1x20-mL P	Activity Scan	None
✓ B1M4Y7		W	↓	↓	1x500-mL aG	7196_CR6: Hexavalent Chromium (1)	Cool 4C
						JTQFA	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
K.J. YOUNG			APR 11 2007 1345	Eric Darby			APR 11 2007 1345
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 4/11/07

Client: P&W SDG # W05151 X07-013

Work Order Number: J7D110335

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? ✓
2. Custody Seals dated and signed? ✓
3. Chain of Custody record present? ✓
4. Cooler temperature _____ NA ✓ ✓
6. Number of samples in shipping container 18
7. Sample holding times exceeded? ✓
8. Samples have:
   _____ tape
   _____ custody seals ✓
9. Samples are:
   ✓ in good condition
   _____ broken
10. Sample pH taken? NA pH ≤ 2 ✓ pH > 12 ✓
11. Sample Location, Sample Collector Listed? * ✓
    *For documentation only. No corrective action needed
12. Were any anomalies identified in sample receipt? ✓
13. Description of anomalies (include sample number):

Sample Custodian: E. Pearby Date 4/11/07 1345

Client Sample ID	Analysis Requested	Condition

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 12/05, Rev 6

STL RICHLAND

SEVERN TRENT STL

*** RE-ANALYSIS REQUEST ***

DUE DATE 5/28/07

CUSTOMER PGW

ANALYSIS PU

MATRIX water

LOT NUMBER J7D050109

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 7102316

NEW BATCH NUMBER 7120579

LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) all	No tracer yield in sample.
2)	
3)	
4)	
5)	
6)	
7)	
8)	
9)	
10)	
11)	
12)	
13)	
14)	
15)	
16)	
17)	
18)	
19)	
20)	
LAB QC ID	Assigned with new batch.

STL RICHLAND

5/1/2007 8:28:38 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7120579 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

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:
211 1 JTDPC-1-AP-X J7D050109-2-DUP 04/04/2007 13:01		200.50g,in AmtRec: 20ML,2X500ML,9XLP #Containers: 12	PUTC10593 03/13/07,pd 08/04/06,r	200			Scr: Alpha: -7.35E-04 uCi/Sa Beta: 1.07E-03 uCi/Sa	
212 2 JTDPC-2-AE J7D050109-2-SAMP 04/04/2007 13:01		201.30g,in AmtRec: 20ML,2X500ML,9XLP #Containers: 12	PUTC10594 03/13/07,pd 08/04/06,r				Scr: Alpha: -7.35E-04 uCi/Sa Beta: 1.07E-03 uCi/Sa	
213 3 JV02A-1-AA-B J7D300000-579-BLK 04/04/2007 13:01		201.30g,in AmtRec: #Containers: 1	PUTC10595 03/13/07,pd 08/04/06,r				Scr: Alpha: Beta:	
214 4 JV02A-1-AC-C J7D300000-579-LCS 04/04/2007 13:01		199.40g,in AmtRec: #Containers: 1	PUSG0917 02/28/07,pd 08/04/06,r	✓			Scr: Alpha: Beta:	

Comments: pH <2.0 YS 5-1-07

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

JTDPC1AP-DUP Constituent List:

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

JV02A1AA-BLK:

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

JV02A1AC-LCS:

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

STL RICHLAND

5/1/2007 8:28:43 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7120579 pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

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:

JTDPC1AP-DUP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JV02A1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JV02A1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

5/15/2007 2:01:03 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/15/2006, 5/20/2007, Batch: '7120579', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7120579						
AC		**CalcC**	**BockJ**	5/1/2007 8:22:39 AM		
SC			antonsonl	IsBatched	4/30/2007 3:47:58 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/1/2007 8:22:39 AM	RICH-RC-5016 Revision 6
SC			BockJ	Prep1C	5/1/2007 8:28:44 AM	RICH-RC-5016 REVISION 6
SC			FABREM	Sep1C	5/2/2007 7:40:16 PM	RICH-RC-5010 REVISION 4
SC			HarveyK	Sep2C	5/4/2007 1:37:59 PM	RICH-RC-5039 REVISION 5
SC			StringerR	InCnt1	5/4/2007 1:40:08 PM	RICH-RD-0008 REVISION 4
SC			DAWKINSO	CalcC	5/4/2007 8:13:33 PM	RICH-RD-0008 REVISION 4
AC			**BockJ**	5/1/2007 8:28:44 AM		
AC			**FABREM**	5/2/2007 7:40:16 PM		
AC			**HarveyK**	5/4/2007 1:37:59 PM		
AC			**StringerR**	5/4/2007 1:40:08 PM		
AC			**DAWKINSO**	5/4/2007 8:13:33 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt:6

ICOCFractions v4.8.26

STL RICHLAND

5/11/2007 9:50:04 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Balance Id:1120482733
Pipet #: 235

AnalyDueDate: 05/28/2007 W05151

Batch: 7102370 WATER pCi/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ManisD,BockJ /APA

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 JTDPC-1-AC J7D050109-2-SAMP 04/04/2007 13:01		135.90g,in AmtRec: 20ML,2X500ML,9XLP	#Containers: 12	1.5	37.1	100	10A Scr:	1340 Alpha: -7.35E-04 uCi/Sa	5/25/07 R Beta: 1.07E-03 uCi/Sa	
2 JTQC6-1-AA J7D110335-1-SAMP 04/11/2007 10:00		118.50g,in AmtRec: 20ML,LP	#Containers: 2		33.6		10B Scr:	Alpha: 2.11E-04 uCi/Sa	Beta: -2.64E-05 uCi/Sa	
3 JTQC6-1-AD-X J7D110335-1-DUP 04/11/2007 10:00		119.90g,in AmtRec: 20ML,LP	#Containers: 2		34.0		10C Scr:	Alpha: 2.11E-04 uCi/Sa	Beta: -2.64E-05 uCi/Sa	
4 JTQDJ-1-AA J7D110335-2-SAMP 04/11/2007 10:00		142.70g,in AmtRec: 20ML,LP	#Containers: 2		39.6		10d Scr:	Alpha: 2.69E-05 uCi/Sa	Beta: 1.67E-04 uCi/Sa	
5 JTQDK-1-AA J7D110335-3-SAMP 04/11/2007 10:00		133.30g,in AmtRec: 20ML,LP	#Containers: 2		34.0		10F Scr:	Alpha: -7.17E-05 uCi/Sa	Beta: 1.75E-04 uCi/Sa	
6 JTTH5-1-AA-B J7D120000-370-BLK 04/11/2007 10:00		200.30g,in AmtRec:	#Containers: 1		0.3		10A Scr:	1538 Alpha:	5/25/07 R Beta:	
7 JTTH5-1-AC-C J7D120000-370-LCS 04/11/2007 10:00		198.90g,in AmtRec:	ASD4176 03/23/07,pd 06/01/01,r #Containers: 1		0.6		10B Scr:	Alpha:	Beta:	

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.26

98

STL RICHLAND

5/11/2007 9:50:11 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7102370 pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

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: Aliquots reduced due to weight screen activity. pH < 2.0 JB 5-11-07

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

JTDPC1AC-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JTTH51AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JTTH51AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JTDPC1AC-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JTTH51AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JTTH51AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By ____ _____ Date: _____

5/29/2007 10:31:59 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/29/2006, 6/3/2007, Batch: '7102370', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7102370						
AC		CalcC	**BockJ**	5/11/2007 9:45:41		
SC			wagarr	IsBatched	4/12/2007 2:05:19 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	5/11/2007 9:45:41 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C	5/11/2007 9:50:07 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	InPrep2	5/22/2007 8:37:26 AM	RICH-RC-5014 REVISION 6
SC			AshworthA	Prep2C	5/24/2007 4:01:03 PM	RICH-RC-5014 REVISION 6
SC			StringerR	InCnt1	5/24/2007 4:12:49 PM	RICH-RD-0003 REVISION 4
SC			DAWKINSO	CalcC	5/25/2007 9:30:10 PM	RICH-RD-0003 REVISION 4
AC			**BockJ**	5/11/2007 9:50:07		
AC			**AshworthA**	5/22/2007 8:37:26		
AC			**AshworthA**	5/24/2007 4:01:03 PM		
AC			**StringerR**	5/24/2007 4:12:49 PM		
AC			**StringerR**	5/24/2007 4:13:53 PM		
AC			**DAWKINSO**	5/25/2007 9:30:10 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.26

STL RICHLAND

5/11/2007 9:45:00 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: 235

AnalyDueDate: 05/28/2007 WD5151

Sep1 DT/Tm Tech:

Batch: 7102371 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ManisD,BockJ /APA

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 JTDPC-1-AD J7D050109-2-SAMP 04/04/2007 13:01		175.40g,in AmtRec: 20ML,2X500ML,9XLP	#Containers: 12		1.5 90.0	~~100~~ 100 BS-11-07	28C	17/9	5/23/07 DD	Scr: Alpha: -7.35E-04 uCi/Sa Beta: 1.07E-03 uCi/Sa
2 JTQC6-1-AC J7D110335-1-SAMP 04/11/2007 10:00		173.70g,in AmtRec: 20ML,LP	#Containers: 2		81.5		32A			Scr: Alpha: 2.11E-04 uCi/Sa Beta: -2.64E-05 uCi/Sa
3 JTQDJ-1-AC J7D110335-2-SAMP 04/11/2007 10:00		181.50g,in AmtRec: 20ML,LP	#Containers: 2		97.6		32B			Scr: Alpha: 2.69E-05 uCi/Sa Beta: 1.87E-04 uCi/Sa
4 JTQDJ-1-AD-X J7D110335-2-DUP 04/11/2007 10:00		182.30g,in AmtRec: 20ML,LP	#Containers: 2		94.8		32C			Scr: Alpha: 2.69E-05 uCi/Sa Beta: 1.87E-04 uCi/Sa
5 JTQDK-1-AC J7D110335-3-SAMP 04/11/2007 10:00		174.10g,in AmtRec: 20ML,LP	#Containers: 2		91.8		32D			Scr: Alpha: -7.17E-05 uCi/Sa Beta: 1.75E-04 uCi/Sa
6 JTTH7-1-AA-B J7D120000-371-BLK 04/11/2007 10:00		200.60g,in AmtRec:	#Containers: 1		0.3		26B	1404		Scr: Alpha: Beta:
7 JTTH7-1-AC-C J7D120000-371-LCS 04/11/2007 10:00		201.90g,in AmtRec:	BESB3055 03/23/07,pd 08/08/06,r #Containers: 1		0.5		26C			Scr: Alpha: Beta:

STL RICHLAND

5/11/2007 9:45:05 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7102371 pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

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: Aliquots reduced due to weight screen activity - JB 5-11-07
pH < 2.0 JB 5-11-07

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

JTDPC1AD-SAMP Constituent List:
BETA RDL:4 pCi/L LCL: UCL: RPD:
JTTH71AA-BLK:
BETA RDL:4 pCi/L LCL: UCL: RPD:
JTTH71AC-LCS:
Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20

JTDPC1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTH71AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTH71AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

102

5/24/2007 1:31:54 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/24/2006, 5/29/2007, Batch: '7102371', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7102371							
AC			CalcC	BockJ	5/11/2007 9:40:29		
SC				wagarr	IsBatched	4/12/2007 2:05:19 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep	5/11/2007 9:40:29 AM	RICH-RC-5014 Revision 6
SC				BockJ	Prep1C	5/11/2007 9:45:06 AM	RICH-RC-5014 REVISION 6
SC				AshworthA	InPrep2	5/22/2007 2:24:16 PM	RICH-RC-5014 REVISION 6
SC				AshworthA	Prep2C	5/23/2007 3:11:38 PM	RICH-RC-5014 REVISION 6
SC				DAWKINSO	InCnt1	5/23/2007 3:38:48 PM	RICH-RD-0003 REVISION 4
SC				DAWKINSO	CalcC	5/23/2007 9:28:58 PM	RICH-RD-0003 REVISION 4
AC				BockJ	5/11/2007 9:45:06		
AC				AshworthA	5/22/2007 2:24:16 PM		
AC				AshworthA	5/23/2007 3:11:38 PM		
AC				DAWKINSO	5/23/2007 3:38:48 PM		
AC				DAWKINSO	5/23/2007 9:28:58 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.26

STL RICHLAND

5/6/2007 11:26:34 AM

Sample Preparation/Analysis

Balance Id:1120482733,1120373922,na,E3

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 #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech: 04/28/2007 14:56,ManisD

Batch: 7102374 WATER pCi/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech: 05/06/2007 08:19,ManisD

SEQ Batch, Test: None All Tests: 7095161 88EA, 7102366 6DSO, 7102367 DHSS, 7102368 FPS5, 7102370 AZS7, 7102371 BCS8, 7102374 CLTL, 7102382 ARS6, 7102386 ASU3, 7120579 6DSO,

Prep Tech: ManisD

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 JTDPC-1-AF J7D050109-2-SAMP		1004.40g,in	SRTB14706 04/19/07,pd 09/11/06,r	0.7305	1.0	25.3	100	2A 2A	0653 0739	5/7 [illegible] 5/8 [illegible]	
						~~04/28/2007 14:56,s1, 05/06/2007~~					
04/04/2007 13:01		AmtRec: 20ML,2X500ML,9XLP	#Containers: 12					Scr:	Alpha: -7.35E-04 uCi/Sa		Beta: 1.07E-03 uCi/Sa
2 JTQDM-1-AA J7D110335-4-SAMP		1005.80g,in	SRTB14707 04/19/07,pd 09/11/06,r	0.8476	1.0	24.1	100	2B 2B	0653 0739	5/7 [illegible] 5/8 [illegible]	
						~~04/28/2007 14:56,s1, 05/06/2007~~					
04/11/2007 10:00		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: 2.69E-04 uCi/Sa		Beta: -2.21E-04 uCi/Sa
3 JTQDM-1-AC-X J7D110335-4-DUP		995.10g,in	SRTB14708 04/19/07,pd 09/11/06,r	0.7787	1.0	24.7	100	2C 2C	0653 0739	5/7 [illegible] 5/8 [illegible]	
						~~04/28/2007 14:56,s1, 05/06/2007~~					
04/11/2007 10:00		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: 2.69E-04 uCi/Sa		Beta: -2.21E-04 uCi/Sa
4 JTQDP-1-AA J7D110335-5-SAMP		983.30g,in	SRTB14709 04/25/07,pd 09/11/06,r	0.8562	1.0	25.2	100	2D 2D	0653 0731	5/7 [illegible] 5/8 [illegible]	
						~~04/28/2007 14:56,s1, 05/06/2007~~					
04/11/2007 10:00		AmtRec: 20ML,3XLP	#Containers: 4					Scr:	Alpha: -5.16E-05 uCi/Sa		Beta: 2.40E-04 uCi/Sa

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: 4

Prep_SamplePrep v4.8.26

104

STL RICHLAND

5/6/2007 11:26:37 AM

Sample Preparation/Analysis

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

Balance Id:1120482733,1120482733,1120

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech: 04/28/2007 14:56,ManisD

Batch: 7102374 pCi/L

Sep2 DT/Tm Tech: 05/06/2007 08:19,ManisD

SEQ Batch, Test: None

Prep Tech: ManisD

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 JTTJD-1-AA-B J7D120000-374-BLK		997.10g,in	SRTB14710 04/25/07,pd 09/11/06,r	0.8062	1.0	25.7	100	3A 3A	0663 0739	5/7/03 5/8/03	
						~~04/28/2007 14:56;s1, 05/06/2007~~					
04/11/2007 10:00		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:
6 JTTJD-1-AC-C J7D120000-374-LCS		1000.30g,in	SRSG1341 04/19/07,pd 09/11/06,r	0.9035	1.0	25	100	3B 3B	0663 0739	5/7/03 5/8/03	
						~~04/28/2007 14:56;s1, 05/06/2007~~					
04/11/2007 10:00		AmtRec:	#Containers: 1					Scr:	Alpha:		Beta:

Comments:

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

JTDPC1AF-SAMP Constituent List:

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

JTTJD1AA-BLK:

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

JTTJD1AC-LCS:

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

JTDPC1AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTJD1AA-BLK:

5/6/2007 11:26:40 AM

Sample Preparation/Analysis

Balance Id:1120482733,1120482733,1120

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

Pipet #: _____ _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech: 04/28/2007 14:56,ManisD

Batch: 7102374 pCi/L

Sep2 DT/Tm Tech: 05/06/2007 08:19,ManisD

SEQ Batch, Test: None

Prep Tech: ManisD

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:

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

JTTJD1AC-LCS:

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

Approved By _____ Date: _____

5/16/2007 11:51:28 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/16/2006, 5/21/2007, Batch: '7102374', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7102374						
AC		CalcC	BockJ	4/26/2007 12:30:28		
SC			wagarr	IsBatched	4/12/2007 2:05:19 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/26/2007 12:30:28 PM	RICH-RC-5017 Revision 5
SC			ManisD	InSep1	4/26/2007 3:14:29 PM	RICH-RC-5006 REVISION 6
SC			ManisD	Sep1C	4/28/2007 3:14:08 PM	RICH-RC-5006 REVISION 6
SC			StringerR	InCnt1	4/28/2007 3:17:08 PM	RICH-RD-0007 REVISION 5
SC			StringerR	Cnt1C	4/29/2007 9:26:05 AM	RICH-RD-0007 REVISION 5
SC			ManisD	InSep2	5/6/2007 7:34:57 AM	RICH-RC-5071 REVISION 4
SC			ManisD	Sep2C	5/6/2007 11:30:53 AM	RICH-RC-5071 REVISION 4
SC			StringerR	InCnt1	5/6/2007 11:40:33 AM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	5/8/2007 8:08:14 AM	RICH-RD-0003 REVISION 4
AC			**ManisD**	4/26/2007 3:14:29 PM		
AC			**ManisD**	4/28/2007 3:14:08 PM		
AC			**StringerR**	4/28/2007 3:17:08 PM		
AC			**StringerR**	4/29/2007 9:26:05		
AC			**ManisD**	5/6/2007 7:34:57 AM		
AC			**ManisD**	5/6/2007 11:30:53		
AC			**StringerR**	5/6/2007 11:40:33		
AC			**BlackCL**	5/8/2007 8:08:14 AM		

AC: Accepting Entry; SC: Status Change

STL RICHLAND

4/18/2007 11:08:00 AM

Sample Preparation/Analysis

Balance Id:112048273314 A

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 05/28/2007 WO5151

Sep1 DT/Tm Tech:

Batch: 7102368 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JTDPC-1-AG J7D050109-2-SAMP 04/04/2007 13:01			127.30g,in	127.30g		60				
		AmtRec: 20ML,2X500ML,9XLP		#Containers: 12				Scr:	Alpha: -7.35E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa
2 JTDPC-1-AN-X J7D050109-2-DUP 04/04/2007 13:01			126.10g,in	126.10g						
		AmtRec: 20ML,2X500ML,9XLP		#Containers: 12				Scr:	Alpha: -7.35E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa
3 JTQDQ-1-AA J7D110335-6-SAMP 04/11/2007 10:00			126.70g,in	126.70g						
		AmtRec: 20ML,500MLP		#Containers: 2				Scr:	Alpha: -8.68E-05 uCi/Sa	Beta: 7.55E-05 uCi/Sa
4 JTQDT-1-AA J7D110335-7-SAMP 04/11/2007 10:00			128.80g,in	128.80g						
		AmtRec: 20ML,500MLP		#Containers: 2				Scr:	Alpha: 3.31E-05 uCi/Sa	Beta: 4.03E-05 uCi/Sa
5 JTQDT-1-AC-S J7D110335-7-MS 04/11/2007 10:00			125.10g,in	125.10g	TCSG1793 02/28/07,pd 01/10/06,r					
		AmtRec: 20ML,500MLP		#Containers: 2				Scr:	Alpha: 3.31E-05 uCi/Sa	Beta: 4.03E-05 uCi/Sa
6 JTQD0-1-AA J7D110335-8-SAMP 04/11/2007 10:00			126.50g,in	126.50g						
		AmtRec: 20ML,500MLP		#Containers: 2				Scr:	Alpha: -4.50E-05 uCi/Sa	Beta: 5.81E-05 uCi/Sa
7 JTTH3-1-AA-B J7D120000-368-BLK 04/04/2007 13:01			125.60g,in	125.60g						
		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:

STL RICHLAND

4/18/2007 11:08:05 AM

Sample Preparation/Analysis

Balance Id:112048273314 A

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

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7102368 pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JTTH3-1-AC-C J7D120000-368-LCS 04/04/2007 13:01			126.60g,in	126.60g	TCSE2101 04/05/07,pd 01/10/06,r	60				
		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:
9 JTTH3-1-AD-BN J7D120000-368-IBLK 04/04/2007 13:01										
		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:

Comments: PH < 2.0 JB 4-18-07

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

JTDPC1AG-SAMP Constituent List:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JTQDT1AC-MS:

JTTH31AA-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JTTH31AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JTTH31AD-IBLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JTDPC1AG-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTQDT1AC-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTH31AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTH31AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTH31AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

109

STL RICHLAND

4/18/2007 11:08:08 AM

Sample Preparation/Analysis

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

Balance Id:

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 05/28/2007

Batch: 7102368 pCi/L

SEQ Batch, Test: None

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

Approved By _____ Date: _____

5/3/2007 7:11:33 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/3/2006, 5/8/2007, Batch: '7102368', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7102368						
AC		CalcC	BockJ	4/18/2007 11:01:55		
SC			wagarr	IsBatched	4/12/2007 2:05:19 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/18/2007 11:01:55 AM	RICH-RC-5015 Revision 4
SC			FABREM	Sep1C	4/18/2007 6:39:31 PM	RICH-RC-5086 REVISION 2
SC			BlackCL	InCnt1	4/18/2007 6:40:29 PM	RICH-RD-0001 REVISION 3
SC			StringerR	CalcC	4/19/2007 2:42:34 PM	RICH-RD-0001 REVISION 3
AC			FABREM	4/18/2007 6:39:31 PM		
AC			BlackCL	4/18/2007 6:40:29 PM		
AC			StringerR	4/19/2007 2:42:34 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.26

STL RICHLAND

4/12/2007 2:04:10 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

AnalyDueDate: 05/28/2007 W05151

Batch: 7102382 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 5-8-07 tm
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 JTDPC-1-AA J7D050109-2-SAMP 04/04/2007 13:01		AmtRec: 20ML,2X500ML,9XLP	#Containers: 12			Scr:	Alpha: -7.35E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa
2 JTQD1-1-AA J7D110335-9-SAMP 04/11/2007 10:00		AmtRec: 20ML,MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 JTQD1-1-AC-X J7D110335-9-DUP 04/11/2007 10:00		AmtRec: 20ML,MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 JTQD3-1-AA J7D110335-10-SAMP 04/11/2007 10:00		AmtRec: 20ML,MLP	#Containers: 2			Scr:	Alpha:	Beta:
5 JTQD9-1-AA J7D110335-11-SAMP 04/11/2007 10:00		AmtRec: 20ML,MLP	#Containers: 2			Scr:	Alpha:	Beta:
6 JTTKL-1-AA-B J7D120000-382-BLK 04/11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 JTTKL-1-AC-C J7D120000-382-LCS 04/11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

4/12/2007 2:04:14 PM

Sample Preparation/Analysis

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

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 5-8-07 [illegible]
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/28/2007

Batch: 7102382 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:
8 JTTKL-1-AD-BX J7D120000-382-MBLK 04/11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
9 JTTKL-1-AE-CM J7D120000-382-MLCS 04/11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 JTTKL-1-AF-BN J7D120000-382-IBLK 04/11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
11 JTTKL-1-AG-BN J7D120000-382-IBLK 04/11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

JTDPC1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20

JTTKL1AA-BLK:

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

JTTKL1AC-LCS:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20

JTTKL1AD-MBLK:

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

4/12/2007 2:04:20 PM

Sample Preparation/Analysis

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

AnalyDueDate: 05/28/2007

Batch: 7102382 pCi/L
SEQ Batch, Test: None

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
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:

```
JTTKL1AE-MLCS:
  H-3        RDL:400        pCi/L    LCL:70     UCL:130    RPD:20
JTTKL1AF-IBLK:
  H-3        RDL:400        pCi/L    LCL:       UCL:       RPD:
JTTKL1AG-IBLK:
  H-3        RDL:400        pCi/L    LCL:       UCL:       RPD:
JTDPC1AA-SAMP Calc Info:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JTTKL1AA-BLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JTTKL1AC-LCS:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JTTKL1AD-MBLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JTTKL1AE-MLCS:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JTTKL1AF-IBLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JTTKL1AG-IBLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

5/11/2007 4:57:45 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/11/2006, 5/16/2007, Batch: '7102382', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7102382						
AC		CalcC	McDowellD	5/8/2007 8:25:33 AM		
SC			wagarr	IsBatched	4/12/2007 2:05:19 PM	ICOC_RADCALC v4.8.26
SC			McDowellD	InSep1	5/8/2007 8:25:33 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	5/8/2007 2:30:09 PM	RICH-RC-5007 REVISION 6
SC			BlackCL	InCnt1	5/8/2007 2:33:55 PM	RICH-RD-0003 REVISION 4
SC			BlackCL	CalcC	5/10/2007 6:42:11 AM	RICH-RD-0001 REVISION 3
AC			McDowellD	5/8/2007 2:30:09 PM		
AC			BlackCL	5/8/2007 2:33:55 PM		
AC			BlackCL	5/10/2007 6:42:11		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.26

STL RICHLAND

STL RICHLAND

4/12/2007 2:04:20 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AS H-3 Prp/SepRC5024
U3 Enriched Tritium by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 05/28/2007 W05151

Batch: 7102386 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

Balance Id: 12424
Pipet #:
Sep1 DT/Tm Tech: 4-19-07 Tom
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 JTDPC-1-AH J7D050109-2-SAMP 04/04/2007 13:01		AmtRec: 20ML,2X500ML,9XLP	#Containers: 12			Scr:	Alpha: -7.35E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa
2 JTQEF-1-AA J7D110335-12-SAMP 04/11/2007 10:00		AmtRec: 20ML,3XLP	#Containers: 4			Scr:	Alpha:	Beta:
3 JTQEF-1-AC-X J7D110335-12-DUP 04/11/2007 10:00		AmtRec: 20ML,3XLP	#Containers: 4			Scr:	Alpha:	Beta:
4 JTQEH-1-AA J7D110335-13-SAMP 04/11/2007 10:00		AmtRec: 20ML,3XLP	#Containers: 4			Scr:	Alpha:	Beta:
5 JTQEK-1-AA J7D110335-14-SAMP 04/11/2007 10:00		AmtRec: 20ML,3XLP	#Containers: 4			Scr:	Alpha:	Beta:
6 JTTKT-1-AA-B J7D120000-386-BLK 04/11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 JTTKT-1-AC-C J7D120000-386-LCS 04/11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added ICOC v4.8.26

STL RICHLAND

4/12/2007 2:04:24 PM

Sample Preparation/Analysis

AS H-3 Prp/SepRC5024
U3 Enriched Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12424
Pipet #:
Sep1 DT/Tm Tech: 4-19-07
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/28/2007

Batch: 7102386 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:
8 JTTKT-1-AD-BN J7D120000-386-IBLK 04/11/2007 10:00	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

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

JTDPC1AH-SAMP Constituent List:
  H-3          RDL:1.00E+01    pCi/L    LCL:70      UCL:130     RPD:20
JTTKT1AA-BLK:
  H-3          RDL:1.00E+01    pCi/L    LCL:        UCL:        RPD:
JTTKT1AC-LCS:
  H-3          RDL:10          pCi/L    LCL:70      UCL:130     RPD:20
JTTKT1AD-IBLK:
  H-3          RDL:1.00E+01    pCi/L    LCL:        UCL:        RPD:

JTDPC1AH-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JTTKT1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JTTKT1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
JTTKT1AD-IBLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

Approved By _____ Date: _____

117

5/1/2007 4:28:04 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/1/2006, 5/6/2007, Batch: '7102386', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7102386							
AC			CalcC	McDowellD	4/18/2007 2:39:25 PM		
SC				wagarr	IsBatched	4/12/2007 2:05:19 PM	ICOC_RADCALC v4.8.26
SC				McDowellD	InPrep	4/18/2007 2:39:25 PM	RICH-RC-5024 REVISION 2
SC				McDowellD	InSep1	4/19/2007 2:04:39 PM	RICH-RC-5024 REVISION 2
SC				McDowellD	Sep1C	4/30/2007 1:07:22 PM	RICH-RC-5024 REVISION 2
SC				BlackCL	InCnt1	4/30/2007 1:19:19 PM	RICH-RD-0001 REVISION 3
SC				BlackCL	CalcC	5/1/2007 8:14:27 AM	RICH-RD-0001 REVISION 3
AC				McDowellD	4/19/2007 2:04:39 PM		
AC				McDowellD	4/30/2007 1:07:22 PM		
AC				BlackCL	4/30/2007 1:19:19 PM		
AC				BlackCL	5/1/2007 8:14:27 AM		

AC: Accepting Entry; SC: Status Change

STL RICHLAND

4/18/2007 11:54:42 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

Pipet #: _____

AnalyDueDate: 05/28/2007 WO5151

Sep1 DT/Tm Tech:

Batch: 7102367 WATER ug/L PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: Nonc All Tests: 7095161 88EA, 7102366 6DSO, 7102367 DHSS, 7102368 FPS5, 7102370 AZS7, 7102371 BCS8, 7102374 CLTL, 7102382 ARS6, 7102386 ASU3,

Prep Tech: ,BockJ

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 JTDPC-1-AJ J7D050109-2-SAMP 04/04/2007 13:01		25.40g,in AmtRec: 20ML,2X500ML,9XLP	#Containers: 12			Scr:	Alpha: -7.35E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa
2 JTDPC-1-AL-S J7D050109-2-MS 04/04/2007 13:01		25.10g,in AmtRec: 20ML,2X500ML,9XLP	UNSF3682 04/18/07,pd 03/22/05,r #Containers: 12			Scr:	Alpha: -7.35E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa
3 JTDPC-1-AM-X J7D050109-2-DUP 04/04/2007 13:01		25.60g,in AmtRec: 20ML,2X500ML,9XLP	#Containers: 12			Scr:	Alpha: -7.35E-04 uCi/Sa	Beta: 1.07E-03 uCi/Sa
4 JTQEV-1-AA J7D110335-15-SAMP 04/11/2007 10:00		25.40g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -3.78E-05 uCi/Sa	Beta: -3.70E-05 uCi/Sa
5 JTQEW-1-AA J7D110335-16-SAMP 04/11/2007 10:00		26.20g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -1.27E-04 uCi/Sa	Beta: 1.17E-04 uCi/Sa
6 JTQE0-1-AA J7D110335-17-SAMP 04/11/2007 10:00		26.70g,in AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: 1.49E-05 uCi/Sa	Beta: -1.92E-05 uCi/Sa
7 JTTH2-1-AA-B J7D120000-367-BLK 04/04/2007 13:01		25.30g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

4/18/2007 11:54:47 AM

Sample Preparation/Analysis

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

Balance Id:1120482733

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

AnalyDueDate: 05/28/2007

Batch: 7102367 ug/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:
8 JTTH2-1-AC-C J7D120000-367-LCS 04/04/2007 13:01		25.40g,in AmtRec:	UNSF3683 04/18/07,pd 03/22/05,r #Containers: 1			Scr:	Alpha:	Beta:
9 JTTH2-1-AD-C J7D120000-367-LCS 04/04/2007 13:01		25.60g,in AmtRec:	UNSC1630 04/05/07,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

Comments: PH<2.0 JB 4-18-07

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

JTDPC1AJ-SAMP Constituent List:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JTDPC1AL-MS Constituent List:

JTTH21AA-BLK:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JTTH21AC-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20
JTTH21AD-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

JTDPC1AJ-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTDPC1AL-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTH21AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTH21AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTH21AD-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

STL RICHLAND

4/18/2007 11:54:50 AM

Sample Preparation/Analysis

Balance Id:1120482733

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

Pipet #: _____

AnalyDueDate: 05/28/2007

Sep1 DT/Tm Tech:

Batch: 7102367 ug/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

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:

Approved By _____ Date: _____

121

5/25/2007 10:00:33 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/25/2006, 5/30/2007, Batch: '7102367', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7102367						
AC		Cnt1C	BockJ	4/18/2007 11:20:57		
SC			wagarr	IsBatched	4/12/2007 2:05:19 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	4/18/2007 11:20:57 AM	RICH-RC-5015 Revision 4
SC			BockJ	Prep1C	4/18/2007 11:54:47 AM	RICH-RC-5015 REVISION 4
SC			AshworthA	InPrep2	5/23/2007 2:03:45 PM	RICH-RC-5015 REVISION 4
SC			AshworthA	Prep2C	5/24/2007 12:56:36 PM	RICH-RC-5015 REVISION 4
SC			NelsonT	Cnt1C	5/24/2007 2:42:03 PM	RICH-RC-5058 REV 7
AC			BockJ	4/18/2007 11:54:47		
AC			AshworthA	5/23/2007 2:03:45 PM		
AC			AshworthA	5/24/2007 12:56:36		
AC			NelsonT	5/24/2007 2:42:03 PM		

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.26

4/5/2007 11:01:20 AM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 05/18/2007

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Batch: 7095161 **WATER** **mg/L**
SEQ Batch, Test: None All Tests: 7095161 88EA.

PM, Quote: SA , 57671

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
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 JTDPA-1-AA J7D050109-1-SAMP 04/04/2007 10:42		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
2 JTDPA-1-AC-S J7D050109-1-MS 04/04/2007 10:42		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
3 JTDPA-1-AD-D J7D050109-1-MSD 04/04/2007 10:42		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
4 JTDPA-1-AE-X J7D050109-1-DUP 04/04/2007 10:42		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
5 JTDX0-1-AA-B J7D050000-161-BLK 04/04/2007 10:42		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 JTDX0-1-AC-C J7D050000-161-LCS 04/04/2007 10:42		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

EXHIBIT 123

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/18/2007

Batch: 7095161 mg/L
SEQ Batch, Test: None

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

Comments:

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

JTDPA1AA-SAMP Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JTDPA1AC-MS Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JTDPA1AD-MSD:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JTDX01AA-BLK:
HEXCHROME RDL:0.002 mg/L LCL: UCL: RPD:
JTDX01AC-LCS:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20

JTDPA1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTDPA1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTDPA1AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTDX01AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTDX01AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

STL RICHLAND

STL RICHLAND

4/12/2007 2:52:34 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

AnalyDueDate: 05/28/2007

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Batch: 7102439 WATER mg/L PM, Quote: SA , 57671

SEQ Batch, Test: None All Tests: 88EA, ARS6, ASU3, AZS7, BCS8, CLTL, DHSS, FPS5, 7102367 DHSS, 7102368 FPS5, 7102370 AZS7, 7102371 BCS8, 7102374 CLTL, 7102382 ARS6, 7102386 ASU3, 7102439 88EA

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 JTQE2-1-AA J7D110335-18-SAMP 04/11/2007 10:00		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 JTQE2-1-AC-S J7D110335-18-MS 04/11/2007 10:00		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 JTQE2-1-AD-D J7D110335-18-MSD 04/11/2007 10:00		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 JTQE2-1-AE-X J7D110335-18-DUP 04/11/2007 10:00		AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha:	Beta:
5 JTQE4-1-AA J7D110335-19-SAMP 04/11/2007 10:00		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
6 JTQFA-1-AA J7D110335-20-SAMP 04/11/2007 10:00		AmtRec: 20ML,500G	#Containers: 2			Scr:	Alpha:	Beta:
7 JTTTR-1-AA-B J7D120000-439-BLK 04/11/2007 10:00		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

STL RICHLAND

4/12/2007 2:52:39 PM

Sample Preparation/Analysis

88 NO SAMPLE PREPARATION PERFORMED / DIRECT INJECTION
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 05/28/2007

Batch: 7102439 mg/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:
8 JTTTR-1-AC-C J7D120000-439-LCS 04/11/2007 10:00	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

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

JTQE21AA-SAMP Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JTQE21AC-MS Constituent List:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JTQE21AD-MSD:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20
JTTTR1AA-BLK:
HEXCHROME RDL:0.002 mg/L LCL: UCL: RPD:
JTTTR1AC-LCS:
HEXCHROME RDL:0.002 mg/L LCL:85 UCL:115 RPD:20

JTQE21AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTQE21AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTQE21AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTTR1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JTTTR1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

Seger, Sandra

From: Seger, Sandra
Sent: Tuesday, May 29, 2007 11:16 AM
To: Trent, Stephen J; Stewart, Dorothy L
Cc: (Heidi_Hampt@rl.gov); 'Felmy, Diana'; 'Thompson, Christopher J'
Subject: W05151 Report and EDD

Attachments: W05151.Edd; W05151.txt; W05151.pdf

W05151.Edd (30 KB) W05151.txt (9 KB) W05151.pdf (4 MB)