Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

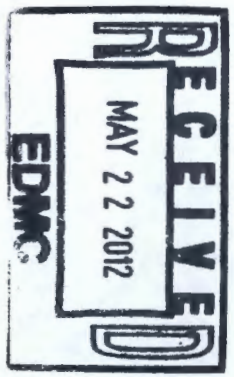
STL Richland STLRL

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

Data Package Contains _____ Pages

Report Nbr: 32419

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W04938	S06-006	B1J9C7	J6F050199-1	H6QFG1AA	9H6QFG10	6157161



1214104

Comments:

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

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

Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

June 20, 2006

Attention: Dot Stewart

SAF Number	:	S06-006
Date SDG Closed	:	June 5, 2006
Number of Samples	:	One (1)
Sample Type	:	Water
SDG Number	:	W04938
Data Deliverable	:	15-Day / Summary

CASE NARRATIVE

I. Introduction

On June 5, 2006, one water sample was received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the sample was assigned the following laboratory ID number to correspond with the Pacific Northwest National Laboratories (PGW) specific ID:

PGW ID#	STLR ID#	MATRIX	DATE OF RECEIPT
B1J9C7	H6QFG	WATER	6/5/06

II. Sample Receipt

The sample was 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:

Liquid Scintillation Counting
Tritium by method RICH-RC-5007

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Liquid Scintillation Counting
Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1J9C7) results are within contractual requirements.

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

Reviewed and approved:

Sandra Segura

Sherryl A. Adam
for Project Manager

Drinking Water Method Cross References

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

Uncertainty Estimation

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

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

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

Report Definitions

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

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 32419 File Name: h:\Reportdb\edd\FeadIV\Rad\W04938.Edd, h:\Reportdb\edd\FeadIV\Rad\32419.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:
9H6QFG10	B1J9C7		MW6-SBB-A1	S06-006	W04938					06/05/2006 10:18

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
6157161	H-3	10028-17-8	1.19E+04	pCi/L	3.6E+02	6.3E+02		2.92E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/16/200 21:01	I

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04938.Edd, h:\Reportdb\edd\FeadIV\Rad\32419.Edd

Lab Sample Id:	H6Q0J1AB	**Sdg/Rept Nbr:**	W04938	32419	**Collection Date:** 06/05/2006 10:18
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 06/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AB	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
6157161	H-3	4.19E+01	pCi/L	1.4E+02	U	2.91E+02	100.0		906.0_H3_LSC	5.00E-03	06/16/2006				D
BLK	10028-17-8			1.2E+02						L	15:33				

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

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04938.Edd, h:\Reportdb\edd\FeadIV\Rad\32419.Edd

Lab Sample Id:	H6Q0J1DX	**Sdg/Rept Nbr:**	W04938	32419	**Collection Date:** 06/05/2006 10:18
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 06/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AD	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
6157161	H-3	7.97E+01	pCi/L	1.4E+02	U	2.93E+02	100.0		906.0_H3_LSC	5.00E-03	06/16/2006				D
BLK	10028-17-8			1.2E+02						L	18:17				

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04938.Edd, h:\Reportdb\edd\FeadIV\Rad\32419.Edd

Lab Sample Id:	H6Q0J1CS	**Sdg/Rept Nbr:**	W04938	32419	**Collection Date:** 06/05/2006 10:18
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BS**		**Received Date:** 06/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AC	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
6157161	H-3	2.53E+03	pCi/L	2.4E+02		2.91E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	06/16/2006			75	D
BS	10028-17-8			2.0E+02				93.0		L	16:55			125	

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

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIV\Rad\W04938.Edd, h:\Reportdb\edd\FeadIV\Rad\32419.Edd

Lab Sample Id:	H6Q0J1EM	**Sdg/Rept Nbr:**	W04938	32419	**Collection Date:** 06/05/2006 10:18
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 06/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								AE	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
6157161	H-3	2.53E+03	pCi/L	2.4E+02		2.89E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	06/16/2006			75	D
BS	10028-17-8			2.0E+02				93.3		L	19:39			125	

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

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W04938.Edd, h:\Reportdb\edd\FeadIV\Rad\32419.Edd

Lab Sample Id:	H6QFG1CR	**Sdg/Rept Nbr:**	W04938	32419	**Collection Date:** 06/05/2006 10:18
Client Id:	B1J9C7	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 06/05/2006

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S06-006	MW6-SBB-A19981								AF	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
6157161	H-3	1.16E+04	pCi/L	6.2E+02		2.92E+02	100.0		906.0_H3_LSC	5.00E-03	06/16/2006	2.9	0.8		D
DUP	10028-17-8	1.19E+04		3.6E+02						L	22:22	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.

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/19/2006 10:56:30 AM

Lot No., Due Date: J6F050199; 06/20/2006

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 6157161; RTRITIUM H-3 by LSC

SDG, Matrix: W04938; 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 Steven E. Richland **Date** 6/19/06

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 6157161

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: 6-20-06

PNNL J6F050159
W04938
due 6-20-06

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S06-006-402

Page 1 of 1

Collector DURATEK F.M.HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S06-006	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, JUNE 2006	DTS-SAWS-H106	**Ice Chest No.** SAWS-119 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 15 Days **PRIORITY**	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** **

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

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1J9C7		W	6-5-06	1018	1x1000-mL P	906.0_H3_LSC: Tritium (1) H6QFG	None
B1J9C7		W	"	"	1x20-mL P	Activity Scan	None

Relinquished By DURATEK F.M.HALL Print Sign	Date/Time JUN 05 2006 1302	Received By S. Welch Print S. Welch Sign	Date/Time JUN 05 2006 1302
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

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

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

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 6.5.06 15:02

Client: P.GW SDG #: W04938 NA [ ] SAF #: 506-006 NA [ ]

Work Order Number: JGF050199 Chain of Custody # 506-006-402

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

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

   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [ ] adjusted pH [ ]
11. Sample Location, Sample Collector Listed? * Yes [ ] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [ ]
13. Description of anomalies (include sample numbers): N/A

Sample Custodian: S. Welch Date: 6.5.06 15:02

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

6/6/2006 8:05:51 AM

Sample Preparation/Analysis

Balance Id: 12445

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

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

PRIORITY

Pipet #:

AnalyDueDate: 06/20/2006 W04938

Sep1 DT/Tm Tech: 6-15-06 am

Batch: 6157161 **WATER** **pCi/L** **PM, Quote: HC , 57671**

SEQ Batch, Test: None

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 H6QFG-1-AA J6F050199-1-SAMP 06/05/2006 10:18		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:
2 H6QFG-1-AC-X J6F050199-1-DUP 06/05/2006 10:18		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:
3 H6Q0J-1-AA-B J6F060000-161-BLK 06/05/2006 10:18		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
4 H6Q0J-1-AC-C J6F060000-161-LCS 06/05/2006 10:18		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 H6Q0J-1-AD-BX J6F060000-161-MBLK 06/05/2006 10:18		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
6 H6Q0J-1-AE-CM J6F060000-161-MLCS 06/05/2006 10:18		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 H6Q0J-1-AF-BN J6F060000-161-IBLK 06/05/2006 10:18		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

6/6/2006 8:05:53 AM

Sample Preparation/Analysis

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

PRIORITY

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 6-15 06 am
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/20/2006

Batch: 6157161 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 H6Q0J-1-AG-BN								
J6F060000-161-IBLK								
06/05/2006 10:18	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

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

H6QFG1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
H6Q0J1AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
H6Q0J1AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
H6Q0J1AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
H6Q0J1AE-MLCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
H6Q0J1AF-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
H6Q0J1AG-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

H6QFG1AA-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
H6Q0J1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
H6Q0J1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
H6Q0J1AD-MBLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
H6Q0J1AE-MLCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
H6Q0J1AF-IBLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Sample Preparation/Analysis

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

PRIORITY

Balance Id: 13445
Pipet #:
Sep1 DT/Tm Tech: 6/5-0600
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/20/2006

Batch: 6157161 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:

H6Q0J1AG-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/19/2006 10:55:44 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/19/2005, 6/24/2006, Batch: '6157161', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
6157161						
AC		CalcC	McDowellD	6/15/2006 9:07:10		
SC			wagarr	IsBatched	6/6/2006 8:06:27 AM	ICOC_RADCALC v4.8.24
SC			McDowellD	InSep1	6/15/2006 9:07:10 AM	RICH-RC-5007 REVISION 6
SC			McDowellD	Sep1C	6/15/2006 3:12:04 PM	RICH-RC-5007 REVISION 6
SC			DAWKINSO	InCnt1	6/15/2006 4:14:36 PM	RICH-RD-0001 REVISION 3
SC			BlackCL	CalcC	6/18/2006 7:34:00 AM	RICH-RD-0091 REVISION 3
AC			McDowellD	6/15/2006 3:12:04 PM		
AC			DAWKINSO	6/15/2006 4:14:36 PM		
AC			BlackCL	6/18/2006 7:34:00		

AC: Accepting Entry; SC: Status Change

Seger, Sandra

From: Seger, Sandra
Sent: Tuesday, June 20, 2006 1:08 PM
To: Stewart, Dorothy L
Cc: 'Felmy, Diana'; 'Hampt, Heidi'
Subject: W04938 Priority Report and EDD

Attachments: W04938.Edd; W04938_PGW.pdf


W04938.Edd (6 KB)

W04938_PGW.pdf (585 KB)

STL Richland
2800 George Washington Way
Richland,WA 99354-1613
(509) 375-3131
(509) 375-5590 FAX

30056288 20 JUN 06

J6F050199 00384868

SEVERN TRENT LABORATORIES, INC.
BOX 4305
PHILADELPHIA, PA 19175-4305

NET 30 DAYS

SAMPLE RECEIVING DATE : 6/05/06
REPORT DATE : 6/20/06
Pacific Northwest Nationa

Pacific Northwest National Labortories
Pacific Northwest National Laboratory
K6-96
P O Box 999
Richland,WA 99352

Pacific Northwest National Laboratory
K6-96
P O Box 999
Richland,WA 99352

3	WATER	906.0_H3_LSC: Tritium (1) + 2 QC	91.00	273.00

W04938
SURV, June 2006
S06-006
7K 15/45

Please reference Invoice number when remitting.

/PGW 615HANFORD/HANFORD

273.00

Hans Carman **P R O J E C T F I L E C O P Y**