0100494

SAF-RC-183
ARRA 100F Remaining Sites Remediation – Other
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COMMENTS:

SDG JP0085 SAF-RC-183

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 100-F-49 Anomalous Sludge

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-13056-1

SDG Number: JP0085

Job Description: SAF# RC-183

For:
Washington Closure Hanford
2620 Fermi Avenue
Richland, WA 99354

Attention: Joan H Kessner

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APR 2011

Approved for release.
Kae E Yoder
Project Manager II
4/9/2011 11:47 AM

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Project Manager II
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04/09/2011

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is E87667.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-13056-1

SDG #: JP0085
SAF#: RC-183

Date SDG Closed: March 3, 2011
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1F1N2	280-13056-1	6010/7471/1010/WTPH-D+/WTPH-G/ 8260A/8270A/8310/8082/8081/8151	6010B/7471A/1010A/NWTPH-Dx/NWTPH-Gx/ 8260B/8270C/8310/8082/8081A/8151A

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed in this Case Narrative. 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 signature on the Report Cover.

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits, with any exceptions noted. Calculations are performed before rounding to avoid round-off errors in calculated results.

This report includes reporting limits (RLs) less than TestAmerica Denver's practical quantitation limits. These reporting limits are being used specifically at the client's request to meet the needs of this project. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The sample was received on 3/3/2011; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 5.6 C.

GC/MS VOLATILES - SW846 8260B
Sample J1F1N2 had to be prepared using the medium-level methanol preparation procedure, due to the nature of the sample matrix (oil). The reporting limits have been elevated accordingly.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to the nature of the sample matrix and abundance of interfering, non-target analytes, sample J1F1N2 had to be analyzed at a dilution, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilution required.

Surrogate recoveries have been "D" flagged in sample J1F1N2, as the recoveries obtained are calculated from a diluted sample and are not considered reliable.

Spike compound recoveries, RPD data and surrogate recoveries have been "D" flagged in the MS/MSD performed on sample J1F1N1, as the recoveries obtained are calculated from diluted samples and are not considered reliable. The acceptable LCS analysis data indicated that the analytical system was operating within control.

No other anomalies were encountered.

GC/MS SEMIVOLATILES - SW846 8270C
The routine extraction procedure could not be performed for sample J1F1N2, due to the oily matrix of the sample. The sample had to be analyzed using the waste dilution procedure. The reporting limits have been elevated accordingly.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to the nature of the sample matrix, sample J1F1N2 had to be analyzed at a dilution, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilution required.

Surrogate recoveries have been "D" flagged in sample J1F1N2, as the recoveries obtained are calculated from a diluted sample and are not considered reliable.

Spike compound recoveries, RPD data and surrogate recoveries have been "D" flagged in the MS/MSD performed on sample J1F1N2, as the recoveries obtained are calculated from diluted samples and are not considered reliable. The acceptable LCS analysis data indicated that the analytical system was operating within control.

No other anomalies were encountered.

GC VOLATILES - NWTPH-Gx - GRO

The method specified initial volume is 10 grams; however, due to the oily nature of the sample matrix, only 1 gram was used for sample J1F1N2. The reporting limit has been elevated accordingly.

Each sample is analyzed to achieve the lowest possible reporting limit within the constraints of the method. Due to high constituent concentration, sample J1F1N2 had to be analyzed at a dilution, and the associated result has been flagged with a "D". The reporting limit has been adjusted relative to the dilution required.

The surrogate recovery was not calculated for sample J1F1N2, because the sample was diluted beyond the ability to reliably quantitate a recovery. The recovery has been flagged with a "D".

MS/MSD were not performed for batch 280-56122, due to analyst oversight. A duplicate LCS (LCSD) was analyzed to provide some evidence of batch precision. The laboratory noted that had an MS/MSD been performed, it would have been diluted beyond the ability to reliably quantitate recoveries.

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8081A - PESTICIDEs

The routine extraction procedure could not be performed for sample J1F1N2, due to the oily matrix of the sample. The sample had to be analyzed using the waste dilution procedure. The reporting limits have been elevated accordingly.

The organic prep laboratory noted that a Florisil clean-up was performed on sample J1F1N2 to reduce matrix interferences.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to the nature of the sample matrix and abundance of interfering, non-target analytes, sample J1F1N2 required a 10X dilution prior to the analysis of several compounds. The associated results have been flagged with a "D", and the reporting limits have been adjusted relative to the dilution required.

Surrogate Decachlorobiphenyl was not recovered in the undiluted analysis of sample J1F1N2. The laboratory noted that this anomaly is due to obvious matrix interference; therefore, corrective action is deemed unnecessary.

Surrogate recoveries have been "D" flagged in the diluted analysis of sample J1F1N2, as the recoveries obtained are calculated from a diluted sample and are not considered reliable.

The RPD between the primary and confirmation columns exceeded 40% for analytes in sample J1F1N2. The lower of the two values have been reported, as matrix interference is evident. Associated results have been flagged with an "X".

Spike compound recoveries, RPD data and surrogate recoveries have been "D" flagged in the MS/MSD performed on sample J1F1N2, as the recoveries obtained are calculated from diluted samples and are not considered reliable. The acceptable LCS analysis data indicated that the analytical system was operating within control.

A Continuing Calibration Verification (CCV) standard associated with the undiluted analysis of sample J1F1N2 exhibited %Difference (%D) values >15%, biased low, on the primary column for 4,4'-DDT (-15.7%) and Methoxychlor (-15.7%). The overall mean %D is≤15%; therefore, method criteria have been met and corrective action is deemed unnecessary.

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8082 - PCBs

The routine extraction procedure could not be performed for sample J1F1N2, due to the oily matrix of the sample. The sample had to be analyzed using the waste dilution procedure. The reporting limits have been elevated accordingly.

The laboratory noted that a Sulfuric Acid clean-up and a Mercury clean-up were performed on sample J1F1N2 to reduce matrix interferences.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to the sample matrix interfering with PCB pattern recognition, sample J1F1N2 had to be analyzed at a dilution, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilution required.

Surrogate recoveries were not calculated for sample J1F1N2, because the sample was diluted beyond the ability to reliably quantitate recoveries. The recoveries have been flagged with a "D".

Spike compound recoveries, RPD data and surrogate recoveries were not calculated for the MS/MSD performed on sample J1F1N2, because the sample was diluted beyond the ability to reliably quantitate recoveries. The acceptable LCS analysis data indicated that the analytical system was operating within control. Recoveries have been flagged with a "D".

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8151A - HERBICIDEs

The routine extraction procedure could not be performed for sample J1F1N2, due to the oily matrix of the sample. The sample had to be analyzed using the waste dilution procedure. The reporting limits have been elevated accordingly.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to the nature of the sample matrix, sample J1F1N2 had to be analyzed at a dilution, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilution required.

The surrogate recovery has been "D" flagged in sample J1F1N2, as the recovery obtained is calculated from a diluted sample and is not considered reliable.

Surrogate DCAA was recovered outside the control limits, biased high, in the method blank associated with batch 280-55672. As no detectable concentrations are present in the method blank, corrective action is deemed unnecessary.

The LCS associated with batch 280-55672 exhibited percent recoveries outside the control limits, biased high, and the associated sample results have been flagged "N". In addition, surrogate DCAA was recovered outside the control limits, biased high. This is an indicator that data may be biased high. As no detectable concentrations are present in the associated sample, corrective action is deemed unnecessary.

Spike compound recoveries, RPD data and surrogate recoveries have been "D" flagged in the MS and MSD performed on sample J1F1N2, as the recoveries obtained are calculated from diluted samples and are not considered reliable.

Continuing Calibration Verification (CCV) standards exhibited %Difference (%D) values >15%, biased high, for Dinoseb, Dalapon and surrogate DCAA. The overall mean %D is ≤15%; therefore, method criteria have been met and corrective action is deemed unnecessary.

No other anomalies were encountered.

GC SEMIVOLATILES - NWTPH-Dx - DRO

The routine extraction procedure could not be performed for sample J1F1N2, due to the oily matrix of the sample. The sample had to be analyzed using the waste dilution procedure. The reporting limits have been elevated accordingly.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high constituent concentration, sample J1F1N2 had to be analyzed at a dilution, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilution required.

The surrogate recovery was not calculated for sample J1F1N2, because the sample was diluted beyond the ability to reliably quantitate a recovery. The recovery has been flagged with a "D".

Spike compound recoveries, RPD data and surrogate recoveries were not calculated for the MS/MSD performed on sample J1F1N2, because the sample was diluted beyond the ability to reliably quantitate recoveries. The acceptable LCS analysis data indicated that the analytical system was operating within control. Recoveries have been flagged with a "D".

No other anomalies were encountered.

HPLC - SW846 8310 - PAHs

The routine extraction procedure could not be performed for sample J1F1N2, due to the oily matrix of the sample. The sample had to be analyzed using the waste dilution procedure. The reporting limits have been elevated accordingly.

The method specified final extract volume is 10 mLs; however, due to the nature of the sample matrix, sample J1F1N2 would not concentrate below 20 mLs. The reporting limits have been elevated accordingly.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to the nature of the sample matrix, sample J1F1N2 had to be analyzed at a dilution, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilution required.

The surrogate recovery has been "D" flagged in sample J1F1N2, as the recovery obtained is calculated from a diluted sample and is not considered reliable.

The RPD between the primary and confirmation columns exceeded 40% for analytes in sample J1F1N2. The lower of the two values have been reported, as matrix interference is evident. Associated results have been flagged with an "X".

Spike compound recoveries, RPD data and surrogate recoveries have been "D" flagged in the MS and MSD performed on sample J1F1N2, as the recoveries obtained are calculated from diluted samples and are not considered reliable. The acceptable LCS analysis data indicated that the analytical system was operating within control.

A Continuing Calibration Verification (CCV) standard exhibited the %Difference (%D) value >15%, biased low, on the confirmation column for Fluoranthene (-16.2%). The overall mean %D is ≤15%; therefore, method criteria have been met and corrective action is deemed unnecessary.

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A

Due to the oily matrix of sample J1F1N2, the routine ICP Metals digestion procedure could not be performed. The sample was digested with 0.25 g of sample and taken to a final volume of 25 mL, instead of the routine 1 g of sample taken to a final volume of 100 mL.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Due to high constituent concentration, the Barium, Lead and Zinc analyses of sample J1F1N2 had to be performed at a dilution. The reporting limits have been adjusted relative to the dilution required.

Lead is present at a level greater than the reporting limit in the method blank associated with batch 280-55744. As the associated sample amount is ten times greater than the method blank concentration, corrective action is deemed unnecessary.

Low levels of Boron, Calcium, Manganese and Silicon are present in the method blank associated with batch 280-55744. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Calcium, Iron, Silicon, Barium, Lead and Zinc in the Matrix Spike performed on sample J1F1N2; therefore, control limits are not applicable.

Manganese was recovered outside the control limits in the Matrix Spike performed on sample J1F1N2, and the associated sample result has been flagged "N". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

The duplicate analysis of sample J1F1N2 exhibited RPD data outside the control limits for Barium, and the associated sample result has been flagged "M". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GENERAL CHEMISTRY - 40CFR136A 1010A - FLASHPOINT

No anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
GC VOA		
	U	Analyzed for but not detected.
	D	The reported value is from a dilution.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Lab Section	Qualifier	Description
GC Semi VOA		
	U	Analyzed for but not detected.
	N	LCS, LCSD: Recovery exceeds upper or lower control limits.
	X	More than 40% difference between columns, lower result reported.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	*	Surrogate exceeds the control limit
	D	The reported value is from a dilution.
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	M	Sample duplicate precision not met.
HPLC/IC		
	U	Analyzed for but not detected.
	X	More than 40% difference between columns, lower result reported.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	The reported value is from a dilution.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Description	Lab Location	Method	Preparation Method
Matrix: Waste			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Waste Dilution	TAL DEN		SW846 3580A
Northwest - Volatile Petroleum Products (GC)	TAL DEN	NWTPH NWTPH-Gx	
Purge and Trap	TAL DEN		SW846 5030B
Organochlorine Pesticides (GC)	TAL DEN	SW846 8081A	
Waste Dilution	TAL DEN		SW846 3580A
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL DEN	SW846 8082	
Waste Dilution	TAL DEN		SW846 3580A
Herbicides (GC)	TAL DEN	SW846 8151A	
Waste Dilution	TAL DEN		SW846 3580A
Northwest - Semi-Volatile Petroleum Products (GC)	TAL DEN	NWTPH NWTPH-Dx	
Waste Dilution	TAL DEN		SW846 3580A
PAHs (HPLC)	TAL DEN	SW846 8310	
Waste Dilution	TAL DEN		SW846 3580A
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals, Microwave Assisted	TAL DEN		SW846 3052
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A
Flashpoint	TAL DEN	40CFR136A 1010A	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method	Analyst	Analyst ID
SW846 8260B	Ilczyszyn, Dennis P	DPI
SW846 8270C	Tinkham, Sarah A	SAT
NWTPH NWTPH-Gx	Gaskill, Daniel B	DBG
SW846 8081A	Ream, Brian E	BER
SW846 8082	Pavlakovich, Adam M	AMP
SW846 8151A	Wells, David	DW
NWTPH NWTPH-Dx	Pavlakovich, Adam M	AMP
SW846 6010B	Bowen, Heidi E	HEB
SW846 7471A	Stoltz, Katie	KS
40CFR136A 1010A	Elkin, David	DE
SW846 8310	Hall, Koley J	KJH

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-13056-1	J1F1N2	Waste	03/01/2011 0948	03/03/2011 0930

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-56357	Instrument ID:	MSV_G2
Prep Method:	5030B	Prep Batch:	280-55843	Lab File ID:	g2_1711.D
Dilution:	4.0			Initial Weight/Volume:	1.054 g
Analysis Date:	03/05/2011 0832			Final Weight/Volume:	1000 mL
Prep Date:	03/04/2011 1401				

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		7600	U D	7600	19000
Benzene		6000	D	860	4700
Bromodichloromethane		750	U D	750	4700
Bromoform		550	U D	550	4700
Bromomethane		890	U D	890	9500
2-Butanone (MEK)		5600	U D	5600	19000
Carbon disulfide		1200	U D	1200	4700
Carbon tetrachloride		320	U D	320	4700
Chlorobenzene		570	U D	570	4700
Dibromochloromethane		630	U D	630	4700
Chloroethane		830	U D	830	9500
Chloroform		870	U D	870	4700
Chloromethane		950	U D	950	9500
1,1-Dichloroethane		960	U D	960	4700
1,2-Dichloroethane		470	U D	470	4700
1,1-Dichloroethene		960	U D	960	4700
1,2-Dichloroethene, Total		420	U D	420	4700
1,2-Dichloropropane		880	U D	880	4700
cis-1,3-Dichloropropene		510	U D	510	4700
trans-1,3-Dichloropropene		790	U D	790	4700
Ethylbenzene		63000	D	650	4700
2-Hexanone		4100	U D	4100	19000
Methylene Chloride		1300	U D	1300	4700
4-Methyl-2-pentanone (MIBK)		4300	U D	4300	19000
Styrene		490	U D	490	4700
1,1,2,2-Tetrachloroethane		550	U D	550	4700
Tetrachloroethene		510	U D	510	4700
Toluene		93000	D	740	4700
1,1,1-Trichloroethane		3200	J D	380	4700
1,1,2-Trichloroethane		510	U D	510	4700
Trichloroethene		440	U D	440	4700
Vinyl chloride		510	U D	510	9500
Xylenes, Total		490000	D	660	4700

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	82	D	50 - 139
Toluene-d8 (Surr)	91	D	68 - 143
4-Bromofluorobenzene (Surr)	125	D	62 - 133
Dibromofluoromethane (Surr)	75	D	60 - 133

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-56357	Instrument ID:	MSV_G2
Prep Method:	5030B	Prep Batch:	280-55843	Lab File ID:	g2_1711.D
Dilution:	4.0			Initial Weight/Volume:	1.054 g
Analysis Date:	03/05/2011 0832			Final Weight/Volume:	1000 mL
Prep Date:	03/04/2011 1401				

Tentatively Identified Compounds **Number TIC's Found:** 10

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
136777-61-2	m-Xylene & p-Xylene	10.25	340000	J N
95-47-6	o-Xylene	10.57	150000	J N
103-65-1	N-Propylbenzene	11.16	44000	J N
611-14-3	Benzene, 1-ethyl-2-methyl-	11.21	98000	J N
108-67-8	1,3,5-Trimethylbenzene	11.27	140000	J N
95-63-6	1,2,4-Trimethylbenzene	11.60	340000	J N
526-73-8	1,2,3-Trimethylbenzene	12.00	120000	J N
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	12.17	53000	J N
488-23-3	Benzene, 1,2,3,4-tetramethyl-	13.04	52000	J N
91-20-3	Naphthalene	14.50	98000	J N

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-55992	Instrument ID:	MSS_Y
Prep Method:	3580A	Prep Batch:	280-55662	Lab File ID:	Y8712.D
Dilution:	10			Initial Weight/Volume:	1.0655 g
Analysis Date:	03/04/2011 1548			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2214			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		83000	J D	51000	930000
2-Chlorophenol		59000	U D	59000	930000
1,3-Dichlorobenzene		34000	U D	34000	930000
1,4-Dichlorobenzene		38000	U D	38000	930000
1,2-Dichlorobenzene		62000	U D	62000	930000
2-Methylphenol		37000	U D	37000	930000
3 & 4 Methylphenol		93000	U D	93000	930000
N-Nitrosodi-n-propylamine		87000	U D	87000	930000
Hexachloroethane		60000	U D	60000	930000
Nitrobenzene		62000	U D	62000	930000
Isophorone		48000	U D	48000	930000
2,4-Dimethylphenol		190000	U D	190000	930000
2-Nitrophenol		28000	U D	28000	930000
Bis(2-chloroethoxy)methane		65000	U D	65000	930000
2,4-Dichlorophenol		28000	U D	28000	930000
1,2,4-Trichlorobenzene		79000	U D	79000	930000
Naphthalene		140000	J D	87000	930000
4-Chloroaniline		230000	U D	230000	930000
Hexachlorobutadiene		28000	U D	28000	930000
4-Chloro-3-methylphenol		190000	U D	190000	930000
2-Methylnaphthalene		310000	J D	53000	930000
Hexachlorocyclopentadiene		140000	U D	140000	4500000
2,4,6-Trichlorophenol		28000	U D	28000	930000
2,4,5-Trichlorophenol		28000	U D	28000	930000
2-Chloronaphthalene		28000	U D	28000	930000
2-Nitroaniline		140000	U D	140000	4500000
Dimethyl phthalate		65000	U D	65000	930000
2,6-Dinitrotoluene		79000	U D	79000	930000
Acenaphthylene		48000	U D	48000	930000
3-Nitroaniline		210000	U D	210000	4500000
Acenaphthene		28000	U D	28000	930000
2,4-Dinitrophenol		930000	U D	930000	4500000
4-Nitrophenol		270000	U D	270000	4500000
Dibenzofuran		56000	U D	56000	930000
2,4-Dinitrotoluene		190000	U D	190000	930000
Diethyl phthalate		73000	U D	73000	1900000
4-Chlorophenyl phenyl ether		59000	U D	59000	930000
Fluorene		51000	U D	51000	930000
4-Nitroaniline		210000	U D	210000	4500000
4,6-Dinitro-2-methylphenol		930000	U D	930000	4500000
N-Nitrosodiphenylamine		59000	U D	59000	930000
4-Bromophenyl phenyl ether		53000	U D	53000	930000
Hexachlorobenzene		82000	U D	82000	930000
Pentachlorophenol		930000	U D	930000	4500000
Phenanthrene		69000	J D	48000	930000
Anthracene		48000	U D	48000	930000

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-55992	Instrument ID:	MSS_Y
Prep Method:	3580A	Prep Batch:	280-55662	Lab File ID:	Y8712.D
Dilution:	10			Initial Weight/Volume:	1.0655 g
Analysis Date:	03/04/2011 1548			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2214			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Carbazole		100000	U D	100000	930000
Di-n-butyl phthalate		82000	U D	82000	930000
Fluoranthene		100000	U D	100000	930000
Pyrene		34000	U D	34000	930000
Butyl benzyl phthalate		120000	U D	120000	930000
Bis(2-ethylhexyl) phthalate		450000	J D	130000	930000
3,3'-Dichlorobenzidine		250000	U D	250000	1900000
Benzo[a]anthracene		56000	U D	56000	930000
Chrysene		76000	U D	76000	930000
Di-n-octyl phthalate		40000	U D	40000	930000
Benzo[b]fluoranthene		74000	U D	74000	930000
Benzo[k]fluoranthene		110000	U D	110000	930000
Benzo[a]pyrene		56000	U D	56000	930000
Dibenz(a,h)anthracene		53000	U D	53000	930000
Indeno[1,2,3-cd]pyrene		62000	U D	62000	930000
Benzo[ghi]perylene		45000	U D	45000	930000
Bis(2-chloroethyl)ether		47000	U D	47000	930000
bis (2-chloroisopropyl) ether		65000	U D	65000	930000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	103	D	53 - 120
Phenol-d5	105	D	52 - 120
Nitrobenzene-d5	90	D	50 - 120
2-Fluorobiphenyl	100	D	50 - 120
2,4,6-Tribromophenol	93	D	51 - 120
Terphenyl-d14	103	D	55 - 120

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-55992	Instrument ID:	MSS_Y
Prep Method:	3580A	Prep Batch:	280-55662	Lab File ID:	Y8712.D
Dilution:	10			Initial Weight/Volume:	1.0655 g
Analysis Date:	03/04/2011 1548			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2214			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **2**

Cas Number	Analyte	RT	Est. Result (mg/Kg)	Qualifier
90-12-0	1-Methylnaphthalene	6.75	150	J N J
544-76-3	Hexadecane	7.95	190	J N J

Tentatively Identified Compounds **Number TIC's Found:** **11**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
108-38-3	Benzene, 1,3-dimethyl-	3.59	600000	N J
526-73-8	Benzene, 1,2,3-trimethyl-	4.55	870000	N J
	Unknown	5.67	400000	N J
629-62-9	Pentadecane	9.63	430000	N J
	Unknown	9.71	380000	N J
	Unknown	9.81	410000	N J
	Unknown	9.99	480000	N J
	Unknown	10.19	450000	N J
	Unknown	10.27	740000	N J
	Unknown	10.51	690000	N J
	Unknown	10.65	620000	N J

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

NWTPH-Gx Northwest - Volatile Petroleum Products (GC)

Analysis Method:	NWTPH-Gx	Analysis Batch:	280-56422	Instrument ID:	GCV_L
Prep Method:	5030B	Prep Batch:	280-56122	Initial Weight/Volume:	1.16 g
Dilution:	20			Final Weight/Volume:	500 mL
Analysis Date:	03/08/2011 1606			Injection Volume:	5 mL
Prep Date:	03/07/2011 1230			Result Type:	PRIMARY

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Gasoline		4600000	D	56000	210000

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	0	D	77 - 123

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-56426	Instrument ID:	GCS_P1
Prep Method:	3580A	Prep Batch:	280-56241	Initial Weight/Volume:	1.1770 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	03/08/2011 2212			Injection Volume:	
Prep Date:	03/08/2011 1105			Result Type:	PRIMARY

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDT		32	J X	15	43
Aldrin		19	J X	6.4	43
alpha-BHC		13	J	5.5	43
alpha-Chlordane		8.2	U	8.2	43
beta-BHC		17	U	17	43
delta-BHC		10	U	10	43
gamma-BHC (Lindane)		12	U	12	43
Heptachlor epoxide		93	X	11	43
Methoxychlor		39	J X	11	84
Toxaphene		400	U	400	1700

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	0	*	63 - 124
Tetrachloro-m-xylene	80		59 - 115

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-56426	Instrument ID:	GCS_P1
Prep Method:	3580A	Prep Batch:	280-56241	Initial Weight/Volume:	1.1770 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	03/08/2011 1959			Injection Volume:	
Prep Date:	03/08/2011 1105			Result Type:	PRIMARY

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		140	U D	140	430
4,4'-DDE		250	J D	61	430
Dieldrin		150	J D	54	430
Endosulfan I		180	J D	45	430
Endosulfan II		210	J X D	73	430
Endosulfan sulfate		190	J D	70	430
Endrin		140	J D	78	430
Endrin aldehyde		100	J X D	44	430
Endrin ketone		230	J D	120	430
gamma-Chlordane		73	J X D	68	430
Heptachlor		55	U D	55	430

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	11	D	63 - 124
Tetrachloro-m-xylene	86	D	59 - 115

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-56129	Instrument ID:	GCS_P3
Prep Method:	3580A	Prep Batch:	280-55675	Initial Weight/Volume:	1.0131 g
Dilution:	5.0			Final Weight/Volume:	10000 uL
Analysis Date:	03/05/2011 0041			Injection Volume:	1 uL
Prep Date:	03/03/2011 2301			Result Type:	PRIMARY

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		25	U D	25	160
Aroclor 1221		77	U D	77	230
Aroclor 1232		25	U D	25	160
Aroclor 1242		45	U D	45	160
Aroclor 1248		28	U D	28	160
Aroclor 1254		27	U D	27	160
Aroclor 1260		13	U D	13	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	0	D	59 - 130
Tetrachloro-m-xylene	0	D	53 - 128

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-56586	Instrument ID:	GCS_M
Prep Method:	3580A	Prep Batch:	280-55672	Initial Weight/Volume:	1.0339 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	03/08/2011 1904			Injection Volume:	1 uL
Prep Date:	03/03/2011 2224			Result Type:	PRIMARY

Analyte DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T	1100	U D N	1100	9700
2,4-Dichlorophenoxyacetic acid	6800	U D N	6800	39000
2,4-DB	1400	U D	1400	39000
Dalapon	680	U D N	680	19000
Dicamba	680	U D N	680	19000
Dichlorprop	1500	U D	1500	39000
Dinoseb	680	U D	680	5800
MCPA	970000	U D	970000	3900000
2,4,5-TP (Silvex)	680	U D	680	9700
MCPP	970000	U D	970000	3900000

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	170	D	31 - 105

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

NWTPH-Dx Northwest - Semi-Volatile Petroleum Products (GC)

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-56029	Instrument ID:	GCS_U2
Prep Method:	3580A	Prep Batch:	280-55654	Lab File ID:	007F0701.D
Dilution:	5.0			Initial Weight/Volume:	1.0721 g
Analysis Date:	03/04/2011 1517			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2145			Injection Volume:	1 uL

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		380000000	D	1400000	4700000
C10-C28		220000000	D	950000	4700000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	0	D	58 - 125

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-56239	Instrument ID:	CHHPLC_G
Prep Method:	3580A	Prep Batch:	280-55639	Initial Weight/Volume:	1.0250 g
Dilution:	10			Final Weight/Volume:	20 mL
Analysis Date:	03/09/2011 0148			Injection Volume:	20 uL
Prep Date:	03/03/2011 2113			Result Type:	PRIMARY

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		5800	J D X	2300	16000
Acenaphthylene		2100	U D	2100	16000
Anthracene		710	U D	710	1600
Benzo[a]anthracene		750	U D	750	1600
Benzo[a]pyrene		7300	D	1500	1600
Benzo[b]fluoranthene		980	U D	980	1600
Benzo[g,h,i]perylene		1700	U D	1700	3100
Benzo[k]fluoranthene		920	U D	920	1600
Chrysene		11000	D	1100	3100
Dibenzo(a,h)anthracene		2600	U D	2600	3100
Fluoranthene		3000	U D	3000	3100
Fluorene		2200	J D X	1200	3100
Indeno[1,2,3-cd]pyrene		2800	U D	2800	3100
Naphthalene		190000	D	2800	16000
Phenanthrene		2800	U D	2800	3100
Pyrene		2800	U D	2800	3100

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	198	D	72 - 115

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-56674	Instrument ID:	MT_026
Prep Method:	3052	Prep Batch:	280-55744	Lab File ID:	26c030911.asc
Dilution:	1.0			Initial Weight/Volume:	0.24 g
Analysis Date:	03/09/2011 2324			Final Weight/Volume:	25 mL
Prep Date:	03/09/2011 1300				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		1950		5.6	20.8
Antimony		19.3		0.63	1.6
Arsenic		3.8		0.63	2.1
Beryllium		0.073	U	0.073	0.52
Boron		22.3		0.42	10.4
Cadmium		13.0		0.10	0.52
Calcium		5470		9.4	52.1
Chromium		60.8		0.16	1.6
Cobalt		2.7		0.21	1.0
Copper		155		0.52	2.1
Iron		6070		5.2	15.6
Magnesium		898	N	4.5	20.8
Manganese		64.5		0.084	1.0
Molybdenum		4.6		0.52	2.1
Nickel		16.2		1.0	4.2
Potassium		369		52.1	313
Selenium		0.88	B	0.69	1.4
Silicon		483		11.7	52.1
Silver		0.40	B	0.12	1.0
Sodium		245	B	34.8	521
Vanadium		9.1		0.13	2.1

Analysis Method:	6010B	Analysis Batch:	280-56674	Instrument ID:	MT_026
Prep Method:	3052	Prep Batch:	280-55744	Lab File ID:	26c030911.asc
Dilution:	10			Initial Weight/Volume:	0.24 g
Analysis Date:	03/10/2011 0926			Final Weight/Volume:	25 mL
Prep Date:	03/09/2011 1300				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Barium		4450	M	5.2	10.4
Lead		32400		2.8	8.3
Zinc		3820		10.4	31.3

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-56300	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-55703	Lab File ID:	110308AD.txt
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	03/08/2011 1323			Final Weight/Volume:	50 mL
Prep Date:	03/07/2011 1452				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0089	U	0.0089	0.027

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

General Chemistry

Client Sample ID: **J1F1N2**

Lab Sample ID: 280-13056-1
Client Matrix: Waste

Date Sampled: 03/01/2011 0948
Date Received: 03/03/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Flashpoint	>160		Degrees F	1.00	1.00	1.0	1010A

Analysis Batch: 280-56313 Analysis Date: 03/08/2011 0807 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 280-55843					
LCS 280-55843/2-A	Lab Control Sample	T	Waste	5030B	
LCSD 280-55843/3-A	Lab Control Sample Duplicate	T	Waste	5030B	
MB 280-55843/1-A	Method Blank	T	Waste	5030B	
280-13056-1	J1F1N2	T	Waste	5030B	
280-13056-1MS	Matrix Spike	T	Waste	5030B	
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	5030B	
Analysis Batch:280-55938					
LCS 280-55843/2-A	Lab Control Sample	T	Waste	8260B	280-55843
LCSD 280-55843/3-A	Lab Control Sample Duplicate	T	Waste	8260B	280-55843
MB 280-55843/1-A	Method Blank	T	Waste	8260B	280-55843
Analysis Batch:280-56357					
280-13056-1	J1F1N2	T	Waste	8260B	280-55843
280-13056-1MS	Matrix Spike	T	Waste	8260B	280-55843
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	8260B	280-55843

Report Basis
T = Total

GC/MS Semi VOA					
Prep Batch: 280-55662					
LCS 280-55662/2-A	Lab Control Sample	T	Waste	3580A	
MB 280-55662/1-A	Method Blank	T	Waste	3580A	
280-13056-1	J1F1N2	T	Waste	3580A	
280-13056-1MS	Matrix Spike	T	Waste	3580A	
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	3580A	
Analysis Batch:280-55992					
LCS 280-55662/2-A	Lab Control Sample	T	Waste	8270C	280-55662
MB 280-55662/1-A	Method Blank	T	Waste	8270C	280-55662
280-13056-1	J1F1N2	T	Waste	8270C	280-55662
280-13056-1MS	Matrix Spike	T	Waste	8270C	280-55662
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	8270C	280-55662

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC VOA					
Prep Batch: 280-56122					
LCS 280-56122/1-A	Lab Control Sample	T	Waste	5030B	
LCSD 280-56122/2-A	Lab Control Sample Duplicate	T	Waste	5030B	
MB 280-56122/3-A	Method Blank	T	Waste	5030B	
280-13056-1	J1F1N2	T	Waste	5030B	
Analysis Batch:280-56422					
LCS 280-56122/1-A	Lab Control Sample	T	Waste	NWTPH-Gx	280-56122
LCSD 280-56122/2-A	Lab Control Sample Duplicate	T	Waste	NWTPH-Gx	280-56122
MB 280-56122/3-A	Method Blank	T	Waste	NWTPH-Gx	280-56122
280-13056-1	J1F1N2	T	Waste	NWTPH-Gx	280-56122

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-55654					
LCS 280-55654/2-A	Lab Control Sample	T	Waste	3580A	
MB 280-55654/1-A	Method Blank	T	Waste	3580A	
280-13056-1	J1F1N2	T	Waste	3580A	
280-13056-1MS	Matrix Spike	T	Waste	3580A	
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	3580A	
Prep Batch: 280-55672					
LCS 280-55672/2-A	Lab Control Sample	T	Waste	3580A	
MB 280-55672/1-A	Method Blank	T	Waste	3580A	
280-13056-1	J1F1N2	T	Waste	3580A	
280-13056-1MS	Matrix Spike	T	Waste	3580A	
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	3580A	
Prep Batch: 280-55675					
LCS 280-55675/2-A	Lab Control Sample	T	Waste	3580A	
MB 280-55675/1-A	Method Blank	T	Waste	3580A	
280-13056-1	J1F1N2	T	Waste	3580A	
280-13056-1MS	Matrix Spike	T	Waste	3580A	
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	3580A	
Analysis Batch:280-56029					
LCS 280-55654/2-A	Lab Control Sample	T	Waste	NWTPH-Dx	280-55654
MB 280-55654/1-A	Method Blank	T	Waste	NWTPH-Dx	280-55654
280-13056-1	J1F1N2	T	Waste	NWTPH-Dx	280-55654
280-13056-1MS	Matrix Spike	T	Waste	NWTPH-Dx	280-55654
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	NWTPH-Dx	280-55654
Analysis Batch:280-56129					
LCS 280-55675/2-A	Lab Control Sample	T	Waste	8082	280-55675
MB 280-55675/1-A	Method Blank	T	Waste	8082	280-55675
280-13056-1	J1F1N2	T	Waste	8082	280-55675
280-13056-1MS	Matrix Spike	T	Waste	8082	280-55675
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	8082	280-55675
Prep Batch: 280-56241					
LCS 280-56241/2-A	Lab Control Sample	T	Waste	3580A	
MB 280-56241/1-A	Method Blank	T	Waste	3580A	
280-13056-1	J1F1N2	T	Waste	3580A	
280-13056-1MS	Matrix Spike	T	Waste	3580A	
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	3580A	
Analysis Batch:280-56426					
280-13056-1	J1F1N2	T	Waste	8081A	280-56241
280-13056-1MS	Matrix Spike	T	Waste	8081A	280-56241
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	8081A	280-56241

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:280-56586					
LCS 280-55672/2-A	Lab Control Sample	T	Waste	8151A	280-55672
MB 280-55672/1-A	Method Blank	T	Waste	8151A	280-55672
280-13056-1	J1F1N2	T	Waste	8151A	280-55672
280-13056-1MS	Matrix Spike	T	Waste	8151A	280-55672
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	8151A	280-55672
Analysis Batch:280-56587					
LCS 280-56241/2-A	Lab Control Sample	T	Waste	8081A	280-56241
MB 280-56241/1-A	Method Blank	T	Waste	8081A	280-56241

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-55703					
LCS 280-55703/2-A ^50	Lab Control Sample	T	Waste	7471A	
MB 280-55703/1-A	Method Blank	T	Waste	7471A	
280-13056-1	J1F1N2	T	Waste	7471A	
280-13056-1DU	Duplicate	T	Waste	7471A	
280-13056-1MS	Matrix Spike	T	Waste	7471A	
Prep Batch: 280-55744					
LCS 280-55744/2-A	Lab Control Sample	T	Waste	3052	
MB 280-55744/1-A	Method Blank	T	Waste	3052	
280-13056-1	J1F1N2	T	Waste	3052	
280-13056-1DU	Duplicate	T	Waste	3052	
280-13056-1MS	Matrix Spike	T	Waste	3052	
Analysis Batch:280-56300					
LCS 280-55703/2-A ^50	Lab Control Sample	T	Waste	7471A	280-55703
MB 280-55703/1-A	Method Blank	T	Waste	7471A	280-55703
280-13056-1	J1F1N2	T	Waste	7471A	280-55703
280-13056-1DU	Duplicate	T	Waste	7471A	280-55703
280-13056-1MS	Matrix Spike	T	Waste	7471A	280-55703
Analysis Batch:280-56674					
LCS 280-55744/2-A	Lab Control Sample	T	Waste	6010B	280-55744
MB 280-55744/1-A	Method Blank	T	Waste	6010B	280-55744
280-13056-1	J1F1N2	T	Waste	6010B	280-55744
280-13056-1DU	Duplicate	T	Waste	6010B	280-55744
280-13056-1MS	Matrix Spike	T	Waste	6010B	280-55744

Report Basis
T = Total

General Chemistry

Analysis Batch:280-56313					
LCS 280-56313/2	Lab Control Sample	T	Waste	1010A	
MB 280-56313/1	Method Blank	T	Waste	1010A	
280-13056-1	J1F1N2	T	Waste	1010A	
280-13056-1DU	Duplicate	T	Waste	1010A	

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-55639					
LCS 280-55639/2-A	Lab Control Sample	T	Waste	3580A	
MB 280-55639/1-A	Method Blank	T	Waste	3580A	
280-13056-1	J1F1N2	T	Waste	3580A	
280-13056-1MS	Matrix Spike	T	Waste	3580A	
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	3580A	
Analysis Batch:280-56028					
LCS 280-55639/2-A	Lab Control Sample	T	Waste	8310	280-55639
MB 280-55639/1-A	Method Blank	T	Waste	8310	280-55639
Analysis Batch:280-56239					
280-13056-1	J1F1N2	T	Waste	8310	280-55639
280-13056-1MS	Matrix Spike	T	Waste	8310	280-55639
280-13056-1MSD	Matrix Spike Duplicate	T	Waste	8310	280-55639

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-55843

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-55843/1-A	Analysis Batch:	280-55938	Instrument ID:	MSV_G2
Client Matrix:	Waste	Prep Batch:	280-55843	Lab File ID:	g2_1692.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.011 g
Analysis Date:	03/04/2011 2025	Units:	ug/Kg	Final Weight/Volume:	1000 mL
Prep Date:	03/04/2011 1401				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	400	U	400	1000
Benzene	45	U	45	250
Bromodichloromethane	40	U	40	250
Bromoform	29	U	29	250
Bromomethane	47	U	47	500
2-Butanone (MEK)	290	U	290	1000
Carbon disulfide	64	U	64	250
Carbon tetrachloride	17	U	17	250
Chlorobenzene	30	U	30	250
Dibromochloromethane	33	U	33	250
Chloroethane	44	U	44	500
Chloroform	46	U	46	250
Chloromethane	50	U	50	500
1,3-Dichlorobenzene	41	U	41	250
1,1-Dichloroethane	50	U	50	250
1,2-Dichloroethane	25	U	25	250
trans-1,2-Dichloroethene	45	U	45	120
1,1-Dichloroethene	50	U	50	250
1,2-Dichloroethene, Total	22	U	22	250
1,2-Dichloropropane	46	U	46	250
cis-1,3-Dichloropropene	27	U	27	250
trans-1,3-Dichloropropene	41	U	41	250
Ethylbenzene	34	U	34	250
2-Hexanone	220	U	220	1000
Methylene Chloride	69	U	69	250
4-Methyl-2-pentanone (MIBK)	220	U	220	1000
Styrene	26	U	26	250
1,1,2,2-Tetrachloroethane	29	U	29	250
Tetrachloroethene	27	U	27	250
Toluene	39	U	39	250
1,1,1-Trichloroethane	20	U	20	250
1,1,2-Trichloroethane	27	U	27	250
Trichloroethene	23	U	23	250
Vinyl chloride	27	U	27	500
Xylenes, Total	35	U	35	250

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89	50 - 139
Toluene-d8 (Surr)	106	68 - 143
4-Bromofluorobenzene (Surr)	97	62 - 133
Dibromofluoromethane (Surr)	82	60 - 133

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank TICs- Batch: 280-55843

Cas Number	Analyte	RT	Est. Result	Qual
	Tentatively Identified Compound		None	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-55843

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID:	LCS 280-55843/2-A	Analysis Batch:	280-55938	Instrument ID:	MSV_G2
Client Matrix:	Waste	Prep Batch:	280-55843	Lab File ID:	g2_1693.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	03/04/2011 2044	Units:	ug/Kg	Final Weight/Volume:	1000 mL
Prep Date:	03/04/2011 1401				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-55843/3-A	Analysis Batch:	280-55938	Instrument ID:	MSV_G2
Client Matrix:	Waste	Prep Batch:	280-55843	Lab File ID:	g2_1694.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	03/04/2011 2103	Units:	ug/Kg	Final Weight/Volume:	1000 mL
Prep Date:	03/04/2011 1401				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	96	96	67 - 125	0	20		
Bromodichloromethane	81	81	67 - 122	0	23		
Carbon tetrachloride	87	87	60 - 137	0	21		
Chlorobenzene	94	95	72 - 124	1	20		
Chloroform	87	86	69 - 122	1	20		
1,3-Dichlorobenzene	94	96	74 - 119	2	20		
1,1-Dichloroethane	92	92	66 - 121	1	25		
trans-1,2-Dichloroethene	99	99	71 - 119	1	25		
1,1-Dichloroethene	100	100	62 - 125	0	29		
1,2-Dichloropropane	90	91	66 - 119	1	22		
Ethylbenzene	101	102	73 - 127	1	20		
Methylene Chloride	122	120	49 - 126	2	22		
Tetrachloroethene	97	98	73 - 131	1	20		
Toluene	99	100	71 - 127	1	20		
1,1,1-Trichloroethane	90	90	65 - 129	0	20		
Trichloroethene	89	90	70 - 125	1	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85	81	50 - 139
Toluene-d8 (Surr)	97	94	68 - 143
4-Bromofluorobenzene (Surr)	97	92	62 - 133
Dibromofluoromethane (Surr)	81	77	60 - 133

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-55843

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	280-13056-1	Analysis Batch:	280-56357	Instrument ID:	MSV_G2
Client Matrix:	Waste	Prep Batch:	280-55843	Lab File ID:	g2_1712.D
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.048 g
Analysis Date:	03/05/2011 0852			Final Weight/Volume:	1000 mL
Prep Date:	03/04/2011 1401				
Leach Date:	N/A				

MSD Lab Sample ID:	280-13056-1	Analysis Batch:	280-56357	Instrument ID:	MSV_G2
Client Matrix:	Waste	Prep Batch:	280-55843	Lab File ID:	g2_1713.D
Dilution:	4.0	Leach Batch:	N/A	Initial Weight/Volume:	1.023 g
Analysis Date:	03/05/2011 0911			Final Weight/Volume:	1000 mL
Prep Date:	03/04/2011 1401				
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	88	92	67 - 125	4	20	D	D
Bromodichloromethane	77	80	67 - 122	7	23	D	D
Carbon tetrachloride	65	69	60 - 137	8	21	D	D
Chlorobenzene	85	87	72 - 124	4	20	D	D
Chloroform	86	87	69 - 122	3	20	D	D
1,3-Dichlorobenzene	79	80	74 - 119	3	20	D	D
1,1-Dichloroethane	85	84	66 - 121	2	25	D	D
trans-1,2-Dichloroethene	87	91	71 - 119	6	25	D	D
1,1-Dichloroethene	86	89	62 - 125	6	29	D	D
1,2-Dichloropropane	92	93	66 - 119	3	22	D	D
Ethylbenzene	35	77	73 - 127	6	20	D	D
Methylene Chloride	131	114	49 - 126	12	22	D	D
Tetrachloroethene	75	74	73 - 131	1	20	D	D
Toluene	72	102	71 - 127	3	20	D	D
1,1,1-Trichloroethane	79	79	65 - 129	2	20	D	D
Trichloroethene	85	82	70 - 125	1	20	D	D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	76	D	79	D	50 - 139
Toluene-d8 (Surr)	84	D	86	D	68 - 143
4-Bromofluorobenzene (Surr)	123	D	133	D	62 - 133
Dibromofluoromethane (Surr)	74	D	78	D	60 - 133

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-55662

Method: 8270C
Preparation: 3580A

Lab Sample ID:	MB 280-55662/1-A	Analysis Batch:	280-55992	Instrument ID:	MSS_Y
Client Matrix:	Waste	Prep Batch:	280-55662	Lab File ID:	Y8704.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/04/2011 1307	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2214			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Phenol	5400	U	5400	99000
2-Chlorophenol	6300	U	6300	99000
1,3-Dichlorobenzene	3600	U	3600	99000
1,4-Dichlorobenzene	4100	U	4100	99000
1,2-Dichlorobenzene	6600	U	6600	99000
2-Methylphenol	3900	U	3900	99000
3 & 4 Methylphenol	9900	U	9900	99000
N-Nitrosodi-n-propylamine	9300	U	9300	99000
Hexachloroethane	6400	U	6400	99000
Nitrobenzene	6600	U	6600	99000
Isophorone	5100	U	5100	99000
2,4-Dimethylphenol	20000	U	20000	99000
2-Nitrophenol	3000	U	3000	99000
Bis(2-chloroethoxy)methane	6900	U	6900	99000
2,4-Dichlorophenol	3000	U	3000	99000
1,2,4-Trichlorobenzene	8400	U	8400	99000
Naphthalene	9300	U	9300	99000
4-Chloroaniline	25000	U	25000	99000
Hexachlorobutadiene	3000	U	3000	99000
4-Chloro-3-methylphenol	20000	U	20000	99000
2-Methylnaphthalene	5700	U	5700	99000
Hexachlorocyclopentadiene	15000	U	15000	480000
2,4,6-Trichlorophenol	3000	U	3000	99000
2,4,5-Trichlorophenol	3000	U	3000	99000
2-Chloronaphthalene	3000	U	3000	99000
2-Nitroaniline	15000	U	15000	480000
Dimethyl phthalate	6900	U	6900	99000
2,6-Dinitrotoluene	8400	U	8400	99000
Acenaphthylene	5100	U	5100	99000
3-Nitroaniline	22000	U	22000	480000
Acenaphthene	3000	U	3000	99000
2,4-Dinitrophenol	99000	U	99000	480000
4-Nitrophenol	29000	U	29000	480000
Dibenzofuran	6000	U	6000	99000
2,4-Dinitrotoluene	20000	U	20000	99000
Diethyl phthalate	7800	U	7800	200000
4-Chlorophenyl phenyl ether	6300	U	6300	99000
Fluorene	5400	U	5400	99000
4-Nitroaniline	22000	U	22000	480000
4,6-Dinitro-2-methylphenol	99000	U	99000	480000
N-Nitrosodiphenylamine	6300	U	6300	99000
4-Bromophenyl phenyl ether	5700	U	5700	99000
Hexachlorobenzene	8700	U	8700	99000
Pentachlorophenol	99000	U	99000	480000
Phenanthrene	5100	U	5100	99000

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-55662

Method: 8270C
Preparation: 3580A

Lab Sample ID:	MB 280-55662/1-A	Analysis Batch:	280-55992	Instrument ID:	MSS_Y
Client Matrix:	Waste	Prep Batch:	280-55662	Lab File ID:	Y8704.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/04/2011 1307	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2214			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Anthracene	5100	U	5100	99000
Carbazole	11000	U	11000	99000
Di-n-butyl phthalate	8700	U	8700	99000
Fluoranthene	11000	U	11000	99000
Pyrene	3600	U	3600	99000
Butyl benzyl phthalate	13000	U	13000	99000
Bis(2-ethylhexyl) phthalate	14000	U	14000	99000
3,3'-Dichlorobenzidine	27000	U	27000	200000
Benzo[a]anthracene	6000	U	6000	99000
Chrysene	8100	U	8100	99000
Di-n-octyl phthalate	4300	U	4300	99000
Benzo[b]fluoranthene	7900	U	7900	99000
Benzo[k]fluoranthene	12000	U	12000	99000
Benzo[a]pyrene	6000	U	6000	99000
Dibenz(a,h)anthracene	5700	U	5700	99000
Indeno[1,2,3-cd]pyrene	6600	U	6600	99000
Benzo[ghi]perylene	4800	U	4800	99000
Bis(2-chloroethyl)ether	5000	U	5000	99000
bis (2-chloroisopropyl) ether	6900	U	6900	99000

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	99	53 - 120
Phenol-d5	99	52 - 120
Nitrobenzene-d5	98	50 - 120
2-Fluorobiphenyl	99	50 - 120
2,4,6-Tribromophenol	88	51 - 120
Terphenyl-d14	105	55 - 120

Method Blank TICs- Batch: 280-55662

Cas Number	Analyte	RT	Est. Result	Qual
	Tentatively Identified Compound		None	

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Lab Control Sample - Batch: 280-55662

Method: 8270C
Preparation: 3580A

Lab Sample ID:	LCS 280-55662/2-A	Analysis Batch:	280-55992	Instrument ID:	MSS_Y
Client Matrix:	Waste	Prep Batch:	280-55662	Lab File ID:	Y8705.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/04/2011 1327	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2214			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Phenol	1500000	1530000	102	54 - 120	
2-Chlorophenol	1500000	1540000	103	53 - 120	
1,4-Dichlorobenzene	1000000	989000	99	46 - 120	
N-Nitrosodi-n-propylamine	1000000	992000	99	51 - 120	
1,2,4-Trichlorobenzene	1000000	922000	92	50 - 120	
4-Chloro-3-methylphenol	1500000	1480000	98	57 - 120	
Acenaphthene	1000000	993000	99	52 - 120	
4-Nitrophenol	1500000	1290000	86	41 - 120	
2,4-Dinitrotoluene	1000000	928000	93	53 - 120	
Pentachlorophenol	1500000	1390000	93	30 - 120	
Pyrene	1000000	1080000	108	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	104	53 - 120
Phenol-d5	105	52 - 120
Nitrobenzene-d5	102	50 - 120
2-Fluorobiphenyl	100	50 - 120
2,4,6-Tribromophenol	96	51 - 120
Terphenyl-d14	110	55 - 120

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-55662

Method: 8270C
Preparation: 3580A

MS Lab Sample ID:	280-13056-1	Analysis Batch:	280-55992	Instrument ID:	MSS_Y
Client Matrix:	Waste	Prep Batch:	280-55662	Lab File ID:	Y8713.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.0969 g
Analysis Date:	03/04/2011 1608			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2214			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-13056-1	Analysis Batch:	280-55992	Instrument ID:	MSS_Y
Client Matrix:	Waste	Prep Batch:	280-55662	Lab File ID:	Y8714.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.0548 g
Analysis Date:	03/04/2011 1629			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2214			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenol	106	104	54 - 120	2	30	D	D
2-Chlorophenol	108	104	53 - 120	0	30	D	D
1,4-Dichlorobenzene	106	101	46 - 120	1	30	D	D
N-Nitrosodi-n-propylamine	109	105	51 - 120	0	30	D	D
1,2,4-Trichlorobenzene	98	95	50 - 120	0	30	J D	J D
4-Chloro-3-methylphenol	100	101	57 - 120	5	30	D	D
Acenaphthene	104	104	52 - 120	4	30	D	D
4-Nitrophenol	85	84	41 - 120	4	30	J D	J D
2,4-Dinitrotoluene	98	98	53 - 120	4	30	J D	J D
Pentachlorophenol	122	121	30 - 120	3	30	J D	J D
Pyrene	111	110	50 - 120	3	38	D	D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
2-Fluorophenol	109	D	106	D	53 - 120
Phenol-d5	110	D	106	D	52 - 120
Nitrobenzene-d5	98	D	97	D	50 - 120
2-Fluorobiphenyl	104	D	106	D	50 - 120
2,4,6-Tribromophenol	103	D	104	D	51 - 120
Terphenyl-d14	106	D	104	D	55 - 120

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-56122

Method: NWTPH-Gx
Preparation: 5030B

Lab Sample ID:	MB 280-56122/3-A	Analysis Batch:	280-56422	Instrument ID:	GCV_L
Client Matrix:	Waste	Prep Batch:	280-56122	Lab File ID:	112F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10.45 g
Analysis Date:	03/08/2011 1528	Units:	ug/Kg	Final Weight/Volume:	500 mL
Prep Date:	03/07/2011 1230			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Gasoline	310	U	310	1100

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	94	77 - 123

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-56122

Method: NWTPH-Gx
Preparation: 5030B

LCS Lab Sample ID:	LCS 280-56122/1-A	Analysis Batch:	280-56422	Instrument ID:	GCV_L
Client Matrix:	Waste	Prep Batch:	280-56122	Lab File ID:	110F0301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10.37 g
Analysis Date:	03/08/2011 1412	Units:	ug/Kg	Final Weight/Volume:	500 mL
Prep Date:	03/07/2011 1230			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY
LCSD Lab Sample ID:	LCSD 280-56122/2-A	Analysis Batch:	280-56422	Instrument ID:	GCV_L
Client Matrix:	Waste	Prep Batch:	280-56122	Lab File ID:	111F0401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	10.37 g
Analysis Date:	03/08/2011 1450	Units:	ug/Kg	Final Weight/Volume:	500 mL
Prep Date:	03/07/2011 1230			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline	130	119	85 - 153	9	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
a,a,a-Trifluorotoluene	107	99	77 - 123

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-56241

Method: 8081A
Preparation: 3580A

Lab Sample ID:	MB 280-56241/1-A	Analysis Batch:	280-56587	Instrument ID:	GCS_P1
Client Matrix:	Waste	Prep Batch:	280-56241	Lab File ID:	010F1001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/09/2011 1630	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/08/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	16	U	16	51
4,4'-DDE	7.1	U	7.1	51
4,4'-DDT	18	U	18	51
Aldrin	7.5	U	7.5	51
alpha-BHC	6.4	U	6.4	51
alpha-Chlordane	9.7	U	9.7	51
beta-BHC	20	U	20	51
delta-BHC	12	U	12	51
Dieldrin	6.3	U	6.3	51
Endosulfan I	5.3	U	5.3	51
Endosulfan II	8.6	U	8.6	51
Endosulfan sulfate	8.3	U	8.3	51
Endrin	9.2	U	9.2	51
Endrin aldehyde	5.1	U	5.1	51
Endrin ketone	15	U	15	51
gamma-BHC (Lindane)	14	U	14	51
gamma-Chlordane	8.0	U	8.0	51
Heptachlor	6.4	U	6.4	51
Heptachlor epoxide	13	U	13	51
Methoxychlor	14	U	14	99
Toxaphene	470	U	470	2000

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	103	63 - 124
Tetrachloro-m-xylene	81	59 - 115

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Lab Control Sample - Batch: 280-56241

Method: 8081A
Preparation: 3580A

Lab Sample ID:	LCS 280-56241/2-A	Analysis Batch:	280-56587	Instrument ID:	GCS_P1
Client Matrix:	Waste	Prep Batch:	280-56241	Lab File ID:	009F0901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/09/2011 1613	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/08/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	500	303	61	57 - 118	
4,4'-DDE	500	322	64	61 - 115	
4,4'-DDT	500	318	64	53 - 125	
Aldrin	500	374	75	60 - 115	
alpha-BHC	500	375	75	54 - 115	
alpha-Chlordane	500	370	74	60 - 115	
beta-BHC	500	396	79	58 - 115	
delta-BHC	500	404	81	62 - 115	
Dieldrin	500	404	81	63 - 117	
Endosulfan I	500	360	72	55 - 115	
Endosulfan II	500	404	81	60 - 115	
Endosulfan sulfate	500	404	81	58 - 118	
Endrin	500	391	78	61 - 121	
Endrin aldehyde	500	399	80	54 - 115	
Endrin ketone	500	368	74	61 - 118	
gamma-BHC (Lindane)	500	384	77	59 - 115	
gamma-Chlordane	500	379	76	60 - 115	
Heptachlor	500	381	76	61 - 115	
Heptachlor epoxide	500	390	78	62 - 112	
Methoxychlor	500	370	74	52 - 123	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	101	63 - 124
Tetrachloro-m-xylene	79	59 - 115

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-56241

Method: 8081A
Preparation: 3580A

MS Lab Sample ID:	280-13056-1	Analysis Batch:	280-56426	Instrument ID:	GCS_P1
Client Matrix:	Waste	Prep Batch:	280-56241	Lab File ID:	036F3601.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.1466 g
Analysis Date:	03/08/2011 2016			Final Weight/Volume:	10000 uL
Prep Date:	03/08/2011 1105			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-13056-1	Analysis Batch:	280-56426	Instrument ID:	GCS_P1
Client Matrix:	Waste	Prep Batch:	280-56241	Lab File ID:	037F3701.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.1548 g
Analysis Date:	03/08/2011 2032			Final Weight/Volume:	10000 uL
Prep Date:	03/08/2011 1105			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	135	92	57 - 118	39	20	D	D
4,4'-DDE	171	122	61 - 115	25	15	D	D
4,4'-DDT	138	86	53 - 125	32	29	D	D
Aldrin	170	152	60 - 115	12	50	D	D
alpha-BHC	92	86	54 - 115	7	17	D	D
alpha-Chlordane	96	81	60 - 115	14	18	D	D
beta-BHC	219	155	58 - 115	35	17	D	D
delta-BHC	95	77	62 - 115	21	19	D	D
Dieldrin	145	90	63 - 117	37	25	D	D
Endosulfan I	145	116	55 - 115	17	26	D	D
Endosulfan II	119	81	60 - 115	27	20	D	D
Endosulfan sulfate	144	95	58 - 118	31	22	D	D
Endrin	92	70	61 - 121	20	30	D	D
Endrin aldehyde	99	45	54 - 115	57	29	D	D
Endrin ketone	96	67	61 - 118	22	20	D	D
gamma-BHC (Lindane)	87	81	59 - 115	8	24	D	D
gamma-Chlordane	200	159	60 - 115	18	21	D	D
Heptachlor	99	88	61 - 115	12	18	D	D
Heptachlor epoxide	196	166	62 - 112	13	18	D	D
Methoxychlor	136	84	52 - 123	49	23	D	D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Decachlorobiphenyl	50	D	0	D	63 - 124
Tetrachloro-m-xylene	149	D	134	D	59 - 115

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-55675

Method: 8082
Preparation: 3580A

Lab Sample ID:	MB 280-55675/1-A	Analysis Batch:	280-56129	Instrument ID:	GCS_P3
Client Matrix:	Waste	Prep Batch:	280-55675	Lab File ID:	093B9301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/04/2011 2358	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2301			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	5.1	U	5.1	33
Aroclor 1221	16	U	16	47
Aroclor 1232	5.1	U	5.1	33
Aroclor 1242	9.1	U	9.1	33
Aroclor 1248	5.6	U	5.6	33
Aroclor 1254	5.5	U	5.5	33
Aroclor 1260	2.6	U	2.6	33

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	105	59 - 130
Tetrachloro-m-xylene	104	53 - 128

Lab Control Sample - Batch: 280-55675

Method: 8082
Preparation: 3580A

Lab Sample ID:	LCS 280-55675/2-A	Analysis Batch:	280-56129	Instrument ID:	GCS_P3
Client Matrix:	Waste	Prep Batch:	280-55675	Lab File ID:	094B9401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/05/2011 0020	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2301			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	2000	2090	104	54 - 132	
Aroclor 1260	2000	2120	106	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	107	59 - 130
Tetrachloro-m-xylene	103	53 - 128

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-55675

Method: 8082
Preparation: 3580A

MS Lab Sample ID:	280-13056-1	Analysis Batch:	280-56129	Instrument ID:	GCS_P3
Client Matrix:	Waste	Prep Batch:	280-55675	Lab File ID:	096B9601.D
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0362 g
Analysis Date:	03/05/2011 0103			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2301			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-13056-1	Analysis Batch:	280-56129	Instrument ID:	GCS_P3
Client Matrix:	Waste	Prep Batch:	280-55675	Lab File ID:	097B9701.D
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0288 g
Analysis Date:	03/05/2011 0124			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2301			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	0	0	54 - 132	NC	36	U D	U D
Aroclor 1260	0	0	62 - 129	NC	44	U D	U D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Decachlorobiphenyl	0	D	0	D	59 - 130
Tetrachloro-m-xylene	0	D	0	D	53 - 128

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-55672

Method: 8151A
Preparation: 3580A

Lab Sample ID:	MB 280-55672/1-A	Analysis Batch:	280-56586	Instrument ID:	GCS_M
Client Matrix:	Waste	Prep Batch:	280-55672	Lab File ID:	079B7901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/08/2011 1820	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2224			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
2,4,5-T	120	U	120	1000
2,4-Dichlorophenoxyacetic acid	700	U	700	4000
2,4-DB	140	U	140	4000
Dalapon	70	U	70	2000
Dicamba	70	U	70	2000
Dichlorprop	160	U	160	4000
Dinoseb	70	U	70	600
MCPA	100000	U	100000	400000
2,4,5-TP (Silvex)	70	U	70	1000
MCPP	100000	U	100000	400000

Surrogate	% Rec		Acceptance Limits
DCAA	120	*	31 - 105

Lab Control Sample - Batch: 280-55672

Method: 8151A
Preparation: 3580A

Lab Sample ID:	LCS 280-55672/2-A	Analysis Batch:	280-56586	Instrument ID:	GCS_M
Client Matrix:	Waste	Prep Batch:	280-55672	Lab File ID:	080B8001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/08/2011 1842	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2224			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	4800	5320	111	24 - 98	N
2,4-Dichlorophenoxyacetic acid	4600	5410	118	32 - 97	N
2,4-DB	5000	5260	105	37 - 119	
Dalapon	5200	5800	111	11 - 87	N
Dicamba	4600	5190	113	11 - 87	N
Dichlorprop	4600	4860	106	35 - 115	
Dinoseb	4600	5190	113	5 - 166	
MCPA	466000	522000	112	37 - 115	
2,4,5-TP (Silvex)	4600	5140	112	53 - 134	
MCPP	467000	598000	128	48 - 132	

Surrogate	% Rec		Acceptance Limits
DCAA	118	*	31 - 105

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-55672

Method: 8151A
Preparation: 3580A

MS Lab Sample ID:	280-13056-1	Analysis Batch:	280-56586	Instrument ID:	GCS_M
Client Matrix:	Waste	Prep Batch:	280-55672	Lab File ID:	082B8201.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.0726 g
Analysis Date:	03/08/2011 1926			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2224			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-13056-1	Analysis Batch:	280-56586	Instrument ID:	GCS_M
Client Matrix:	Waste	Prep Batch:	280-55672	Lab File ID:	083B8301.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.0649 g
Analysis Date:	03/08/2011 1947			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2224			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	73	72	24 - 98	2	40	J D	J D
2,4-Dichlorophenoxyacetic acid	NC	NC	32 - 97	NC	40	U D	U D
2,4-DB	52	39	37 - 119	29	50	J D	J D
Dalapon	88	104	11 - 87	17	50	J D	J D
Dicamba	98	103	11 - 87	6	50	J D	J D
Dichlorprop	76	71	35 - 115	5	50	J D	J D
Dinoseb	16	0	5 - 166	NC	50	J D	U D
MCPA	NC	NC	37 - 115	NC	50	U D	U D
2,4,5-TP (Silvex)	88	88	53 - 134	1	40	J D	J D
MCPP	0	0	48 - 132	NC	50	U D	U D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
DCAA	167	D	240	D	31 - 105

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-55654

Method: NWTPH-Dx
Preparation: 3580A

Lab Sample ID:	MB 280-55654/1-A	Analysis Batch:	280-56029	Instrument ID:	GCS_U2
Client Matrix:	Waste	Prep Batch:	280-55654	Lab File ID:	005F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/04/2011 1408	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2145			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
C10-C36	300000	U	300000	1000000
C10-C28	200000	U	200000	1000000

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	80	55 - 125

Lab Control Sample - Batch: 280-55654

Method: NWTPH-Dx
Preparation: 3580A

Lab Sample ID:	LCS 280-55654/2-A	Analysis Batch:	280-56029	Instrument ID:	GCS_U2
Client Matrix:	Waste	Prep Batch:	280-55654	Lab File ID:	006F0601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/04/2011 1442	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2145			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C36	20000000	19000000	95	57 - 138	
C10-C28	20000000	19000000	95	53 - 115	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	87	55 - 125

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-55654

Method: NWTPH-Dx
Preparation: 3580A

MS Lab Sample ID:	280-13056-1	Analysis Batch:	280-56029	Instrument ID:	GCS_U2
Client Matrix:	Waste	Prep Batch:	280-55654	Lab File ID:	008F0801.D
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0269 g
Analysis Date:	03/04/2011 1551			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2145			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-13056-1	Analysis Batch:	280-56029	Instrument ID:	GCS_U2
Client Matrix:	Waste	Prep Batch:	280-55654	Lab File ID:	009F0901.D
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0708 g
Analysis Date:	03/04/2011 1625			Final Weight/Volume:	10000 uL
Prep Date:	03/03/2011 2145			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C36	0	0	57 - 134	NC	38	D	D
C10-C28	0	0	53 - 115	NC	23	D	D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
o-Terphenyl	0	D	0	D	55 - 125

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-55639

Method: 8310
Preparation: 3580A

Lab Sample ID:	MB 280-55639/1-A	Analysis Batch:	280-56028	Instrument ID:	CHHPLC_G
Client Matrix:	Waste	Prep Batch:	280-55639	Lab File ID:	G0307008.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/07/2011 1218	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	03/03/2011 2113			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	120	U	120	800
Acenaphthylene	110	U	110	800
Anthracene	37	U	37	80
Benzo[a]anthracene	38	U	38	80
Benzo[a]pyrene	77	U	77	80
Benzo[b]fluoranthene	50	U	50	80
Benzo[g,h,i]perylene	86	U	86	160
Benzo[k]fluoranthene	47	U	47	80
Chrysene	58	U	58	160
Dibenzo(a,h)anthracene	130	U	130	160
Fluoranthene	160	U	160	160
Fluorene	63	U	63	160
Indeno[1,2,3-cd]pyrene	140	U	140	160
Naphthalene	140	U	140	800
Phenanthrene	140	U	140	160
Pyrene	140	U	140	160

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	99	72 - 115

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Lab Control Sample - Batch: 280-55639

Method: 8310
Preparation: 3580A

Lab Sample ID:	LCS 280-55639/2-A	Analysis Batch:	280-56028	Instrument ID:	CHHPLC_G
Client Matrix:	Waste	Prep Batch:	280-55639	Lab File ID:	G0307009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/07/2011 1249	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	03/03/2011 2113			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	150000	149000	99	72 - 115	
Acenaphthylene	150000	144000	96	60 - 115	
Anthracene	150000	141000	94	61 - 115	
Benzo[a]anthracene	150000	161000	107	76 - 115	
Benzo[a]pyrene	150000	139000	93	69 - 115	
Benzo[b]fluoranthene	150000	152000	101	81 - 115	
Benzo[g,h,i]perylene	150000	153000	102	71 - 115	
Benzo[k]fluoranthene	150000	153000	102	85 - 115	
Chrysene	150000	149000	99	70 - 115	
Dibenzo(a,h)anthracene	150000	154000	102	79 - 115	
Fluoranthene	150000	151000	101	67 - 115	
Fluorene	150000	146000	97	72 - 115	
Indeno[1,2,3-cd]pyrene	150000	163000	109	76 - 115	
Naphthalene	150000	155000	103	77 - 115	
Phenanthrene	150000	151000	101	79 - 115	
Pyrene	150000	153000	102	77 - 115	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	99	72 - 115

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-55639

Method: 8310
Preparation: 3580A

MS Lab Sample ID:	280-13056-1	Analysis Batch:	280-56239	Instrument ID:	CHHPLC_G
Client Matrix:	Waste	Prep Batch:	280-55639	Lab File ID:	G0308032.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.0163 g
Analysis Date:	03/09/2011 0218			Final Weight/Volume:	20 mL
Prep Date:	03/03/2011 2113			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-13056-1	Analysis Batch:	280-56239	Instrument ID:	CHHPLC_G
Client Matrix:	Waste	Prep Batch:	280-55639	Lab File ID:	G0308033.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.0767 g
Analysis Date:	03/09/2011 0249			Final Weight/Volume:	20 mL
Prep Date:	03/03/2011 2113			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	92	89	72 - 115	9	20	D	D
Acenaphthylene	85	89	60 - 115	1	21	D	D
Anthracene	145	142	61 - 115	8	20	D	D
Benzo[a]anthracene	151	144	76 - 115	10	20	D	D
Benzo[a]pyrene	108	93	69 - 115	20	20	D	D
Benzo[b]fluoranthene	117	106	81 - 115	16	20	D	D
Benzo[g,h,i]perylene	92	91	71 - 115	7	20	D	D
Benzo[k]fluoranthene	143	109	85 - 115	33	20	D	D
Chrysene	100	98	70 - 115	7	20	D	D
Dibenzo(a,h)anthracene	100	99	79 - 115	6	20	D	D
Fluoranthene	132	133	67 - 115	5	20	D	D
Fluorene	99	98	72 - 115	6	20	D	D
Indeno[1,2,3-cd]pyrene	101	100	76 - 115	7	20	D	D
Naphthalene	121	103	77 - 115	10	20	D	D
Phenanthrene	196	192	79 - 115	8	20	D	D
Pyrene	214	230	77 - 115	2	20	D	D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Terphenyl-d14 (SUR)	183	D	183	D	72 - 115

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-55744

Method: 6010B
Preparation: 3052

Lab Sample ID:	MB 280-55744/1-A	Analysis Batch:	280-56674	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-55744	Lab File ID:	26c030911.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.25 mL
Analysis Date:	03/09/2011 2319	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	03/09/2011 1300				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	5.4	U	5.4	20.0
Antimony	0.60	U	0.60	1.5
Arsenic	0.60	U	0.60	2.0
Barium	0.50	U	0.50	1.0
Beryllium	0.070	U	0.070	0.50
Boron	0.462	B	0.40	10.0
Cadmium	0.10	U	0.10	0.50
Calcium	10.60	B	9.1	50.0
Chromium	0.15	U	0.15	1.5
Cobalt	0.20	U	0.20	1.0
Copper	0.50	U	0.50	2.0
Iron	5.0	U	5.0	15.0
Lead	2.13		0.26	0.80
Magnesium	4.4	U	4.4	20.0
Manganese	0.0900	B	0.081	1.0
Molybdenum	0.50	U	0.50	2.0
Nickel	1.0	U	1.0	4.0
Potassium	50.0	U	50.0	300
Selenium	0.67	U	0.67	1.3
Silicon	12.97	B	11.2	50.0
Silver	0.11	U	0.11	1.0
Sodium	33.4	U	33.4	500
Vanadium	0.13	U	0.13	2.0
Zinc	1.0	U	1.0	3.0

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Lab Control Sample - Batch: 280-55744

Method: 6010B
Preparation: 3052

Lab Sample ID:	LCS 280-55744/2-A	Analysis Batch:	280-56674	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-55744	Lab File ID:	26c030911.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.25 mL
Analysis Date:	03/09/2011 2322	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	03/09/2011 1300				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	120	135.5	113	80 - 120	
Antimony	120	125.7	105	80 - 120	
Arsenic	120	125.5	105	80 - 120	
Barium	120	117.5	98	80 - 120	
Beryllium	120	113.5	95	80 - 120	
Boron	120	113.4	94	80 - 120	
Cadmium	120	122.1	102	80 - 120	
Calcium	1260	1279	101	80 - 120	
Chromium	120	125.6	105	80 - 120	
Cobalt	120	123.6	103	80 - 120	
Copper	120	125.8	105	80 - 120	
Iron	120	123.9	103	80 - 120	
Lead	120	125.6	105	80 - 120	
Magnesium	1260	1188	94	80 - 120	
Manganese	120	125.3	104	80 - 120	
Molybdenum	120	123.2	103	80 - 120	
Nickel	120	126.1	105	80 - 120	
Potassium	1260	1293	103	80 - 120	
Selenium	120	133.7	111	80 - 120	
Silicon	120	137.7	115	80 - 120	
Silver	120	118.4	99	80 - 120	
Sodium	1260	1368	109	80 - 120	
Vanadium	120	119.9	100	80 - 120	
Zinc	120	112.6	94	80 - 120	

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Matrix Spike - Batch: 280-55744

Method: 6010B
Preparation: 3052

Lab Sample ID:	280-13056-1	Analysis Batch:	280-56674	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-55744	Lab File ID:	26c030911.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.25 g
Analysis Date:	03/09/2011 2331	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	03/09/2011 1300				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	1950		96.0	2039	91	50 - 200	4
Antimony	19.3		96.0	117.5	102	20 - 200	
Arsenic	3.8		96.0	100.7	101	76 - 111	
Beryllium	0.073	U	96.0	90.62	94	72 - 105	
Boron	22.3		96.0	107.3	89	75 - 107	
Cadmium	13.0		96.0	108.6	100	40 - 130	
Calcium	5470		480	6429	199	43 - 165	4
Chromium	60.8		96.0	176.0	120	70 - 200	
Cobalt	2.7		96.0	100.2	102	72 - 106	
Copper	155		96.0	253.3	102	37 - 187	
Iron	6070		96.0	5954	-119	70 - 200	4
Magnesium	898		480	1087	39	64 - 145	N
Manganese	64.5		96.0	155.6	95	40 - 200	
Molybdenum	4.6		96.0	103.4	103	75 - 103	
Nickel	16.2		96.0	117.4	105	61 - 126	
Potassium	369		480	886.6	108	56 - 172	
Selenium	0.88	B	96.0	99.74	103	76 - 104	
Silicon	483		96.0	1070	612	20 - 200	4
Silver	0.40	B	96.0	88.48	92	75 - 141	
Sodium	245	B	480	768.8	109	78 - 111	
Vanadium	9.1		96.0	98.63	93	50 - 169	

Matrix Spike - Batch: 280-55744

Method: 6010B
Preparation: 3052

Lab Sample ID:	280-13056-1	Analysis Batch:	280-56674	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-55744	Lab File ID:	26c030911.asc
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	0.25 g
Analysis Date:	03/10/2011 0933	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	03/09/2011 1300				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Barium	4450	96.0	5948	1560	52 - 159	4
Lead	32400	96.0	46380	14602	70 - 200	4
Zinc	3820	96.0	3429	-409	70 - 200	4

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Duplicate - Batch: 280-55744

Method: 6010B
Preparation: 3052

Lab Sample ID:	280-13056-1	Analysis Batch:	280-56674	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-55744	Lab File ID:	26c030911.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.29 g
Analysis Date:	03/09/2011 2329	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	03/09/2011 1300				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	1950		1976	1	40	
Antimony	19.3		23.29	18	40	
Arsenic	3.8		4.08	8	30	
Beryllium	0.073	U	0.060	NC	30	U
Boron	22.3		21.03	6	30	
Cadmium	13.0		13.58	4	30	
Calcium	5470		6191	12	30	
Chromium	60.8		68.39	12	40	
Cobalt	2.7		2.87	7	30	
Copper	155		117.4	28	30	
Iron	6070		6038	0.5	40	
Magnesium	898		841.4	6	30	
Manganese	64.5		61.78	4	40	
Molybdenum	4.6		3.96	15	30	
Nickel	16.2		16.69	3	30	
Potassium	369		376.9	2	40	
Selenium	0.88	B	0.57	NC	30	U
Silicon	483		501.3	4	40	
Silver	0.40	B	0.430	8	30	B
Sodium	245	B	219.8	11	30	B
Vanadium	9.1		8.89	2	30	

Duplicate - Batch: 280-55744

Method: 6010B
Preparation: 3052

Lab Sample ID:	280-13056-1	Analysis Batch:	280-56674	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-55744	Lab File ID:	26c030911.asc
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	0.29 g
Analysis Date:	03/10/2011 0930	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	03/09/2011 1300				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Barium	4450	6271	34	30	M
Lead	32400	37390	14	40	
Zinc	3820	4421	15	40	

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-55703

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-55703/1-A	Analysis Batch:	280-56300	Instrument ID:	MT_033
Client Matrix:	Waste	Prep Batch:	280-55703	Lab File ID:	110308AD.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	03/08/2011 1319	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/07/2011 1452				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0092	U	0.0092	0.028

Lab Control Sample - Batch: 280-55703

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-55703/2-A ^50	Analysis Batch:	280-56300	Instrument ID:	MT_033
Client Matrix:	Waste	Prep Batch:	280-55703	Lab File ID:	110308AD.txt
Dilution:	50	Leach Batch:	N/A	Initial Weight/Volume:	0.62 g
Analysis Date:	03/08/2011 1414	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/07/2011 1452				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	34.0	35.93	106	87 - 111	

Matrix Spike - Batch: 280-55703

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-13056-1	Analysis Batch:	280-56300	Instrument ID:	MT_033
Client Matrix:	Waste	Prep Batch:	280-55703	Lab File ID:	110308AD.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.69 g
Analysis Date:	03/08/2011 1328	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/07/2011 1452				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0089	U	0.362	0.339	94	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Duplicate - Batch: 280-55703

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-13056-1	Analysis Batch:	280-56300	Instrument ID:	MT_033
Client Matrix:	Waste	Prep Batch:	280-55703	Lab File ID:	110308AD.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.66 g
Analysis Date:	03/08/2011 1326	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/07/2011 1452				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0089	U	0.0184	NC	20	B

Client: Washington Closure Hanford

Job Number: 280-13056-1
Sdg Number: JP0085

Method Blank - Batch: 280-56313

Method: 1010A
Preparation: N/A

Lab Sample ID:	MB 280-56313/1	Analysis Batch:	280-56313	Instrument ID:	WC_Herzog
Client Matrix:	Waste	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	03/08/2011 0807	Units:	Degrees F	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	RL	RL
Flashpoint	>160		1.00	1.00

Lab Control Sample - Batch: 280-56313

Method: 1010A
Preparation: N/A

Lab Sample ID:	LCS 280-56313/2	Analysis Batch:	280-56313	Instrument ID:	WC_Herzog
Client Matrix:	Waste	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	03/08/2011 0807	Units:	Degrees F	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Flashpoint	81.0	83.00	102	97.5 - 102	

Duplicate - Batch: 280-56313

Method: 1010A
Preparation: N/A

Lab Sample ID:	280-13056-1	Analysis Batch:	280-56313	Instrument ID:	WC_Herzog
Client Matrix:	Waste	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	03/08/2011 0807	Units:	Degrees F	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Flashpoint	>160	>160	NC	10	

S.6 FP JP 3/3/11

AJ 3-2-11

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-183-013	Page 1 of ~~1~~ 1

Collector RICE, DD	Company Contact S. Van Den Hende	Telephone No. 509-551-3934	Project Coordinator KESSNER, JH
Price Code ~~9L~~ 8J JR 3/1/11	Data Turnaround ~~21 Days~~ 7 Days JR 3/1/11		
Project Designation ARRA 100F Remaining Sites Remediation - Other	Sampling Location JR 3/1/11 100-F-49 Anomalous ~~Oil and~~ Sludge	SAF No. RC-183	
Ice Chest No. ERC-03-103	Field Logbook No. EL-1651	COA S00F498100	Method of Shipment FedEx
Shipped To JR 3/1/11 TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No. NA		Bill of Lading/Air Bill No. 7968 2447 7095

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 degrees C

Preservation	Cool 4C	None	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C
Type of Container	G/P	G/P	G	G	G	aG	aG	aG	aG	aG	aG
No. of Container(s)	1	1	1	0 JR 3/1/11	1	1 JR 3/1/11	0	0	0	0	0
Volume	60mL	120mL	120mL	~~60mL~~ 125 mL	60mL	~~60mL~~ 125mL	~~60mL~~ 125mL	~~60mL~~ 125mL	~~60mL~~ 125mL	~~60mL~~ 125mL	~~60mL~~ 125mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions. JR 3/1/11	Ignitability - 1010	TPH-Diesel Range - WTPH-D +	VOA - 8260A (TCL)	Semi-VOA - 8270A (TCL)	PAHs - 8310	PCBs - 8082	Pesticides - 8081	Chloro-Herbicides - EPA8151	

Sample No.	Matrix *	Sample Date	Sample Time										
~~J1F1N1~~ JR 3/1/11	~~OTHER~~												
J1F1N2	OTHER	3/1/11	0948	X		X	X	X	X	X	X	X	X

Page 1 of 3

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From David D. Rice	Date/Time 3-1-11 0952	Received By/Stored In Jen Russell Jen Russell	Date/Time 3-1-11 0952
Relinquished By/Removed From Jen Russell Jen Russell	Date/Time 3/1/11 1245	Received By/Stored In A. Freier A. Freier	Date/Time 1245 3-1-11
Relinquished By/Removed From A. Freier A. Freier	Date/Time ~~2-2-11~~ AJ 3-2-11 3-2-11 1420	Received By/Stored In Fed Ex	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time 3-2-11 0920
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

Please Leach and Hold TCLPs per Joan Kessner. Please run analyses from available material. JR 3/1/11

(1) ICP Metals - 6010TR (Client List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV) {Mercury}

~~(2) Metals by ICP (TCLP) - 1311/6010 (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver); Mercury (TCLP) - 1311/7470 (Mercury)~~ JR 3/1/11

* Additional bottle included for TPH-Gas Range. Please contact Joan Kessner w/ questions. JR 3/1/11

JP0085

Matrix *

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

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

REVIEWED BY JRE DATE 3-2-11

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 - White ~~Gone~~

Analytical Due:

Report Due: 3/10/11 (Rush 5d)

Sample Check-in List

Date/Time Received: 3/3/11 930 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: JP0085 NA[ ] SAF #: RC-183 NA [ ]

Job Number: 13056 Chain of Custody # RC-183-013

Shipping Container ID: ERC-03-103 Air Bill # 7968247 7085

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? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature °C: 5.6 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 Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added ___
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): ___

Sample Custodian: [signature] Date: 3/3/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager [signature] Date 3/4/11

LS-023, Rev. 7, 1/08

From: (509) 375-4640 Origin ID: PSCA
WCH MAILROOM
WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J11101012220225

Ship Date: 02MAR11
ActWgt: 47.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

THU - 03 MAR A1
PRIORITY OVERNIGHT

TRK# 0201 7968 2447 7095

XH WHHA

80002
CO-US
DEN

50DG1/396A/7EFB

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