



STL St. Louis  
13715 Rider Trail North  
Earth City, MO 63045

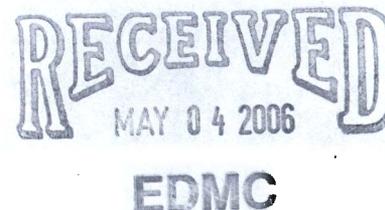
Tel: 314 298 8566 Fax: 314 298 8757  
www.stl-inc.com

**ANALYTICAL REPORT**

PROJECT NO. 299-W18-8 WELL

F06-002

Lot #: F6B140249  
SDG #: W04787



Steve Trent

Floor Hanford Inc  
PO Box 1000 T6-03  
Richland, WA 99352



SEVERN TRENT LABORATORIES, INC.

Melania Harris  
Project Manager

March 14, 2006

**Case Narrative**  
**LOT NUMBER: F6B140249**  
**SDG: W04787**

This report contains the analytical results for the sample received under chain of custody by STL St. Louis on February 10, 2006. This sample is associated with your F06-002 project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted note.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by STL St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

**Observations/Nonconformances**

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

**Herbicides Method: 8151A**

Batch 6045402

There was insufficient sample volume to perform MS/MSD analysis. A LCS and LCSD were performed to demonstrate accuracy and replicate precision.

The LCS/LCSD analytes dicamba, dichloroprop, and 2,4,5TP recoveries are outside the upper QC limit, indicating a potential positive bias for these analytes. The spike analyte Dinoseb recovered below acceptable QC limits, indicating a potential low bias for the analyte. The sample was reprepared and reanalyzed outside holding time. The reanalysis, with an acceptable LCS/LCSD, yielded comparable results. The original results, performed within hold time, are reported.

The opening CCV recovery was outside the upper QC limit (greater than 15% RSD) for dinoseb indicating a potential high bias for this analyte in the samples associated with this CCV. This analyte was not detected above the reporting limit in the associated samples. No further action is required.

**Affected Sample:**

F6B140249 (1): B1H4K8

**Oil and Grease Method: 9071A**

The LCS, LCSD and MS are outside the upper QC limit, indicating a potential positive bias. This analyte was not observed above the reporting limit in the associated sample; therefore the sample data was not adversely affected by this excursion. The original sample results are provided.

**Affected Sample:**

F6B140249 (1): B1H4K8

**Pesticides Method: 8081A**

Batch 6045405

There was insufficient sample volume to perform MS/MSD analysis. A LCS and LCSD were performed to demonstrate accuracy and replicate precision.

The LCS recoveries for heptachlor, endosulfan I, 4,4'-DDE and endosulfan II on both the primary/unreported column and the confirmation/reported column are outside the upper QC limit, indicating a potential positive bias for these analytes. The LCSD analyte recovery for beta-BHC, delta-BHC, gamma-BHC, heptachlor, aldrin, heptachlor epoxide, endosulfan I, dieldrin, endrin, endosulfan II and endrin aldehyde on the primary/unreported column and beta-BHC, delta-BHC, gamma-BHC, aldrin, heptachlor epoxide, endosulfan I, dieldrin, endrin, endosulfan II, 4,4'-DDD, endrin aldehyde and gamma-chlordane on the confirmation/reported column is outside the upper QC limit, indicating a potential positive bias for these analytes. These analytes were not observed above the reporting limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The original sample results are provided. Results are provided with this narrative.

**Affected Sample:**

F6B140249 (1): B1H4K8

**Nonhalogenated Organics Method: 8015B**

Batch 6069042

Sample F6B140249-001 was extracted out of hold. The sample was received on the day the hold time expired. Until the time of extraction the sample remained sealed at 4 degrees Celsius.

**Affected Sample:**

F6B140249 (1): B1H4K8

**Sulfide Method: 9030**

Batch 6047218

There was insufficient sample provided to perform the analysis at the method specified amount.

**Affected Sample:**

F6B140249 (1): B1H4K8

**Hexavalent Chromium Method: 7196A**

There are no observations or nonconformances associated with this analysis.

**TIC and TOC Method: 9060**

There are no observations or nonconformances associated with this analysis.

**EXECUTIVE SUMMARY - Detection Highlights**

F6B140249

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
BIH4E8 01/31/06 09:00 001				
Total Inorganic Carbon	368 J	25.9	mg/kg	SW846 9060
Total Organic Carbon	457	25.9	mg/kg	SW846 9060
Nitrate/Nitrite as N	18.9	5.0	mg/kg	MCAWW 353.1
Percent Moisture	3.5	0.10	%	MCAWW 160.3 MOD

**METHODS SUMMARY**

F6B140249

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Chlorinated Herbicides by GC	SW846 8151A	SW846 8151A
Hexavalent Chromium	SW846 7196A	SW846 3060A
Nitrate-Nitrite	MCAWW 353.1	
Nonhalogenated Organics Using GC/FID	SW846 8015B	SW846 8015B
Oil & Grease (Gravimetric)	SW846 9071A	
Organochlorine Pesticides	SW846 8081A	SW846 3550
Percent Moisture	MCAWW 160.3 MOD	MCAWW 160.3 MOD
Sulfide	SW846 9030	
Total Inorganic Carbon	SW846 9060	
Total Organic Carbon	SW846 9060	SW846 9060

**References:**

- MCAWW "Methods for Chemical Analysis of Water and Wastes",  
EPA-600/4-79-020, March 1983 and subsequent revisions.
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical  
Methods", Third Edition, November 1986 and its updates.

### SAMPLE SUMMARY

F6B140249

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT</u>	<u>SAMPLE ID</u>	<u>SAMPLED</u>	<u>SAMP</u>
				<u>DATE</u>	<u>TIME</u>
HXETK	001	B1H4K8		01/31/06	09:00

**NOTE(S) :**

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

FLOOR HANFORD IC

Client Sample ID: B1H4K8

GC Volatiles

Lot-Sample #....: F6B140249-001    Work Order #....: HXETK1AM    Matrix.....: SOLID  
 Date Sampled....: 01/31/06    Date Received...: 02/10/06  
 Prep Date.....: 03/10/06    Analysis Date...: 03/10/06  
 Prep Batch #....: 6069042  
 Dilution Factor: 1  
 % Moisture.....: 3.5    Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1-Butanol	ND	52	mg/kg	2.0
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS		
Isobutanol	100	(60 - 131)		

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: F6B140249      Work Order #...: H01WL1AA      Matrix.....: SOLID  
MB Lot-Sample #: F6C100000-042      Prep Date.....: 03/10/06  
Analysis Date...: 03/10/06      Prep Batch #...: 6069042  
Dilution Factor: 1

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>		<u>METHOD</u>
		<u>LIMIT</u>	<u>UNITS</u>	
1-Butanol	ND	50	mg/kg	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>		
	<u>RECOVERY</u>	<u>LIMITS</u>		
Isobutanol	95	(60 - 131)		

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: F6B140249      Work Order #...: H01WL1AC      Matrix.....: SOLID  
 LCS Lot-Sample#: F6C100000-042  
 Prep Date.....: 03/10/06      Analysis Date...: 03/10/06  
 Prep Batch #...: 6069042  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u> <u>AMOUNT</u>	<u>MEASURED</u> <u>AMOUNT</u>	<u>UNITS</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>METHOD</u>
1-Butanol	0.809		ng/kg	83	SW846 8015B
<u>SURROGATE</u>		<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>		
Isobutanol		95	(77 - 116)		

**NOTE (5):**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: F6B140249      Work Order #...: HXETK1A1-MS      Matrix.....: SOLID  
 MS Lot-Sample #: F6B140249-001      HXETK1A2-MSD  
 Date Sampled...: 01/31/06      Date Received...: 02/10/06  
 Prep Date.....: 03/10/06      Analysis Date...: 03/10/06  
 Prep Batch #...: 6069042  
 Dilution Factor: 1      % Moisture.....: 3.5

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECOVERY	RPD	METHOD
1-Butanol	ND	0.760		mg/kg	89		SW846 8015B
	ND	0.708		mg/kg	98	1.8	SW846 8015B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Isobutanol	97	(60 - 131)
	107	(60 - 131)

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Bold print denotes control parameters.  
 Results and reporting limits have been adjusted for dry weight.

FLDOR HANFORD IC

Client Sample ID: B1B4K8

GC Semivolatiles

Lot-Sample #....: F6B140249-001    Work Order #....: HKETK1AK    Matrix.....: SOLID  
 Date Sampled....: 01/31/06    Date Received...: 02/10/06  
 Prep Date.....: 02/14/06    Analysis Date...: 02/17/06  
 Prep Batch #....: 6045405  
 Dilution Factor: 1  
 % Moisture.....: 3.5    Method.....: SW846 8081A

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Aldrin	ND	1.8	ug/kg	0.10
alpha-BHC	ND	1.8	ug/kg	0.63
beta-BHC	ND	1.8	ug/kg	0.12
delta-BHC	ND	1.8	ug/kg	0.12
gamma-BHC (Lindane)	ND	1.8	ug/kg	0.26
4,4'-DDD	ND	1.8	ug/kg	0.097
4,4'-DDE	ND	1.8	ug/kg	0.40
4,4'-DDT	ND	1.8	ug/kg	0.20
Dieldrin	ND	1.8	ug/kg	0.28
Endosulfan I	ND	1.8	ug/kg	0.13
Endosulfan II	ND	1.8	ug/kg	0.098
Endosulfan sulfate	ND	1.8	ug/kg	0.24
Endrin	ND	1.8	ug/kg	0.20
Heptachlor	ND	1.8	ug/kg	0.10
Heptachlor epoxide	ND	1.8	ug/kg	0.14
Toxaphene	ND	69	ug/kg	6.8

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
Tetrachloro-m-xylene	86	(36 - 129)
Decachlorobiphenyl	87	(35 - 150)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

## METHOD BLANK REPORT

## GC Semivolatiles

Client Lot #: F6B140249  
 ME Lot-Sample #: F6B140000-405

Work Order #: HXE521AA

Matrix: SOLID

Analysis Date: 02/17/06  
 Dilution Factor: 1

Prep Date: 02/14/06

Prep Batch #: 6045405

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	METHOD
Aldrin	ND	1.7	ug/kg	SW846 8081A
alpha-BHC	ND	1.7	ug/kg	SW846 8081A
beta-BHC	ND	1.7	ug/kg	SW846 8081A
delta-BHC	ND	1.7	ug/kg	SW846 8081A
gamma-BHC (Lindane)	ND	1.7	ug/kg	SW846 8081A
4,4'-DDD	ND	1.7	ug/kg	SW846 8081A
4,4'-DDE	ND	1.7	ug/kg	SW846 8081A
4,4'-DDT	ND	1.7	ug/kg	SW846 8081A
Dieldrin	ND	1.7	ug/kg	SW846 8081A
Endosulfan I	ND	1.7	ug/kg	SW846 8081A
Endosulfan II	ND	1.7	ug/kg	SW846 8081A
Endosulfan sulfate	ND	1.7	ug/kg	SW846 8081A
Endrin	ND	1.7	ug/kg	SW846 8081A
Heptachlor	ND	1.7	ug/kg	SW846 8081A
Heptachlor epoxide	ND	1.7	ug/kg	SW846 8081A
Toxaphene	ND	67	ug/kg	SW846 8081A
	PERCENT	RECOVERY		
SURROGATE	RECOVERY	LIMITS		
Tetrachloro-m-xylene	80	(36 - 129)		
Decachlorobiphenyl	84	(35 - 150)		

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: F6B140249      Work Order #...: HXES21AC-LCS      Matrix.....: SOLID  
 LCS Lot-Sample#: F6B140000-405      HXES21AD-LCSD  
 Prep Date.....: 02/14/06      Analysis Date...: 02/17/06  
 Prep Batch #...: 6045405  
 Dilution Factor: 1

PARAMETER	SPIKE		MEASURED		PERCENT		METHOD
	AMOUNT	AMOUNT	AMOUNT	UNITS	RECOVERY	RPD	
gamma-BHC (Lindane)	16.7	17.4	17.4	ug/kg	104		SW846 8081A
	16.7	18.4	18.4 a	ug/kg	110	5.6	SW846 8081A
Heptachlor	16.7	17.3	17.3	ug/kg	104		SW846 8081A
	16.7	18.2	18.2	ug/kg	109	5.1	SW846 8081A
Aldrin	16.7	17.4	17.4	ug/kg	104		SW846 8081A
	16.7	18.4	18.4 a	ug/kg	110	5.6	SW846 8081A
Dieldrin	16.7	17.7	17.7	ug/kg	106		SW846 8081A
	16.7	19.0	19.0 a	ug/kg	114	7.1	SW846 8081A
Endrin	16.7	18.6	18.6	ug/kg	112		SW846 8081A
	16.7	19.7	19.7 a	ug/kg	118	5.7	SW846 8081A
4,4'-DDT	16.7	20.1	20.1	ug/kg	121		SW846 8081A
	16.7	20.8	20.8	ug/kg	125	3.4	SW846 8081A
alpha-BHC	16.7	17.5	17.5	ug/kg	105		SW846 8081A
	16.7	18.5	18.5	ug/kg	111	5.6	SW846 8081A
beta-BHC	16.7	17.1	17.1 a	ug/kg	103		SW846 8081A
	16.7	17.9	17.9 a	ug/kg	107	4.6	SW846 8081A
delta-BHC	16.7	17.4	17.4	ug/kg	104		SW846 8081A
	16.7	18.7	18.7 a	ug/kg	112	7.2	SW846 8081A
4,4'-DDD	16.7	18.2	18.2	ug/kg	109		SW846 8081A
	16.7	19.5	19.5 a	ug/kg	117	6.9	SW846 8081A
4,4'-DDE	16.7	19.4	19.4 a	ug/kg	116		SW846 8081A
	16.7	18.7	18.7	ug/kg	112	3.7	SW846 8081A
Endosulfan I	16.7	17.2	17.2 a	ug/kg	103		SW846 8081A
	16.7	18.3	18.3 a	ug/kg	110	6.2	SW846 8081A
Endosulfan II	16.7	17.1	17.1 a	ug/kg	103		SW846 8081A
	16.7	18.4	18.4 a	ug/kg	110	7.3	SW846 8081A
Endosulfan sulfate	16.7	15.8	15.8	ug/kg	95		SW846 8081A
	16.7	16.1	16.1	ug/kg	97	1.9	SW846 8081A
Heptachlor epoxide	16.7	17.4	17.4	ug/kg	104		SW846 8081A
	16.7	18.6	18.6 a	ug/kg	112	6.7	SW846 8081A

SURROGATE	PERCENT RECOVERY	
	RECOVERY	LIMITS
Tetrachloro-m-xylene	86	(75 - 110)
	87	(75 - 110)
Decachlorobiphenyl	84	(73 - 122)
	86	(73 - 122)

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters.

a Spiked analyte recovery is outside stated control limits.

FLOOR HANFORD IC

Client Sample ID: B1H4K8

GC Semivolatiles

Lot-Sample #....: F6B140249-001    Work Order #....: HXETK1A1    Matrix.....: SOLID  
 Date Sampled....: 01/31/06    Date Received...: 02/10/06  
 Prep Date.....: 02/14/06    Analysis Date...: 02/17/06  
 Prep Batch #....: 6045402  
 Dilution Factor: 1  
 % Moisture.....: 3.5    Method.....: SW846 8151A

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
2,4-D	ND	83	ug/kg	30
Dalapon	ND	41	ug/kg	28
2,4-DB	ND	83	ug/kg	25
Dicamba	ND	41	ug/kg	1.5
Dichlorprop	ND	83	ug/kg	28
Dinoseb	ND	26	ug/kg	6.1
MCPA	ND	8300	ug/kg	800
MCPP	ND	8300	ug/kg	1200
2,4,5-TP (Silvex)	ND	21	ug/kg	3.3
2,4,5-T	ND	21	ug/kg	5.2
	PERCENT	RECOVERY		
<u>SURROGATE</u>	<u>RECOVERY</u>	<u>LIMITS</u>		
2,4-Dichlorophenylacetic acid	100	(22 - 113)		

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**METHOD BLANK REPORT**

**GC Semivolatiles**

Client Lot #...: F6B140249      Work Order #...: HXE5P1AA      Matrix.....: SOLID  
 MB Lot-Sample #: F6B140000-402      Prep Date.....: 02/14/06  
 Analysis Date...: 02/17/06      Prep Batch #...: 6045402  
 Dilution Factor: 1

PARAMETER	RESULT	REPORTING		METHOD
		LIMIT	UNITS	
2,4-D	ND	80	ug/kg	SW846 8151A
Dalapon	ND	40	ug/kg	SW846 8151A
2,4-DB	ND	80	ug/kg	SW846 8151A
Dicamba	ND	40	ug/kg	SW846 8151A
Dichlorprop	ND	80	ug/kg	SW846 8151A
Dinoseb	ND	25	ug/kg	SW846 8151A
MCPA	ND	8000	ug/kg	SW846 8151A
MCPP	ND	8000	ug/kg	SW846 8151A
2,4,5-TP (Silvex)	ND	20	ug/kg	SW846 8151A
2,4,5-T	ND	20	ug/kg	SW846 8151A

SURROGATE	PERCENT	RECOVERY
	RECOVERY	LIMITS
2,4-Dichlorophenylacetic acid	100	(22 - 113)

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #...: F6B140249      Work Order #...: HXE5PIAC-LCS      Matrix.....: SOLID  
 LCS Lot-Sample#: F6B140000-402      HXE5PIAD-LCSD  
 Prep Date.....: 02/14/06      Analysis Date...: 02/17/06  
 Prep Batch #...: 6045402  
 Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
2,4-D	500	475	ug/kg	95		SW846 8151A
	500	524	ug/kg	105	9.8	SW846 8151A
Dalapon	1250	1060	ug/kg	85		SW846 8151A
	1250	1180	ug/kg	94	11	SW846 8151A
2,4-DB	500	498	ug/kg	100		SW846 8151A
	500	497	ug/kg	99	0.20	SW846 8151A
Dicamba	50.0	55.8 a	ug/kg	112		SW846 8151A
	50.0	61.7 a	ug/kg	123	10	SW846 8151A
Dichlorprop	500	626 a	ug/kg	125		SW846 8151A
	500	663 a	ug/kg	133	5.7	SW846 8151A
Dinoseb	250	60.1 a	ug/kg	24		SW846 8151A
	250	59.7 a	ug/kg	24	0.66	SW846 8151A
2,4,5-TP (Silverx)	50.0	55.3 a	ug/kg	111		SW846 8151A
	50.0	57.4 a	ug/kg	115	3.7	SW846 8151A
2,4,5-T	50.0	46.2	ug/kg	92		SW846 8151A
	50.0	45.8	ug/kg	92	0.87	SW846 8151A

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
2,4-Dichlorophenylacetic acid	109	(35 - 115)
	112	(35 - 115)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

## FLUOR HAMFORD IC

Client Sample ID: B1B4E8

## General Chemistry

Lot-Sample #....: F6B140249-001

Work Order #....: HXETK

Matrix.....: SOLID

Date Sampled....: 01/31/06

Date Received...: 02/10/06

\* Moisture.....: 3.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	ND	0.40	mg/kg	SW846 7196A	02/27/06	6058493
				Dilution Factor: 1		MDL.....: 0.15
Nitrate/Nitrite as N	18.9	5.0	mg/kg	MCAHW 353.1	02/16/06	6047362
				Dilution Factor: 10		MDL.....: 0.31
Oil and Grease (Gravimetric)	ND	207	mg/kg	SW846 9071A	02/28-03/01/06	6060219
				Dilution Factor: 1		MDL.....: 78.0
Percent Moisture	3.5	0.10	%	MCAHW 160.3 MOD	02/15/06	6046123
				Dilution Factor: 1		MDL.....:
Total Inorganic Carbon	368 J	25.9	mg/kg	SW846 9060	03/10-03/13/06	6072466
				Dilution Factor: 1		MDL.....: 8.2
Total Organic Carbon	457	25.9	mg/kg	SW846 9060	03/09-03/10/06	6069210
				Dilution Factor: 1		MDL.....: 20.9
Total Sulfide	ND	10.4	mg/kg	SW846 9030	02/16/06	6047218
				Dilution Factor: 1		MDL.....: 3.2

**NOTE(S):**

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

## METHOD BLANK REPORT

## General Chemistry

Client Lot #....: F6B140249

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	ND	0.40	mg/kg	SW846 7196A	02/27/06	6058493
		Work Order #: HX9VA1AA MB Lot-Sample #: F6B270000-493				
		Dilution Factor: 1				
Nitrate/Nitrite as N	ND	0.50	mg/kg	MCAWW 353.1	02/16/06	6047362
		Work Order #: HXK8C1AA MB Lot-Sample #: F6B160000-362				
		Dilution Factor: 1				
Oil and Grease (Gravimetric)	ND	200	mg/kg	SW846 9071A	02/28-03/01/06	6060219
		Work Order #: H0D581AA MB Lot-Sample #: F6C010000-219				
		Dilution Factor: 1				
Total Inorganic Carbon	16.5 B	25.0	mg/kg	SW846 9060	03/10-03/13/06	6072466
		Work Order #: H06P61AA MB Lot-Sample #: F6C130000-466				
		Dilution Factor: 1				
Total Organic Carbon	ND	25.0	mg/kg	SW846 9060	03/09-03/10/06	6069210
		Work Order #: H02HC1AA MB Lot-Sample #: F6C100000-210				
		Dilution Factor: 1				
Total Sulfide	ND	10.0	mg/kg	SW846 9030	02/16/06	6047218
		Work Order #: HXKH71AA MB Lot-Sample #: F6B160000-218				
		Dilution Factor: 1				

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: F6B140249

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Nitrate/Nitrite as N								
	4.00	4.05	mg/kg	101		MCAWW 353.1	02/16/06	6047362
	4.00	4.04	mg/kg	101	0.24	MCAWW 353.1	02/16/06	6047362

Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Oil and Grease (Gravimetric)								
	3330	4500 N	mg/kg	135		SW846 9071A	02/28-03/01/06	6060219
	3330	4700 N	mg/kg	141	4.3	SW846 9071A	02/28-03/01/06	6060219

Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Inorganic Carbon								
	600	635	mg/kg	106		SW846 9060	03/10-03/13/06	6072466
	600	688	mg/kg	115	8.0	SW846 9060	03/10-03/13/06	6072466

Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Sulfide								
	8.00	8.00	mg/kg	100		SW846 9030	02/16/06	6047218
	8.00	7.68	mg/kg	96	4.1	SW846 9030	02/16/06	6047218

Dilution Factor: 1

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: F6B140249

Matrix.....: SOLID

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	2.00	2.14	mg/kg	107	SW846 7196A	02/27/06	6058493
Work Order #: HX9VALAC LCS Lot-Sample#: F6B270000-493 Dilution Factor: 1							
Total Organic Carbon	600	553	mg/kg	92	SW846 9060	03/09-03/10/06	6069210
Work Order #: H02HCLAC LCS Lot-Sample#: F6C100000-210 Dilution Factor: 1							

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.

**MATRIX SPIKE SAMPLE DATA REPORT**

**General Chemistry**

Client Lot #...: F6B140249  
 Date Sampled...: 01/31/06

Date Received...: 02/10/06

Matrix.....: SOLID

Percent Moisture: 73

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Hexavalent Chromium	ND	40.0	37.1	mg/kg	93	SW846 7196A	02/27/06	6058493
			Work Order #...: HXETK1AW MS Lot-Sample #: F6B140249-001					
			Dilution Factor: 1					
Nitrate/Nitrite as N	18.9	50.0	68.1	mg/kg	98	MCAWW 353.1	02/16/06	6047362
			Work Order #...: HXETK1AQ MS Lot-Sample #: F6B140249-001					
			Dilution Factor: 1					
Oil and Grease (Gravimetric)	ND	3450	4250	mg/kg	123	SW846 9071A	02/28-03/01/06	6060219
			Work Order #...: HXETK1A0 MS Lot-Sample #: F6B140249-001					
			Dilution Factor: 1					

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.  
 Results and reporting limits have been adjusted for dry weight.





CR 3085

OT# FBI 10249

SDG# W04787

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST					F06-002-003	
COLLECTOR Mikler/Pope/Pfister	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR TRENT, SJ		PRICE CODE	SN	DATA TURNAROUND 45 Days / 45 Days	
SAMPLING LOCATION 299-W18-8	PROJECT DESIGNATION 299-W18-8 Well Decommissioning - Waste Management		SAF NO. F06-002		AIR QUALITY	<input type="checkbox"/>		
ICE CHEST NO. <i>CRP-05-015</i>	FIELD LOGBOOK NO.	COA 119312ES10	METHOD OF SHIPMENT FEDERAL EXPRESS					
SHIPPED TO Savern Trent St. Louis	OFFSITE PROPERTY NO. <i>See PTR 16866</i>		BILL OF LADING/AIR BILL NO. <i>See PTR 16866</i>					
MATRIX* A=Air DL=Drum L=Liquid DS=Drum S=Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water WT=Wipe X=Other	POSSIBLE SAMPLE HAZARDS/ REMARKS	PRESERVATION	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	
		TYPE OF CONTAINER	aG*	aG	aG	G	aG	
		NO. OF CONTAINER(S)	2	1	1	1	1	
		VOLUME	40mL	40mL	40mL	120mL	60mL	
SPECIAL HANDLING AND/OR STORAGE Radioactive tie to B1HBNO		SAMPLE ANALYSIS	Alcohol, Glycols, Petrols - 8015 (1-8uand)	Peroxides - 8081	Chloro-Halocides - 818151	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	
SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME					
B1H4K8	OTHER SOLID	1-31-06	0900	X	X	X	X	

CHAIN OF POSSESSION		SIGN/ PRINT NAMES		SPECIAL INSTRUCTIONS	
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME	(1)NO2/NO3 - 353.1; Sulfides - 9030; Chromium Hex - 7196; Oil & Grease - 413.1; (2)TIC - 415.1M (Total Inorganic Carbon) TOC - 415.1 (Total organic carbon)	
<i>Shirley J. Mikler</i>	<i>1/31/06 1415</i>	<i>R. R. R. R.</i>	<i>1/31/06 1415</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>M. G. B...</i>	<i>0900</i>	<i>M. G. B...</i>	<i>0900</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
<i>M. G. B...</i>	<i>0900</i>	<i>Red X</i>	<i>0900</i>		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

24 OI 25



# STL

Lot No(s) F6B140249

(Note all associated lot No's)

### Condition Upon Receipt Form St. Louis Laboratory

Client: Hanford COC/RFA No: F06-002-003 Date: 02/00/06  
Quote No: \_\_\_\_\_ Initiated By: [Signature] Time: 0900

#### Shipping Information

Shipper Name: Fed Ex Multiple Packages: Y (N) N/A  
Shipper No(s):\* 1. IRW 7908 0846 8979 Sample Temperature(s):\*\* 1. 3  
2. \_\_\_\_\_ 2. \_\_\_\_\_  
3. \_\_\_\_\_ 3. \_\_\_\_\_  
4. \_\_\_\_\_ 4. \_\_\_\_\_  
5. \_\_\_\_\_ 5. \_\_\_\_\_

\*Numbered shipping lines correspond to Numbered Sample Temp lines.

\*\*Sample must be received at 4°C ± 2°C. If not, note contents below.  
Temperature variance does NOT affect the following analysis/matrix: Metals-Liquid  
Rad tests - Liquids or Solids.

Condition/Variance (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in undamaged condition?	7. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?
2. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Sample received with proper pH? (N/A for soil samples) If NO: sample ID _____ Preservative _____ Lot _____ Date _____ Time _____ Sticker applied Y/N _____	8. <input checked="" type="radio"/> Y <input type="radio"/> N	Chain of Custody matches sample IDs on container(s)?
3. <input type="radio"/> Y <input type="radio"/> N	If N/A - Was pH taken by original STL Lab?	9. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Custody seal received intact?
4. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?	10. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Custody seal tamper evident?
5. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample volume sufficient for analysis?	11. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Custody seal on bottles intact?
6. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If yes, note sample ID's below)	12. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Custody seal tamper evident?
<sup>1</sup> For DOE-AL (Pantex, LANL, Sandia) sites, verify pH of all containers received, EXCEPT VOA, TOX, and soils.		13. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was Internal COC/CUR rec'd?

#### Notes:

PM notified of different method for TIC and TOC. Rec. 2-15-06

PM Notified of Short Hold samples: Y N PM Initials: \_\_\_\_\_

#### Corrective Action:

- Client's Name: \_\_\_\_\_ Informed by: \_\_\_\_\_ By: \_\_\_\_\_
- Sample(s) processed "as is". \_\_\_\_\_
- Sample(s) on hold until: \_\_\_\_\_ If released, notify: \_\_\_\_\_

#### Project Management Review:

[Signature] Date: 02-15-06

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

3285

ADMIN-0004, REVISED 10/06/05  
\\slr01\QA\FORMS\ST-Louis\ADMIN\Admin004\_rev9.doc