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SEVERN
TRENT

STL

STL St. Louis
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Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757
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ANALYTICAL REPORT

PROJECT NO. 200-LW-1/LW-2

F03-025

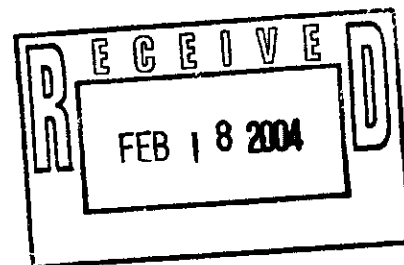
Lot #: F5B070203

SDG #: W04380A

Steve Trent

Fluor Hanford Inc
MSIN A0-21
PO Box 1000
Richland, WA 99352

SEVERN TRENT LABORATORIES, INC.



RECEIVED
MAY 09 2005
EDMC

A handwritten signature in cursive script, appearing to read "Marti Ward".

MARTI WARD
Project Manager

February 15, 2005

Case Narrative
LOT NUMBER: F5B070203
SDG: W04380A

This report contains the analytical results for the sample received under chain of custody by STL St. Louis on February 7, 2005. This sample is associated with your F03-025 SAF.

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

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.

TCLP Metals

TCLP non-volatiles preparation requires 100 grams of sample. There was insufficient sample provided to perform analysis at the method specified amount. A reduced sample amount was used. There was insufficient volume to run an MS/MSD on the sample.

SAMPLE SUMMARY

F5B070203

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
G3XV4	001	B191F1	08/18/04	08:58

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.

METHODS SUMMARY

F5B070203

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 1311/3010

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METALS

FD010203

1104380A

2051

FLOOR HANFORD IC

Client Sample ID: B191F1

TCLP Metals

Lot-Sample #...: F5B070203-001

Matrix.....: SOLID

Date Sampled...: 08/18/04

Date Received...: 02/07/05

Leach Date.....: 02/08/05

Leach Batch #...: P503912

PARAMETER	RESULT	REPORTING		METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS			
Prep Batch #...: 5040226						
Chromium	ND	0.025	mg/L	SW846 6010B	02/09-02/10/05	G3XV41AA
		Dilution Factor: 2.5		MDL.....: 0.018		
Lead	0.20 B	0.25	mg/L	SW846 6010B	02/09-02/10/05	G3XV41AC
		Dilution Factor: 2.5		MDL.....: 0.20		

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: F5B070203

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
MB Lot-Sample #: F5B080000-421 Prep Batch #...: 5040226						
Leach Date.....: 02/08/05 Leach Batch #...: P503912						
Chromium	ND	0.025	mg/L	SW846 6010B	02/09-02/10/05	G31RE1AA
Dilution Factor: 2.5						
Lead	ND	0.25	mg/L	SW846 6010B	02/09-02/10/05	G31RE1AC
Dilution Factor: 2.5						

NOTE(S):

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

LABORATORY CONTROL SAMPLE DATA REPORT

TCLP Metals

Client Lot #...: F5B070203

Matrix.....: SOLID

<u>PARAMETER</u>	<u>SPIKE AMOUNT</u>	<u>MEASURED AMOUNT</u>	<u>UNITS</u>	<u>PERCNT RECVRY</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: F5B090000-226 Prep Batch #...: 5040226							
Chromium	2.50	2.41	mg/L	96	SW846 6010B	02/09-02/10/05	G33FE1AE
			Dilution Factor: 2.5				
Lead	2.50	2.42	mg/L	97	SW846 6010B	02/09-02/10/05	G33FE1AF
			Dilution Factor: 2.5				

NOTE(S):

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

Fluor Humbold Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSES REQUEST		PAGE 3 OF 54	
COLLECTOR Pope/Plaster/Wiberg/Tyra	COMPANY CONTACT TRENT, STEVE	TELEPHONE NO. 373-5889	PROJECT COORDINATOR TRENT, SJ	PRICE CODE 80	DATA TURNAROUND 60 Days / 60 Days
SAMPLING LOCATION 216-S-20; 29.5-32.0 ft.	PROJECT DESIGNATION 200-LW-1/LW-2 Characterization - Soil	COA 119143ES10	SAF NO. R03-025	AIR QUALITY	
ICE CHEST NO. N/A	FIELD LOGBOOK NO.		METHOD OF SHIPMENT Government Vehicle		
SHIPPED TO 223-S Lab Operators	OFFSITE PROPERTY NO. N/A		BILL OF LADING/AIR BILL NO. N/A		
PATRIOS* A-Air DL-Dust L-Liquid DS-Dust S-Solids O-Oil S-Soil SC-Sediment T-Tissue V-Vegetation W-Water X-Other	POSSIBLE SAMPLE HAZARDS/ REMARKS N/A W04380	Preservation Cool 4C	Cool 4C	Preservation Cool 4C	Notes
SPECIAL HANDLING AND/OR STORAGE N/A	SAMPLE ANALYSIS	NON - GEN - Contaminants	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	POB - BEC - SPECIAL INSTRUCTIONS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS
SAMPLE NO. 8191F1	MATRIX SOIL	SAMPLE DATE 8/18/09	SAMPLE TIME 0800		
CHAIN OF POSSESSION		SIGN / PRINT NAMES		SPECIAL INSTRUCTIONS	
RECEIVED BY/REMOVED FROM J. Plaster	DATE/TIME 11-5-04	DATE/TIME 1400	DATE/TIME 8-18-09	DATE/TIME 0800	DATE/TIME 0800
RECEIVED BY/REMOVED FROM NO-026	DATE/TIME 11/17/09	DATE/TIME 0800	DATE/TIME 11/17/09	DATE/TIME 0800	DATE/TIME 0800
RECEIVED BY/REMOVED FROM	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
RECEIVED BY/REMOVED FROM	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
RECEIVED BY/REMOVED FROM	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
RECEIVED BY/REMOVED FROM	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
RECEIVED BY	DISPOSAL METHOD	TITLE			
LABORATORY SECTION	DISPOSAL METHOD	RESPONSOR BY			
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DATE/TIME			

SPECIAL INSTRUCTIONS
 The lab is to analyze pH within 24 hours of sample receipt. The lab is to report kerosemic range organics from the WTPH-D analysis. FH acknowledges that the analytical holding time for Nitrate, Nitrite and Phosphate by EPA Method 300.0 will be met.
 (Semi-VOC - 8270A (TC) (Phenol) Semi-VOC - 8270A (Add-On) (Tributyl phosphate)
 (2)IC Anions - 300.0 (Chloride, Fluoride, Nitrate, Nitrogen in Nitrite, Phosphate, Sulfate) Cations (TC) - 300.7 (Nitrogen in ammonium) Total Cyanide - 9010, Sulfides 9090; pH(Sol) pH(S);
 Sample data returned from Trent from original CoC with 11/17/09 CoC enclosed on pg 4 of 4

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FLOOR HANFORD INC. COMPANY CONTACT TRENT, STEVE TELEPHONE NO. 373-5689		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST PROJECT COORDINATOR TRENT, SJ SAF NO. F13-025		F13-025-173 PRICE CODE SN AIR QUALITY <input type="checkbox"/>	DATA TURNAROUND 45 Days / 45 Days
PROJECT DESIGNATION 200-LV-1/LV-2 Characterization - Sol		COA 1181XES10			
FIELD LOGBOOK NO. HNF-N-356 1		OFFSITE PROPERTY NO. 200 PTK 14452		METHOD OF SHIPMENT Federal Express BILL OF LADING/AVIATION 200 PTK 14452	
SHIPPED TO Severn Trent St. Louis		PRESERVATION None			
POSSIBLE SAMPLE HAZARDS/ REMARKS N/A		TYPE OF CONTAINER G/T			
SPECIAL HANDLING AND/OR STORAGE N/A		NO. OF CONTAINER(S) 1			
MATRIX* A-Air DL-Drum L-Liquid DS-Drum S-Solid L-Liquid C-Cl S-Sol SS-Sediment T-Tissue V-Vegetation W-Water W-Wire X-Other		VOLUME 200L			
SAMPLE NO. B191F1		SAMPLE DATE 8/10/04		SAMPLE TIME 0858	
CHAIN OF POSSESSION RECEIVED BY/REMOVED FROM DATE/TIME RECEIVED BY/STORER IN DATE/TIME RECEIVED BY/STORER IN DATE/TIME RECEIVED BY/STORER IN DATE/TIME RECEIVED BY/STORER IN DATE/TIME RECEIVED BY/STORER IN DATE/TIME		SPECIAL INSTRUCTIONS (1) ICP Metals - 6010A (Supertracs) (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver) ICP Metals - 6010A (Supertracs A68-01) (Antimony, Beryllium, Bismuth, Copper, Nickel) Mercury - 7471 - (CV);			
LABORATORY SECTION RECEIVED BY		TITILE		DATE/TIME	
DISPOSAL METHOD RECEIVED BY		DATE/TIME		DATE/TIME	



STL

Lot No: F4K180368

Condition Upon Receipt Form
St. Louis Laboratory

Client: Richland

Date: 11.18.04 Time: 0900

Quote No: _____

Initiated by: _____

Shipper/No: Fed X Below

COC/RFA Numbers: Below

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

1. <input checked="" type="radio"/> N	Sample received in undamaged condition?	7. <input checked="" type="radio"/> N	Sample received with Chain of Custody?
2. <input checked="" type="radio"/> N	Sample received within 4C ± 2C°?	8. <input checked="" type="radio"/> N	Chain of Custody matches sample IDs on containers?
	Record <u>2° 2° 2° 2° 3°</u>	9. <input checked="" type="radio"/> N N/A	Custody seal received intact on cooler?
3. <input checked="" type="radio"/> N N/A	Sample received with proper pH '1'?	10. <input checked="" type="radio"/> N N/A	Custody seal tamper evident on cooler?
4. <input checked="" type="radio"/> Y N	If N/A - Was pH taken by original STL lab?	11. <input checked="" type="radio"/> Y N N/A	Custody seal on bottles received intact?
5. <input checked="" type="radio"/> Y N	Sample received in proper containers?	12. <input checked="" type="radio"/> Y N N/A	Custody seal tamper evident on bottles?
6. <input checked="" type="radio"/> N ?	Sample volume sufficient for analysis?	13. <input checked="" type="radio"/> Y N	Was CUR (equivalent) rec'd from original STL lab?

see below

* Temperature Variance Does Not Affect the Following Analyses: _____

1) For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils. on 11.18.04

Notes: 7927 8069 7109 181932
7908 3365 852 C-O-C F03-025-094 - bottle
7908 3341 1054 have no custody seals
7921 3949 4659 C-O-C F03-025-094 has only 1x250g
7913 9119 9071 that is only about 1/4 full
* Only run metals / client 11-19-04
C-O-C's 181932, 505-010-144, 148, 146, 150 / 505-011-95, 93, 94,
87, 81, / 505-005-117, 504-007-64 + FLUORATED chains.

Corrective Action:

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

Project Management Review: Meward Date: 11-19-04

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

ADMIN-0004, Revised 2/17/04

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