

H1189

0054595

Recra LabNet - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
TNUHANFORD B00-046 H1189

DATE RECEIVED: 12/15/00

RFW LOT # :0012L586

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
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B11274

CALORIMETER BOMB PRE	001	W	00BOMB15	12/05/00	12/18/00	12/18/00
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B11275

CALORIMETER BOMB PRE	002	W	00BOMB15	12/11/00	12/18/00	12/18/00
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B11274

SULFATE BY IC	003	W	00LICB81	12/11/00	12/20/00	12/20/00
SULFATE BY IC	003 REP	W	00LICB81	12/11/00	12/20/00	12/20/00
SULFATE BY IC	003 MS	W	00LICB81	12/11/00	12/20/00	12/20/00

B11275

SULFATE BY IC	004	W	00LICB81	12/11/00	12/20/00	12/20/00
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LAB QC:

SULFATE BY IC	MB1	S	00LICB81	N/A	12/20/00	12/20/00
SULFATE BY IC	MB1 BS	S	00LICB81	N/A	12/20/00	12/20/00
SULFATE BY IC	MB2	S	00LICB81	N/A	12/20/00	12/20/00

RECEIVED
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EDMC



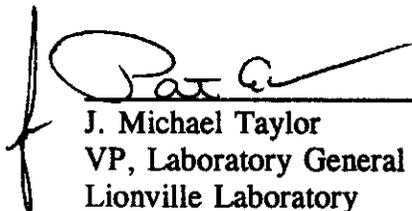
**Recra LabNet Philadelphia
Analytical Report**

Client : TNU-HANFORD B00-046 H1189
RFW# : 0012L586

W.O. # : 10985-001-001-9999-00
Date Received: 12-15-00

INORGANIC CASE NARRATIVE

1. This narrative covers the analyses of 2 water samples.
2. The samples were prepared and analyzed in accordance with the methods indicated on the attached glossary.
3. Sample holding times as required by the method and/or contract were met.
4. The cooler temperature was recorded on the chain-of-custody.
5. The method blanks (MB) were within method criteria, 00LICB81-MB2 represents the oxygen bomb preparation blank.
6. The Laboratory Control Samples (LCS) were within the laboratory control limits.
7. The matrix spike recovery was within the 75-125% control limits.
8. The replicate analysis was within the 20% Relative Percent Difference (RPD) control limit.
9. Results for oxygen bomb prepared samples are reported on a wet weight basis.
10. I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.



J. Michael Taylor
VP, Laboratory General Manager
Lionville Laboratory

01-10-01
Date

njp\112-586

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 11 pages.

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WET CHEMISTRY
 METHODS GLOSSARY FOR SOIL/SOLIDS SAMPLE ANALYSIS

	<u>ASTM</u>	<u>SW846</u>	<u>OTHER</u>
% Ash	___ D2216-80		
% Moisture	___ D2216-80		___ ILMO4.0 (e)
% Solids	___ D2216-80		___ ILMO4.0 (e)
% Volatile Solids	___ D2216-80		
ASTM Extraction in Water	___ D3987-81/85		
BTU	___ D240-87		
CEC		___ 9081	___ c
Chromium VI		___ 3060A/7196A	
Corrosivity ___ by coupon ___ by pH		___ 1110(mod) ___ 9045C	
Cyanide, Total		___ 9010B	___ ILMO4.0 (e)
Cyanide, Reactive		___ Section 7.3/9014	
Halides, Extractable Organic		___ 9020B	___ EPA 600/4/84-008
Halides, Total		___ 9020B	___ EPA 600/4/84-008
EP Toxicity		___ 1310A	
Flash Point		___ 1010	
Ignitability		___ 1010	
Oil & Grease		___ 9071A	
Carbon, Total Organic		___ 9060	___ Lloyd Kahn (mod)
Oxygen Bomb Prep for Anions	___ D240-87(mod)	___ 5050	
Petroleum Hydrocarbons, Total Recoverable		___ 9071	___ EPA 418.1
pH, Soil		___ 9045C	
Sulfide, Reactive		___ Section 7.3/9030B	
Sulfide		___ 9030B(mod)	
Specific Gravity	___ D1429-76C/	___ D5057-90	
Sulfur, Total		___ 9056	
Synthetic Preparation Leach		___ 1312	
Paint Filter		___ 9095A	
Other: <i>Sulfate</i>		Method: <i>EPA 300.0 (mod.)</i>	
Other:		Method	

* Water samples

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METHOD REFERENCES AND DATA QUALIFIERS

DATA QUALIFIERS

- U = Indicates that the parameter was not detected at or above the reported limit. The associated numerical value is the sample detection limit.
- * = Indicates that the original sample result is greater than 4x the spike amount added.

ABBREVIATIONS

- MB = Method or Preparation Blank.
MS = Matrix Spike.
MSD = Matrix Spike Duplicate.
REP = Sample Replicate
LC = Laboratory Control Sample.
NC = Not calculated.

A suffix of -R, -S, or -T following these codes indicate a replicate, spike or sample duplicate analysis respectively.

ANALYTICAL WET CHEMISTRY METHODS

1. ASTM Standard Methods.
2. USEPA Methods for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020).
3. Test Methods for Evaluating Solid Waste (USEPA SW-846).
 - a. Standard Methods for the Examination of Water and Waste, 16 ed, (1983).
 - b. Standard Methods for the Examination of Water and Waste, 17 ed, (1989)/18ed (1992).
 - c. Method of Soil Analysis, Part 1, Physical and Mineralogical Methods, 2nd ed, (1986).
 - d. Method of Soil Analysis, Part 2, Chemical and Microbiological Properties, Am. Soc. Agron., Madison, WI (1965).
 - e. USEPA Contract Laboratory Program, Statement of Work for Inorganic Analysis.
 - f. Code of Federal Regulations.

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INORGANICS DATA SUMMARY REPORT 12/29/00

CLIENT: TNUHANFORD B00-046 H1189
WORK ORDER: 10985-001-001-9999-00

RECRA LOT #: 0012L586

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-003	B11274	Sulfate by IC	918	MG/KG	123	10.0
-004	B11275	Sulfate by IC	825	MG/KG	123	10.0

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INORGANICS METHOD BLANK DATA SUMMARY PAGE 12/29/00

CLIENT: TNUHANFORD B00-046 H1189
WORK ORDER: 10985-001-001-9999-00

RECRA LOT #: 0012L586

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
BLANK10	00LICB81-MB1	Sulfate by IC	12.5	u MG/KG	12.5	1.0
BLANK20	00LICB81-MB2	Sulfate by IC	194	MG/KG	125	10.0

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INORGANICS ACCURACY REPORT 12/29/00

CLIENT: TNUHANFORD B00-046 H1189
 WORK ORDER: 10985-001-001-9999-00

RECRA LOT #: 0012L586

SAMPLE	SITE ID	ANALYTE	SPIKED	INITIAL	SPIKED	%RECOV	DILUTION
			SAMPLE	RESULT	AMOUNT		FACTOR (SPK)
-003	B11274	Sulfate by IC	3380	918	2450	100.2	10.0
BLANK10	00LICB81-MB1	Sulfate by IC	241	12.5 u	250	96.4	1.0

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INORGANICS PRECISION REPORT 12/29/00

CLIENT: TNUHANFORD B00-046 H1189
WORK ORDER: 10985-001-001-9999-00

RECRA LOT #: 0012L586

SAMPLE	SITE ID	ANALYTE	INITIAL			DILUTION FACTOR (REP)
			RESULT	REPLICATE RPD		
-003REP	B11274	Sulfate by IC	918	903	1.7	10.0

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B00-046-43	Page 1 of 1		
Collector <i>Gregory B. DeRoos / D Blankenship</i>		Company Contact Julian Laurenz		Telephone No. 372-9351		Project Coordinator TRENT, SJ	Price Code 7L	Data Turnaround 21 Days	
Project Designation 100-HR-3 ISRM Sampling and Analysis		Sampling Location 100 Area		<i>EL 1815</i> <i>12/11/00</i>		SAF No. B00-046	Air Quality <input type="checkbox"/>	<i>7 Days</i>	
Ice Chest No. <i>ERC 99-068 L101</i>		Field Logbook No. <i>EL-1815</i>		COA <i>T101R3C140</i>		Method of Shipment <i>FED EX</i>		<i>RE 12/11/00</i>	
Shipped To TMA/RECRA		Offsite Property No. <i>A010188</i>		Bill of Lading/Air Bill No. <i>42357953-1231</i>					
POSSIBLE SAMPLE HAZARDS/REMARKS <i>WONG</i>		Preservation	Cool 4C						
Special Handling and/or Storage <i>ET @ 12/12/00</i>		Type of Container	G/P						
Samples did not originate in radiological controlled area. No total activity associated with sample/samples.		No. of Container(s)	1						
		Volume	125mL						
		Substrate by Bomb Combustion							
SAMPLE ANALYSIS									
Sample No.	Matrix *	Sample Date	Sample Time						
B11275	WATER	12/11/00	0650	✓					
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS				Matrix *	
Relinquished By <i>D Blankenship</i>		Date/Time <i>12-11-00 0925</i>		Received By <i>R. Fallberg</i>		Date/Time <i>12-11-00 0925</i>		** No radiological screening is required prior to shipping samples off-site.	S=Soil SE=Soilmen SO=Solid S=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WL=Wipe L=Liquid V=Vegetation X=Other
Relinquished By <i>R. DeRoos</i>		Date/Time <i>10-75</i>		Received By <i>R. Thoren</i>		Date/Time <i>10-45</i>			
Relinquished By <i>R. Thoren</i>		Date/Time <i>12-11-00 1050</i>		Received By <i>R. Thoren</i>		Date/Time <i>12-11-00 1050</i>			
Relinquished By <i>R. Thoren</i>		Date/Time <i>12-11-00 12-11-00</i>		Received By <i>R. Thoren</i>		Date/Time <i>12-11-00 12-11-00</i>			
Relinquished By <i>R. Thoren</i>		Date/Time <i>12-11-00 12-17-00</i>		Received By <i>R. Thoren</i>		Date/Time <i>12-12-00 12-12-00</i>			
Relinquished By <i>R. Thoren</i>		Date/Time <i>12-12-00 0600</i>		Received By <i>FED EX</i>		Date/Time <i>12-12-00</i>			
Relinquished By <i>FED EX</i>		Date/Time <i>12-15-00/10-00</i>		Received By <i>D. DeRoos</i>		Date/Time <i>12-15-00/10-00</i>			
LABORATORY SECTION	Received By							Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method							Date/Time	