

Lionville Laboratory, Inc.
 INORGANIC ANALYTICAL DATA PACKAGE FOR
 TNUHANFORD S04-004 H2610

DATE RECEIVED: 09/14/04

LVL LOT # :0409L630

CLIENT ID /ANALYSIS	LVL #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
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B194C2

TOTAL ORGANIC CARBON	001	W	04LTC029	05/26/04	09/28/04	09/28/04
TOTAL ORGANIC CARBON	001 REP	W	04LTC029	05/26/04	09/28/04	09/28/04
TOTAL ORGANIC CARBON	001 MS	W	04LTC029	05/26/04	09/28/04	09/28/04

B194C3

TOTAL ORGANIC CARBON	002	W	04LTC029	05/26/04	09/28/04	09/28/04
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B194C4

TOTAL ORGANIC CARBON	003	W	04LTC029	05/26/04	09/28/04	09/28/04
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B194C5

TOTAL ORGANIC CARBON	004	W	04LTC029	05/26/04	09/28/04	09/28/04
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LAB QC:

TOTAL ORGANIC CARBON	MB1	W	04LTC029	N/A	09/28/04	09/28/04
TOTAL ORGANIC CARBON	MB1 BS	W	04LTC029	N/A	09/28/04	09/28/04



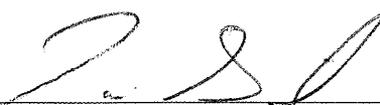
Analytical Report

Client: TNU-HANFORD S04-004 H2610
LVL#: 0409L630

W.O.#: 11343-606-001-9999-00
Date Relogged: 09-14-04

INORGANIC NARRATIVE

1. This narrative covers the analysis of 4 water samples.
2. The samples were prepared and analyzed in accordance with the method checked on the attached glossary.
3. Sample holding times as required by the method and/or contract were not met as the re-analysis was requested past the holding time.
4. The method blank was within the method criteria.
5. The Laboratory Control Sample (LCS) was within the laboratory control limits.
6. The matrix spike recovery was within the 75-125% control limits.
7. The replicate analysis was within the 20% Relative Percent Difference (RPD) control limit.
8. 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 package has been authorized by the Laboratory Manager or a designee, as verified by the following signature.



Iain Daniels
Laboratory Manager
Lionville Laboratory Incorporated

10/4/04
Date

njpl09-630

The results presented in this report relate to the analytical testing and conditions of the samples upon 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 9 pages.

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WET CHEMISTRY

METHODS GLOSSARY FOR WATER SAMPLE ANALYSIS

	<u>EPA /600</u>	<u>SW846</u>	<u>OTHER</u>
Acidity	305.1		
___ Alkalinity ___ Bicarbonate ___ Carbonate	310.1		
BOD	405.1		5210B (b)
Ion Chromatography:			
___ Bromide ___ Chloride ___ Fluoride	300.0	9056	
___ Nitrate ___ Nitrite ___ Phosphate	300.0	9056	
___ Sulfate ___ Formate ___ Acetate ___ Oxalate	300.0	9056	
Chloride	325.2	9251	
Chlorine, Residual	330.5 (mod)		
Cyanide, Amenable to Chlorination	335.2	9010B	
Cyanide, Total	335.2	9010B	9014 ILMO4.0 (e)
Cyanide, Weak Acid Dissociable			412 (a) 4500CN-I (b)
COD	410.4(mod)		5220C (b)
Color	110.2		
Corrosivity by Coupon		1110(mod)	
Chromium VI		7196A	3500Cr-D (b)
Fluoride	340.2		4500-FC
Hardness, Calcium	215.2		
Hardness, Total	130.2		
Iodide			ASTM D19P202 (1)
Surfactant	425.1		
___ Nitrate-Nitrite ___ Nitrate ___ Nitrite	353.2		
Ammonia	350.3		
Total ___ Kjeldahl ___ Organic Nitrogen	351.3		
Total <input checked="" type="checkbox"/> Organic ___ Inorganic Carbon	415.1	9060	
Oil & Grease	413.1	9070	
___ pH ___ pH; paper	150.1	9040B	9041A
Petroleum Hydrocarbons, Total Recoverable	418.1		
Phenol	420.1	420.2	9065 9066
___ Ortho ___ Total Phosphate	365.2		4500-P B C
Salinity			210A (a) 2520 (b)
Settleable Solids	160.5		
Sulfide	376.1		9030B/9034 (acid soluble)
Reactive ___ Cyanide ___ Sulfide		Section 7.3	(9014 9030B)
Silica	370.1		
Sulfite	377.1		
Sulfate	375.4	9038	
Specific Conductance	120.1	9050A	
Specific Gravity			D5057-90 213E (a)
Synthetic Precipitation Leach		1312	
Total ___ Dissolved ___ Suspended ___ Solids	160 .1	.2 .3	
Total Organic Halides	450.1	9020B	
Turbidity	180.1		
Volatile Solids:			
___ Total ___ Dissolved ___ Suspended	160.4		
Other:		Method:	

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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 10/01/04

CLIENT: TNUHANFORD S04-004 H2610
WORK ORDER: 11343-606-001-9999-00

LVL LOT #: 0409L630

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
=====	=====	=====	=====	=====	=====	=====
-001	B194C2	Total Organic Carbon	2.1	MG/L	0.50	1.0
-002	B194C3	Total Organic Carbon	2.0	MG/L	0.50	1.0
-003	B194C4	Total Organic Carbon	2.7	MG/L	0.50	1.0
-004	B194C5	Total Organic Carbon	2.0	MG/L	0.50	1.0

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INORGANICS METHOD BLANK DATA SUMMARY PAGE 10/01/04

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SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
=====	=====	=====	=====	=====	=====	=====
BLANK10	04LTC029-MB1	Total Organic Carbon	0.50 u	MG/L	0.50	1.0

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INORGANICS ACCURACY REPORT 10/01/04

CLIENT: TNUHANFORD S04-004 H2610
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SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV	DILUTION FACTOR (SPK)
-001	B194C2	Total Organic Carbon	7.3	2.1	5.0	103.3	1.0
BLANK10	04LTC029-MB1	Total Organic Carbon	5.1	0.50u	5.0	101.6	1.0

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INORGANICS PRECISION REPORT 10/01/04

CLIENT: TNUHANFORD S04-004 H2610
WORK ORDER: 11343-606-001-9999-00

LVL LOT #: 0409L630

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR (REP)
=====	=====	=====	=====	=====	=====	=====
-001REP	B194C2	Total Organic Carbon	2.1	2.1	0.14	1.0

