

**WORK ORDER Summary****Evergreen Analytical, Inc.****08-7909**

Rpt To: John Axelson

Email To: john.axelson@state.co.us

Colorado Oil &amp; Gas Conservation

Commission

9203 E 155th Dr

Brighton, CO 80602

(303) 637-7178

10/14/2008 4:25:47 PM

Client Project ID: Job # 200113299

QC Level: LEVEL 1

Comments: Invoice in triplicate 6/30/08 ot 6/30/09. PM

Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Test Code	Test Name	Hold	MS	Date Due	Hold Time
08-7909-01A	Injection Well	Groundwater	10/13/08 1253	10/13/08	TEH_W *	8015: TEH-Diesel	<input type="checkbox"/>	<input type="checkbox"/>	10/16/08	10/20/08
08-7909-01B	Injection Well	Groundwater	10/13/08 1253	10/13/08	ANIONS_NonDW *	300.0: Anions by IC	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	10/15/08
08-7909-01C	Injection Well	Groundwater	10/13/08 1253	10/13/08	F_W	Fluoride	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	11/10/08
08-7909-01D	Injection Well	Groundwater	10/13/08 1253	10/13/08	6010_D *	6010: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	4/11/09
08-7909-01D	Injection Well	Groundwater	10/13/08 1253	10/13/08	6020_D *	6020: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	4/11/09
08-7909-01E	Injection Well	Groundwater	10/13/08 1253	10/13/08	TDS_W	Total Dissolved Solids (TDS)	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	10/20/08
08-7909-02A	Nelson Well	Groundwater	10/13/08 1434	10/13/08	TEH_W *	8015: TEH-Diesel	<input type="checkbox"/>	<input type="checkbox"/>	10/16/08	10/20/08
08-7909-02B	Nelson Well	Groundwater	10/13/08 1434	10/13/08	ANIONS_NonDW *	300.0: Anions by IC	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	10/15/08
08-7909-02C	Nelson Well	Groundwater	10/13/08 1434	10/13/08	F_W	Fluoride	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	11/10/08
08-7909-02D	Nelson Well	Groundwater	10/13/08 1434	10/13/08	6010_D *	6010: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	4/11/09
08-7909-02D	Nelson Well	Groundwater	10/13/08 1434	10/13/08	6020_D *	6020: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	4/11/09
08-7909-02E	Nelson Well	Groundwater	10/13/08 1434	10/13/08	TDS_W	Total Dissolved Solids (TDS)	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	10/20/08
08-7909-02F	Nelson Well	Groundwater	10/13/08 1434	10/13/08	SURF	Anionic Surfactants (MBAS)	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	10/15/08
08-7909-02G	Nelson Well	Groundwater	10/13/08 1434	10/13/08	FCOLMPN	Fecal Coliform MPN	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	10/14/08
08-7909-02H	Nelson Well	Groundwater	10/13/08 1434	10/13/08	TCOLMPN	Total Coliform MPN	<input type="checkbox"/>	<input type="checkbox"/>	10/27/08	10/14/08

Definitions: \* - Test Code has a Select List

## Page 1 of 1

Date / Time

08-7909

due 10/27/08

**Patty McClellan**

**From:** "Axelson, John" <John.Axelson@state.co.us>  
**To:** "Patty McClellan" <patty@evergreenanalytical.com>  
**Cc:** "Dellaport, John C." <jcdellaport@terracon.com>  
**Sent:** Tuesday, October 14, 2008 8:25 AM  
**Subject:** Nelson Complaint

Hi Patty,

The COGCC has subcontracted Terracon to perform sampling in regard to the Nelson Water well complaint. They will be submitting the samples to Evergreen for analysis. Please invoice the COGCC under our existing PO, and the pdf and hard copy should be sent directly to me.

Please note the Nelson Complaint #200113299 on the related report and invoice. Thanks!

**John Axelson, P.G.**

Environmental Protection Specialist, Northeast Region  
Colorado Oil and Gas Conservation Commission

Phone: 303-637-7178

Cell: 303-877-9964

Fax: 303-637-7179

**Evergreen Analytical, Inc.**

**Date:** 29-Oct-08

**Lab Order:** 08-7909

**Client Project ID** Job # 200113299

## **CASE NARRATIVE**

### **SAMPLE RECEIVING**

Sample(s) were hand delivered to the laboratory by the client.

Custody seals were not present.

The temperature of the sample(s) upon arrival was 5.1 °C.

Sample(s) were received in good condition, in the proper container, and within holding times. NJO

### **QUALITY ASSURANCE (QA)**

Analyses performed on samples in this work order by EAL meet the requirements of the EAL Quality Assurance Program unless otherwise explained. Analyses of RCRA samples meet the requirements of NELAC and Utah Rule R444-14 unless otherwise explained. TP

### **CLIENT SERVICES**

Job number, report to and invoice to instructions received by email from John Axelson, 10/14/08 PM.

The metal and anion analytes were selected per the quotation. There are no other anomalies to report. EKH

### **GENERAL CHEMISTRY**

The Anion samples had high conductivity and high Chloride levels and needed diluting. This raised the reporting limit for Nitrate-N and Nitrite-N for 08-7909-01 and Nitrite-N for -02. There are no other anomalies to report. JML/MM

### **METALS ANALYSIS**

The matrix spike and matrix spike duplicate (MS/MSD) recoveries for Sodium are outside the QC limits due to the high concentration of Sodium in the sample versus the low concentration of the spike. The Sodium RPD for the matrix spike and matrix spike duplicate (MS/MSD) recoveries is above the QC limits. The laboratory control spike (LCS) recoveries are within QC limits, showing the analysis is in control. There are no other anomalies to report. SS

### **GAS CHROMATOGRAPHY**

Method TEH\_W: The method blank (Batch16999) was contaminated, so sample 08-7922-01B was referenced as the batch method blank. There are no other anomalies to report. MDS

**Evergreen Analytical, Inc.**

4036 Youngfield Street

Wheat Ridge, Colorado 80033-3862

(303) 425-6021

PO Number: 8280

Outside Laboratory:

Industrial Laboratories

4046 Youngfield Street

Wheat Ridge, CO 80033

TEL: (303) 287-9691  
FAX: (303) 287-0964

Acct #:

**CHAIN-OF-CUSTODY RECORD**

WorkOrder: 08-7909

13-Oct-08

Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests									
				FCOLMPN	TCOLMPN								
08-7909-02G	Groundwater	10/13/2008 2:34:00 PM	COL	1									
08-7909-02H	Groundwater	10/13/2008 2:34:00 PM	COL		1								

Comments:

Relinquished by:	<i>MAC</i>	Date/Time	10/14/08
Relinquished by:			
Received by:	<i>J. Harny</i>	Date/Time	10/14/08 813
Received by:			



# Industrial LABORATORIES

Industrial Laboratories is your independent,  
third-party analytical testing laboratory

To: Evergreen Analytical  
4036 Youngfield

Wheat Ridge CO 80033-3862

Attn: Carl Smits

## TEST REPORT

EV1601

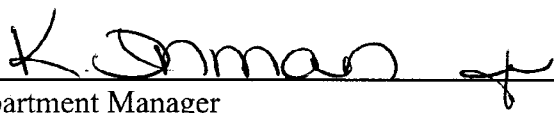
Date Received: 10/14/2008

Date Reported: 10/16/2008

PO Number: 8280

Note: Sample test procedures conform to EPA 40CFR136 requirements.

Lab No.	Sample Description	Test Method	Result	Units	MDL	Analysis Date/By
081014012-01A	08-7909-02G/H 10/13/08	* Fecal Coliform MPN  SM 9221 C/E	<2	MPN/100mL		CO  10/14/200
081014012-01A	08-7909-02G/H 10/13/08	* Total Coliforms MPN  SM 9221 B	<2	MPN/100mL		CO  10/14/200

  
Department Manager

\* = Scope Analysis

# = Subcontracted Analysis

MDL = Method Detection Limit

ND = Not Detected at the Method Detection Limit

Page: 1 of 1

**Evergreen Analytical, Inc.**  
4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Lab Order: 08-7909  
Client Project ID: Job # 200113299  
Matrix: Groundwater  
Date Received: 10/13/08  
Date Prepared: 10/14/08  
Prep Batch ID: 16999  
Units: mg/L

**Total Extractable Hydrocarbons  
Diesel Fuel (No. 2)**

Method: SW8015B Mod

Prep Method: SW3510C

Lab ID	Client Sample ID	File ID	Date Collected	Date Analyzed	DF	Surr REC	Sample Results	LQL
08-7909-01A	Injection Well	FID61014\072R	10/13/08	10/14/08	1	41%	13	3.2
08-7909-02A	Nelson Well	FID61014\073R	10/13/08	10/14/08	1	37%	6.0	3.2
Surrogate QC Limits 35-130 %REC						Surr: TBB		

Analyst

Approved

**Qualifiers:** B - Analyte detected in the associated Method Blank, value not subtracted from result

E - Extrapolated value, Value exceeds calibration range

H - Sample analysis exceeded analytical holding time

J - Indicates an estimated value when the compound is detected, but is below the LQL

S - Spike Recovery outside accepted limits

U - Compound analyzed for but not detected

X - See case narrative

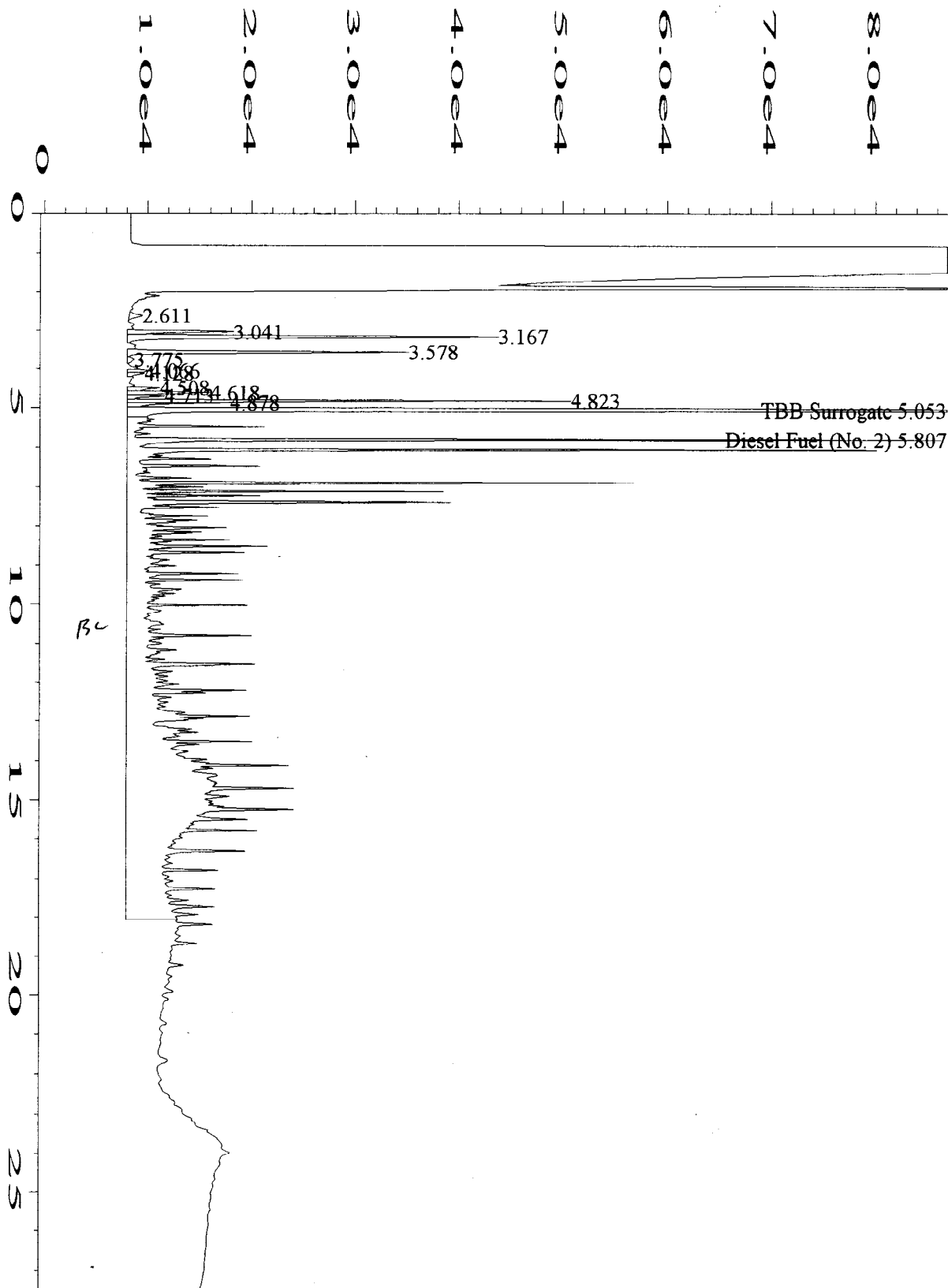
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Definitions:** DF - Dilution Factor

LQL - Lower Quantitation Limit

Surr - Surrogate

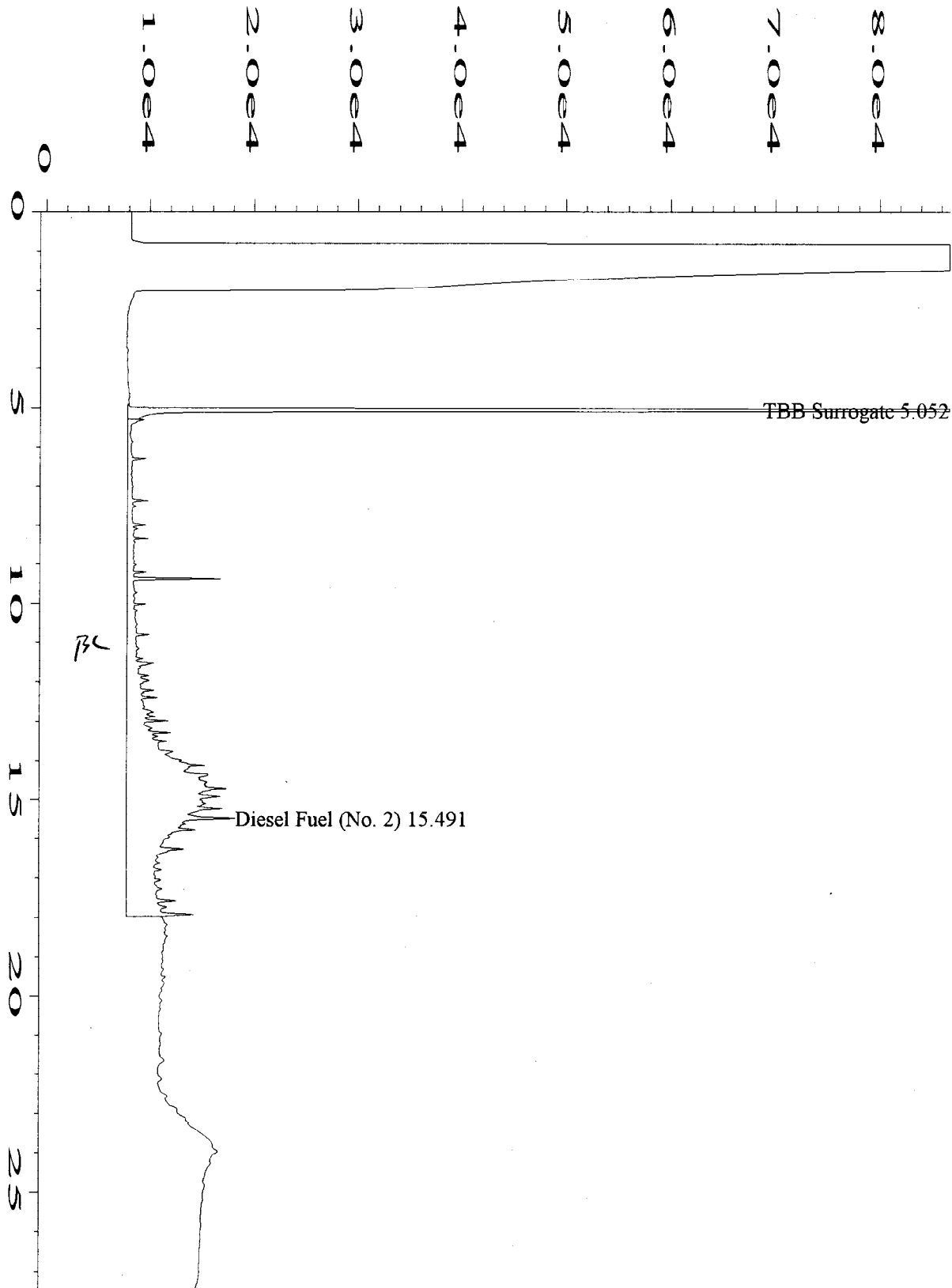
Print Date: 10/15/08



user modified

Data File Name	: C:\HPCHEM\1\DATA\FID61014\072R0101.D	Page Number	: 1
Operator	: Marcus Stephenson	Vial Number	: 72
Instrument	: FID6	Injection Number	: 1
Sample Name	: 08-7909-01A	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: DUALFID.MTH
Acquired on	: 14 Oct 08 08:50 PM	Analysis Method	: DR0417.MTH
Report Created on:	: 15 Oct 08 09:49 AM	Sample Amount	: 0
Last Recalib on	: 18 APR 08 10:01 AM	ISTD Amount	:
Multiplier	: 1		

1x Mh) 10-15-08



user modified

Data File Name	: C:\HPCHEM\1\DATA\FID61014\073R0101.D	Page Number	: 1
Operator	: Marcus Stephenson	Vial Number	: 73
Instrument	: FID6	Injection Number	: 1
Sample Name	: 08-7909-02A	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	DUALFID.MTH
Acquired on	: 14 Oct 08 09:23 PM	Analysis Method	: DR0417.MTH
Report Created on:	15 Oct 08 09:51 AM	Sample Amount	: 0
Last Recalib on	: 18 APR 08 10:01 AM	ISTD Amount	:
Multiplier	: 1		

12 MS 10-15-08

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: Injection Well  
Client Project ID: Job # 200113299  
Date Collected: 10/13/08 1253  
Date Received: 10/13/08

Lab Work Order 08-7909  
Lab Sample ID: 08-7909-01  
Sample Matrix: Groundwater

## ANIONS BY IC

Method: E300.0

Prep Method:

Date Prepared: 10/14/08  
Date Analyzed: 10/14/08 1147

Method Blank: MB 10/14/08

Dilution Factor: 20  
Lab Fraction ID: 08-7909-01B

Analytes	CAS Number	Result	LQL	Units
Bromide	7647-15-6	17.6	4.0	mg/L
Nitrate-N		U	0.90	mg/L
Sulfate	7778-80-2	380	10	mg/L

Date Prepared: 10/14/08  
Date Analyzed: 10/14/08 1508

Method Blank: MB 10/14/08

Dilution Factor: 100  
Lab Fraction ID: 08-7909-01B

Analytes	CAS Number	Result	LQL	Units
Chloride	7647-14-5	3870	50	mg/L
Nitrite-N		U	6.1	mg/L

  
Analyst

  
Approved

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E - Extrapolated value. Value exceeds calibration range  
H - Sample analysis exceeded analytical holding time  
J - Indicates an estimated value when the compound is detected, but is below the LQL  
S - Spike Recovery outside accepted limits  
U - Compound analyzed for but not detected  
X - See case narrative  
\* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Definitions:** NA - Not Applicable  
LQL - Lower Quantitation Limit  
Surr - Surrogate

Print Date: 10/15/08

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: Nelson Well  
Client Project ID: Job # 200113299  
Date Collected: 10/13/08 1434  
Date Received: 10/13/08

Lab Work Order: 08-7909  
Lab Sample ID: 08-7909-02  
Sample Matrix: Groundwater

## ANIONS BY IC

Method: E300.0

Prep Method:

Date Prepared: 10/14/08  
Date Analyzed: 10/14/08 1158

Method Blank: MB 10/14/08

Dilution Factor: 10  
Lab Fraction ID: 08-7909-02B

Analytes	CAS Number	Result	LQL	Units
Bromide	7647-15-6	9.93	2.0	mg/L
Nitrate-N		1.73	0.45	mg/L
Sulfate	7778-80-2	43.9	5.0	mg/L

Date Prepared: 10/14/08  
Date Analyzed: 10/14/08 1305

Method Blank: MB 10/14/08

Dilution Factor: 100  
Lab Fraction ID: 08-7909-02B

Analytes	CAS Number	Result	LQL	Units
Chloride	7647-14-5	2050	50	mg/L
Nitrite-N		U	6.1	mg/L

  
Analyst

  
Approved

**Qualifiers:** B - Analyte detected in the associated Method Blank, value not subtracted from result  
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LQL - Lower Quantitation Limit  
Surr - Surrogate

Print Date: 10/15/08

**Evergreen Analytical, Inc.**

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: Injection Well  
Client Project ID: Job # 200113299  
Date Collected: 10/13/08  
Date Received: 10/13/08

Lab Work Order 08-7909  
Lab Sample ID: 08-7909-01  
Sample Matrix: Groundwater

**FLUORIDE****Method: SM 4500-F C****Prep Method:**

Date Prepared: 10/16/08

Lab File ID: 36

Dilution Factor: 1

Date Analyzed: 10/16/08

Method Blank: MBLK 10/16/08

Lab Fraction ID: 08-7909-01C

Analytes	CAS Number	Result	LQL	Units
Fluoride	16984-48-8	2.3	0.20	mg/L

**TOTAL DISSOLVED SOLIDS (TDS)****Method: SM 2540C****Prep Method:**

Date Prepared: 10/14/08

Lab File ID: 97

Dilution Factor: 1

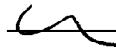
Date Analyzed: 10/14/08

Method Blank: MBLK 101408

Lab Fraction ID: 08-7909-01E

Analytes	CAS Number	Result	LQL	Units
Total Dissolved Solids		9360	10.0	mg/L

  
 Analyst

  
 Approved

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**Definitions:** NA - Not Applicable  
 LQL - Lower Quantitation Limit  
 Surr - Surrogate

Print Date: 10/21/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: Nelson Well  
Client Project ID: Job # 200113299  
Date Collected: 10/13/08 1434  
Date Received: 10/13/08

Lab Work Order 08-7909  
Lab Sample ID: 08-7909-02  
Sample Matrix: Groundwater

## FLUORIDE

Method: SM 4500-F C

Prep Method:

Date Prepared: 10/16/08	Lab File ID: 37	Dilution Factor: 1
Date Analyzed: 10/16/08	Method Blank: MBLK 10/16/08	Lab Fraction ID: 08-7909-02C
Analytes	CAS Number	Result
Fluoride	16984-48-8	0.22
		LQL
		0.20
		mg/L

## ANIONIC SURFACTANTS (MBAS)

Method: SM5540C

Prep Method:

Comments: Results reported as LAS (MW 342)

Date Prepared: 10/14/08	Lab File ID: 49	Dilution Factor: 1
Date Analyzed: 10/14/08 1000	Method Blank: MBLK 10/14/08	Lab Fraction ID: 08-7909-02F
Analytes	CAS Number	Result
Surfactants		0.082
		LQL
		0.025
		mgMBAS/L

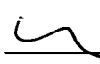
## TOTAL DISSOLVED SOLIDS (TDS)

Method: SM 2540C

Prep Method:

Date Prepared: 10/14/08	Lab File ID: 98	Dilution Factor: 1
Date Analyzed: 10/14/08	Method Blank: MBLK 101408	Lab Fraction ID: 08-7909-02E
Analytes	CAS Number	Result
Total Dissolved Solids		3840
		LQL
		10.0
		mg/L

  
Analyst

  
Approved

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LQL - Lower Quantitation Limit  
Surr - Surrogate

Print Date: 10/21/2008

**Evergreen Analytical, Inc.**  
 4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
 (303) 425-6021

**Client Sample ID:** Injection Well  
**Client Project ID:** Job # 200113299  
**Date Collected:** 10/13/08  
**Date Received:** 10/13/08

**Lab Work Order:** 08-7909  
**Lab Sample ID:** 08-7909-01  
**Sample Matrix:** Groundwater

**DISSOLVED METALS**

**Method:** SW6010B

**Prep Method:** E200.7/SW3010A

**Date Prepared:** 10/14/08  
**Date Analyzed:** 10/16/08

**Lab File ID:** 101608AM  
**Method Blank:** MB-17000

**Dilution Factor:** 1  
**Lab Fraction ID:** 08-7909-01D

Analytes	CAS Number	Result	LQL	Units
Calcium	7440-70-2	12	0.39	mg/L
Iron	7439-89-6	U	0.070	mg/L
Magnesium	7439-95-4	2.5	0.15	mg/L
Manganese	7439-96-5	0.022	0.0050	mg/L
Potassium	7440-09-7	25	0.34	mg/L

**Date Prepared:** 10/14/08  
**Date Analyzed:** 10/20/08

**Lab File ID:** 102008AM  
**Method Blank:** MB-17000

**Dilution Factor:** 10  
**Lab Fraction ID:** 08-7909-01D

Analytes	CAS Number	Result	LQL	Units
Sodium	7440-23-5	3700	4.0	mg/L

**DISSOLVED METALS**

**Method:** SW6020

**Prep Method:** SW6020

**Date Prepared:** 10/21/08  
**Date Analyzed:** 10/23/08

**Lab File ID:** 081023A.B\052SMPL.D  
**Method Blank:** MB-17069

**Dilution Factor:** 1  
**Lab Fraction ID:** 08-7909-01D

Analytes	CAS Number	Result	LQL	Units
Selenium	7782-49-2	0.0068	0.0050	mg/L

  
 Analyst

  
 Approved

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 S - Spike Recovery outside accepted limits  
 U - Compound analyzed for but not detected  
 X - See case narrative  
 \* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Definitions:** NA - Not Applicable  
 LQL - Lower Quantitation Limit  
 Surr - Surrogate

Print Date: 10/24/2008

# Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862  
(303) 425-6021

Client Sample ID: Nelson Well  
Client Project ID: Job # 200113299  
Date Collected: 10/13/08  
Date Received: 10/13/08

Lab Work Order 08-7909  
Lab Sample ID: 08-7909-02  
Sample Matrix: Groundwater

## DISSOLVED METALS

Method: SW6010B

Prep Method: E200.7/SW3010A

Date Prepared: 10/14/08  
Date Analyzed: 10/16/08

Lab File ID: 101608AM  
Method Blank: MB-17000

Dilution Factor: 1  
Lab Fraction ID: 08-7909-02D

Analytes	CAS Number	Result	LQL	Units
Calcium	7440-70-2	660	0.39	mg/L
Iron	7439-89-6	0.17	0.070	mg/L
Magnesium	7439-95-4	230	0.15	mg/L
Manganese	7439-96-5	0.023	0.0050	mg/L
Potassium	7440-09-7	36	0.34	mg/L
Sodium	7440-23-5	200	0.40	mg/L

## DISSOLVED METALS

Method: SW6020

Prep Method: SW6020

Date Prepared: 10/21/08  
Date Analyzed: 10/23/08

Lab File ID: 081023A.B\053SMPL.D  
Method Blank: MB-17069

Dilution Factor: 1  
Lab Fraction ID: 08-7909-02D

Analytes	CAS Number	Result	LQL	Units
Selenium	7782-49-2	0.012	0.0050	mg/L



Analyst



Approved

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Surr - Surrogate

Print Date: 10/27/2008

## **QUALITY ASSURANCE REPORTS**

**METHOD BLANKS (MB)**

**LABORATORY CONTROL SPIKES (LCS)**

**MATRIX SPIKES (MS/MSD)\***

**DUPLICATES (DUP)\***

♦ **For Metals or Wet Chemistry analyses: only included if requested.**

Work Order: 08-7909  
Client Project ID: Job # 200113299

ANALYTICAL QC SUMMARY REPORT  
BatchID: 16999

Sample ID: 08-7922-01B	SampleType: MBLK	TestCode: TEH_W	Run ID: FID6_081014A	Prep Date: 10/14/08	Units: mg/L
Batch ID: 16999	TestNo: SW8015B Mo	FileID: FID610141075R	Analysis Date: 10/14/08	SeqNo: 756827	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual

Diesel Fuel (No. 2) U 3.2  
Surr: TBB 8.042 0 16 0 50.3 35 130 0 0

Sample ID: LCS-16999	SampleType: LCS	TestCode: TEH_W	Run ID: FID6_081014A	Prep Date: 10/14/08	Units: mg/L
Batch ID: 16999	TestNo: SW8015B Mo	FileID: FID610141070R	Analysis Date: 10/14/08	SeqNo: 756820	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual

Diesel Fuel (No. 2) 17.38 0.40 20 0 86.9 70 130 0 0  
Surr: TBB 0.8548 0 2 0 42.7 35 130 0 0

Sample ID: LCSD-16999	SampleType: LCSD	TestCode: TEH_W	Run ID: FID6_081014A	Prep Date: 10/14/08	Units: mg/L
Batch ID: 16999	TestNo: SW8015B Mo	FileID: FID610141071R	Analysis Date: 10/14/08	SeqNo: 756826	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual

Diesel Fuel (No. 2) 16.37 0.40 20 0 81.8 70 130 17.38 6.00 30  
Surr: TBB 0.8085 0 2 0 40.4 35 130 0 0

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Work Order: 08-7909  
Client Project ID: Job # 200113299

## ANALYTICAL QC SUMMARY REPORT

TestNo: E300.0

Sample ID: MB 10/14/08	Sample Type: MBLK	TestCode: ANIONS_W	Run ID: IC-DX120_081014A	Prep Date: 10/14/08	Units: mg/L						
	Batch ID: R42769	TestNo: E300.0	FieldID:	Analysis Date: 10/14/08	SeqNo: 756951						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	0	0.50									
Nitrite-N	0	0.0040									
Bromide	0	0.050									
Nitrate-N	0	0.010									
Sulfate	0	0.50									

Sample ID: LCS ALLT218076	SampleType: LCS	TestCode: ANIONS_W	Run ID: IC-DX120_081014A	Prep Date: 10/14/08	Units: mg/L						
Batch ID: R42769	TestNo: E300.0	FieldID:		Analysis Date: 10/14/08	SeqNo: 756950						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloride	18.59	2.5	20	0	93	90	110	0	0		
Nitrite-N	6.035	0.020	6.09	0	99.1	90	110	0	0		
Bromide	19.37	0.25	20	0	96.9	90	110	0	0		
Nitrate-N	4.242	0.050	4.518	0	93.9	90	110	0	0		
Sulfate	28.88	2.5	30	0	96.3	90	110	0	0		

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Evergreen Analytical, Inc.

Date: 21-Oct-08

Work Order: 08-7909  
 Client Project ID: Job # 200113299

## ANALYTICAL QC SUMMARY REPORT

TestCode: F\_W

Sample ID	MBLK 10/16/08	SampleType: MBLK	Batch ID: R42800	TestCode: F_W	TestNo: SM 4500-F C	Run ID: F_081016A	FieldID: 1	Prep Date: 10/16/2008	Units: mg/L				
Analyte		Result		LQL	SPK value	SPK Ref Val	%REC	Lowlimit	Highlimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride		U		0.20									

Sample ID	MBLK 10/16/08	SampleType: MBLK	Batch ID: R42800	TestCode: F_W	TestNo: SM 4500-F C	Run ID: F_081016A	FieldID: 26	Prep Date: 10/16/2008	Units: mg/L				
Analyte		Result		LQL	SPK value	SPK Ref Val	%REC	Lowlimit	Highlimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride		U		0.20									

Sample ID	LCS	SampleType: LCS	Batch ID: R42800	TestCode: F_W	TestNo: SM 4500-F C	Run ID: F_081016A	FieldID: 2	Prep Date: 10/16/2008	Units: mg/L				
Analyte		Result		LQL	SPK value	SPK Ref Val	%REC	Lowlimit	Highlimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride		10.19		0.20	10	0	102	95	105	0	0		

Sample ID	LCS	SampleType: LCS	Batch ID: R42800	TestCode: F_W	TestNo: SM 4500-F C	Run ID: F_081016A	FieldID: 27	Prep Date: 10/16/2008	Units: mg/L				
Analyte		Result		LQL	SPK value	SPK Ref Val	%REC	Lowlimit	Highlimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride		10.19		0.20	10	0	102	95	105	0	0		

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Work Order: 08-7909  
Client Project ID: Job # 200113299

## ANALYTICAL QC SUMMARY REPORT

TestCode: TDS\_W

Sample ID	MBLK 101408	Sample Type: MBLK	TestCode: TDS_W	Run ID: ANALYTICAL BALANCE_081015C	Prep Date: 10/14/2008	Units: mg/L					
		Batch ID: R42776	TestNo: SM 2540C	FileID: 73	Analysis Date: 10/14/2008	SeqNo: 757029					
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids											
U 10.0											

Sample ID	LCS	Sample Type: LCS	TestCode: TDS_W	Run ID: ANALYTICAL BALANCE_081015C	Prep Date: 10/14/2008	Units: mg/L					
		Batch ID: R42776	TestNo: SM 2540C	FileID: 74	Analysis Date: 10/14/2008	SeqNo: 757030					
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids											
410 10.0 400 0 103 90 110 0 0											

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Work Order: 08-7909  
Client Project ID: Job # 200113299

# ANALYTICAL QC SUMMARY REPORT

TestCode: SURF

Sample ID	MBLK 10/14/08	Sample Type: MBLK	TestCode: SURF	Run ID: SPEC GEN 10_081014A	Prep Date: 10/14/2008	Units: mgMBAS/L
	Batch ID: R42707	TestNo: SM5540C	FileID: 47	Analysis Date: 10/14/2008	SeqNo: 758642	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Surfactants

U 0.025

Sample ID	LCS	Sample Type: LCS	TestCode: SURF	Run ID: SPEC GEN 10_081014A	Prep Date: 10/14/2008	Units: mgMBAS/L
	Batch ID: R42707	TestNo: SM5540C	FileID: 48	Analysis Date: 10/14/2008	SeqNo: 758643	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Surfactants

0.167 0.025 0.15 0 111 70 130 0 0

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Work Order: 08-7909  
Client Project ID: Job # 200113299

# ANALYTICAL QC SUMMARY REPORT

BatchID: 17000

Sample ID: MB-17000	SampleType: MBLK	TestCode: 200.7_D	Run ID: ICP-OPTIMA 5300 DV_081016A	Prep Date: 10/14/2008	Units: mg/L
	Batch ID: 17000	TestNo: E200.7, Rev.	FileID: 101608AM	Analysis Date: 10/16/2008	SeqNo: 757422
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC Lowlimit Highlimit RPD Ref Val %RPD RPDLimit Qual
Calcium	0	0.387			
Iron	0	0.0700			
Magnesium	0	0.150			
Manganese	0	0.00500			
Potassium	0	0.340			
Sodium	U	0.400			

Sample ID: LCS-17000	SampleType: LCS	TestCode: 200.7_D	Run ID: ICP-OPTIMA 5300 DV_081016A	Prep Date: 10/14/2008	Units: mg/L
	Batch ID: 17000	TestNo: E200.7, Rev.	FileID: 101608AM	Analysis Date: 10/16/2008	SeqNo: 757423
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC Lowlimit Highlimit RPD Ref Val %RPD RPDLimit Qual
Calcium	9.923	0.387	10	0	99.2 74 113 0 0
Iron	4.921	0.0700	5	0	98.4 76.6 115 0 0
Magnesium	9.852	0.150	10	0	98.5 76.7 114 0 0
Manganese	1.922	0.00500	2	0	96.1 72.4 109 0 0
Potassium	10.01	0.340	10	0	100 70.9 115 0 0
Sodium	10.18	0.400	10	0.2601	102 80 120 0 0

Sample ID: 08-7909-01DMS	SampleType: MS	TestCode: 6010_D	Run ID: ICP-OPTIMA 5300 DV_081016A	Prep Date: 10/14/2008	Units: mg/L
Client ID: Injection Well	Batch ID: 17000	TestNo: SW6010B	FileID: 101608AM	Analysis Date: 10/16/2008	SeqNo: 757749
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC Lowlimit Highlimit RPD Ref Val %RPD RPDLimit Qual
Calcium	23.53	0.48	12.5	12.25	90.2 75 125 0 0
Iron	5.491	0.088	6.25	0.05725	87.9 75 125 0 0
Magnesium	13.2	0.19	12.5	2.525	85.4 75 125 0 0
Manganese	2.128	0.0063	2.5	0.0218	84.3 75 125 0 0
Potassium	40.39	0.43	12.5	25.33	120 75 125 0 0

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Work Order: 08-7909  
Client Project ID: Job # 200113299

## ANALYTICAL QC SUMMARY REPORT

BatchID: 17000

Sample ID: 08-7909-01AMS	Sample Type: MS	Test Code: 6010_D	Run ID: ICP-OPTIMA 5300 DV_081020A	Prep Date:	Units: mg/L						
Client ID: Injection Well	Batch ID: 17000	Test No: SW6010B	File ID: 102008AM	Analysis Date: 10/21/2008	Seq No: 758901						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	Low limit	High limit	RPD Ref Val	%RPD	RPD limit	Qual

Sodium	3925	4.0	10	3956	-309	75	125	0	0	S
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Sample ID: 08-7909-01D	MSD	TestCode: 6010_D	Run ID: ICP-OPTIMA 5300 DV_081016A	Prep Date: 10/14/2008	Units: mg/L						
Client ID: Injection Well	Batch ID: 17000	TestNo: SW6010B	FileID: 101608AM	Analysis Date: 10/16/2008	SeqNo: 757750						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Calcium	23.36	0.48	12.5	12.25	88.8	75	125	23.53	0.757	20
Iron	5.361	0.088	6.25	0.05725	85.8	75	125	5.491	2.40	20
Magnesium	13.01	0.19	12.5	2.525	83.9	75	125	13.2	1.44	20
Manganese	2.082	0.0063	2.5	0.0218	82.4	75	125	2.128	2.19	20
Potassium	39.99	0.43	12.5	25.33	117	75	125	40.39	1.01	20

Sample ID: 08-7909-01A	MSD	TestCode: 6010_D	Run ID: ICP-OPTIMA 5300 DV_081020A	Prep Date:	Units: mg/L						
Client ID: Injection Well	Batch ID: 17000	TestNo: SW6010B	FileID: 102008AM	Analysis Date: 10/21/2008	SeqNo: 758902						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	3006	4.0	10	3956	-9500	75	125	3925	26.5	20	SR

Sodium	3006	4.0	10	3956	-9500	75	125	3925	26.5	20	SR
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Evergreen Analytical, Inc.

Date: 29-Oct-08

Work Order: 08-7909

Client Project ID: Job # 200113299

## ANALYTICAL QC SUMMARY REPORT

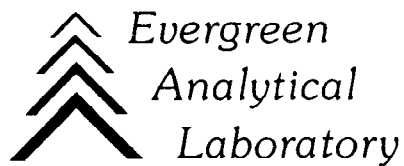
TestCode: 6020\_D

Sample ID	MB-17069	SampleType: MBLK	TestCode: 6020_D	Run ID: ICPMS_081023A	Prep Date: 10/21/2008	Units: mg/L
	Batch ID: 17069	TestNo: SW6020	FileID: 081023A.B1020SMPL.D	Analysis Date: 10/23/2008	SeqNo: 760951	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual
Selenium	U	0.0050				
Sample ID	LCS-17069	SampleType: LCS	TestCode: 6020_D	Run ID: ICPMS_081023A	Prep Date: 10/21/2008	Units: mg/L
	Batch ID: 17069	TestNo: SW6020	FileID: 081023A.B1021SMPL.D	Analysis Date: 10/23/2008	SeqNo: 760952	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual
Selenium	0.06465	0.0050	0.06	0	108	73.4 138 0 0
Sample ID	08-8073-06CMS	SampleType: MS	TestCode: 6020_D	Run ID: ICPMS_081023A	Prep Date: 10/21/2008	Units: mg/L
	Batch ID: 17069	TestNo: SW6020	FileID: 081023A.B1025SMPL.D	Analysis Date: 10/23/2008	SeqNo: 760955	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual
Selenium	0.04262	0.0050	0.04	0.00157	107	75 125 0 0
Sample ID	08-8073-06CMS	SampleType: MSD	TestCode: 6020_D	Run ID: ICPMS_081023A	Prep Date: 10/21/2008	Units: mg/L
	Batch ID: 17069	TestNo: SW6020	FileID: 081023A.B1026SMPL.D	Analysis Date: 10/23/2008	SeqNo: 760956	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual
Selenium	0.0409	0.0050	0.04	0.00157	102	75 125 0.04262 4.11 20

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October 29, 2008

John Axelson  
Colorado Oil & Gas Conservation Commission  
9203 E 155th Dr  
Brighton, CO 80602

Lab Work Order: 08-7909  
Client Project ID: Job # 200113299

Dear John Axelson:

Enclosed are the analytical results for the samples shown in the Laboratory Work Order Summary. The invoice is included with this report or has been mailed to another party as indicated on the chain of custody.

The enclosed data for testing performed at Evergreen Analytical Laboratory (EAL) have been reviewed for quality assurance. A case narrative is included to describe any anomalies associated with the samples or data.

EAL will dispose of all samples 44 days from the sample receipt date. If you want samples returned, please advise us by mail or fax as soon as possible.

A copy of this project report and supporting data will be retained for a period of five years unless we are otherwise advised by you. A document retrieval charge will apply.

Thank you for using the services of Evergreen Analytical. If you have any questions concerning the analytical data, please contact me. Please direct other questions to Client Services.

Sincerely,

A handwritten signature in cursive script that reads 'Carl Smits'.

Kaprie Hollman/Carl Smits  
Quality Assurance  
khollman@evergreenanalytical.com