

**WORK ORDER Summary****Evergreen Analytical, Inc.****09-8085****Rpt To:** John Axelson**Email To:** john.axelson@state.co.us

10/8/2009 5:33:17 PM

Colorado Oil & Gas Conservation  
Commission

9203 E 155th Dr

Brighton, CO 80602

(303) 637-7178

**Client Project ID:****QC Level:** LEVEL I+**Comments:** EDD COGCC format.

| Sample ID   | Client Sample ID | Matrix         | Collection Date | Date Received | Test Code     | Test Name                          | Hold                     | MS                       | Date Due | Hold Time |
|-------------|------------------|----------------|-----------------|---------------|---------------|------------------------------------|--------------------------|--------------------------|----------|-----------|
| 09-8085-01A | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | 8021_W * ^    | 8021: BTEX                         | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/21/09  |
| 09-8085-01B | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | TOX_SUB       | TOX (Outside Lab)                  | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 11/04/09  |
| 09-8085-01C | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | ANIONS_W *    | 300.0: DW Anions by IC             | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/09/09  |
| 09-8085-01C | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | C/A_BAL       | Cation / Anion Balance calculation | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 |           |
| 09-8085-01D | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | 200.7_T *     | 200.7: Total Metals                | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 4/05/10   |
| 09-8085-01E | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | 200.7_D *     | 200.7: Dissolved Metals            | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 4/05/10   |
| 09-8085-01F | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | COND_W        | Specific Conductance @ 25°C        | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 11/04/09  |
| 09-8085-01G | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | PH_DW         | E150.1 pH                          | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/08/09  |
| 09-8085-01G | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | TDS_W         | Total Dissolved Solids (TDS)       | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/14/09  |
| 09-8085-01H | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | MEEP_W *      | RSK175M: Methane                   | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/14/09  |
| 09-8085-01I | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | CARB/BICARB_W | Carbonate and Bicarbonate          | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/21/09  |
| 09-8085-01J | Nolin            | Drinking Water | 10/07/09 1335   | 10/08/09      | F_W           | Fluoride                           | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 11/04/09  |
| 09-8085-02A | Tollefson        | Drinking Water | 10/07/09 1415   | 10/08/09      | 8021_W *      | 8021: BTEX                         | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/21/09  |
| 09-8085-02B | Tollefson        | Drinking Water | 10/07/09 1415   | 10/08/09      | TOX_SUB       | TOX (Outside Lab)                  | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 11/04/09  |
| 09-8085-02C | Tollefson        | Drinking Water | 10/07/09 1415   | 10/08/09      | ANIONS_W *    | 300.0: DW Anions by IC             | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/09/09  |
| 09-8085-02C | Tollefson        | Drinking Water | 10/07/09 1415   | 10/08/09      | C/A_BAL       | Cation / Anion Balance calculation | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 |           |
| 09-8085-02D | Tollefson        | Drinking Water | 10/07/09 1415   | 10/08/09      | 200.7_T *     | 200.7: Total Metals                | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 4/05/10   |
| 09-8085-02E | Tollefson        | Drinking Water | 10/07/09 1415   | 10/08/09      | 200.7_D *     | 200.7: Dissolved Metals            | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 4/05/10   |
| 09-8085-02F | Tollefson        | Drinking Water | 10/07/09 1415   | 10/08/09      | COND_W        | Specific Conductance @ 25°C        | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 11/04/09  |
| 09-8085-02G | Tollefson        | Drinking Water | 10/07/09 1415   | 10/08/09      | PH_DW         | E150.1 pH                          | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/08/09  |

**Definitions:** \* - Test Code has a Select List

**WORK ORDER Summary****Evergreen Analytical, Inc.****09-8085****Rpt To:** John Axelson**Email To:** john.axelson@state.co.usColorado Oil & Gas Conservation  
Commission9203 E 155th Dr  
Brighton, CO 80602  
(303) 637-7178

10/8/2009 5:33:17 PM

**Client Project ID:****QC Level:** LEVEL I+

|             |           |                |               |          |               |                              |                          |                          |          |          |
|-------------|-----------|----------------|---------------|----------|---------------|------------------------------|--------------------------|--------------------------|----------|----------|
| 09-8085-02G | Tollefson | Drinking Water | 10/07/09 1415 | 10/08/09 | TDS_W         | Total Dissolved Solids (TDS) | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/14/09 |
| 09-8085-02H | Tollefson | Drinking Water | 10/07/09 1415 | 10/08/09 | MEEP_W *      | RSK175M: Methane             | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/14/09 |
| 09-8085-02I | Tollefson | Drinking Water | 10/07/09 1415 | 10/08/09 | CARB/BICARB_W | Carbonate and Bicarbonate    | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 10/21/09 |
| 09-8085-02J | Tollefson | Drinking Water | 10/07/09 1415 | 10/08/09 | F_W           | Fluoride                     | <input type="checkbox"/> | <input type="checkbox"/> | 10/22/09 | 11/04/09 |

**CHAIN OF CUSTODY RECORD / ANALYTICAL SERVICES AGREEMENT \*\***  
**Evergreen Analytical Laboratory**

Page 1 of 1

## CLIENT INFORMATION

Mail **Original** Report to:

COGCC

Attn John Axelsson

Address 9203 East 155th Drive

City Brighton State CO Zip 80602

Tel # \_\_\_\_\_ Fax # \_\_\_\_\_

E-mail john.axelson@state

REPORT ALSO BY ☐ FAX ☐ PDF ☐ EDD

FAXED CONFIRMATION OF SAMPLE RECEIPT REQUIRED? ☐ YES

REPORT CHROMATOGRAMS ☐ YES

Mail Invoice to:

COGCC

Attn John Axelsson

**Address**

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Tel # \_\_\_\_\_ Fax # \_\_\_\_\_

Project ID#

P.O. \_\_\_\_\_ Quote \_\_\_\_\_

Sampler Chris Roy (Terracen)

**NOTE:** Identify Known Hazards Below

## SAMPLE IDENTIFICATION

DATE  
SAMPLED TIME

[illegible]

**\*\* Important Note:** See reverse side hereof for terms and conditions.

002 Tallows Dr, F 10/10/85: AB, Ba, Cd, Cr, Pb, Se, Mn  
Cd = 0.01; Ab C Mn K Fe N V W

reference bottle orders 32429 (1782) and 32475/11019

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

| Date/Time        | Location | Activity               | Remarks                    |
|------------------|----------|------------------------|----------------------------|
| 10/10/2023 10:00 | Room 101 | Meeting with Mr. Smith | Discussed project progress |
| 10/10/2023 14:30 | Room 202 | Training session       | Completed module 3         |
| 10/10/2023 16:00 | Room 101 | Meeting with Mr. Smith | Discussed project progress |
| 10/10/2023 18:00 | Room 101 | Meeting with Mr. Smith | Discussed project progress |

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

10-08-09  
9:13am

APL

10-8-99  
913

| Date/Time |
|-----------|
|-----------|

Received by: (Signature)

|           |  |
|-----------|--|
| Date/Time |  |
|-----------|--|

**Evergreen Analytical, Inc.**

**Date:** 22-Oct-09

**Lab Order:** 09-8085

**Client Project ID**

## **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 5.0°C.

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

Sample(s) were preserved properly.

VOC sample(s) were marked as preserved on the bottle labels.

VOC sample(s) were received with no headspace present. JD

### **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 drinking water samples meet the requirements of the EPA Manual for the Certification of Laboratories Analyzing Drinking Water, unless otherwise explained.

In order to reduce paperwork and minimize misinterpretation of results, the QA pages normally attached at the end of the report have been retained in the project file. They are available upon request. JE

### **CLIENT SERVICES**

There are no anomalies to report. PM

### **GENERAL CHEMISTRY**

Method 300.0: Sample Tollefson (09-8085-02) has a high conductivity level, which required dilution of the sample to avoid saturating the detector. This raised the reporting limit for Nitrite-N. There are no other anomalies to report. GH/MM/JE

### **METALS ANALYSIS**

There are no anomalies to report. MB

### **GAS CHROMATOGRAPHY**

Method 8021\_W: There are no anomalies to report. LC

**Evergreen Analytical, Inc.**

**Date:** 22-Oct-09

**Lab Order:** 09-8085

**Client Project ID**

**CASE NARRATIVE**

Method RSK175: There are no anomalies to report. AS

006

**Evergreen Analytical, Inc.**

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

PO Number: 27883

**CHAIN-OF-CUSTODY RECORD**

Page 1 of 1

**WorkOrder: 09-8085****Outside Laboratory:**

Huffman Laboratories, Inc.  
4630 Indiana Street  
Golden, CO 80403

TEL: (303) 278-4455  
FAX: (303) 278-7012

Acct #:

**08-Oct-09**

| Sample ID   | Matrix         | Collection Date      | Bottle Type | TOL      |   | Requested Tests |  |  |
|-------------|----------------|----------------------|-------------|----------|---|-----------------|--|--|
|             |                |                      |             | SW 9020B |   |                 |  |  |
| 09-8085-01B | Drinking Water | 10/7/2009 1:35:00 PM | 1LAH2SO4    |          | 1 |                 |  |  |
| 09-8085-02B | Drinking Water | 10/7/2009 2:15:00 PM | 1LAH2SO4    |          | 1 |                 |  |  |

**Comments:**

Relinquished by:

*Hi Zk*

Date/Time

*10-8-09*

Received by:

*Sandy Kaugon*

Date/Time

*10/8/09 1:30*

Relinquished by:

Received by:

OCT 14 2009

CUSTOMER #:  
02602

**HUFFMAN**  
**LABORATORIES, INC.**

*Quality Analytical Services Since 1936*  
4630 Indiana Street • Golden, CO 80403  
Phone: (303) 278-4455 • FAX: (303) 278-7012

OCT 14 2009

DATE 10/13/09  
LAB# 189709  
P.O. 27883  
RECD 10/08/09

007

**ANALYSIS REPORT**

CARL SMITS  
EVERGREEN ANALYTICAL  
4036 YOUNGFIELD  
WHEAT RIDGE CO 80033

PROJ NO. 09-8085

| SEQUENCE/<br>SAMPLE ID | 01<br>09-8085-01B1 | 02<br>09-8086-02B1 |
|------------------------|--------------------|--------------------|
|------------------------|--------------------|--------------------|

|                |              |      |
|----------------|--------------|------|
| TOX-----µg/L - | <40. - - - - | <40. |
|                | <20.         | <20. |

**TOX:**

Method #: US EPA SW846 9020B  
Method Detection Limit: 10 µg/l  
Date of Analysis: 10/9/09

Both samples contained high levels of chloride and exhibited breakthrough. Sample to water dilution of 1+3 and 1+1 were run. Some breakthrough was still evident but levels were below the MDL. Increased detection limits proportional to sample dilutions are reported above for replicate analyses.

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

Client Sample ID: Nolin  
Client Project ID:  
Date Collected: 10/7/2009  
Date Received: 10/8/2009

Lab Work Order: 09-8085  
Lab Sample ID: 09-8085-01A  
Sample Matrix: Drinking Water

**AROMATIC VOLATILE ORGANICS**

**Method: SW8021B**

**Prep Method: SW5030B**

Date Prepared: 10/8/2009

Lab File ID: 100809\TB2415.D\FID1A.

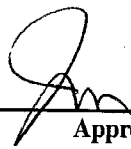
Dilution Factor: 1

Date Analyzed: 10/8/2009

Method Blank: MB4100809

| Analytes                         | CAS Number | Result | LQL               | Units |
|----------------------------------|------------|--------|-------------------|-------|
| Benzene                          | 71-43-2    | U      | 1.0               | µg/L  |
| Toluene                          | 108-88-3   | U      | 2.0               | µg/L  |
| Ethylbenzene                     | 100-41-4   | U      | 2.0               | µg/L  |
| m,p-Xylene                       | 1330-20-7  | U      | 2.0               | µg/L  |
| o-Xylene                         | 95-47-6    | U      | 2.0               | µg/L  |
| Surr: 1,2,4-Trichlorobenzene (S) | 120-82-1   | 80     | QC Limits: 60-140 | %REC  |

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved

Notes: Total Xylenes consist of three isomers, two of which co-elute. The Xylene RL is for a single peak. Confirmation analysis was not performed.

**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:** LQL - Lower Quantitation Limit  
Surr - Surrogate

Print Date: 10/9/2009



Signal #1 : Y:\1\DATA\100809\TB2415.D\FID1A.CH Vial: 22  
Signal #2 : Y:\1\DATA\100809\TB2415.D\FID2B.CH  
Acq On : 8 Oct 2009 10:22 pm Operator: laurac  
Sample : 09-8085-01A Inst : GC/MS Ins  
Misc : ,SAMP,8021\_W,TVH\_W,1,|GC288,GTB116,,,,,1 Multiplr: 1.00  
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E  
Quant Time: Oct 9 7:43 2009 Quant Results File: TW40914.RES

Quant Method : C:\MSDCHEM\1\METHODS\TW40914.M (Chemstation Integrator)  
Title : 8015B/8021B TVH/BTEX  
Last Update : Thu Oct 08 12:40:31 2009  
Response via : Multiple Level Calibration  
DataAcq Meth : TVB4.M

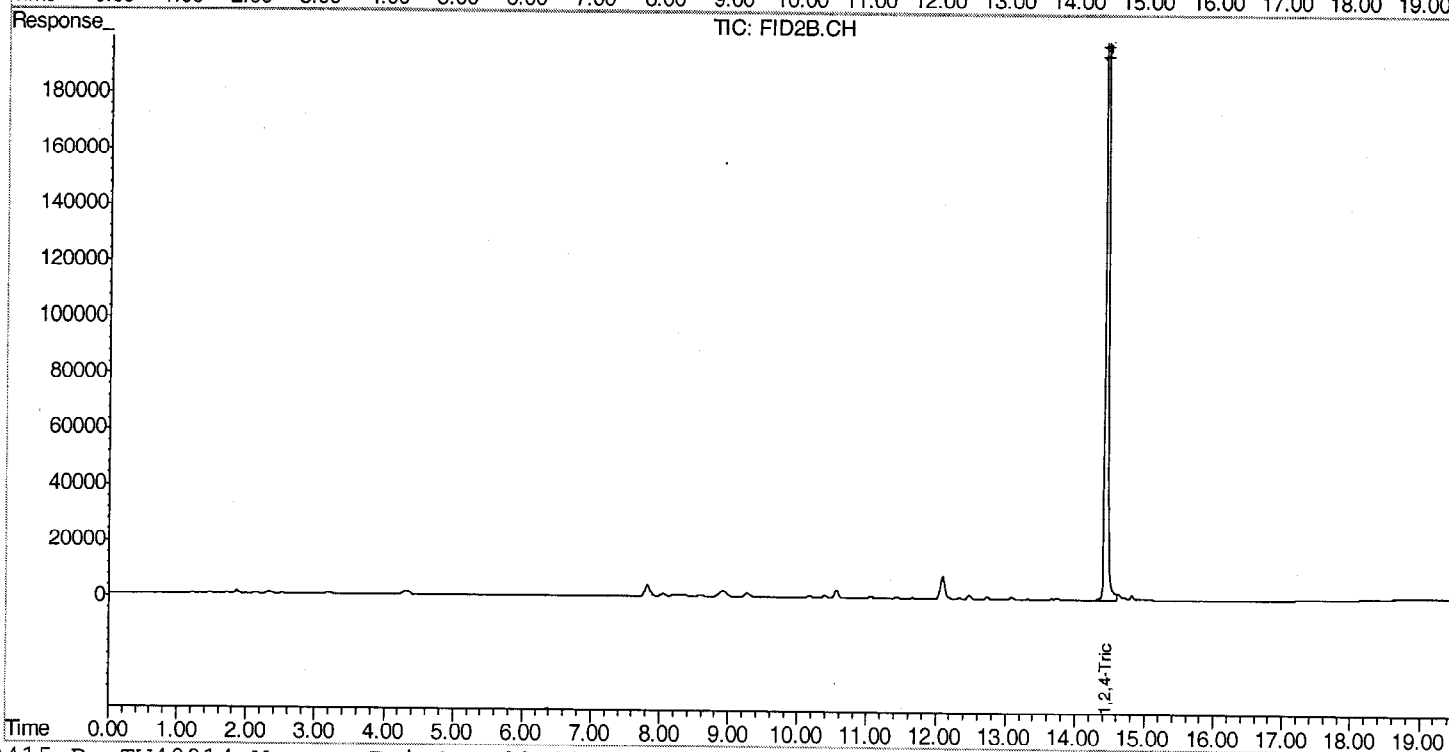
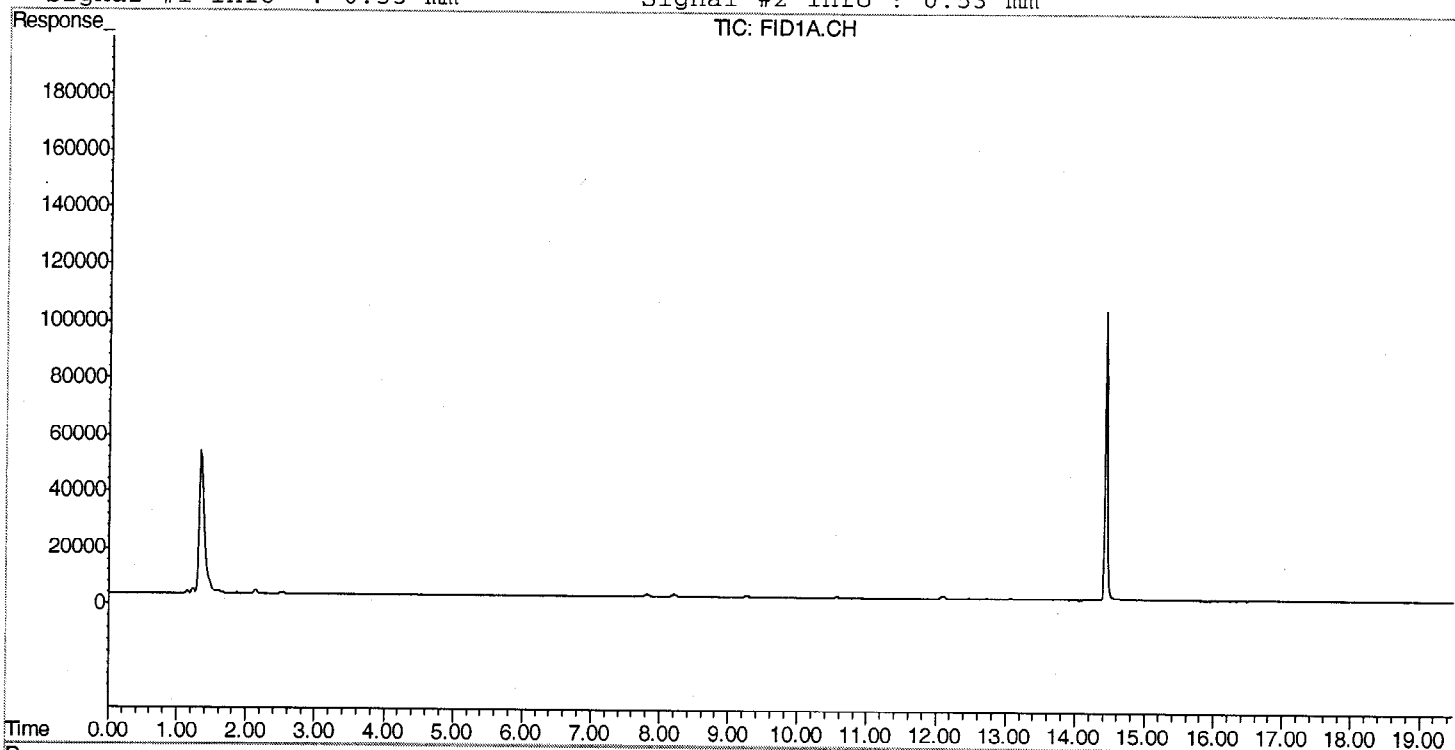
Volume Inj. :

Signal #1 Phase : DB-624

Signal #2 Phase: DB-624

Signal #1 Info : 0.53 mm

Signal #2 Info : 0.53 mm



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

**Client Sample ID:** Tollefson  
**Client Project ID:**  
**Date Collected:** 10/7/2009  
**Date Received:** 10/8/2009

**Lab Work Order:** 09-8085  
**Lab Sample ID:** 09-8085-02A  
**Sample Matrix:** Drinking Water

**AROMATIC VOLATILE ORGANICS**

**Method:** SW8021B

**Prep Method:** SW5030B

**Date Prepared:** 10/8/2009

**Lab File ID:** 100809\TB2416.D\FID1A.

**Dilution Factor:** 1

**Date Analyzed:** 10/8/2009

**Method Blank:** MB4100809

| Analytes                         | CAS Number | Result | LQL                      | Units |
|----------------------------------|------------|--------|--------------------------|-------|
| Benzene                          | 71-43-2    | U      | 1.0                      | µg/L  |
| Toluene                          | 108-88-3   | U      | 2.0                      | µg/L  |
| Ethylbenzene                     | 100-41-4   | U      | 2.0                      | µg/L  |
| m,p-Xylene                       | 1330-20-7  | U      | 2.0                      | µg/L  |
| o-Xylene                         | 95-47-6    | U      | 2.0                      | µg/L  |
| Surr: 1,2,4-Trichlorobenzene (S) | 120-82-1   | 76     | <b>QC Limits:</b> 60-140 | %REC  |

  
 Analyst

  
 Approved

**Notes:** Total Xylenes consist of three isomers, two of which co-elute. The Xylene RL is for a single peak. Confirmation analysis was not performed.

**Qualifiers:** B - Analyte detected in the associated Method Blank, value not subtracted from result  
 E - Extrapolated value. Value exceeds calibration range  
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 \* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

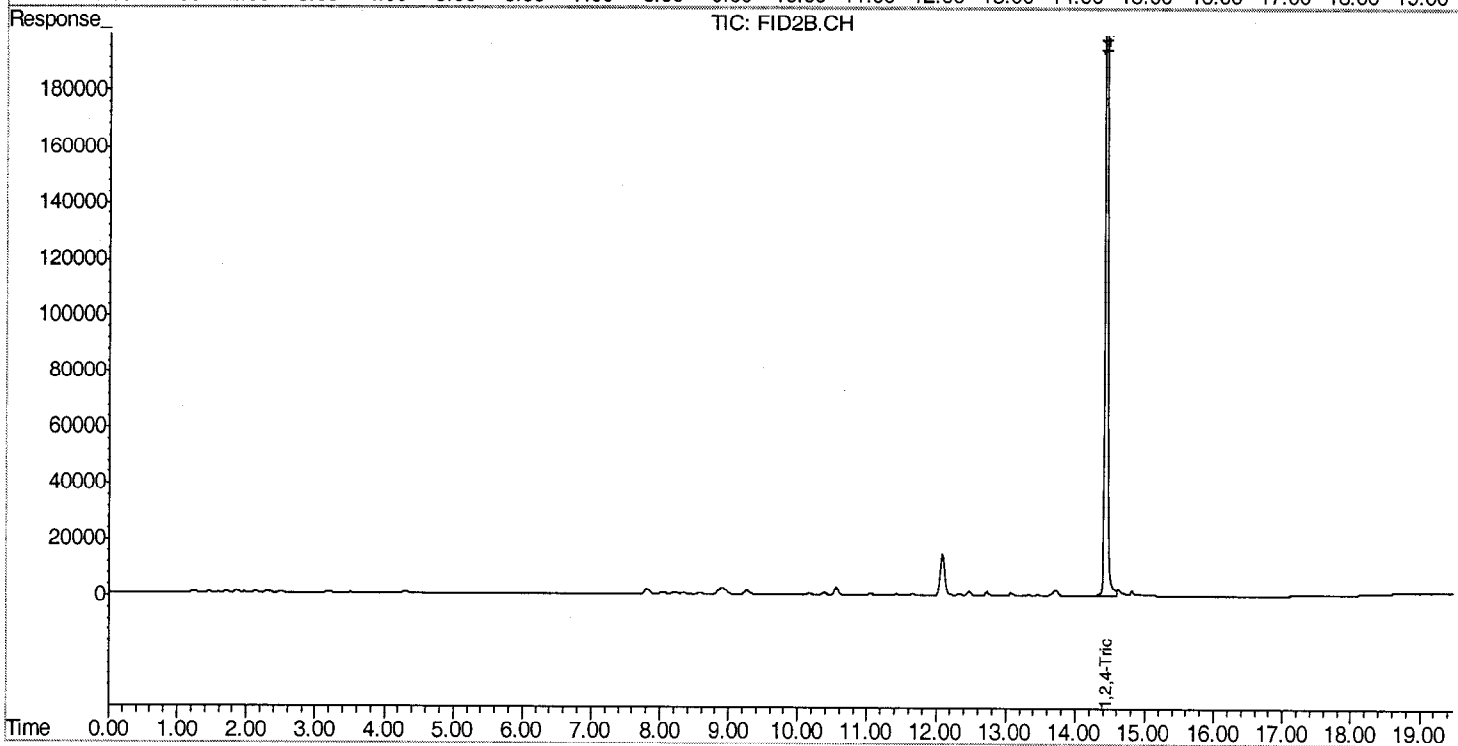
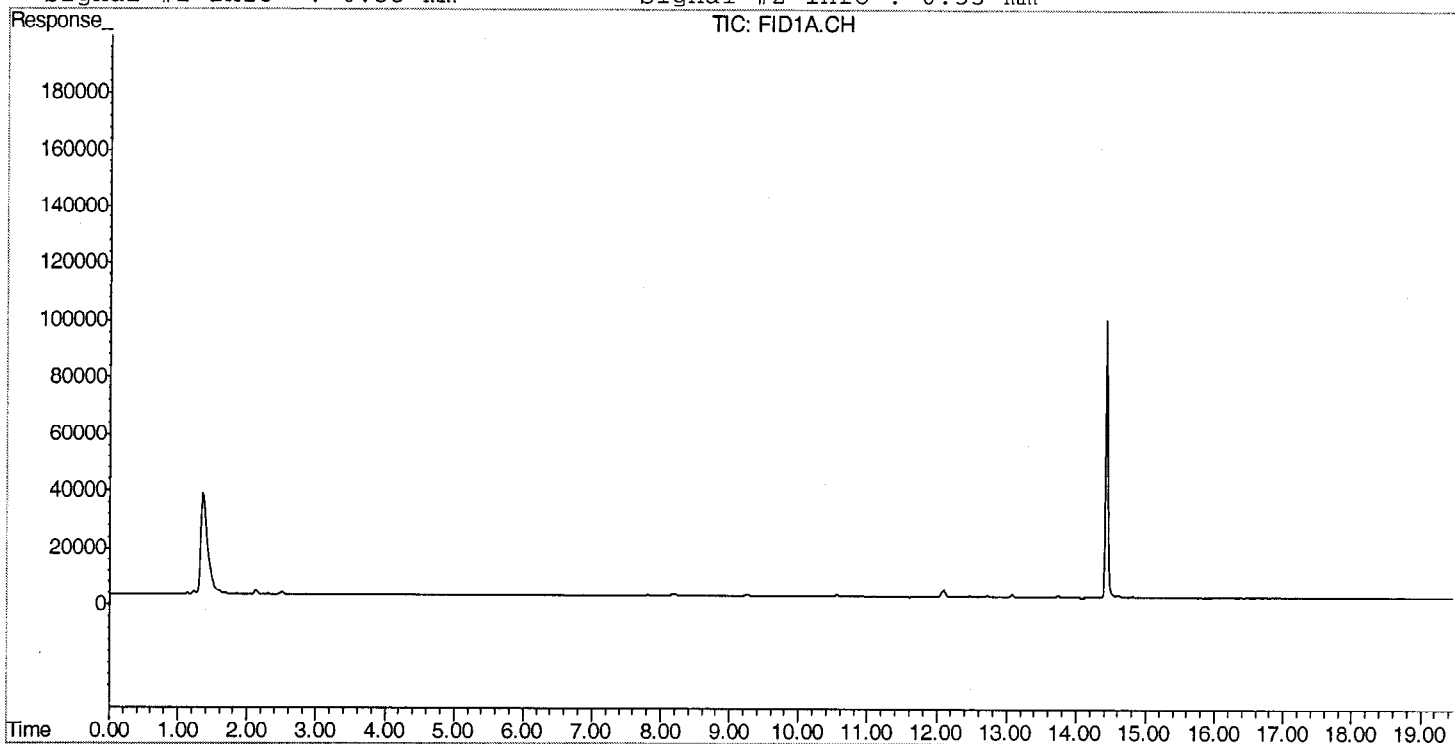
**Definitions:** LQL - Lower Quantitation Limit  
 Surr - Surrogate

Print Date: 10/9/2009

Signal #1 : Y:\1\DATA\100809\TB2416.D\FID1A.CH Vial: 23  
Signal #2 : Y:\1\DATA\100809\TB2416.D\FID2B.CH  
Acq On : 8 Oct 2009 10:59 pm Operator: laurac  
Sample : 09-8085-02A Inst : GC/MS Ins  
Misc : ,SAMP,8021\_W,TVH\_W,1,|GC288,GTB116,,,,,1 Multiplr: 1.00  
IntFile Signal #1: TVH1.E IntFile Signal #2: FB2.E  
Quant Time: Oct 9 7:44 2009 Quant Results File: TW40914.RES

Quant Method : C:\MSDCHEM\1\METHODS\TW40914.M (Chemstation Integrator)  
Title : 8015B/8021B TVH/BTEX  
Last Update : Thu Oct 08 12:40:31 2009  
Response via : Multiple Level Calibration  
DataAcq Meth : TVB4.M

Volume Inj. :  
Signal #1 Phase : DB-624 Signal #2 Phase: DB-624  
Signal #1 Info : 0.53 mm Signal #2 Info : 0.53 mm



012

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

Client Sample ID: Nolin  
Client Project ID:  
Date Collected: 10/7/09 1335  
Date Received: 10/8/09

Lab Work Order: 09-8085  
Lab Sample ID: 09-8085-01  
Sample Matrix: Drinking Water

**ANIONS BY IC**

**Method: E300.0**

**Prep Method:**

Date Prepared: 10/8/09  
Date Analyzed: 10/8/09 1138

Lab File ID: 05  
Method Blank: MB 10/08/09

Dilution Factor: 1  
Lab Fraction ID: 09-8085-01C

| Analytes  | CAS Number | Result | LQL    | Units |
|-----------|------------|--------|--------|-------|
| Nitrite-N |            | U      | 0.0040 | mg/L  |
| Bromide   | 7647-15-6  | 0.38   | 0.050  | mg/L  |

Date Prepared: 10/8/09  
Date Analyzed: 10/8/09 1559

Lab File ID: 06  
Method Blank: MB 10/08/09

Dilution Factor: 10  
Lab Fraction ID: 09-8085-01C

| Analytes          | CAS Number | Result | LQL  | Units |
|-------------------|------------|--------|------|-------|
| Chloride          | 7647-14-5  | 121    | 5.0  | mg/L  |
| Nitrate-N         |            | 5.35   | 0.10 | mg/L  |
| Nitrite+Nitrate-N |            | 5.35   | 0.10 | mg/L  |
| Sulfate           | 7778-80-2  | 251    | 5.0  | mg/L  |

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Approved

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\* - 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: 10/13/2009

# Evergreen Analytical, Inc.

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

Client Sample ID: Tollefson  
Client Project ID:  
Date Collected: 10/7/09 1415  
Date Received: 10/8/09

Lab Work Order: 09-8085  
Lab Sample ID: 09-8085-02  
Sample Matrix: Drinking Water

## ANIONS BY IC

Method: E300.0

Prep Method:

Date Prepared: 10/9/09  
Date Analyzed: 10/9/09 1037

Lab File ID: 07  
Method Blank: MB 10/09/09

Dilution Factor: 20  
Lab Fraction ID: 09-8085-02C

| Analytes | CAS Number | Result | LQL | Units |
|----------|------------|--------|-----|-------|
| Sulfate  | 7778-80-2  | 385    | 10  | mg/L  |

Date Prepared: 10/8/09  
Date Analyzed: 10/8/09 1153

Lab File ID: 07  
Method Blank: MB 10/08/09

Dilution Factor: 2  
Lab Fraction ID: 09-8085-02C

| Analytes          | CAS Number | Result | LQL    | Units |
|-------------------|------------|--------|--------|-------|
| Chloride          | 7647-14-5  | 49.8   | 1.0    | mg/L  |
| Nitrite-N         |            | U      | 0.0080 | mg/L  |
| Bromide           | 7647-15-6  | 0.507  | 0.10   | mg/L  |
| Nitrate-N         |            | 0.0846 | 0.020  | mg/L  |
| Nitrite+Nitrate-N |            | 0.0846 | 0.020  | mg/L  |

  
Analyst

  
Approved

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

Print Date: 10/13/2009

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

Client Sample ID: Nolin  
 Client Project ID:  
 Date Collected: 10/7/09  
 Date Received: 10/8/09

Lab Work Order: 09-8085  
 Lab Sample ID: 09-8085-01  
 Sample Matrix: Drinking Water

**DISSOLVED METALS**

Method: E200.7, Rev. 4.4

Prep Method: E200.7/SW3010A

Date Prepared: 10/19/09  
 Date Analyzed: 10/22/09

Lab File ID: 102209AM  
 Method Blank: MB-21215

Dilution Factor: 1  
 Lab Fraction ID: 09-8085-01E

| Analytes  | CAS Number | Result | LQL    | Units |
|-----------|------------|--------|--------|-------|
| Calcium   | 7440-70-2  | 106    | 0.387  | mg/L  |
| Iron      | 7439-89-6  | U      | 0.0700 | mg/L  |
| Magnesium | 7439-95-4  | 42.7   | 0.150  | mg/L  |
| Potassium | 7440-09-7  | 4.20   | 0.340  | mg/L  |
| Sodium    | 7440-23-5  | 144    | 0.400  | mg/L  |

**TOTAL METALS**

Method: E200.7, Rev. 4.4

Prep Method: E200.7, Rev. 4.4


Date Prepared: 10/15/09  
 Date Analyzed: 10/16/09

Lab File ID: 101609AM  
 Method Blank: MB-21193

Dilution Factor: 1  
 Lab Fraction ID: 09-8085-01D

| Analytes  | CAS Number | Result | LQL     | Units |
|-----------|------------|--------|---------|-------|
| Arsenic   | 7440-38-2  | U      | 0.0500  | mg/L  |
| Barium    | 7440-39-3  | 0.0655 | 0.00200 | mg/L  |
| Cadmium   | 7440-43-9  | U      | 0.0100  | mg/L  |
| Chromium  | 7440-47-3  | U      | 0.0100  | mg/L  |
| Lead      | 7439-92-1  | U      | 0.0730  | mg/L  |
| Manganese | 7439-96-5  | U      | 0.00500 | mg/L  |
| Selenium  | 7782-49-2  | U      | 0.100   | mg/L  |

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

Print Date: 10/22/2009

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

**Client Sample ID:** Tollefson  
**Client Project ID:**  
**Date Collected:** 10/7/09  
**Date Received:** 10/8/09

**Lab Work Order:** 09-8085  
**Lab Sample ID:** 09-8085-02  
**Sample Matrix:** Drinking Water

**DISSOLVED METALS**

**Method: E200.7, Rev. 4.4**

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

**Date Prepared:** 10/19/09  
**Date Analyzed:** 10/22/09

**Lab File ID:** 102209AM  
**Method Blank:** MB-21215

**Dilution Factor:** 1  
**Lab Fraction ID:** 09-8085-02E

| Analytes  | CAS Number | Result | LQL    | Units |
|-----------|------------|--------|--------|-------|
| Calcium   | 7440-70-2  | 27.2   | 0.387  | mg/L  |
| Iron      | 7439-89-6  | U      | 0.0700 | mg/L  |
| Magnesium | 7439-95-4  | 9.00   | 0.150  | mg/L  |
| Potassium | 7440-09-7  | 2.87   | 0.340  | mg/L  |
| Sodium    | 7440-23-5  | 270    | 0.400  | mg/L  |

**TOTAL METALS**

**Method: E200.7, Rev. 4.4**

**Prep Method: E200.7, Rev. 4.4**

**Date Prepared:** 10/15/09  
**Date Analyzed:** 10/16/09

**Lab File ID:** 101609AM  
**Method Blank:** MB-21193

**Dilution Factor:** 1  
**Lab Fraction ID:** 09-8085-02D

| Analytes  | CAS Number | Result | LQL     | Units |
|-----------|------------|--------|---------|-------|
| Arsenic   | 7440-38-2  | U      | 0.0500  | mg/L  |
| Barium    | 7440-39-3  | 0.0373 | 0.00200 | mg/L  |
| Cadmium   | 7440-43-9  | U      | 0.0100  | mg/L  |
| Chromium  | 7440-47-3  | U      | 0.0100  | mg/L  |
| Lead      | 7439-92-1  | U      | 0.0730  | mg/L  |
| Manganese | 7439-96-5  | 0.0310 | 0.00500 | mg/L  |
| Selenium  | 7782-49-2  | U      | 0.100   | mg/L  |



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

Print Date: 10/22/2009

# ACCUTEST MOUNTAIN STATES LABORATORY

4036 Youngfield St., Wheat Ridge, CO 80033  
(303)425-6021

## Anion-Cation (Ion) Balance - Method 1030, Standard Methods, 20th Ed.

| EAL Sample ID                         | 09-8085-01 |        | 09-8085-02 |        | 09-  |       | 09-  |       | 09-  |       |
|---------------------------------------|------------|--------|------------|--------|------|-------|------|-------|------|-------|
| Client Sample ID                      | Nolin      |        | Tollefson  |        |      |       |      |       |      |       |
| Sample Result                         | mg/L       | Meq/L  | mg/L       | Meq/L  | mg/L | Meq/L | mg/L | Meq/L | mg/L | Meq/L |
| <i>Anions</i>                         |            |        |            |        |      |       |      |       |      |       |
| Cl                                    | 121        | 3.413  | 49.8       | 1.405  |      | 0.000 |      | 0.000 |      | 0.000 |
| SO <sub>4</sub>                       | 251        | 5.226  | 385        | 8.016  |      | 0.000 |      | 0.000 |      | 0.000 |
| HCO <sub>3</sub> as CaCO <sub>3</sub> | 371        | 7.413  | 299        | 5.975  |      | 0.000 |      | 0.000 |      | 0.000 |
| CO <sub>3</sub> as CaCO <sub>3</sub>  |            | 0.000  |            | 0.000  |      | 0.000 |      | 0.000 |      | 0.000 |
| NO <sub>3</sub>                       |            | 0.000  |            | 0.000  |      | 0.000 |      | 0.000 |      | 0.000 |
| NO <sub>3</sub> as N                  | 5.35       | 0.382  | 0.085      | 0.006  |      | 0.000 |      | 0.000 |      | 0.000 |
| Other                                 |            | 0.000  |            | 0.000  |      | 0.000 |      | 0.000 |      | 0.000 |
| <b>Anions Total</b>                   |            | 16.434 |            | 15.401 |      | 0.000 |      | 0.000 |      | 0.000 |
| <i>Cations</i>                        |            |        |            |        |      |       |      |       |      |       |
| Ca                                    | 106.0      | 5.289  | 27.2       | 1.357  |      | 0.000 |      | 0.000 |      | 0.000 |
| Mg                                    | 42.70      | 3.514  | 9.00       | 0.741  |      | 0.000 |      | 0.000 |      | 0.000 |
| K                                     | 4.20       | 0.107  | 2.87       | 0.073  |      | 0.000 |      | 0.000 |      | 0.000 |
| Na                                    | 144        | 6.264  | 270        | 11.744 |      | 0.000 |      | 0.000 |      | 0.000 |
| Other                                 |            | 0.000  |            | 0.000  |      | 0.000 |      | 0.000 |      | 0.000 |
| <b>Cations Total</b>                  |            | 15.174 |            | 13.916 |      | 0.000 |      | 0.000 |      | 0.000 |
| <b>Ion Balance</b>                    |            |        |            |        |      |       |      |       |      |       |
| <b>% Difference</b>                   | 3.99       |        | 5.07       |        |      |       |      |       |      |       |

$$\% \text{ difference} = 100 \times \frac{(\text{sum cations} - \text{sum anions})}{(\text{sum cations} + \text{sum anions})}$$



Approved



# Evergreen Analytical, Inc.

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

Client Sample ID: Nolin  
Client Project ID:  
Date Collected: 10/7/09 1335  
Date Received: 10/8/09

Lab Work Order 09-8085  
Lab Sample ID: 09-8085-01  
Sample Matrix: Drinking Water

## CARBONATE AND BICARBONATE

Method: SM2320 B

Prep Method:

Date Prepared: 10/14/09  
Date Analyzed: 10/14/09

Lab File ID: 143  
Method Blank: MBLK 10/14/09

Dilution Factor: 1  
Lab Fraction ID: 09-8085-01I

| Analytes    | CAS Number | Result | LQL | Units |
|-------------|------------|--------|-----|-------|
| Bicarbonate |            | 371    | 5.0 | mg/L  |
| Carbonate   |            | U      | 5.0 | mg/L  |

## SPECIFIC CONDUCTANCE @ 25°C

Method: SM2510 B

Prep Method:

Date Prepared: 10/9/09  
Date Analyzed: 10/9/09

Lab File ID: 62

Dilution Factor: 1  
Lab Fraction ID: 09-8085-01F

| Analytes             | CAS Number | Result | LQL  | Units    |
|----------------------|------------|--------|------|----------|
| Specific Conductance |            | 1270   | 1.00 | µmhos/cm |

## FLUORIDE

Method: SM 4500-F C

Prep Method:

Date Prepared: 10/13/09  
Date Analyzed: 10/13/09

Lab File ID: 11  
Method Blank: MBLK 10/13/09

Dilution Factor: 1  
Lab Fraction ID: 09-8085-01J

| Analytes | CAS Number | Result | LQL  | Units |
|----------|------------|--------|------|-------|
| Fluoride | 16984-48-8 | 1.1    | 0.20 | mg/L  |

## E150.1 PH


Method: E150.1

Prep Method:

Date Prepared: 10/8/09  
Date Analyzed: 10/8/09 1100

Dilution Factor: 1  
Lab Fraction ID: 09-8085-01G

| Analytes | CAS Number | Result | LQL  | Units    |
|----------|------------|--------|------|----------|
| pH       |            | 7.27   | 1.00 | pH Units |



Analyst



Approved

**Qualifiers:** B - Analyte detected in the associated Method Blank, value not subtracted from result  
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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: 10/19/2009

018

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

Client Sample ID: Nolin  
Client Project ID:  
Date Collected: 10/7/09 1335  
Date Received: 10/8/09

Lab Work Order 09-8085  
Lab Sample ID: 09-8085-01  
Sample Matrix: Drinking Water

**TOTAL DISSOLVED SOLIDS (TDS)**

Method: SM 2540C

Prep Method:

Date Prepared: 10/12/09  
Date Analyzed: 10/12/09

Lab File ID: 20  
Method Blank: MBLK 10/12/09

Dilution Factor: 1  
Lab Fraction ID: 09-8085-01G

| Analytes               | CAS Number | Result | LQL  | Units |
|------------------------|------------|--------|------|-------|
| Total Dissolved Solids |            | 930    | 10.0 | mg/L  |

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

Print Date: 10/19/2009

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

Client Sample ID: Tollefson  
 Client Project ID:  
 Date Collected: 10/7/09 1415  
 Date Received: 10/8/09

Lab Work Order 09-8085  
 Lab Sample ID: 09-8085-02  
 Sample Matrix: Drinking Water

**CARBONATE AND BICARBONATE**

Method: SM2320 B

Prep Method:

Date Prepared: 10/14/09  
 Date Analyzed: 10/14/09

Lab File ID: 144  
 Method Blank: MBLK 10/14/09

Dilution Factor: 1  
 Lab Fraction ID: 09-8085-02I

| Analytes    | CAS Number | Result | LQL | Units |
|-------------|------------|--------|-----|-------|
| Bicarbonate |            | 299    | 5.0 | mg/L  |
| Carbonate   |            | U      | 5.0 | mg/L  |

**SPECIFIC CONDUCTANCE @ 25°C**

Method: SM2510 B

Prep Method:

Date Prepared: 10/9/09  
 Date Analyzed: 10/9/09

Lab File ID: 63

Dilution Factor: 1  
 Lab Fraction ID: 09-8085-02F

| Analytes             | CAS Number | Result | LQL  | Units    |
|----------------------|------------|--------|------|----------|
| Specific Conductance |            | 1240   | 1.00 | µmhos/cm |

**FLUORIDE**

Method: SM 4500-F C

Prep Method:

Date Prepared: 10/13/09  
 Date Analyzed: 10/13/09

Lab File ID: 12  
 Method Blank: MBLK 10/13/09

Dilution Factor: 1  
 Lab Fraction ID: 09-8085-02J

| Analytes | CAS Number | Result | LQL  | Units |
|----------|------------|--------|------|-------|
| Fluoride | 16984-48-8 | 0.95   | 0.20 | mg/L  |

**E150.1 PH**

Method: E150.1

Prep Method:

Date Prepared: 10/8/09  
 Date Analyzed: 10/8/09 1100

Dilution Factor: 1  
 Lab Fraction ID: 09-8085-02G

| Analytes | CAS Number | Result | LQL  | Units    |
|----------|------------|--------|------|----------|
| pH       |            | 8.03   | 1.00 | pH Units |

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

Print Date: 10/19/2009

020

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

Client Sample ID: Tollefson  
Client Project ID:  
Date Collected: 10/7/09 1415  
Date Received: 10/8/09

Lab Work Order 09-8085  
Lab Sample ID: 09-8085-02  
Sample Matrix: Drinking Water

**TOTAL DISSOLVED SOLIDS (TDS)**

Method: SM 2540C

Prep Method:

Date Prepared: 10/12/09  
Date Analyzed: 10/12/09

Lab File ID: 21  
Method Blank: MBLK 10/12/09

Dilution Factor: 1  
Lab Fraction ID: 09-8085-02G

| Analytes               | CAS Number | Result | LQL  | Units |
|------------------------|------------|--------|------|-------|
| Total Dissolved Solids |            | 944    | 10.0 | mg/L  |

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

Print Date: 10/19/2009

**Evergreen Analytical, Inc.**

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

**Client Project ID****Lab Order:** 09-8085**Units:** mg/L**RSKSOP-175M Headspace  
Methane****Method: RSKSOP175M****Prep Method: RSKSOP175M**

| Lab ID      | Client ID | Matrix         | Date Received | Collection Date | Date Prepared | Date Analyzed | Results | LQL     | DF |
|-------------|-----------|----------------|---------------|-----------------|---------------|---------------|---------|---------|----|
| 09-8085-01H | Nolin     | Drinking Water | 10/8/09       | 10/7/09         | 10/9/09       | 10/9/09       | 0.022   | 0.00080 | 1  |
| 09-8085-02H | Tollefson | Drinking Water | 10/8/09       | 10/7/09         | 10/9/09       | 10/9/09       | 0.018   | 0.00080 | 1  |

**Comments:****Analyst****Approved**

**Qualifiers:** J - Indicates an estimated value when the compound is detected, but is below the LQL  
H - Sample analysis exceeded analytical holding time  
U - Compound analyzed for but not detected  
X - See case narrative  
\*- Value exceeds Maximum Contamination Level(MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

**Definitions:** DF - Dilution Factor  
LQL - Lower Quantitation Limit

Print Date: 10/12/09

## **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.**

Evergreen Analytical, Inc.

Date: 09-Oct-09

Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8021\_W

|                                  |        |                |                  |             |                                |          |                          |             |               |          |      |
|----------------------------------|--------|----------------|------------------|-------------|--------------------------------|----------|--------------------------|-------------|---------------|----------|------|
| Sample ID: MB4100809             |        | SampType: MBLK | TestCode: 8021_W |             | Run ID: TVHBTEX4_091008A       |          | Prep Date: 10/8/2009     |             | Units: µg/L   |          |      |
| Batch ID: R50538                 |        |                | TestNo: SW8021B  |             | FileID: 100809\TB2397.D\FID1A. |          | Analysis Date: 10/8/2009 |             | SeqNo: 922333 |          |      |
| Analyte                          | Result | LQL            | SPK value        | SPK Ref Val | %REC                           | LowLimit | HighLimit                | RPD Ref Val | %RPD          | RPDLimit | Qual |
| Benzene                          | U      | 1.0            |                  |             |                                |          |                          |             |               |          |      |
| Toluene                          | U      | 2.0            |                  |             |                                |          |                          |             |               |          |      |
| Ethylbenzene                     | U      | 2.0            |                  |             |                                |          |                          |             |               |          |      |
| m,p-Xylene                       | U      | 2.0            |                  |             |                                |          |                          |             |               |          |      |
| o-Xylene                         | U      | 2.0            |                  |             |                                |          |                          |             |               |          |      |
| Surr: 1,2,4-Trichlorobenzene (S) | 100.3  | 0              | 100              | 0           | 100                            | 60       | 140                      | 0           | 0             |          |      |

|                                  |        |               |                  |             |                                |          |                          |             |               |          |      |
|----------------------------------|--------|---------------|------------------|-------------|--------------------------------|----------|--------------------------|-------------|---------------|----------|------|
| Sample ID: LCS4100809            |        | SampType: LCS | TestCode: 8021_W |             | Run ID: TVHBTEX4_091008A       |          | Prep Date: 10/8/2009     |             | Units: µg/L   |          |      |
| Batch ID: R50538                 |        |               | TestNo: SW8021B  |             | FileID: 100809\TB2398.D\FID1A. |          | Analysis Date: 10/8/2009 |             | SeqNo: 922334 |          |      |
| Analyte                          | Result | LQL           | SPK value        | SPK Ref Val | %REC                           | LowLimit | HighLimit                | RPD Ref Val | %RPD          | RPDLimit | Qual |
| Benzene                          | 25.29  | 1.0           | 27.2             | 0           | 93                             | 70       | 130                      | 0           | 0             |          |      |
| Toluene                          | 193.3  | 2.0           | 211.6            | 0           | 91.4                           | 70       | 130                      | 0           | 0             |          |      |
| Ethylbenzene                     | 41.15  | 2.0           | 45.6             | 0           | 90.2                           | 70       | 130                      | 0           | 0             |          |      |
| m,p-Xylene                       | 137.9  | 2.0           | 150              | 0           | 91.9                           | 70       | 130                      | 0           | 0             |          |      |
| o-Xylene                         | 62.41  | 2.0           | 65.9             | 0           | 94.7                           | 70       | 130                      | 0           | 0             |          |      |
| Surr: 1,2,4-Trichlorobenzene (S) | 111.1  | 0             | 100              | 0           | 111                            | 60       | 140                      | 0           | 0             |          |      |

|                                  |        |              |                  |             |                                |          |                          |             |               |          |      |
|----------------------------------|--------|--------------|------------------|-------------|--------------------------------|----------|--------------------------|-------------|---------------|----------|------|
| Sample ID: 09-8016-01AMS         |        | SampType: MS | TestCode: 8021_W |             | Run ID: TVHBTEX4_091008A       |          | Prep Date: 10/8/2009     |             | Units: µg/L   |          |      |
| Batch ID: R50538                 |        |              | TestNo: SW8021B  |             | FileID: 100809\TB2400.D\FID1A. |          | Analysis Date: 10/8/2009 |             | SeqNo: 922336 |          |      |
| Analyte                          | Result | LQL          | SPK value        | SPK Ref Val | %REC                           | LowLimit | HighLimit                | RPD Ref Val | %RPD          | RPDLimit | Qual |
| Benzene                          | 21.89  | 1.0          | 27.2             | 0           | 80.5                           | 70       | 130                      | 0           | 0             |          |      |
| Toluene                          | 168.8  | 2.0          | 211.6            | 0           | 79.8                           | 70       | 130                      | 0           | 0             |          |      |
| Ethylbenzene                     | 34.37  | 2.0          | 45.6             | 0           | 75.4                           | 62       | 130                      | 0           | 0             |          |      |
| m,p-Xylene                       | 116.9  | 2.0          | 150              | 0           | 77.9                           | 70       | 134                      | 0           | 0             |          |      |
| o-Xylene                         | 52.53  | 2.0          | 65.9             | 0           | 79.7                           | 63       | 130                      | 0           | 0             |          |      |
| Surr: 1,2,4-Trichlorobenzene (S) | 93.63  | 0            | 100              | 0           | 93.6                           | 60       | 140                      | 0           | 0             |          |      |

## Qualifiers:

U - Not detected at or above the Reporting Limit  
J - Analyte detected below quantitation limits  
S - Spike Recovery outside acceptance limits  
E - Extrapolated value, value exceeds calibration range.

R - RPD outside acceptance limits  
B - Analyte detected in the associated Method Blank  
H - Prep or analytical holding time exceeded  
X - See case narrative

Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: 8021\_W

| Sample ID: 09-8016-01AMSD        |        | SampType: MSD    |           | TestCode: 8021_W |      | Run ID: TVHBTEX4_091008A       |           | Prep Date: 10/8/2009     |      | Units: µg/L   |      |
|----------------------------------|--------|------------------|-----------|------------------|------|--------------------------------|-----------|--------------------------|------|---------------|------|
|                                  |        | Batch ID: R50538 |           | TestNo: SW8021B  |      | FileID: 100809\TB2401.D\FID1A. |           | Analysis Date: 10/8/2009 |      | SeqNo: 922337 |      |
| Analyte                          | Result | LQL              | SPK value | SPK Ref Val      | %REC | LowLimit                       | HighLimit | RPD Ref Val              | %RPD | RPDLimit      | Qual |
| Benzene                          | 22.47  | 1.0              | 27.2      | 0                | 82.6 | 70                             | 130       | 21.89                    | 2.65 | 30            |      |
| Toluene                          | 170.7  | 2.0              | 211.6     | 0                | 80.6 | 70                             | 130       | 168.8                    | 1.12 | 30            |      |
| Ethylbenzene                     | 35.85  | 2.0              | 45.6      | 0                | 78.6 | 62                             | 130       | 34.37                    | 4.19 | 30            |      |
| m,p-Xylene                       | 119.7  | 2.0              | 150       | 0                | 79.8 | 70                             | 134       | 116.9                    | 2.41 | 30            |      |
| o-Xylene                         | 53.8   | 2.0              | 65.9      | 0                | 81.6 | 63                             | 130       | 52.53                    | 2.38 | 30            |      |
| Surr: 1,2,4-Trichlorobenzene (S) | 107.2  | 0                | 100       | 0                | 107  | 60                             | 140       | 0                        | 0    | 0             |      |

## Qualifiers:

U - Not detected at or above the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside acceptance limits

E - Extrapolated value, value exceeds calibration range.

R - RPD outside acceptance limits

B - Analyte detected in the associated Method Blank

H - Prep or analytical holding time exceeded

X - See case narrative



Evergreen Analytical, Inc.

Date: 13-Oct-09

Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: anions\_w

| Sample ID: MB 10/09/09 |        | SampType: MBLK   | TestCode: anions_w |             | Run ID: IC-2000_091009A |          | Prep Date: 10/9/2009     |             | Units: mg/L   |          |      |
|------------------------|--------|------------------|--------------------|-------------|-------------------------|----------|--------------------------|-------------|---------------|----------|------|
|                        |        | Batch ID: R50592 | TestNo: E300.0     |             | FileID: 12              |          | Analysis Date: 10/9/2009 |             | SeqNo: 923411 |          |      |
| Analyte                | Result | LQL              | SPK value          | SPK Ref Val | %REC                    | LowLimit | HighLimit                | RPD Ref Val | %RPD          | RPDLimit | Qual |
| Chloride               | U      | 0.50             |                    |             |                         |          |                          |             |               |          |      |
| Nitrite-N              | U      | 0.0040           |                    |             |                         |          |                          |             |               |          |      |
| Bromide                | U      | 0.050            |                    |             |                         |          |                          |             |               |          |      |
| Nitrate-N              | U      | 0.010            |                    |             |                         |          |                          |             |               |          |      |
| Nitrite+Nitrate-N      | U      | 0.010            |                    |             |                         |          |                          |             |               |          |      |
| Sulfate                | U      | 0.50             |                    |             |                         |          |                          |             |               |          |      |

| Sample ID: MB 10/08/09 |        | SampType: MBLK   | TestCode: anions_w |             | Run ID: IC-2000_091008A |          | Prep Date: 10/8/2009     |             | Units: mg/L   |          |      |
|------------------------|--------|------------------|--------------------|-------------|-------------------------|----------|--------------------------|-------------|---------------|----------|------|
|                        |        | Batch ID: R50597 | TestNo: E300.0     |             | FileID: 32              |          | Analysis Date: 10/8/2009 |             | SeqNo: 923465 |          |      |
| Analyte                | Result | LQL              | SPK value          | SPK Ref Val | %REC                    | LowLimit | HighLimit                | RPD Ref Val | %RPD          | RPDLimit | Qual |
| Chloride               | U      | 0.50             |                    |             |                         |          |                          |             |               |          |      |
| Nitrite-N              | U      | 0.0040           |                    |             |                         |          |                          |             |               |          |      |
| Bromide                | U      | 0.050            |                    |             |                         |          |                          |             |               |          |      |
| Nitrate-N              | U      | 0.010            |                    |             |                         |          |                          |             |               |          |      |
| Nitrite+Nitrate-N      | U      | 0.010            |                    |             |                         |          |                          |             |               |          |      |
| Sulfate                | U      | 0.50             |                    |             |                         |          |                          |             |               |          |      |

| Sample ID: LCS    |        | SampType: LCS    | TestCode: anions_w |             | Run ID: IC-2000_091009A |          | Prep Date: 10/9/2009     |             | Units: mg/L   |          |      |
|-------------------|--------|------------------|--------------------|-------------|-------------------------|----------|--------------------------|-------------|---------------|----------|------|
|                   |        | Batch ID: R50592 | TestNo: E300.0     |             | FileID: 11              |          | Analysis Date: 10/9/2009 |             | SeqNo: 923410 |          |      |
| Analyte           | Result | LQL              | SPK value          | SPK Ref Val | %REC                    | LowLimit | HighLimit                | RPD Ref Val | %RPD          | RPDLimit | Qual |
| Chloride          | 18.22  | 2.5              | 20                 | 0           | 91.1                    | 90       | 110                      | 0           | 0             |          |      |
| Nitrite-N         | 6.087  | 0.020            | 6.09               | 0           | 99.9                    | 90       | 110                      | 0           | 0             |          |      |
| Bromide           | 19.18  | 0.25             | 20                 | 0           | 95.9                    | 90       | 110                      | 0           | 0             |          |      |
| Nitrate-N         | 4.261  | 0.050            | 4.518              | 0           | 94.3                    | 90       | 110                      | 0           | 0             |          |      |
| Nitrite+Nitrate-N | 10.35  | 0.050            | 10.61              | 0           | 97.5                    | 90       | 110                      | 0           | 0             |          |      |
| Sulfate           | 28.67  | 2.5              | 30                 | 0           | 95.6                    | 90       | 110                      | 0           | 0             |          |      |

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Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: anions\_w

|                   |                  |                    |                         |                          |               |          |           |             |      |          |      |
|-------------------|------------------|--------------------|-------------------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: LCS    | SampType: LCS    | TestCode: anions_w | Run ID: IC-2000_091008A | Prep Date: 10/8/2009     | Units: mg/L   |          |           |             |      |          |      |
|                   | Batch ID: R50597 | TestNo: E300.0     | FileID: 31              | Analysis Date: 10/8/2009 | SeqNo: 923464 |          |           |             |      |          |      |
| Analyte           | Result           | LQL                | SPK value               | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Chloride          | 18.35            | 2.5                | 20                      | 0                        | 91.8          | 90       | 110       | 0           | 0    |          |      |
| Nitrite-N         | 6.064            | 0.020              | 6.09                    | 0                        | 99.6          | 90       | 110       | 0           | 0    |          |      |
| Bromide           | 19.33            | 0.25               | 20                      | 0                        | 96.7          | 90       | 110       | 0           | 0    |          |      |
| Nitrate-N         | 4.316            | 0.050              | 4.518                   | 0                        | 95.5          | 90       | 110       | 0           | 0    |          |      |
| Nitrite+Nitrate-N | 10.38            | 0.050              | 10.61                   | 0                        | 97.8          | 90       | 110       | 0           | 0    |          |      |
| Sulfate           | 28.59            | 2.5                | 30                      | 0                        | 95.3          | 90       | 110       | 0           | 0    |          |      |

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Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

BatchID: 21193

|                            |                        |                             |   |             |      |          |                                  |             |                      |          |      |
|----------------------------|------------------------|-----------------------------|---|-------------|------|----------|----------------------------------|-------------|----------------------|----------|------|
| Sample ID: <b>MB-21193</b> | SampType: <b>MBLK</b>  | TestCode: <b>200.7_T</b>    | Run ID: <b>ICP-OPTIMA 5300 DV_091016A</b> |             |      |          | Prep Date: <b>10/15/2009</b>     |             | Units: <b>mg/L</b>   |          |      |
|                            | Batch ID: <b>21193</b> | TestNo: <b>E200.7, Rev.</b> | FileID: <b>101609AM</b>                   |             |      |          | Analysis Date: <b>10/16/2009</b> |             | SeqNo: <b>925608</b> |          |      |
| Analyte                    | Result                 | LQL                         | SPK value                                 | SPK Ref Val | %REC | LowLimit | HighLimit                        | RPD Ref Val | %RPD                 | RPDLimit | Qual |

|           |   |         |  |  |  |  |  |  |  |  |  |
|-----------|---|---------|--|--|--|--|--|--|--|--|--|
| Arsenic   | U | 0.0500  |  |  |  |  |  |  |  |  |  |
| Barium    | U | 0.00200 |  |  |  |  |  |  |  |  |  |
| Cadmium   | U | 0.0100  |  |  |  |  |  |  |  |  |  |
| Chromium  | U | 0.0100  |  |  |  |  |  |  |  |  |  |
| Lead      | U | 0.0730  |  |  |  |  |  |  |  |  |  |
| Manganese | U | 0.00500 |  |  |  |  |  |  |  |  |  |
| Selenium  | U | 0.100   |  |  |  |  |  |  |  |  |  |

|                             |                        |                             |   |                                  |                      |          |           |             |      |          |      |
|-----------------------------|------------------------|-----------------------------|---|----------------------------------|----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS-21193</b> | SampType: <b>LCS</b>   | TestCode: <b>200.7_T</b>    | Run ID: <b>ICP-OPTIMA 5300 DV_091016A</b> | Prep Date: <b>10/15/2009</b>     | Units: <b>mg/L</b>   |          |           |             |      |          |      |
|                             | Batch ID: <b>21193</b> | TestNo: <b>E200.7, Rev.</b> | FileID: <b>101609AM</b>                   | Analysis Date: <b>10/16/2009</b> | SeqNo: <b>925609</b> |          |           |             |      |          |      |
| Analyte                     | Result                 | LQL                         | SPK value                                 | SPK Ref Val                      | %REC                 | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

|           |        |         |     |   |      |    |     |   |   |  |  |
|-----------|--------|---------|-----|---|------|----|-----|---|---|--|--|
| Arsenic   | 2.023  | 0.0500  | 2   | 0 | 101  | 85 | 115 | 0 | 0 |  |  |
| Barium    | 4.971  | 0.00200 | 5   | 0 | 99.4 | 85 | 115 | 0 | 0 |  |  |
| Cadmium   | 0.2012 | 0.0100  | 0.2 | 0 | 101  | 85 | 115 | 0 | 0 |  |  |
| Chromium  | 1.983  | 0.0100  | 2   | 0 | 99.2 | 85 | 115 | 0 | 0 |  |  |
| Lead      | 2.023  | 0.0730  | 2   | 0 | 101  | 85 | 115 | 0 | 0 |  |  |
| Manganese | 1.95   | 0.00500 | 2   | 0 | 97.5 | 85 | 115 | 0 | 0 |  |  |
| Selenium  | 2.201  | 0.100   | 2   | 0 | 110  | 85 | 115 | 0 | 0 |  |  |

|                          |                 |                      |                                    |                           |               |          |           |             |      |          |      |
|--------------------------|-----------------|----------------------|------------------------------------|---------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: 09-8026-01BMS | SampType: MS    | TestCode: 200.7_T    | Run ID: ICP-OPTIMA 5300 DV_091016A | Prep Date: 10/15/2009     | Units: mg/L   |          |           |             |      |          |      |
|                          | Batch ID: 21193 | TestNo: E200.7, Rev. | FileID: 101609AM                   | Analysis Date: 10/16/2009 | SeqNo: 925611 |          |           |             |      |          |      |
| Analyte                  | Result          | LQL                  | SPK value                          | SPK Ref Val               | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

|          |        |         |        |        |      |    |     |   |   |  |  |
|----------|--------|---------|--------|--------|------|----|-----|---|---|--|--|
| Arsenic  | 2.275  | 0.0556  | 2.222  | 0      | 102  | 75 | 125 | 0 | 0 |  |  |
| Barium   | 5.802  | 0.00222 | 5.556  | 0.2174 | 101  | 75 | 125 | 0 | 0 |  |  |
| Cadmium  | 0.2249 | 0.0111  | 0.2222 | 0      | 101  | 75 | 125 | 0 | 0 |  |  |
| Chromium | 2.215  | 0.0111  | 2.222  | 0      | 99.7 | 75 | 125 | 0 | 0 |  |  |
| Lead     | 2.278  | 0.0811  | 2.222  | 0      | 102  | 75 | 125 | 0 | 0 |  |  |

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Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

BatchID: 21193

|                          |        |                 |                      |             |                                    |          |           |                           |      |               |      |
|--------------------------|--------|-----------------|----------------------|-------------|------------------------------------|----------|-----------|---------------------------|------|---------------|------|
| Sample ID: 09-8026-01BMS |        | SampType: MS    | TestCode: 200.7_T    |             | Run ID: ICP-OPTIMA 5300 DV_091016A |          |           | Prep Date: 10/15/2009     |      | Units: mg/L   |      |
|                          |        | Batch ID: 21193 | TestNo: E200.7, Rev. |             | FileID: 101609AM                   |          |           | Analysis Date: 10/16/2009 |      | SeqNo: 925611 |      |
| Analyte                  | Result | LQL             | SPK value            | SPK Ref Val | %REC                               | LowLimit | HighLimit | RPD Ref Val               | %RPD | RPDLimit      | Qual |

Manganese

2.145

0.00556

2.222

0

96.5

75

125

0

0

Selenium

2.366

0.111

2.222

0

106

75

125

0

0

|                           |        |                 |                      |                                    |      |                           |           |               |      |          |      |
|---------------------------|--------|-----------------|----------------------|------------------------------------|------|---------------------------|-----------|---------------|------|----------|------|
| Sample ID: 09-8026-01BMSD |        | SampType: MSD   | TestCode: 200.7_T    | Run ID: ICP-OPTIMA 5300 DV_091016A |      | Prep Date: 10/15/2009     |           | Units: mg/L   |      |          |      |
|                           |        | Batch ID: 21193 | TestNo: E200.7, Rev. | FileID: 101609AM                   |      | Analysis Date: 10/16/2009 |           | SeqNo: 925612 |      |          |      |
| Analyte                   | Result | LQL             | SPK value            | SPK Ref Val                        | %REC | LowLimit                  | HighLimit | RPD Ref Val   | %RPD | RPDLimit | Qual |

Arsenic

2.284

0.0556

2.222

0

103

75

125

2.275

0.405

20

Barium

5.847

0.00222

5.556

0.2174

101

75

125

5.802

0.773

20

Cadmium

0.2272

0.0111

0.2222

0

102

75

125

0.2249

1.05

20

Chromium

2.232

0.0111

2.222

0

100

75

125

2.215

0.788

20

Lead

2.288

0.0811

2.222

0

103

75

125

2.278

0.455

20

Manganese

2.164

0.00556

2.222

0

97.4

75

125

2.145

0.897

20

Selenium

2.396

0.111

2.222

0

108

75

125

2.366

1.28

20

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Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

BatchID: 21215

|                            |                        |                             |   |                                  |                      |          |           |             |      |          |      |
|----------------------------|------------------------|-----------------------------|---|----------------------------------|----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>MB-21215</b> | SampType: <b>MBLK</b>  | TestCode: <b>200.7_D</b>    | Run ID: <b>ICP-OPTIMA 5300 DV_091022A</b> | Prep Date: <b>10/19/2009</b>     | Units: <b>mg/L</b>   |          |           |             |      |          |      |
|                            | Batch ID: <b>21215</b> | TestNo: <b>E200.7, Rev.</b> | FileID: <b>102209AM</b>                   | Analysis Date: <b>10/22/2009</b> | SeqNo: <b>927555</b> |          |           |             |      |          |      |
| Analyte                    | Result                 | LQL                         | SPK value                                 | SPK Ref Val                      | %REC                 | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

|           |   |        |  |  |  |  |  |  |  |  |  |
|-----------|---|--------|--|--|--|--|--|--|--|--|--|
| Calcium   | U | 0.387  |  |  |  |  |  |  |  |  |  |
| Iron      | U | 0.0700 |  |  |  |  |  |  |  |  |  |
| Magnesium | U | 0.150  |  |  |  |  |  |  |  |  |  |
| Potassium | U | 0.340  |  |  |  |  |  |  |  |  |  |
| Sodium    | U | 0.400  |  |  |  |  |  |  |  |  |  |

|                             |                        |                             |   |                                  |                      |          |           |             |      |          |      |
|-----------------------------|------------------------|-----------------------------|---|----------------------------------|----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS-21215</b> | SampType: <b>LCS</b>   | TestCode: <b>200.7_D</b>    | Run ID: <b>ICP-OPTIMA 5300 DV_091022A</b> | Prep Date: <b>10/19/2009</b>     | Units: <b>mg/L</b>   |          |           |             |      |          |      |
|                             | Batch ID: <b>21215</b> | TestNo: <b>E200.7, Rev.</b> | FileID: <b>102209AM</b>                   | Analysis Date: <b>10/22/2009</b> | SeqNo: <b>927556</b> |          |           |             |      |          |      |
| Analyte                     | Result                 | LQL                         | SPK value                                 | SPK Ref Val                      | %REC                 | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

|           |       |        |    |   |      |    |     |   |   |  |  |
|-----------|-------|--------|----|---|------|----|-----|---|---|--|--|
| Calcium   | 9.965 | 0.387  | 10 | 0 | 99.6 | 85 | 115 | 0 | 0 |  |  |
| Iron      | 4.956 | 0.0700 | 5  | 0 | 99.1 | 85 | 115 | 0 | 0 |  |  |
| Magnesium | 9.878 | 0.150  | 10 | 0 | 98.8 | 85 | 115 | 0 | 0 |  |  |
| Potassium | 9.816 | 0.340  | 10 | 0 | 98.2 | 85 | 115 | 0 | 0 |  |  |
| Sodium    | 9.738 | 0.400  | 10 | 0 | 97.4 | 85 | 115 | 0 | 0 |  |  |

|                          |        |                 |                      |             |                                    |          |           |                           |      |               |      |
|--------------------------|--------|-----------------|----------------------|-------------|------------------------------------|----------|-----------|---------------------------|------|---------------|------|
| Sample ID: 09-8085-01EMS |        | SampType: MS    | TestCode: 200.7_D    |             | Run ID: ICP-OPTIMA 5300 DV_091022A |          |           | Prep Date: 10/19/2009     |      | Units: mg/L   |      |
| Client ID: Nolin         |        | Batch ID: 21215 | TestNo: E200.7, Rev. |             | FileID: 102209AM                   |          |           | Analysis Date: 10/22/2009 |      | SeqNo: 927558 |      |
| Analyte                  | Result | LQL             | SPK value            | SPK Ref Val | %REC                               | LowLimit | HighLimit | RPD Ref Val               | %RPD | RPDLimit      | Qual |

|           |       |        |      |       |     |    |     |   |   |  |  |
|-----------|-------|--------|------|-------|-----|----|-----|---|---|--|--|
| Calcium   | 120   | 0.484  | 12.5 | 106.3 | 109 | 75 | 125 | 0 | 0 |  |  |
| Iron      | 6.361 | 0.0875 | 6.25 | 0     | 102 | 75 | 125 | 0 | 0 |  |  |
| Magnesium | 56.28 | 0.188  | 12.5 | 42.73 | 108 | 75 | 125 | 0 | 0 |  |  |
| Potassium | 17.22 | 0.425  | 12.5 | 4.196 | 104 | 75 | 125 | 0 | 0 |  |  |
| Sodium    | 158.4 | 0.500  | 12.5 | 143.7 | 118 | 75 | 125 | 0 | 0 |  |  |

|                           |                 |                      |                                    |                           |               |          |           |             |      |          |      |
|---------------------------|-----------------|----------------------|------------------------------------|---------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: 09-8085-01EMSD | SampType: MSD   | TestCode: 200.7_D    | Run ID: ICP-OPTIMA 5300 DV_091022A | Prep Date: 10/19/2009     | Units: mg/L   |          |           |             |      |          |      |
| Client ID: Nolin          | Batch ID: 21215 | TestNo: E200.7, Rev. | FileID: 102209AM                   | Analysis Date: 10/22/2009 | SeqNo: 927559 |          |           |             |      |          |      |
| Analyte                   | Result          | LQL                  | SPK value                          | SPK Ref Val               | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

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Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

BatchID: 21215

| Sample ID: 09-8085-01EMSD | SampType: MSD   | TestCode: 200.7_D    | Run ID: ICP-OPTIMA 5300 DV_091022A | Prep Date: 10/19/2009     | Units: mg/L   |          |           |             |       |          |      |
|---------------------------|-----------------|----------------------|------------------------------------|---------------------------|---------------|----------|-----------|-------------|-------|----------|------|
| Client ID: Nolin          | Batch ID: 21215 | TestNo: E200.7, Rev. | FileID: 102209AM                   | Analysis Date: 10/22/2009 | SeqNo: 927559 |          |           |             |       |          |      |
| Analyte                   | Result          | LQL                  | SPK value                          | SPK Ref Val               | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD  | RPDLimit | Qual |
| Calcium                   | 119.5           | 0.484                | 12.5                               | 106.3                     | 105           | 75       | 125       | 120         | 0.402 | 20       |      |
| Iron                      | 6.374           | 0.0875               | 6.25                               | 0                         | 102           | 75       | 125       | 6.361       | 0.205 | 20       |      |
| Magnesium                 | 55.75           | 0.188                | 12.5                               | 42.73                     | 104           | 75       | 125       | 56.28       | 0.947 | 20       |      |
| Potassium                 | 17.09           | 0.425                | 12.5                               | 4.196                     | 103           | 75       | 125       | 17.22       | 0.769 | 20       |      |
| Sodium                    | 156.7           | 0.500                | 12.5                               | 143.7                     | 104           | 75       | 125       | 158.4       | 1.10  | 20       |      |

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Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: CARB/BICARB\_W

|             |               |                  |                      |                     |                           |               |           |             |      |          |      |
|-------------|---------------|------------------|----------------------|---------------------|---------------------------|---------------|-----------|-------------|------|----------|------|
| Sample ID   | MBLK 10/14/09 | SampType: MBLK   | TestCode: CARB/BICAR | Run ID: ALK_091014B | Prep Date: 10/14/2009     | Units: mg/L   |           |             |      |          |      |
|             |               | Batch ID: R50657 | TestNo: SM2320 B     | FileID: 141         | Analysis Date: 10/14/2009 | SeqNo: 924455 |           |             |      |          |      |
| Analyte     | Result        | LQL              | SPK value            | SPK Ref Val         | %REC                      | LowLimit      | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Bicarbonate | U             | 5.0              |                      |                     |                           |               |           |             |      |          |      |
| Carbonate   | U             | 5.0              |                      |                     |                           |               |           |             |      |          |      |

|             |        |                  |                      |                     |                           |               |           |             |      |          |      |
|-------------|--------|------------------|----------------------|---------------------|---------------------------|---------------|-----------|-------------|------|----------|------|
| Sample ID   | LCS    | SampType: LCS    | TestCode: CARB/BICAR | Run ID: ALK_091014B | Prep Date: 10/14/2009     | Units: mg/L   |           |             |      |          |      |
|             |        | Batch ID: R50657 | TestNo: SM2320 B     | FileID: 142         | Analysis Date: 10/14/2009 | SeqNo: 924456 |           |             |      |          |      |
| Analyte     | Result | LQL              | SPK value            | SPK Ref Val         | %REC                      | LowLimit      | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Bicarbonate | 98.87  | 5.0              | 100                  | 0                   | 98.9                      | 90            | 110       | 0           | 0    |          |      |

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E - Extrapolated value, value exceeds calibration range.

R - RPD outside acceptance limits  
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X - See case narrative

Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: COND\_W

|                      |        |                  |                  |                      |                          |                 |           |             |      |          |      |
|----------------------|--------|------------------|------------------|----------------------|--------------------------|-----------------|-----------|-------------|------|----------|------|
| Sample ID            | LCS    | SampType: LCS    | TestCode: COND_W | Run ID: COND_091009A | Prep Date: 10/9/2009     | Units: µmhos/cm |           |             |      |          |      |
|                      |        | Batch ID: R50550 | TestNo: SM2510 B | FileID: 60           | Analysis Date: 10/9/2009 | SeqNo: 922449   |           |             |      |          |      |
| Analyte              | Result | LQL              | SPK value        | SPK Ref Val          | %REC                     | LowLimit        | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Specific Conductance | 93.5   | 1.00             | 99.7             | 0                    | 93.8                     | 90              | 110       | 0           | 0    |          |      |

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Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: F\_W

|           |               |                  |                     |                   |                           |               |           |             |      |          |      |
|-----------|---------------|------------------|---------------------|-------------------|---------------------------|---------------|-----------|-------------|------|----------|------|
| Sample ID | MBLK 10/13/09 | SampType: MBLK   | TestCode: F_W       | Run ID: F_091013A | Prep Date: 10/13/2009     | Units: mg/L   |           |             |      |          |      |
|           |               | Batch ID: R50609 | TestNo: SM 4500-F C | FileID: 1         | Analysis Date: 10/13/2009 | SeqNo: 923653 |           |             |      |          |      |
| Analyte   | Result        | LQL              | SPK value           | SPK Ref Val       | %REC                      | LowLimit      | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Fluoride  | U             | 0.20             |                     |                   |                           |               |           |             |      |          |      |

|           |               |                  |                     |                   |                           |               |           |             |      |          |      |
|-----------|---------------|------------------|---------------------|-------------------|---------------------------|---------------|-----------|-------------|------|----------|------|
| Sample ID | MBLK 10/13/09 | SampType: MBLK   | TestCode: F_W       | Run ID: F_091013A | Prep Date: 10/13/2009     | Units: mg/L   |           |             |      |          |      |
|           |               | Batch ID: R50609 | TestNo: SM 4500-F C | FileID: 21        | Analysis Date: 10/13/2009 | SeqNo: 923678 |           |             |      |          |      |
| Analyte   | Result        | LQL              | SPK value           | SPK Ref Val       | %REC                      | LowLimit      | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Fluoride  | U             | 0.20             |                     |                   |                           |               |           |             |      |          |      |

|           |        |                  |                     |                   |                           |               |           |             |      |          |      |
|-----------|--------|------------------|---------------------|-------------------|---------------------------|---------------|-----------|-------------|------|----------|------|
| Sample ID | LCS    | SampType: LCS    | TestCode: F_W       | Run ID: F_091013A | Prep Date: 10/13/2009     | Units: mg/L   |           |             |      |          |      |
|           |        | Batch ID: R50609 | TestNo: SM 4500-F C | FileID: 2         | Analysis Date: 10/13/2009 | SeqNo: 923654 |           |             |      |          |      |
| Analyte   | Result | LQL              | SPK value           | SPK Ref Val       | %REC                      | LowLimit      | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Fluoride  | 9.87   | 0.20             | 10                  | 0                 | 98.7                      | 95            | 105       | 0           | 0    |          |      |

|           |        |                  |                     |                   |                           |               |           |             |      |          |      |
|-----------|--------|------------------|---------------------|-------------------|---------------------------|---------------|-----------|-------------|------|----------|------|
| Sample ID | LCS    | SampType: LCS    | TestCode: F_W       | Run ID: F_091013A | Prep Date: 10/13/2009     | Units: mg/L   |           |             |      |          |      |
|           |        | Batch ID: R50609 | TestNo: SM 4500-F C | FileID: 22        | Analysis Date: 10/13/2009 | SeqNo: 923679 |           |             |      |          |      |
| Analyte   | Result | LQL              | SPK value           | SPK Ref Val       | %REC                      | LowLimit      | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Fluoride  | 10.26  | 0.20             | 10                  | 0                 | 103                       | 95            | 105       | 0           | 0    |          |      |

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Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: PH\_DW

|           |            |                  |                 |                    |                          |                 |           |             |      |          |      |
|-----------|------------|------------------|-----------------|--------------------|--------------------------|-----------------|-----------|-------------|------|----------|------|
| Sample ID | LCS-R50514 | SampType: LCS    | TestCode: PH_DW | Run ID: PH_091008A | Prep Date: 10/8/2009     | Units: pH Units |           |             |      |          |      |
|           |            | Batch ID: R50514 | TestNo: E150.1  | FileID:            | Analysis Date: 10/8/2009 | SeqNo: 921764   |           |             |      |          |      |
| Analyte   | Result     | LQL              | SPK value       | SPK Ref Val        | %REC                     | LowLimit        | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| pH        | 7.98       | 1.00             | 8               | 0                  | 99.8                     | 99.3            | 100.7     | 0           | 0    |          |      |

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Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: TDS\_W

|           |               |                  |                  |                                    |                           |               |          |           |             |      |          |      |
|-----------|---------------|------------------|------------------|------------------------------------|---------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID | MBLK 10/12/09 | SampType: MBLK   | TestCode: TDS_W  | Run ID: ANALYTICAL BALANCE_091012B | Prep Date: 10/12/2009     | Units: mg/L   |          |           |             |      |          |      |
|           |               | Batch ID: R50612 | TestNo: SM 2540C | FileID: 47                         | Analysis Date: 10/12/2009 | SeqNo: 923710 |          |           |             |      |          |      |
| 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 | SampType: | LCS    | TestCode: | TDS_W     | Run ID:     | ANALYTICAL BALANCE_091012B |          |           | Prep Date:     | 10/12/2009 | Units:   | mg/L   |
|           |     | Batch ID: | R50612 | TestNo:   | SM 2540C  | FileID:     | 48                         |          |           | Analysis Date: | 10/12/2009 | SeqNo:   | 923711 |
| Analyte   |     | Result    |        | LQL       | SPK value | SPK Ref Val | %REC                       | LowLimit | HighLimit | RPD Ref Val    | %RPD       | RPDLimit | Qual   |

Total Dissolved Solids

412

10.0

400

0

103

90

110

0

0

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Evergreen Analytical, Inc.

Date: 12-Oct-09

Work Order: 09-8085

Client Project ID:

## ANALYTICAL QC SUMMARY REPORT

TestCode: MEEP\_W

|                            |                            |                          |                             |                                |                      |          |           |             |      |          |      |
|----------------------------|----------------------------|--------------------------|-----------------------------|--------------------------------|----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>GB100909</b> | SampType: <b>MBLK</b>      | TestCode: <b>MEEP_W</b>  | Run ID: <b>FID4_091009A</b> | Prep Date: <b>10/09/09</b>     | Units: <b>mg/L</b>   |          |           |             |      |          |      |
|                            | Batch ID: <b>GAS100909</b> | TestNo: <b>RSKSOP175</b> | FileID: <b>FB764</b>        | Analysis Date: <b>10/09/09</b> | SeqNo: <b>923059</b> |          |           |             |      |          |      |
| Analyte                    | Result                     | LQL                      | SPK value                   | SPK Ref Val                    | %REC                 | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Methane                    | U                          | 0.00080                  |                             |                                |                      |          |           |             |      |          |      |

|                             |                            |                          |                             |                                |                      |          |           |             |      |          |      |
|-----------------------------|----------------------------|--------------------------|-----------------------------|--------------------------------|----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCS100909</b> | SampType: <b>LCS</b>       | TestCode: <b>MEEP_W</b>  | Run ID: <b>FID4_091009A</b> | Prep Date: <b>10/09/09</b>     | Units: <b>mg/L</b>   |          |           |             |      |          |      |
|                             | Batch ID: <b>GAS100909</b> | TestNo: <b>RSKSOP175</b> | FileID: <b>FB765</b>        | Analysis Date: <b>10/09/09</b> | SeqNo: <b>923060</b> |          |           |             |      |          |      |
| Analyte                     | Result                     | LQL                      | SPK value                   | SPK Ref Val                    | %REC                 | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Methane                     | 0.5745                     | 0.0080                   | 0.5094                      | 0                              | 113                  | 70       | 130       | 0           | 0    |          |      |

|                              |                            |                          |                             |                                |                      |          |           |             |      |          |      |
|------------------------------|----------------------------|--------------------------|-----------------------------|--------------------------------|----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>LCSD100909</b> | SampType: <b>LCSD</b>      | TestCode: <b>MEEP_W</b>  | Run ID: <b>FID4_091009A</b> | Prep Date: <b>10/09/09</b>     | Units: <b>mg/L</b>   |          |           |             |      |          |      |
|                              | Batch ID: <b>GAS100909</b> | TestNo: <b>RSKSOP175</b> | FileID: <b>FB767</b>        | Analysis Date: <b>10/09/09</b> | SeqNo: <b>923061</b> |          |           |             |      |          |      |
| Analyte                      | Result                     | LQL                      | SPK value                   | SPK Ref Val                    | %REC                 | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Methane                      | 0.5373                     | 0.0080                   | 0.5094                      | 0                              | 105                  | 70       | 130       | 0.5745      | 6.69 | 30       |      |

|                                 |                            |                          |                             |                                |                      |          |           |             |      |          |      |
|---------------------------------|----------------------------|--------------------------|-----------------------------|--------------------------------|----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>09-8155-01AMS</b> | SampType: <b>MS</b>        | TestCode: <b>MEEP_W</b>  | Run ID: <b>FID4_091009A</b> | Prep Date: <b>10/09/09</b>     | Units: <b>mg/L</b>   |          |           |             |      |          |      |
|                                 | Batch ID: <b>GAS100909</b> | TestNo: <b>RSKSOP175</b> | FileID: <b>FB776</b>        | Analysis Date: <b>10/09/09</b> | SeqNo: <b>923057</b> |          |           |             |      |          |      |
| Analyte                         | Result                     | LQL                      | SPK value                   | SPK Ref Val                    | %REC                 | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Methane                         | 0.6095                     | 0.0080                   | 0.5094                      | 0                              | 120                  | 70       | 130       | 0           | 0    |          |      |

|                                  |                            |                          |                             |                                |                      |          |           |             |      |          |      |
|----------------------------------|----------------------------|--------------------------|-----------------------------|--------------------------------|----------------------|----------|-----------|-------------|------|----------|------|
| Sample ID: <b>09-8155-01AMSD</b> | SampType: <b>MSD</b>       | TestCode: <b>MEEP_W</b>  | Run ID: <b>FID4_091009A</b> | Prep Date: <b>10/09/09</b>     | Units: <b>mg/L</b>   |          |           |             |      |          |      |
|                                  | Batch ID: <b>GAS100909</b> | TestNo: <b>RSKSOP175</b> | FileID: <b>FB777</b>        | Analysis Date: <b>10/09/09</b> | SeqNo: <b>923058</b> |          |           |             |      |          |      |
| Analyte                          | Result                     | LQL                      | SPK value                   | SPK Ref Val                    | %REC                 | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Methane                          | 0.5231                     | 0.0080                   | 0.5094                      | 0                              | 103                  | 70       | 130       | 0.6095      | 15.3 | 30       |      |

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October 22, 2009

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

Lab Work Order: 09-8085  
Client Project ID:

Dear John Axelson:

Enclosed are the analytical results for the samples shown in the Laboratory Work Order Summary.

**THE INVOICE WILL BE MAILED FROM OUR NEW JERSEY OFFICE UNDER SEPARATE COVER.**

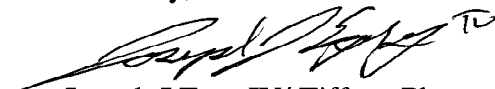
The enclosed data for testing performed at Accutest Laboratory (formerly Evergreen Analytical) have been reviewed for quality assurance. A case narrative is included to describe any anomalies associated with the samples or data.

Accutest 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 Accutest Laboratories. If you have any questions concerning the analytical data, please contact me. Please direct other questions to Client Services.

Sincerely,



Joseph J Egry IV/ Tiffany Pham  
Quality Assurance