



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Charlie Jensen  
Encana  
2717 Co. Rd. 215, Ste 100  
Parachute, CO 81635

## Report Summary

Tuesday November 08, 2011

Report Number: L536293

Samples Received: 09/15/11

Client Project:

Description: West Divide Creek - 02E

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jared Willis, ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140  
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,  
TX - T104704245, OK-9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 08, 2011

Date Received : September 15, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DCS-1-091411  
 Collected By : Tracy Loftus  
 Collection Date : 09/14/11 09:20

ESC Sample # : L536293-01

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 17.    | 1.0        | mg/l   | 9056   | 09/16/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Sodium                 | 88.    | 0.50       | mg/l   | 6010B  | 09/17/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/20/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/20/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 101.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/22/11 16:59 Revised: 11/08/11 13:44



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 08, 2011

Date Received : September 15, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DCS-2-091411  
 Collected By : Tracy Loftus  
 Collection Date : 09/14/11 09:40

ESC Sample # : L536293-02

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 22.    | 1.0        | mg/l   | 9056   | 09/19/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Sodium                 | 89.    | 0.50       | mg/l   | 6010B  | 09/17/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/19/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 102.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 102.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/22/11 16:59 Revised: 11/08/11 13:44



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 08, 2011

Date Received : September 15, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DCS-3-091411  
 Collected By : Tracy Loftus  
 Collection Date : 09/14/11 10:00

ESC Sample # : L536293-03

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 22.    | 1.0        | mg/l   | 9056   | 09/19/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Sodium                 | 85.    | 0.50       | mg/l   | 6010B  | 09/17/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 105.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 101.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/22/11 16:59 Revised: 11/08/11 13:44



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 08, 2011

Date Received : September 15, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DCS-4-091411  
 Collected By : Tracy Loftus  
 Collection Date : 09/14/11 10:30

ESC Sample # : L536293-04

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 21.    | 1.0        | mg/l   | 9056   | 09/19/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Sodium                 | 84.    | 0.50       | mg/l   | 6010B  | 09/17/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 105.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 101.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/22/11 16:59 Revised: 11/08/11 13:44



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 08, 2011

Date Received : September 15, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DCS-5-091411  
 Collected By : Tracy Loftus  
 Collection Date : 09/14/11 10:50

ESC Sample # : L536293-05

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 17.    | 1.0        | mg/l   | 9056   | 09/19/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Sodium                 | 85.    | 0.50       | mg/l   | 6010B  | 09/17/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/22/11 16:59 Revised: 11/08/11 13:44



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 08, 2011

Date Received : September 15, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DCS-6-091411  
 Collected By : Tracy Loftus  
 Collection Date : 09/14/11 11:10

ESC Sample # : L536293-06

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 21.    | 1.0        | mg/l   | 9056   | 09/19/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Sodium                 | 86.    | 0.50       | mg/l   | 6010B  | 09/17/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 105.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 110.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 94.4   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/22/11 16:59 Revised: 11/08/11 13:45



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 08, 2011

Date Received : September 15, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DCS-7-091411  
 Collected By : Tracy Loftus  
 Collection Date : 09/14/11 11:30

ESC Sample # : L536293-07

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 21.    | 1.0        | mg/l   | 9056   | 09/19/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Sodium                 | 84.    | 0.50       | mg/l   | 6010B  | 09/17/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 102.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 99.0   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/22/11 16:59 Revised: 11/08/11 13:45





**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 08, 2011

Date Received : September 15, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DCS-8-091411  
 Collected By : Tracy Loftus  
 Collection Date : 09/14/11 12:00

ESC Sample # : L536293-08

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 21.    | 1.0        | mg/l   | 9056   | 09/19/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/21/11 | 1    |
| Sodium                 | 83.    | 0.50       | mg/l   | 6010B  | 09/17/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 110.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 102.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 09/22/11 16:59 Revised: 11/08/11 13:45

Attachment A  
List of Analytes with QC Qualifiers

| Sample Number | Work Group | Sample Type | Analyte  | Run ID   | Qualifier |
|---------------|------------|-------------|----------|----------|-----------|
| L536293-02    | WG555923   | SAMP        | Chloride | R1866072 | J3        |

Attachment B  
Explanation of QC Qualifier Codes

| Qualifier | Meaning                                                                                  |
|-----------|------------------------------------------------------------------------------------------|
| J3        | The associated batch QC was outside the established quality control range for precision. |

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536293

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 08, 2011

| Analyte                 | Result | Laboratory Blank |       | Limit  | Batch    | Date Analyzed  |
|-------------------------|--------|------------------|-------|--------|----------|----------------|
|                         |        | Units            | % Rec |        |          |                |
| Chloride                | < 1    | mg/l             |       |        | WG555523 | 09/16/11 07:39 |
| Sodium                  | < .5   | mg/l             |       |        | WG555522 | 09/17/11 15:04 |
| Benzene                 | < .001 | mg/l             |       |        | WG555431 | 09/16/11 23:24 |
| Ethylbenzene            | < .001 | mg/l             |       |        | WG555431 | 09/16/11 23:24 |
| Methyl tert-butyl ether | < .001 | mg/l             |       |        | WG555431 | 09/16/11 23:24 |
| Toluene                 | < .005 | mg/l             |       |        | WG555431 | 09/16/11 23:24 |
| Total Xylenes           | < .003 | mg/l             |       |        | WG555431 | 09/16/11 23:24 |
| 4-Bromofluorobenzene    |        | % Rec.           | 96.50 | 82-120 | WG555431 | 09/16/11 23:24 |
| Dibromofluoromethane    |        | % Rec.           | 114.1 | 82-126 | WG555431 | 09/16/11 23:24 |
| Toluene-d8              |        | % Rec.           | 106.1 | 92-112 | WG555431 | 09/16/11 23:24 |
| a,a,a-Trifluorotoluene  |        | % Rec.           | 103.5 | 90-116 | WG555431 | 09/16/11 23:24 |
| Total Xylenes           | < .003 | mg/l             |       |        | WG556037 | 09/19/11 17:29 |
| 4-Bromofluorobenzene    |        | % Rec.           | 100.4 | 82-120 | WG556037 | 09/19/11 17:29 |
| Dibromofluoromethane    |        | % Rec.           | 106.6 | 82-126 | WG556037 | 09/19/11 17:29 |
| Toluene-d8              |        | % Rec.           | 101.8 | 92-112 | WG556037 | 09/19/11 17:29 |
| a,a,a-Trifluorotoluene  |        | % Rec.           | 104.2 | 90-116 | WG556037 | 09/19/11 17:29 |
| Chloride                | < 1    | mg/l             |       |        | WG555923 | 09/19/11 10:41 |
| Ethane                  | < .013 | mg/l             |       |        | WG556487 | 09/21/11 15:39 |
| Ethene                  | < .013 | mg/l             |       |        | WG556487 | 09/21/11 15:39 |
| Methane                 | < .01  | mg/l             |       |        | WG556487 | 09/21/11 15:39 |
| Toluene                 | < .005 | mg/l             |       |        | WG556184 | 09/20/11 15:14 |
| Total Xylenes           | < .003 | mg/l             |       |        | WG556184 | 09/20/11 15:14 |
| 4-Bromofluorobenzene    |        | % Rec.           | 94.77 | 82-120 | WG556184 | 09/20/11 15:14 |
| Dibromofluoromethane    |        | % Rec.           | 105.7 | 82-126 | WG556184 | 09/20/11 15:14 |
| Toluene-d8              |        | % Rec.           | 103.4 | 92-112 | WG556184 | 09/20/11 15:14 |
| a,a,a-Trifluorotoluene  |        | % Rec.           | 106.5 | 90-116 | WG556184 | 09/20/11 15:14 |

| Analyte  | Units | Result | Duplicate |       | Limit | Ref Samp   | Batch    |
|----------|-------|--------|-----------|-------|-------|------------|----------|
|          |       |        | Duplicate | RPD   |       |            |          |
| Chloride | mg/l  | 220.   | 210.      | 2.35  | 20    | L536482-02 | WG555523 |
| Sodium   | mg/l  | 20.0   | 19.3      | 2.56  | 20    | L536311-02 | WG555522 |
| Chloride | mg/l  | 18.0   | 22.0      | 22.8* | 20    | L536293-02 | WG555923 |

| Analyte  | Units | Laboratory Control Sample |        | % Rec | Limit  | Batch    |
|----------|-------|---------------------------|--------|-------|--------|----------|
|          |       | Known Val                 | Result |       |        |          |
| Chloride | mg/l  | 40                        | 39.8   | 99.5  | 90-110 | WG555523 |
| Sodium   | mg/l  | 11.3                      | 11.3   | 100.  | 85-115 | WG555522 |

\* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536293

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 08, 2011

| Analyte                 | Units | Laboratory Control Sample |        | % Rec | Limit  | Batch    |
|-------------------------|-------|---------------------------|--------|-------|--------|----------|
|                         |       | Known Val                 | Result |       |        |          |
| Benzene                 | mg/l  | .025                      | 0.0264 | 106.  | 72-119 | WG555431 |
| Ethylbenzene            | mg/l  | .025                      | 0.0242 | 96.6  | 77-124 | WG555431 |
| Methyl tert-butyl ether | mg/l  | .025                      | 0.0249 | 99.5  | 67-127 | WG555431 |
| Toluene                 | mg/l  | .025                      | 0.0235 | 93.8  | 75-114 | WG555431 |
| Total Xylenes           | mg/l  | .075                      | 0.0717 | 95.7  | 77-123 | WG555431 |
| 4-Bromofluorobenzene    |       |                           |        | 102.3 | 82-120 | WG555431 |
| Dibromofluoromethane    |       |                           |        | 111.2 | 82-126 | WG555431 |
| Toluene-d8              |       |                           |        | 106.5 | 92-112 | WG555431 |
| a,a,a-Trifluorotoluene  |       |                           |        | 100.9 | 90-116 | WG555431 |
| Total Xylenes           | mg/l  | .075                      | 0.0783 | 104.  | 77-123 | WG556037 |
| 4-Bromofluorobenzene    |       |                           |        | 100.1 | 82-120 | WG556037 |
| Dibromofluoromethane    |       |                           |        | 102.8 | 82-126 | WG556037 |
| Toluene-d8              |       |                           |        | 99.04 | 92-112 | WG556037 |
| a,a,a-Trifluorotoluene  |       |                           |        | 100.5 | 90-116 | WG556037 |
| Chloride                | mg/l  | 40                        | 39.9   | 99.8  | 90-110 | WG555923 |
| Ethane                  | mg/l  | .645                      | 0.678  | 105.  | 70-130 | WG556487 |
| Ethene                  | mg/l  | .635                      | 0.660  | 104.  | 70-130 | WG556487 |
| Methane                 | mg/l  | .339                      | 0.333  | 98.1  | 70-130 | WG556487 |
| Toluene                 | mg/l  | .025                      | 0.0254 | 102.  | 75-114 | WG556184 |
| Total Xylenes           | mg/l  | .075                      | 0.0824 | 110.  | 77-123 | WG556184 |
| 4-Bromofluorobenzene    |       |                           |        | 100.0 | 82-120 | WG556184 |
| Dibromofluoromethane    |       |                           |        | 102.9 | 82-126 | WG556184 |
| Toluene-d8              |       |                           |        | 100.6 | 92-112 | WG556184 |
| a,a,a-Trifluorotoluene  |       |                           |        | 100.9 | 90-116 | WG556184 |

| Analyte                 | Units | Laboratory Control Sample Duplicate |        |       | Limit  | RPD   | Limit | Batch    |
|-------------------------|-------|-------------------------------------|--------|-------|--------|-------|-------|----------|
|                         |       | Result                              | Ref    | %Rec  |        |       |       |          |
| Chloride                | mg/l  | 39.8                                | 39.8   | 100.  | 90-110 | 0     | 20    | WG555523 |
| Benzene                 | mg/l  | 0.0247                              | 0.0264 | 99.0  | 72-119 | 6.79  | 20    | WG555431 |
| Ethylbenzene            | mg/l  | 0.0241                              | 0.0242 | 96.0  | 77-124 | 0.190 | 20    | WG555431 |
| Methyl tert-butyl ether | mg/l  | 0.0231                              | 0.0249 | 92.0  | 67-127 | 7.44  | 20    | WG555431 |
| Toluene                 | mg/l  | 0.0231                              | 0.0235 | 92.0  | 75-114 | 1.66  | 20    | WG555431 |
| Total Xylenes           | mg/l  | 0.0723                              | 0.0717 | 96.0  | 77-123 | 0.740 | 20    | WG555431 |
| 4-Bromofluorobenzene    |       |                                     |        | 104.6 | 82-120 |       |       | WG555431 |
| Dibromofluoromethane    |       |                                     |        | 108.7 | 82-126 |       |       | WG555431 |
| Toluene-d8              |       |                                     |        | 107.4 | 92-112 |       |       | WG555431 |
| a,a,a-Trifluorotoluene  |       |                                     |        | 104.4 | 90-116 |       |       | WG555431 |
| Total Xylenes           | mg/l  | 0.0769                              | 0.0783 | 102.  | 77-123 | 1.74  | 20    | WG556037 |
| 4-Bromofluorobenzene    |       |                                     |        | 99.25 | 82-120 |       |       | WG556037 |
| Dibromofluoromethane    |       |                                     |        | 98.48 | 82-126 |       |       | WG556037 |
| Toluene-d8              |       |                                     |        | 99.77 | 92-112 |       |       | WG556037 |
| a,a,a-Trifluorotoluene  |       |                                     |        | 100.7 | 90-116 |       |       | WG556037 |
| Chloride                | mg/l  | 40.0                                | 39.9   | 100.  | 90-110 | 0.250 | 20    | WG555923 |

\* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536293

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 08, 2011

| Analyte                | Units | Laboratory Control |        | Sample Duplicate |  | Limit  | RPD   | Limit | Batch    |
|------------------------|-------|--------------------|--------|------------------|--|--------|-------|-------|----------|
|                        |       | Result             | Ref    | %Rec             |  |        |       |       |          |
| Ethane                 | mg/l  | 0.698              | 0.678  | 108.             |  | 70-130 | 2.90  | 25    | WG556487 |
| Ethene                 | mg/l  | 0.682              | 0.660  | 107.             |  | 70-130 | 3.16  | 25    | WG556487 |
| Methane                | mg/l  | 0.334              | 0.333  | 99.0             |  | 70-130 | 0.550 | 25    | WG556487 |
| Toluene                | mg/l  | 0.0255             | 0.0254 | 102.             |  | 75-114 | 0.280 | 20    | WG556184 |
| Total Xylenes          | mg/l  | 0.0800             | 0.0824 | 107.             |  | 77-123 | 2.96  | 20    | WG556184 |
| 4-Bromofluorobenzene   |       |                    |        | 95.90            |  | 82-120 |       |       | WG556184 |
| Dibromofluoromethane   |       |                    |        | 104.0            |  | 82-126 |       |       | WG556184 |
| Toluene-d8             |       |                    |        | 101.0            |  | 92-112 |       |       | WG556184 |
| a,a,a-Trifluorotoluene |       |                    |        | 103.7            |  | 90-116 |       |       | WG556184 |

| Analyte                 | Units | MS Res | Matrix Spike |      | % Rec | Limit  | Ref Samp   | Batch    |
|-------------------------|-------|--------|--------------|------|-------|--------|------------|----------|
|                         |       |        | Ref Res      | TV   |       |        |            |          |
| Sodium                  | mg/l  | 31.0   | 19.3         | 11.3 | 104.  | 75-125 | L536311-02 | WG555522 |
| Benzene                 | mg/l  | 0.0289 | 0            | .025 | 116.  | 51-134 | L536221-01 | WG555431 |
| Ethylbenzene            | mg/l  | 0.0250 | 0            | .025 | 100.  | 64-135 | L536221-01 | WG555431 |
| Methyl tert-butyl ether | mg/l  | 0.0298 | 0.00320      | .025 | 106.  | 55-136 | L536221-01 | WG555431 |
| Toluene                 | mg/l  | 0.0249 | 0            | .025 | 99.5  | 61-126 | L536221-01 | WG555431 |
| Total Xylenes           | mg/l  | 0.0746 | 0            | .075 | 99.4  | 64-133 | L536221-01 | WG555431 |
| 4-Bromofluorobenzene    |       |        |              |      | 97.37 | 82-120 |            | WG555431 |
| Dibromofluoromethane    |       |        |              |      | 109.6 | 82-126 |            | WG555431 |
| Toluene-d8              |       |        |              |      | 105.3 | 92-112 |            | WG555431 |
| a,a,a-Trifluorotoluene  |       |        |              |      | 100.5 | 90-116 |            | WG555431 |
| Total Xylenes           | mg/l  | 0.0795 | 0            | .075 | 106.  | 64-133 | L536207-02 | WG556037 |
| 4-Bromofluorobenzene    |       |        |              |      | 97.00 | 82-120 |            | WG556037 |
| Dibromofluoromethane    |       |        |              |      | 106.4 | 82-126 |            | WG556037 |
| Toluene-d8              |       |        |              |      | 103.5 | 92-112 |            | WG556037 |
| a,a,a-Trifluorotoluene  |       |        |              |      | 105.4 | 90-116 |            | WG556037 |
| Chloride                | mg/l  | 114.   | 65.0         | 50   | 98.0  | 80-120 | L536033-01 | WG555923 |
| Toluene                 | mg/l  | 0.0237 | 0            | .025 | 94.9  | 61-126 | L536932-01 | WG556184 |
| Total Xylenes           | mg/l  | 0.0696 | 0            | .075 | 92.8  | 64-133 | L536932-01 | WG556184 |
| 4-Bromofluorobenzene    |       |        |              |      | 94.07 | 82-120 |            | WG556184 |
| Dibromofluoromethane    |       |        |              |      | 112.5 | 82-126 |            | WG556184 |
| Toluene-d8              |       |        |              |      | 102.8 | 92-112 |            | WG556184 |
| a,a,a-Trifluorotoluene  |       |        |              |      | 104.6 | 90-116 |            | WG556184 |

| Analyte                 | Units | MSD    | Matrix Spike Duplicate |       | Limit  | RPD   | Limit | Ref Samp   | Batch    |
|-------------------------|-------|--------|------------------------|-------|--------|-------|-------|------------|----------|
|                         |       |        | Ref                    | %Rec  |        |       |       |            |          |
| Sodium                  | mg/l  | 31.5   | 31.0                   | 108.  | 75-125 | 1.60  | 20    | L536311-02 | WG555522 |
| Benzene                 | mg/l  | 0.0296 | 0.0289                 | 118.  | 51-134 | 2.30  | 20    | L536221-01 | WG555431 |
| Ethylbenzene            | mg/l  | 0.0272 | 0.0250                 | 109.  | 64-135 | 8.29  | 20    | L536221-01 | WG555431 |
| Methyl tert-butyl ether | mg/l  | 0.0299 | 0.0298                 | 107.  | 55-136 | 0.630 | 20    | L536221-01 | WG555431 |
| Toluene                 | mg/l  | 0.0261 | 0.0249                 | 104.  | 61-126 | 4.95  | 20    | L536221-01 | WG555431 |
| Total Xylenes           | mg/l  | 0.0803 | 0.0746                 | 107.  | 64-133 | 7.45  | 20    | L536221-01 | WG555431 |
| 4-Bromofluorobenzene    |       |        |                        | 102.0 | 82-120 |       |       |            | WG555431 |

\* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536293

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 08, 2011

| Analyte                | Units | MSD    | Matrix Spike Duplicate |       | Limit  | RPD   | Limit Ref | Samp       | Batch    |
|------------------------|-------|--------|------------------------|-------|--------|-------|-----------|------------|----------|
|                        |       |        | Ref                    | %Rec  |        |       |           |            |          |
| Dibromofluoromethane   |       |        |                        | 109.8 | 82-126 |       |           |            |          |
| Toluene-d8             |       |        |                        | 104.3 | 92-112 |       |           |            |          |
| a,a,a-Trifluorotoluene |       |        |                        | 99.17 | 90-116 |       |           |            |          |
| Total Xylenes          | mg/l  | 0.0867 | 0.0795                 | 116.  | 64-133 | 8.63  | 20        | L536207-02 | WG556037 |
| 4-Bromofluorobenzene   |       |        |                        | 99.04 | 82-120 |       |           |            | WG556037 |
| Dibromofluoromethane   |       |        |                        | 103.0 | 82-126 |       |           |            | WG556037 |
| Toluene-d8             |       |        |                        | 101.7 | 92-112 |       |           |            | WG556037 |
| a,a,a-Trifluorotoluene |       |        |                        | 106.8 | 90-116 |       |           |            | WG556037 |
| Chloride               | mg/l  | 113.   | 114.                   | 96.0  | 80-120 | 0.881 | 20        | L536033-01 | WG555923 |
| Toluene                | mg/l  | 0.0201 | 0.0237                 | 80.3  | 61-126 | 16.7  | 20        | L536932-01 | WG556184 |
| Total Xylenes          | mg/l  | 0.0590 | 0.0696                 | 78.7  | 64-133 | 16.4  | 20        | L536932-01 | WG556184 |
| 4-Bromofluorobenzene   |       |        |                        | 96.73 | 82-120 |       |           |            | WG556184 |
| Dibromofluoromethane   |       |        |                        | 106.7 | 82-126 |       |           |            | WG556184 |
| Toluene-d8             |       |        |                        | 102.1 | 92-112 |       |           |            | WG556184 |
| a,a,a-Trifluorotoluene |       |        |                        | 103.3 | 90-116 |       |           |            | WG556184 |

Batch number /Run number / Sample number cross reference

WG555523: R1861752: L536293-01  
 WG555522: R1862836: L536293-01 02 03 04 05 06 07 08  
 WG555431: R1863812: L536293-01 02 03 04 05 06 07 08  
 WG556037: R1864352: L536293-02  
 WG555923: R1866072: L536293-02 03 04 05 06 07 08  
 WG556487: R1867252: L536293-01 02 03 04 05 06 07 08  
 WG556184: R1867993: L536293-01

\* \* Calculations are performed prior to rounding of reported values.  
 \* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
Charlie Jensen  
2717 Co. Rd. 215, Ste 100

Parachute, CO 81635

Quality Assurance Report  
Level II

L536293

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 08, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



**Encana**  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Billing information:  
 Accounts Payable- Brett Middleton  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Analysis/Container/Preservative

Chain of Custody  
 Page \_\_\_ of \_\_\_

**ESC**  
 L.A.B S.C.I.E.N.C.E.S

12065 Lebanon Road  
 Mt. Juliet, TN 37122

Phone: (800) 767-5859  
 Phone: (615) 758-5858  
 Fax: (615) 758-5859

**C020**

Report to: **Brett Middleton**

Email: **brett.middleton@encana.com**

Project Description: **West Divide Creek - 02E**

City/State Collected: **Silt, CO**

Phone: (970) 285-2739  
 FAX: (970) 625-4636

Client Project #:

Lab Project #  
**ENCRCO-WESTDIVIDE**

Collected by (print): **Tracy Loftus**

Site/Facility ID#:

P.O.#:

Collected by (signature): *Tracy Loftus*  
 Immediately Packed on Ice N  Y

**Rush?** ( Lab MUST Be Notified )  
 Same Day ..... 200%  
 Next Day ..... 100%  
 Two Day ..... 50%  
 Three Day ..... 25%

Date Results Needed  
 Email?  No  Yes  
 FAX?  No  Yes

CHLORIDE 125mlHDPE-NoPres  
 NAICP 500mlHDPE-HNO3 CR  
 RSK175 40mlAmb-NoPres  
 V8260BTEX 40mlAmb-HCl

Acctnum: **ENCRCO** (lab use only)  
 Template/Prelogin: **T73093 P364395**  
 Cooler #: *8/4/11 MMB*  
 Shipped Via: **FedEx Ground**

| Sample ID    | Comp/Grab | Matrix* | Depth | Date    | Time | No. of Cntrs | CHLORIDE 125mlHDPE-NoPres | NAICP 500mlHDPE-HNO3 CR | RSK175 40mlAmb-NoPres | V8260BTEX 40mlAmb-HCl |
|--------------|-----------|---------|-------|---------|------|--------------|---------------------------|-------------------------|-----------------------|-----------------------|
| DCS-1-091411 | Grab      | GW      | N/A   | 9/14/11 | 920  | 7            | X                         | X                       | X                     | X                     |
| DCS-2-091411 |           | GW      |       |         | 940  | 7            | X                         | X                       | X                     | X                     |
| DCS-3-091411 |           |         |       |         | 1000 | 7            | X                         | X                       | X                     | X                     |
| DCS-4-091411 |           |         |       |         | 1030 | 7            | X                         | X                       | X                     | X                     |
| DCS-5-091411 |           |         |       |         | 1050 | 7            | X                         | X                       | X                     | X                     |
| DCS-6-091411 |           |         |       |         | 1110 | 7            | X                         | X                       | X                     | X                     |
| DCS-7-091411 |           |         |       |         | 1130 | 7            | X                         | X                       | X                     | X                     |
| DCS-8-091411 |           |         |       |         | 1200 | 7            | X                         | X                       | X                     | X                     |

Remarks/Contaminant Sample # (lab only)  
**L536293 -01**  
**-02**  
**-03**  
**-04**  
**-05**  
**-06**  
**-07**  
**-08**

\*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other \_\_\_\_\_

pH \_\_\_\_\_ Temp \_\_\_\_\_

Remarks:

Flow \_\_\_\_\_ Other \_\_\_\_\_

*please cc: smann@ruleengineering.com*

*4341 9923 3855*

|                                                  |                      |                   |                                        |                                                                                                                                                        |                                                                                                               |
|--------------------------------------------------|----------------------|-------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Relinquished by: (Signature) <i>Tracy Loftus</i> | Date: <i>9/14/11</i> | Time: <i>1430</i> | Received by: (Signature) _____         | Samples returned via: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> | Condition: (lab use only) <i>OK</i>                                                                           |
| Relinquished by: (Signature) _____               | Date: _____          | Time: _____       | Received by: (Signature) _____         | Temp: <i>3.4"</i> Bottles Received: <i>56 + TB</i>                                                                                                     | COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA |
| Relinquished by: (Signature) _____               | Date: _____          | Time: _____       | Received for lab by: (Signature) _____ | Date: <i>9-15-11</i> Time: <i>09:00</i>                                                                                                                | pH Checked: <i>CR</i> NCF: _____                                                                              |



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Charlie Jensen  
Encana  
2717 Co. Rd. 215, Ste 100  
Parachute, CO 81635

## Report Summary

Monday November 21, 2011

Report Number: L536627


Samples Received: 09/16/11

Client Project:

Description: West Divide Creek - 02E

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

  
Jared Willis , ESC Representative

### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140  
NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A,  
TX - T104704245, OK-9915, PA - 68-02979

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

November 21, 2011

Charlie Jensen
Encana
2717 Co. Rd. 215, Ste 100
Parachute, CO 81635

Date Received : September 16, 2011
Description : West Divide Creek - 02E
Sample ID : MW-1-091511
Collected By : Scotty Mann
Collection Date : 09/15/11 10:45

ESC Sample # : L536627-01
Site ID :
Project # :

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include Chloride, Methane, Ethane, Ethene, Sodium, Benzene, Toluene, Ethylbenzene, Total Xylenes, and Surrogate Recovery (Toluene-d8, Dibromofluoromethane, a,a,a-Trifluorotoluene, 4-Bromofluorobenzene).

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

November 21, 2011

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-2-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 11:00

ESC Sample # : L536627-02

Site ID :

Project # :

| Parameter               | Result | Det. Limit | Units  | Method | Date     | Dil. |
|-------------------------|--------|------------|--------|--------|----------|------|
| Chloride                | 56.    | 1.0        | mg/l   | 9056   | 09/21/11 | 1    |
| Sulfate                 | BDL    | 5.0        | mg/l   | 9056   | 10/04/11 | 1    |
| Alkalinity, Bicarbonate | 340    | 20.        | mg/l   | 2320B  | 10/03/11 | 1    |
| Methane                 | 8.0    | 0.20       | mg/l   | RSK175 | 09/22/11 | 20   |
| Ethane                  | 2.2    | 0.26       | mg/l   | RSK175 | 09/22/11 | 20   |
| Ethene                  | BDL    | 0.26       | mg/l   | RSK175 | 09/22/11 | 20   |
| Calcium                 | 97.    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Magnesium               | 16.    | 0.10       | mg/l   | 6010B  | 09/20/11 | 1    |
| Potassium               | 4.3    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Sodium                  | 140    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                 | 0.13   | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                 | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene            | 0.0013 | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes           | 0.035  | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery      |        |            |        |        |          |      |
| Toluene-d8              | 99.9   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane    | 102.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene  | 102.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene    | 102.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

November 21, 2011

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-4-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 11:15

ESC Sample # : L536627-03

Site ID :

Project # :

| Parameter               | Result | Det. Limit | Units  | Method | Date     | Dil. |
|-------------------------|--------|------------|--------|--------|----------|------|
| Chloride                | 35.    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Sulfate                 | BDL    | 5.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Alkalinity, Bicarbonate | 360    | 20.        | mg/l   | 2320B  | 09/28/11 | 1    |
| Methane                 | 16.    | 0.40       | mg/l   | RSK175 | 09/22/11 | 40   |
| Ethane                  | 3.5    | 0.52       | mg/l   | RSK175 | 09/22/11 | 40   |
| Ethene                  | BDL    | 0.52       | mg/l   | RSK175 | 09/22/11 | 40   |
| Calcium                 | 63.    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Magnesium               | 9.7    | 0.10       | mg/l   | 6010B  | 09/20/11 | 1    |
| Potassium               | 1.6    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Sodium                  | 140    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                 | 0.057  | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                 | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene            | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes           | 0.020  | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery      |        |            |        |        |          |      |
| Toluene-d8              | 100.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane    | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene  | 101.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene    | 95.8   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-6-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 09:00

ESC Sample # : L536627-04

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 37.    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 170    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 98.2   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 101.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 99.4   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-7-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 09:30

ESC Sample # : L536627-05

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 38.    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 240    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/19/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/19/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/19/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/19/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 105.   |            | % Rec. | 8260B  | 09/19/11 | 1    |
| Dibromofluoromethane   | 90.3   |            | % Rec. | 8260B  | 09/19/11 | 1    |
| a,a,a-Trifluorotoluene | 107.   |            | % Rec. | 8260B  | 09/19/11 | 1    |
| 4-Bromofluorobenzene   | 100.   |            | % Rec. | 8260B  | 09/19/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-8-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 09:45

ESC Sample # : L536627-06

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 36.    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 210    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 106.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 111.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41





**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-9-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 12:15

ESC Sample # : L536627-07

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 18.    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Methane                | 4.9    | 0.080      | mg/l   | RSK175 | 09/22/11 | 8    |
| Ethane                 | 0.64   | 0.10       | mg/l   | RSK175 | 09/22/11 | 8    |
| Ethene                 | BDL    | 0.10       | mg/l   | RSK175 | 09/22/11 | 8    |
| Sodium                 | 61.    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 101.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-11-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 12:00

ESC Sample # : L536627-08

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 13.    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Methane                | 0.036  | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 40.    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 106.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-12-091411  
 Collected By : Scotty Mann  
 Collection Date : 09/14/11 16:15

ESC Sample # : L536627-09

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 20.    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Methane                | 0.31   | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 84.    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 106.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-14-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 12:30

ESC Sample # : L536627-10

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 9.6    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Methane                | 3.3    | 0.10       | mg/l   | RSK175 | 09/22/11 | 10   |
| Ethane                 | 0.28   | 0.13       | mg/l   | RSK175 | 09/22/11 | 10   |
| Ethene                 | BDL    | 0.13       | mg/l   | RSK175 | 09/22/11 | 10   |
| Sodium                 | 51.    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 102.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 106.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-16-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 10:30

ESC Sample # : L536627-11

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 40.    | 1.0        | mg/l   | 9056   | 09/23/11 | 1    |
| Methane                | 0.062  | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 250    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 106.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-17-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 10:00

ESC Sample # : L536627-12

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 64.    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Methane                | 5.4    | 0.10       | mg/l   | RSK175 | 09/22/11 | 10   |
| Ethane                 | 1.3    | 0.13       | mg/l   | RSK175 | 09/22/11 | 10   |
| Ethene                 | BDL    | 0.13       | mg/l   | RSK175 | 09/22/11 | 10   |
| Sodium                 | 240    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | 0.064  | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 102.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-18-091411  
 Collected By : Scotty Mann  
 Collection Date : 09/14/11 17:40

ESC Sample # : L536627-13

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 8.5    | 1.0        | mg/l   | 9056   | 09/24/11 | 1    |
| Methane                | 0.89   | 0.020      | mg/l   | RSK175 | 09/22/11 | 2    |
| Ethane                 | BDL    | 0.026      | mg/l   | RSK175 | 09/22/11 | 2    |
| Ethene                 | BDL    | 0.026      | mg/l   | RSK175 | 09/22/11 | 2    |
| Sodium                 | 76.    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 106.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-20-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 13:30

ESC Sample # : L536627-14

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 44.    | 1.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 150    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 110.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41





**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-21-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 13:45

ESC Sample # : L536627-15

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 21.    | 1.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 370    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 110.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 114.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-22-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 13:15

ESC Sample # : L536627-16

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 56.    | 1.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 240    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-23-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 09:50

ESC Sample # : L536627-17

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 55.    | 1.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 440    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 106.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-24-091411  
 Collected By : Scotty Mann  
 Collection Date : 09/14/11 16:30

ESC Sample # : L536627-18

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 4.2    | 1.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 46.    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 110.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-25-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 11:45

ESC Sample # : L536627-19

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 9.7    | 1.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 38.    | 0.50       | mg/l   | 6010B  | 09/20/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 113.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 110.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-26-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 13:00

ESC Sample # : L536627-20

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 10.    | 1.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Methane                | 1.9    | 0.10       | mg/l   | RSK175 | 09/22/11 | 10   |
| Ethane                 | BDL    | 0.13       | mg/l   | RSK175 | 09/22/11 | 10   |
| Ethene                 | BDL    | 0.13       | mg/l   | RSK175 | 09/22/11 | 10   |
| Sodium                 | 96.    | 0.50       | mg/l   | 6010B  | 09/23/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 111.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : MW-27-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 09:20

ESC Sample # : L536627-21

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 19.    | 1.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 310    | 0.50       | mg/l   | 6010B  | 09/23/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 113.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : EICH2-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 10:15

ESC Sample # : L536627-22

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 12.    | 1.0        | mg/l   | 9056   | 09/28/11 | 1    |
| Methane                | BDL    | 0.010      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethane                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Ethene                 | BDL    | 0.013      | mg/l   | RSK175 | 09/22/11 | 1    |
| Sodium                 | 140    | 0.50       | mg/l   | 6010B  | 09/23/11 | 1    |
| Benzene                | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 105.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 109.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 108.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41





**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DUP-1-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 00:00

ESC Sample # : L536627-23

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 62.    | 1.0        | mg/l   | 9056   | 09/21/11 | 1    |
| Methane                | 4.1    | 0.10       | mg/l   | RSK175 | 09/22/11 | 10   |
| Ethane                 | 0.82   | 0.13       | mg/l   | RSK175 | 09/22/11 | 10   |
| Ethene                 | BDL    | 0.13       | mg/l   | RSK175 | 09/22/11 | 10   |
| Sodium                 | 250    | 0.50       | mg/l   | 6010B  | 09/23/11 | 1    |
| Benzene                | 0.059  | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/17/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/17/11 | 1    |
| Total Xylenes          | BDL    | 0.0030     | mg/l   | 8260B  | 09/17/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 103.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| Dibromofluoromethane   | 104.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| a,a,a-Trifluorotoluene | 106.   |            | % Rec. | 8260B  | 09/17/11 | 1    |
| 4-Bromofluorobenzene   | 107.   |            | % Rec. | 8260B  | 09/17/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DUP-2-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 00:00

ESC Sample # : L536627-24

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 54.    | 1.0        | mg/l   | 9056   | 09/21/11 | 1    |
| Methane                | 7.6    | 0.20       | mg/l   | RSK175 | 09/22/11 | 20   |
| Ethane                 | 2.0    | 0.26       | mg/l   | RSK175 | 09/22/11 | 20   |
| Ethene                 | BDL    | 0.26       | mg/l   | RSK175 | 09/22/11 | 20   |
| Sodium                 | 140    | 0.50       | mg/l   | 6010B  | 09/23/11 | 1    |
| Benzene                | 0.049  | 0.0010     | mg/l   | 8260B  | 09/23/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/23/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/23/11 | 1    |
| Total Xylenes          | 0.030  | 0.0030     | mg/l   | 8260B  | 09/23/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 93.4   |            | % Rec. | 8260B  | 09/23/11 | 1    |
| Dibromofluoromethane   | 90.8   |            | % Rec. | 8260B  | 09/23/11 | 1    |
| a,a,a-Trifluorotoluene | 103.   |            | % Rec. | 8260B  | 09/23/11 | 1    |
| 4-Bromofluorobenzene   | 109.   |            | % Rec. | 8260B  | 09/23/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Charlie Jensen  
 Encana  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

November 21, 2011

Date Received : September 16, 2011  
 Description : West Divide Creek - 02E  
 Sample ID : DUP-3-091511  
 Collected By : Scotty Mann  
 Collection Date : 09/15/11 00:00

ESC Sample # : L536627-25

Site ID :

Project # :

| Parameter              | Result | Det. Limit | Units  | Method | Date     | Dil. |
|------------------------|--------|------------|--------|--------|----------|------|
| Chloride               | 40.    | 1.0        | mg/l   | 9056   | 09/22/11 | 1    |
| Methane                | 5.3    | 0.20       | mg/l   | RSK175 | 09/22/11 | 20   |
| Ethane                 | 1.1    | 0.26       | mg/l   | RSK175 | 09/22/11 | 20   |
| Ethene                 | BDL    | 0.26       | mg/l   | RSK175 | 09/22/11 | 20   |
| Sodium                 | 140    | 0.50       | mg/l   | 6010B  | 09/23/11 | 1    |
| Benzene                | 0.036  | 0.0010     | mg/l   | 8260B  | 09/23/11 | 1    |
| Toluene                | BDL    | 0.0050     | mg/l   | 8260B  | 09/23/11 | 1    |
| Ethylbenzene           | BDL    | 0.0010     | mg/l   | 8260B  | 09/23/11 | 1    |
| Total Xylenes          | 0.014  | 0.0030     | mg/l   | 8260B  | 09/23/11 | 1    |
| Surrogate Recovery     |        |            |        |        |          |      |
| Toluene-d8             | 92.4   |            | % Rec. | 8260B  | 09/23/11 | 1    |
| Dibromofluoromethane   | 90.1   |            | % Rec. | 8260B  | 09/23/11 | 1    |
| a,a,a-Trifluorotoluene | 103.   |            | % Rec. | 8260B  | 09/23/11 | 1    |
| 4-Bromofluorobenzene   | 105.   |            | % Rec. | 8260B  | 09/23/11 | 1    |

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 10/05/11 08:39 Revised: 11/21/11 16:41



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536627

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 21, 2011

| Analyte                 | Result | Laboratory Blank |       | Limit  | Batch    | Date Analyzed  |
|-------------------------|--------|------------------|-------|--------|----------|----------------|
|                         |        | Units            | % Rec |        |          |                |
| Benzene                 | < .001 | mg/l             |       |        | WG555650 | 09/17/11 07:57 |
| Ethylbenzene            | < .001 | mg/l             |       |        | WG555650 | 09/17/11 07:57 |
| Methyl tert-butyl ether | < .001 | mg/l             |       |        | WG555650 | 09/17/11 07:57 |
| Toluene                 | < .005 | mg/l             |       |        | WG555650 | 09/17/11 07:57 |
| Total Xylenes           | < .003 | mg/l             |       |        | WG555650 | 09/17/11 07:57 |
| 4-Bromofluorobenzene    |        | % Rec.           | 99.29 | 82-120 | WG555650 | 09/17/11 07:57 |
| Dibromofluoromethane    |        | % Rec.           | 104.1 | 82-126 | WG555650 | 09/17/11 07:57 |
| Toluene-d8              |        | % Rec.           | 99.09 | 92-112 | WG555650 | 09/17/11 07:57 |
| a,a,a-Trifluorotoluene  |        | % Rec.           | 102.1 | 90-116 | WG555650 | 09/17/11 07:57 |
| Chloride                | < 1    | mg/l             |       |        | WG556272 | 09/20/11 21:52 |
| Calcium                 | < .5   | mg/l             |       |        | WG555969 | 09/20/11 16:11 |
| Magnesium               | < .1   | mg/l             |       |        | WG555969 | 09/20/11 16:11 |
| Potassium               | < .5   | mg/l             |       |        | WG555969 | 09/20/11 16:11 |
| Sodium                  | < .5   | mg/l             |       |        | WG555969 | 09/20/11 16:11 |
| Benzene                 | < .001 | mg/l             |       |        | WG556058 | 09/19/11 17:12 |
| Ethylbenzene            | < .001 | mg/l             |       |        | WG556058 | 09/19/11 17:12 |
| Methyl tert-butyl ether | < .001 | mg/l             |       |        | WG556058 | 09/19/11 17:12 |
| Toluene                 | < .005 | mg/l             |       |        | WG556058 | 09/19/11 17:12 |
| Total Xylenes           | < .003 | mg/l             |       |        | WG556058 | 09/19/11 17:12 |
| 4-Bromofluorobenzene    |        | % Rec.           | 96.37 | 82-120 | WG556058 | 09/19/11 17:12 |
| Dibromofluoromethane    |        | % Rec.           | 102.1 | 82-126 | WG556058 | 09/19/11 17:12 |
| Toluene-d8              |        | % Rec.           | 105.4 | 92-112 | WG556058 | 09/19/11 17:12 |
| a,a,a-Trifluorotoluene  |        | % Rec.           | 105.5 | 90-116 | WG556058 | 09/19/11 17:12 |
| Ethane                  | < .013 | mg/l             |       |        | WG556655 | 09/22/11 12:54 |
| Ethene                  | < .013 | mg/l             |       |        | WG556655 | 09/22/11 12:54 |
| Methane                 | < .01  | mg/l             |       |        | WG556655 | 09/22/11 12:54 |
| Ethane                  | < .013 | mg/l             |       |        | WG556718 | 09/22/11 14:53 |
| Ethene                  | < .013 | mg/l             |       |        | WG556718 | 09/22/11 14:53 |
| Methane                 | < .01  | mg/l             |       |        | WG556718 | 09/22/11 14:53 |
| Benzene                 | < .001 | mg/l             |       |        | WG555651 | 09/17/11 08:51 |
| Ethylbenzene            | < .001 | mg/l             |       |        | WG555651 | 09/17/11 08:51 |
| Methyl tert-butyl ether | < .001 | mg/l             |       |        | WG555651 | 09/17/11 08:51 |
| Toluene                 | < .005 | mg/l             |       |        | WG555651 | 09/17/11 08:51 |
| Total Xylenes           | < .003 | mg/l             |       |        | WG555651 | 09/17/11 08:51 |
| 4-Bromofluorobenzene    |        | % Rec.           | 113.8 | 82-120 | WG555651 | 09/17/11 08:51 |
| Dibromofluoromethane    |        | % Rec.           | 105.0 | 82-126 | WG555651 | 09/17/11 08:51 |
| Toluene-d8              |        | % Rec.           | 102.1 | 92-112 | WG555651 | 09/17/11 08:51 |
| a,a,a-Trifluorotoluene  |        | % Rec.           | 106.7 | 90-116 | WG555651 | 09/17/11 08:51 |
| Chloride                | < 1    | mg/l             |       |        | WG556533 | 09/21/11 19:04 |
| Benzene                 | < .001 | mg/l             |       |        | WG556788 | 09/22/11 23:12 |
| Ethylbenzene            | < .001 | mg/l             |       |        | WG556788 | 09/22/11 23:12 |
| Methyl tert-butyl ether | < .001 | mg/l             |       |        | WG556788 | 09/22/11 23:12 |
| Toluene                 | < .005 | mg/l             |       |        | WG556788 | 09/22/11 23:12 |

\* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536627

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 21, 2011

| Analyte                | Result | Laboratory Blank |       | Limit  | Batch    | Date Analyzed  |
|------------------------|--------|------------------|-------|--------|----------|----------------|
|                        |        | Units            | % Rec |        |          |                |
| Total Xylenes          | < .003 | mg/l             |       |        | WG556788 | 09/22/11 23:12 |
| 4-Bromofluorobenzene   |        | % Rec.           | 104.0 | 82-120 | WG556788 | 09/22/11 23:12 |
| Dibromofluoromethane   |        | % Rec.           | 98.39 | 82-126 | WG556788 | 09/22/11 23:12 |
| Toluene-d8             |        | % Rec.           | 95.37 | 92-112 | WG556788 | 09/22/11 23:12 |
| a,a,a-Trifluorotoluene |        | % Rec.           | 106.1 | 90-116 | WG556788 | 09/22/11 23:12 |
| Chloride               | < 1    | mg/l             |       |        | WG556532 | 09/22/11 14:32 |
| Chloride               | < 1    | mg/l             |       |        | WG556858 | 09/23/11 07:15 |
| Sodium                 | < .5   | mg/l             |       |        | WG555996 | 09/23/11 20:20 |
| Chloride               | < 1    | mg/l             |       |        | WG556904 | 09/24/11 07:44 |
| Sulfate                | < 5    | mg/l             |       |        | WG557688 | 09/28/11 07:08 |
| Chloride               | < 1    | mg/l             |       |        | WG557687 | 09/28/11 07:10 |
| Chloride               | < 1    | mg/l             |       |        | WG557685 | 09/28/11 07:11 |
| Sulfate                | < 5    | mg/l             |       |        | WG558758 | 10/04/11 09:08 |

| Analyte   | Units | Duplicate |           | RPD   | Limit | Ref Samp   | Batch    |
|-----------|-------|-----------|-----------|-------|-------|------------|----------|
|           |       | Result    | Duplicate |       |       |            |          |
| Chloride  | mg/l  | 650.      | 650.      | 0.154 | 20    | L536033-02 | WG556272 |
| Calcium   | mg/l  | 66.0      | 0         | NA    | 20    | L536627-19 | WG555969 |
| Magnesium | mg/l  | 30.0      | 0         | NA    | 20    | L536627-19 | WG555969 |
| Potassium | mg/l  | 4.80      | 0         | NA    | 20    | L536627-19 | WG555969 |
| Sodium    | mg/l  | 39.0      | 38.0      | 2.34  | 20    | L536627-19 | WG555969 |
| Chloride  | mg/l  | 62.0      | 62.0      | 0     | 20    | L536627-23 | WG556533 |
| Chloride  | mg/l  | 36.0      | 40.0      | 9.15  | 20    | L536627-25 | WG556533 |
| Chloride  | mg/l  | 64.0      | 64.0      | 0.627 | 20    | L536627-12 | WG556532 |
| Chloride  | mg/l  | 8.40      | 8.40      | 0.238 | 20    | L536374-02 | WG556532 |
| Chloride  | mg/l  | 39.0      | 40.0      | 1.51  | 20    | L536627-11 | WG556858 |
| Sodium    | mg/l  | 2400      | 0         | NA    | 20    | L536677-01 | WG555996 |
| Sulfate   | mg/l  | 86.0      | 86.0      | 0.232 | 20    | L538564-05 | WG557688 |

\* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536627

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 21, 2011

| Analyte  | Units | Result | Duplicate |  | RPD   | Limit | Ref Samp   | Batch    |
|----------|-------|--------|-----------|--|-------|-------|------------|----------|
|          |       |        | Duplicate |  |       |       |            |          |
| Chloride | mg/l  | 90.0   | 91.0      |  | 0.551 | 20    | L538563-01 | WG557687 |
| Chloride | mg/l  | 44.0   | 44.0      |  | 0.228 | 20    | L536627-14 | WG557687 |
| Sulfate  | mg/l  | 31.0   | 31.0      |  | 0.972 | 20    | L537839-06 | WG558758 |

| Analyte                 | Units | Laboratory Control Sample |        | % Rec | Limit  | Batch    |
|-------------------------|-------|---------------------------|--------|-------|--------|----------|
|                         |       | Known Val                 | Result |       |        |          |
| Benzene                 | mg/l  | .025                      | 0.0274 | 110.  | 72-119 | WG555650 |
| Ethylbenzene            | mg/l  | .025                      | 0.0290 | 116.  | 77-124 | WG555650 |
| Methyl tert-butyl ether | mg/l  | .025                      | 0.0275 | 110.  | 67-127 | WG555650 |
| Toluene                 | mg/l  | .025                      | 0.0276 | 110.  | 75-114 | WG555650 |
| Total Xylenes           | mg/l  | .075                      | 0.0849 | 113.  | 77-123 | WG555650 |
| 4-Bromofluorobenzene    |       |                           |        | 100.1 | 82-120 | WG555650 |
| Dibromofluoromethane    |       |                           |        | 98.87 | 82-126 | WG555650 |
| Toluene-d8              |       |                           |        | 102.2 | 92-112 | WG555650 |
| a,a,a-Trifluorotoluene  |       |                           |        | 103.2 | 90-116 | WG555650 |
| Chloride                | mg/l  | 40                        | 39.8   | 99.5  | 90-110 | WG556272 |
| Calcium                 | mg/l  | 11.3                      | 11.2   | 99.1  | 85-115 | WG555969 |
| Magnesium               | mg/l  | 11.3                      | 11.6   | 103.  | 85-115 | WG555969 |
| Potassium               | mg/l  | 11.3                      | 12.1   | 107.  | 85-115 | WG555969 |
| Sodium                  | mg/l  | 11.3                      | 12.9   | 114.  | 85-115 | WG555969 |
| Benzene                 | mg/l  | .025                      | 0.0225 | 89.8  | 72-119 | WG556058 |
| Ethylbenzene            | mg/l  | .025                      | 0.0236 | 94.4  | 77-124 | WG556058 |
| Methyl tert-butyl ether | mg/l  | .025                      | 0.0242 | 96.6  | 67-127 | WG556058 |
| Toluene                 | mg/l  | .025                      | 0.0223 | 89.0  | 75-114 | WG556058 |
| Total Xylenes           | mg/l  | .075                      | 0.0696 | 92.8  | 77-123 | WG556058 |
| 4-Bromofluorobenzene    |       |                           |        | 98.37 | 82-120 | WG556058 |
| Dibromofluoromethane    |       |                           |        | 100.6 | 82-126 | WG556058 |
| Toluene-d8              |       |                           |        | 104.1 | 92-112 | WG556058 |
| a,a,a-Trifluorotoluene  |       |                           |        | 101.5 | 90-116 | WG556058 |
| Ethane                  | mg/l  | .645                      | 0.647  | 100.  | 70-130 | WG556655 |
| Ethene                  | mg/l  | .635                      | 0.628  | 98.9  | 70-130 | WG556655 |
| Methane                 | mg/l  | .339                      | 0.315  | 92.9  | 70-130 | WG556655 |
| Ethane                  | mg/l  | .645                      | 0.686  | 106.  | 70-130 | WG556718 |
| Ethene                  | mg/l  | .635                      | 0.667  | 105.  | 70-130 | WG556718 |
| Methane                 | mg/l  | .339                      | 0.334  | 98.6  | 70-130 | WG556718 |
| Benzene                 | mg/l  | .025                      | 0.0217 | 86.7  | 72-119 | WG555651 |
| Ethylbenzene            | mg/l  | .025                      | 0.0236 | 94.3  | 77-124 | WG555651 |
| Methyl tert-butyl ether | mg/l  | .025                      | 0.0260 | 104.  | 67-127 | WG555651 |
| Toluene                 | mg/l  | .025                      | 0.0220 | 87.8  | 75-114 | WG555651 |
| Total Xylenes           | mg/l  | .075                      | 0.0709 | 94.5  | 77-123 | WG555651 |
| 4-Bromofluorobenzene    |       |                           |        | 109.1 | 82-120 | WG555651 |
| Dibromofluoromethane    |       |                           |        | 107.3 | 82-126 | WG555651 |
| Toluene-d8              |       |                           |        | 105.4 | 92-112 | WG555651 |
| a,a,a-Trifluorotoluene  |       |                           |        | 105.5 | 90-116 | WG555651 |

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536627

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 21, 2011

| Analyte                 | Units | Laboratory Control Sample |        | % Rec | Limit  | Batch    |
|-------------------------|-------|---------------------------|--------|-------|--------|----------|
|                         |       | Known Val                 | Result |       |        |          |
| Chloride                | mg/l  | 40                        | 40.0   | 100.  | 90-110 | WG556533 |
| Benzene                 | mg/l  | .025                      | 0.0223 | 89.3  | 72-119 | WG556788 |
| Ethylbenzene            | mg/l  | .025                      | 0.0264 | 106.  | 77-124 | WG556788 |
| Methyl tert-butyl ether | mg/l  | .025                      | 0.0226 | 90.3  | 67-127 | WG556788 |
| Toluene                 | mg/l  | .025                      | 0.0239 | 95.6  | 75-114 | WG556788 |
| Total Xylenes           | mg/l  | .075                      | 0.0805 | 107.  | 77-123 | WG556788 |
| 4-Bromofluorobenzene    |       |                           |        | 100.2 | 82-120 | WG556788 |
| Dibromofluoromethane    |       |                           |        | 89.11 | 82-126 | WG556788 |
| Toluene-d8              |       |                           |        | 99.76 | 92-112 | WG556788 |
| a,a,a-Trifluorotoluene  |       |                           |        | 108.2 | 90-116 | WG556788 |
| Chloride                | mg/l  | 40                        | 40.1   | 100.  | 90-110 | WG556532 |
| Chloride                | mg/l  | 40                        | 39.6   | 99.0  | 90-110 | WG556858 |
| Sodium                  | mg/l  | 11.3                      | 12.3   | 109.  | 85-115 | WG555996 |
| Chloride                | mg/l  | 40                        | 40.3   | 101.  | 90-110 | WG556904 |
| Sulfate                 | mg/l  | 40                        | 39.8   | 99.5  | 90-110 | WG557688 |
| Chloride                | mg/l  | 40                        | 39.5   | 98.8  | 90-110 | WG557687 |
| Chloride                | mg/l  | 40                        | 39.5   | 98.8  | 90-110 | WG557685 |
| Sulfate                 | mg/l  | 40                        | 39.7   | 99.3  | 90-110 | WG558758 |

| Analyte                 | Units | Laboratory Control |        | Sample Duplicate | Limit  | RPD   | Limit | Batch    |
|-------------------------|-------|--------------------|--------|------------------|--------|-------|-------|----------|
|                         |       | Result             | Ref    |                  |        |       |       |          |
| Benzene                 | mg/l  | 0.0265             | 0.0274 | 106.             | 72-119 | 3.45  | 20    | WG555650 |
| Ethylbenzene            | mg/l  | 0.0278             | 0.0290 | 111.             | 77-124 | 4.13  | 20    | WG555650 |
| Methyl tert-butyl ether | mg/l  | 0.0272             | 0.0275 | 109.             | 67-127 | 0.790 | 20    | WG555650 |
| Toluene                 | mg/l  | 0.0259             | 0.0276 | 104.             | 75-114 | 6.12  | 20    | WG555650 |
| Total Xylenes           | mg/l  | 0.0820             | 0.0849 | 109.             | 77-123 | 3.44  | 20    | WG555650 |
| 4-Bromofluorobenzene    |       |                    |        | 98.68            | 82-120 |       |       | WG555650 |
| Dibromofluoromethane    |       |                    |        | 103.2            | 82-126 |       |       | WG555650 |
| Toluene-d8              |       |                    |        | 102.8            | 92-112 |       |       | WG555650 |
| a,a,a-Trifluorotoluene  |       |                    |        | 103.3            | 90-116 |       |       | WG555650 |
| Chloride                | mg/l  | 39.8               | 39.8   | 100.             | 90-110 | 0     | 20    | WG556272 |
| Benzene                 | mg/l  | 0.0237             | 0.0225 | 95.0             | 72-119 | 5.38  | 20    | WG556058 |
| Ethylbenzene            | mg/l  | 0.0242             | 0.0236 | 97.0             | 77-124 | 2.71  | 20    | WG556058 |
| Methyl tert-butyl ether | mg/l  | 0.0262             | 0.0242 | 105.             | 67-127 | 8.26  | 20    | WG556058 |
| Toluene                 | mg/l  | 0.0224             | 0.0223 | 90.0             | 75-114 | 0.550 | 20    | WG556058 |
| Total Xylenes           | mg/l  | 0.0740             | 0.0696 | 99.0             | 77-123 | 6.10  | 20    | WG556058 |

\* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536627

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 21, 2011

| Analyte                 | Units | Laboratory Control |        | Sample Duplicate | Limit  | RPD   | Limit | Batch    |
|-------------------------|-------|--------------------|--------|------------------|--------|-------|-------|----------|
|                         |       | Result             | Ref    | %Rec             |        |       |       |          |
| 4-Bromofluorobenzene    |       |                    |        | 98.31            | 82-120 |       |       |          |
| Dibromofluoromethane    |       |                    |        | 104.1            | 82-126 |       |       |          |
| Toluene-d8              |       |                    |        | 102.2            | 92-112 |       |       |          |
| a,a,a-Trifluorotoluene  |       |                    |        | 104.4            | 90-116 |       |       |          |
| Ethane                  | mg/l  | 0.644              | 0.647  | 100.             | 70-130 | 0.440 | 25    | WG556655 |
| Ethene                  | mg/l  | 0.624              | 0.628  | 98.0             | 70-130 | 0.620 | 25    | WG556655 |
| Methane                 | mg/l  | 0.310              | 0.315  | 92.0             | 70-130 | 1.49  | 25    | WG556655 |
| Ethane                  | mg/l  | 0.680              | 0.686  | 105.             | 70-130 | 0.860 | 25    | WG556718 |
| Ethene                  | mg/l  | 0.662              | 0.667  | 104.             | 70-130 | 0.730 | 25    | WG556718 |
| Methane                 | mg/l  | 0.330              | 0.334  | 97.0             | 70-130 | 1.26  | 25    | WG556718 |
| Benzene                 | mg/l  | 0.0226             | 0.0217 | 90.0             | 72-119 | 4.15  | 20    | WG555651 |
| Ethylbenzene            | mg/l  | 0.0269             | 0.0236 | 108.             | 77-124 | 13.2  | 20    | WG555651 |
| Methyl tert-butyl ether | mg/l  | 0.0252             | 0.0260 | 101.             | 67-127 | 2.88  | 20    | WG555651 |
| Toluene                 | mg/l  | 0.0235             | 0.0220 | 94.0             | 75-114 | 6.87  | 20    | WG555651 |
| Total Xylenes           | mg/l  | 0.0822             | 0.0709 | 110.             | 77-123 | 14.8  | 20    | WG555651 |
| 4-Bromofluorobenzene    |       |                    |        | 111.3            | 82-120 |       |       | WG555651 |
| Dibromofluoromethane    |       |                    |        | 102.8            | 82-126 |       |       | WG555651 |
| Toluene-d8              |       |                    |        | 105.0            | 92-112 |       |       | WG555651 |
| a,a,a-Trifluorotoluene  |       |                    |        | 109.4            | 90-116 |       |       | WG555651 |
| Chloride                | mg/l  | 40.0               | 40.0   | 100.             | 90-110 | 0     | 20    | WG556533 |
| Benzene                 | mg/l  | 0.0234             | 0.0223 | 94.0             | 72-119 | 4.61  | 20    | WG556788 |
| Ethylbenzene            | mg/l  | 0.0275             | 0.0264 | 110.             | 77-124 | 4.21  | 20    | WG556788 |
| Methyl tert-butyl ether | mg/l  | 0.0219             | 0.0226 | 87.0             | 67-127 | 3.29  | 20    | WG556788 |
| Toluene                 | mg/l  | 0.0236             | 0.0239 | 94.0             | 75-114 | 1.28  | 20    | WG556788 |
| Total Xylenes           | mg/l  | 0.0834             | 0.0805 | 111.             | 77-123 | 3.51  | 20    | WG556788 |
| 4-Bromofluorobenzene    |       |                    |        | 100.1            | 82-120 |       |       | WG556788 |
| Dibromofluoromethane    |       |                    |        | 90.28            | 82-126 |       |       | WG556788 |
| Toluene-d8              |       |                    |        | 98.90            | 92-112 |       |       | WG556788 |
| a,a,a-Trifluorotoluene  |       |                    |        | 107.3            | 90-116 |       |       | WG556788 |
| Chloride                | mg/l  | 40.1               | 40.1   | 100.             | 90-110 | 0     | 20    | WG556532 |
| Chloride                | mg/l  | 39.7               | 39.6   | 99.0             | 90-110 | 0.252 | 20    | WG556858 |
| Chloride                | mg/l  | 40.2               | 40.3   | 100.             | 90-110 | 0.248 | 20    | WG556904 |
| Sulfate                 | mg/l  | 39.9               | 39.8   | 100.             | 90-110 | 0.251 | 20    | WG557688 |
| Chloride                | mg/l  | 39.6               | 39.5   | 99.0             | 90-110 | 0.253 | 20    | WG557687 |
| Chloride                | mg/l  | 39.5               | 39.5   | 99.0             | 90-110 | 0     | 20    | WG557685 |
| Sulfate                 | mg/l  | 39.8               | 39.7   | 100.             | 90-110 | 0.252 | 20    | WG558758 |

\* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'





**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536627

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 21, 2011

| Analyte                 | Units | MS Res | Matrix Spike |      | % Rec  | Limit  | Ref Samp   | Batch    |
|-------------------------|-------|--------|--------------|------|--------|--------|------------|----------|
|                         |       |        | Ref Res      | TV   |        |        |            |          |
| Benzene                 | mg/l  | 0.0319 | 0            | .025 | 128.   | 51-134 | L536488-04 | WG555650 |
| Ethylbenzene            | mg/l  | 0.0323 | 0            | .025 | 129.   | 64-135 | L536488-04 | WG555650 |
| Methyl tert-butyl ether | mg/l  | 0.206  | 0.171        | .025 | 140.*  | 55-136 | L536488-04 | WG555650 |
| Toluene                 | mg/l  | 0.0305 | 0            | .025 | 122.   | 61-126 | L536488-04 | WG555650 |
| Total Xylenes           | mg/l  | 0.0946 | 0            | .075 | 126.   | 64-133 | L536488-04 | WG555650 |
| 4-Bromofluorobenzene    |       |        |              |      | 104.0  | 82-120 |            | WG555650 |
| Dibromofluoromethane    |       |        |              |      | 104.2  | 82-126 |            | WG555650 |
| Toluene-d8              |       |        |              |      | 102.8  | 92-112 |            | WG555650 |
| a,a,a-Trifluorotoluene  |       |        |              |      | 108.7  | 90-116 |            | WG555650 |
| Calcium                 | mg/l  | 76.9   | 0            | 11.3 | 680.*  | 75-125 | L536627-19 | WG555969 |
| Magnesium               | mg/l  | 40.7   | 0            | 11.3 | 360.*  | 75-125 | L536627-19 | WG555969 |
| Potassium               | mg/l  | 16.4   | 0            | 11.3 | 145.*  | 75-125 | L536627-19 | WG555969 |
| Sodium                  | mg/l  | 50.6   | 38.0         | 11.3 | 112.   | 75-125 | L536627-19 | WG555969 |
| Benzene                 | mg/l  | 0.0273 | 0            | .025 | 109.   | 51-134 | L536898-01 | WG556058 |
| Ethylbenzene            | mg/l  | 0.0257 | 0            | .025 | 103.   | 64-135 | L536898-01 | WG556058 |
| Methyl tert-butyl ether | mg/l  | 0.0260 | 0            | .025 | 104.   | 55-136 | L536898-01 | WG556058 |
| Toluene                 | mg/l  | 0.0254 | 0            | .025 | 102.   | 61-126 | L536898-01 | WG556058 |
| Total Xylenes           | mg/l  | 0.0756 | 0            | .075 | 101.   | 64-133 | L536898-01 | WG556058 |
| 4-Bromofluorobenzene    |       |        |              |      | 95.00  | 82-120 |            | WG556058 |
| Dibromofluoromethane    |       |        |              |      | 106.3  | 82-126 |            | WG556058 |
| Toluene-d8              |       |        |              |      | 103.2  | 92-112 |            | WG556058 |
| a,a,a-Trifluorotoluene  |       |        |              |      | 105.1  | 90-116 |            | WG556058 |
| Benzene                 | mg/l  | 0.0214 | 0            | .025 | 85.6   | 51-134 | L536627-06 | WG555651 |
| Ethylbenzene            | mg/l  | 0.0238 | 0            | .025 | 95.2   | 64-135 | L536627-06 | WG555651 |
| Methyl tert-butyl ether | mg/l  | 0.0259 | 0            | .025 | 104.   | 55-136 | L536627-06 | WG555651 |
| Toluene                 | mg/l  | 0.0219 | 0            | .025 | 87.5   | 61-126 | L536627-06 | WG555651 |
| Total Xylenes           | mg/l  | 0.0701 | 0            | .075 | 93.4   | 64-133 | L536627-06 | WG555651 |
| 4-Bromofluorobenzene    |       |        |              |      | 106.5  | 82-120 |            | WG555651 |
| Dibromofluoromethane    |       |        |              |      | 107.6  | 82-126 |            | WG555651 |
| Toluene-d8              |       |        |              |      | 104.4  | 92-112 |            | WG555651 |
| a,a,a-Trifluorotoluene  |       |        |              |      | 105.8  | 90-116 |            | WG555651 |
| Chloride                | mg/l  | 59.2   | 9.20         | 50   | 100.   | 80-120 | L536784-06 | WG556533 |
| Benzene                 | mg/l  | 0.0709 | 0.0490       | .025 | 87.5   | 51-134 | L536627-24 | WG556788 |
| Ethylbenzene            | mg/l  | 0.0278 | 0            | .025 | 111.   | 64-135 | L536627-24 | WG556788 |
| Methyl tert-butyl ether | mg/l  | 0.0247 | 0            | .025 | 98.6   | 55-136 | L536627-24 | WG556788 |
| Toluene                 | mg/l  | 0.0238 | 0            | .025 | 95.1   | 61-126 | L536627-24 | WG556788 |
| Total Xylenes           | mg/l  | 0.115  | 0.0300       | .075 | 113.   | 64-133 | L536627-24 | WG556788 |
| 4-Bromofluorobenzene    |       |        |              |      | 101.6  | 82-120 |            | WG556788 |
| Dibromofluoromethane    |       |        |              |      | 92.58  | 82-126 |            | WG556788 |
| Toluene-d8              |       |        |              |      | 96.68  | 92-112 |            | WG556788 |
| a,a,a-Trifluorotoluene  |       |        |              |      | 104.4  | 90-116 |            | WG556788 |
| Chloride                | mg/l  | 83.9   | 35.0         | 50   | 97.8   | 80-120 | L536627-03 | WG556532 |
| Sodium                  | mg/l  | 2560   | 0            | 2.26 | 22600* | 75-125 | L536677-01 | WG555996 |
| Chloride                | mg/l  | 97.3   | 50.0         | 50   | 94.6   | 80-120 | L538563-02 | WG557687 |

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536627

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 21, 2011

| Analyte | Units | MS Res | Matrix Spike |    | % Rec | Limit  | Ref Samp   | Batch    |
|---------|-------|--------|--------------|----|-------|--------|------------|----------|
|         |       |        | Ref Res      | TV |       |        |            |          |
| Sulfate | mg/l  | 62.4   | 13.0         | 50 | 98.8  | 80-120 | L537839-05 | WG558758 |

| Analyte                 | Units | MSD    | Matrix Spike Duplicate |       | Limit  | RPD   | Limit | Ref Samp   | Batch    |
|-------------------------|-------|--------|------------------------|-------|--------|-------|-------|------------|----------|
|                         |       |        | Ref                    | %Rec  |        |       |       |            |          |
| Benzene                 | mg/l  | 0.0277 | 0.0319                 | 111.  | 51-134 | 14.2  | 20    | L536488-04 | WG555650 |
| Ethylbenzene            | mg/l  | 0.0280 | 0.0323                 | 112.  | 64-135 | 14.1  | 20    | L536488-04 | WG555650 |
| Methyl tert-butyl ether | mg/l  | 0.195  | 0.206                  | 97.0  | 55-136 | 5.40  | 20    | L536488-04 | WG555650 |
| Toluene                 | mg/l  | 0.0267 | 0.0305                 | 107.  | 61-126 | 13.3  | 20    | L536488-04 | WG555650 |
| Total Xylenes           | mg/l  | 0.0831 | 0.0946                 | 111.  | 64-133 | 12.9  | 20    | L536488-04 | WG555650 |
| 4-Bromofluorobenzene    |       |        |                        | 103.3 | 82-120 |       |       |            | WG555650 |
| Dibromofluoromethane    |       |        |                        | 101.9 | 82-126 |       |       |            | WG555650 |
| Toluene-d8              |       |        |                        | 102.0 | 92-112 |       |       |            | WG555650 |
| a,a,a-Trifluorotoluene  |       |        |                        | 102.5 | 90-116 |       |       |            | WG555650 |
| Calcium                 | mg/l  | 78.3   | 76.9                   | 693.* | 75-125 | 1.80  | 20    | L536627-19 | WG555969 |
| Magnesium               | mg/l  | 41.6   | 40.7                   | 368.* | 75-125 | 2.19  | 20    | L536627-19 | WG555969 |
| Potassium               | mg/l  | 17.1   | 16.4                   | 151.* | 75-125 | 4.18  | 20    | L536627-19 | WG555969 |
| Sodium                  | mg/l  | 50.3   | 50.6                   | 109.  | 75-125 | 0.595 | 20    | L536627-19 | WG555969 |
| Benzene                 | mg/l  | 0.0273 | 0.0273                 | 109.  | 51-134 | 0.190 | 20    | L536898-01 | WG556058 |
| Ethylbenzene            | mg/l  | 0.0254 | 0.0257                 | 101.  | 64-135 | 1.40  | 20    | L536898-01 | WG556058 |
| Methyl tert-butyl ether | mg/l  | 0.0262 | 0.0260                 | 105.  | 55-136 | 0.780 | 20    | L536898-01 | WG556058 |
| Toluene                 | mg/l  | 0.0254 | 0.0254                 | 101.  | 61-126 | 0.230 | 20    | L536898-01 | WG556058 |
| Total Xylenes           | mg/l  | 0.0743 | 0.0756                 | 99.1  | 64-133 | 1.77  | 20    | L536898-01 | WG556058 |
| 4-Bromofluorobenzene    |       |        |                        | 92.88 | 82-120 |       |       |            | WG556058 |
| Dibromofluoromethane    |       |        |                        | 106.1 | 82-126 |       |       |            | WG556058 |
| Toluene-d8              |       |        |                        | 101.7 | 92-112 |       |       |            | WG556058 |
| a,a,a-Trifluorotoluene  |       |        |                        | 102.1 | 90-116 |       |       |            | WG556058 |
| Benzene                 | mg/l  | 0.0207 | 0.0214                 | 82.7  | 51-134 | 3.47  | 20    | L536627-06 | WG555651 |
| Ethylbenzene            | mg/l  | 0.0234 | 0.0238                 | 93.7  | 64-135 | 1.64  | 20    | L536627-06 | WG555651 |
| Methyl tert-butyl ether | mg/l  | 0.0242 | 0.0259                 | 96.6  | 55-136 | 7.01  | 20    | L536627-06 | WG555651 |
| Toluene                 | mg/l  | 0.0209 | 0.0219                 | 83.8  | 61-126 | 4.33  | 20    | L536627-06 | WG555651 |
| Total Xylenes           | mg/l  | 0.0706 | 0.0701                 | 94.1  | 64-133 | 0.710 | 20    | L536627-06 | WG555651 |
| 4-Bromofluorobenzene    |       |        |                        | 108.0 | 82-120 |       |       |            | WG555651 |
| Dibromofluoromethane    |       |        |                        | 105.4 | 82-126 |       |       |            | WG555651 |
| Toluene-d8              |       |        |                        | 104.6 | 92-112 |       |       |            | WG555651 |
| a,a,a-Trifluorotoluene  |       |        |                        | 105.7 | 90-116 |       |       |            | WG555651 |
| Chloride                | mg/l  | 61.0   | 59.2                   | 104.  | 80-120 | 3.00  | 20    | L536784-06 | WG556533 |
| Benzene                 | mg/l  | 0.0728 | 0.0709                 | 95.2  | 51-134 | 2.66  | 20    | L536627-24 | WG556788 |
| Ethylbenzene            | mg/l  | 0.0270 | 0.0278                 | 108.  | 64-135 | 2.88  | 20    | L536627-24 | WG556788 |
| Methyl tert-butyl ether | mg/l  | 0.0232 | 0.0247                 | 92.8  | 55-136 | 6.08  | 20    | L536627-24 | WG556788 |
| Toluene                 | mg/l  | 0.0231 | 0.0238                 | 92.4  | 61-126 | 2.80  | 20    | L536627-24 | WG556788 |
| Total Xylenes           | mg/l  | 0.111  | 0.115                  | 108.  | 64-133 | 2.73  | 20    | L536627-24 | WG556788 |
| 4-Bromofluorobenzene    |       |        |                        | 98.89 | 82-120 |       |       |            | WG556788 |
| Dibromofluoromethane    |       |        |                        | 91.00 | 82-126 |       |       |            | WG556788 |
| Toluene-d8              |       |        |                        | 94.79 | 92-112 |       |       |            | WG556788 |
| a,a,a-Trifluorotoluene  |       |        |                        | 101.8 | 90-116 |       |       |            | WG556788 |
| Chloride                | mg/l  | 82.8   | 83.9                   | 95.6  | 80-120 | 1.32  | 20    | L536627-03 | WG556532 |

\* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
 Charlie Jensen  
 2717 Co. Rd. 215, Ste 100  
 Parachute, CO 81635

Quality Assurance Report  
 Level II

L536627

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 21, 2011

| Analyte  | Units | MSD  | Matrix Spike Duplicate |        | Limit  | RPD   | Limit | Ref Samp   | Batch    |
|----------|-------|------|------------------------|--------|--------|-------|-------|------------|----------|
|          |       |      | Ref                    | %Rec   |        |       |       |            |          |
| Sodium   | mg/l  | 2460 | 2560                   | 21800* | 75-125 | 3.98  | 20    | L536677-01 | WG555996 |
| Chloride | mg/l  | 97.6 | 97.3                   | 95.2   | 80-120 | 0.308 | 20    | L538563-02 | WG557687 |
| Sulfate  | mg/l  | 63.3 | 62.4                   | 101.   | 80-120 | 1.43  | 20    | L537839-05 | WG558758 |

Batch number /Run number / Sample number cross reference

WG555650: R1863532: L536627-01 02 03 04  
 WG556272: R1866212: L536627-01 02  
 WG555969: R1866433: L536627-01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19  
 WG555996: R1866732: L536627-20 21 22 23 24 25  
 WG556058: R1867854: L536627-05  
 WG556655: R1868458: L536627-01 02 03 04 05 06 07 08 09 10 11 12 13 14  
 WG556718: R1868459: L536627-15 16 17 18 19 20 21 22 23 24 25  
 WG555651: R1868717: L536627-06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23  
 WG556533: R1868934: L536627-23 24 25  
 WG556788: R1869195: L536627-24 25  
 WG556532: R1869233: L536627-03 04 05 06 07 08 09 10 12  
 WG556858: R1869451: L536627-11  
 WG556904: R1872613: L536627-13  
 WG557439: R1873852: L536627-03 07  
 WG557688: R1875592: L536627-03  
 WG557687: R1875756: L536627-07 14 15 16 17 18 19  
 WG557685: R1875875: L536627-20 21 22  
 WG558703: R1882492: L536627-02  
 WG558758: R1883468: L536627-02

\* \* Calculations are performed prior to rounding of reported values.  
 \* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



**YOUR LAB OF CHOICE**

Encana  
Charlie Jensen  
2717 Co. Rd. 215, Ste 100

Parachute, CO 81635

Quality Assurance Report  
Level II

L536627

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 21, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

**Encana**

2717 Co. Rd. 215. Ste 100  
Parachute, CO 81635

Billing information:

Accounts Payable- Brett Middleton  
2717 Co. Rd. 215, Ste 100

Parachute, CO 81635

Analysis/Container/Preservative

Chain of Custody

Page 1 of 3



12065 Lebanon Road  
Mt. Juliet, TN 37122

Phone: (800) 767-5859  
Phone: (615) 758-5858  
Fax: (615) 758-5859

E022

Report to: **Brett Middleton**

Email: **brett.middleton@encana.com**

Project Description: **West Divide Creek - 02E**

City/State Collected: **CO**

Phone: (970) 285-2739  
FAX: (970) 625-4636

Client Project #:

Lab Project #  
**ENCRCO-WESTDIVIDE**

Collected by (print): **Scotty Mann**

Site/Facility ID#:

P.O.#:

Collected by (signature):

**Rush?** (Lab MUST Be Notified)

Same Day .....200%  
 Next Day .....100%  
 Two Day .....50%  
 Three Day .....25%

Date Results Needed

Email?  No  Yes  
FAX?  No  Yes

No. of Cntrs

CHLORIDE 125mlHDPE-NoPres  
NAICP 500mlHDPE-HNO3 <2  
RSK175 40mlAmb-NoPres  
V8260BTEX 40mlAmb-HCl

Acctnum: **ENCRCO** (lab use only)  
Template/Prelogin: **T73093/P364395**  
Cooler #: **8/4/11**  
Shipped Via: **FedEX Ground**

| Sample ID    | Comp/Grab | Matrix* | Depth | Date    | Time | No. of Cntrs | CHLORIDE 125mlHDPE-NoPres | NAICP 500mlHDPE-HNO3 <2 | RSK175 40mlAmb-NoPres | V8260BTEX 40mlAmb-HCl | Remarks/Contaminant | Sample # (lab only) |
|--------------|-----------|---------|-------|---------|------|--------------|---------------------------|-------------------------|-----------------------|-----------------------|---------------------|---------------------|
| MW-1-091511  | NA        | GW      | NA    | 9/15/11 | 1045 | 7            | X                         | X                       | X                     | X                     |                     | L536627-01          |
| MW-2-091511  |           | GW      |       |         | 1100 | 7            | X                         | X                       | X                     | X                     |                     | -02                 |
| MW-4-091511  |           | GW      |       |         | 1115 | 7            | X                         | X                       | X                     | X                     |                     | -03                 |
| MW-6-091511  |           | GW      |       |         | 0900 | 7            | X                         | X                       | X                     | X                     |                     | -04                 |
| MW-7-091511  |           | GW      |       |         | 0930 | 7            | X                         | X                       | X                     | X                     |                     | -05                 |
| MW-8-091511  |           | GW      |       |         | 0945 | 7            | X                         | X                       | X                     | X                     |                     | -06                 |
| MW-9-091511  |           | GW      |       |         | 1215 | 7            | X                         | X                       | X                     | X                     |                     | -07                 |
| MW-11-091511 |           | GW      |       |         | 1200 | 7            | X                         | X                       | X                     | X                     |                     | -08                 |
| MW-12-091411 |           | GW      |       | 9/14/11 | 1615 | 7            | X                         | X                       | X                     | X                     |                     | -09                 |

\*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

PLEASE! CC: smann@ruleengineering.com

4875 5518 0600  
4875 5518 0595  
4875 5518 0580  
pH \_\_\_\_\_ Temp \_\_\_\_\_  
Flow \_\_\_\_\_ Other \_\_\_\_\_

|                              |               |            |                                  |                                                                                                                               |                                     |
|------------------------------|---------------|------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Relinquished by: (Signature) | Date: 9/15/11 | Time: 1730 | Received by: (Signature)         | Samples returned via: <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> UPS <input type="checkbox"/> Courier | Condition: <b>OK</b> (lab use only) |
| Relinquished by: (Signature) | Date:         | Time:      | Received by: (Signature)         | Temp: 28c                                                                                                                     | Bottles Received: 175 + 3TB         |
| Relinquished by: (Signature) | Date:         | Time:      | Received for lab by: (Signature) | Date: 9-16-11                                                                                                                 | Time: 0900                          |
|                              |               |            |                                  | COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA                 | pH Checked: <b>28</b>               |
|                              |               |            |                                  | NCF:                                                                                                                          |                                     |

Encana

2717 Co. Rd. 215. Ste 100  
Parachute, CO 81635

Billing information:  
Accounts Payable- Brett Middleton  
2717 Co. Rd. 215, Ste 100  
Parachute, CO 81635

Analysis/Container/Preservative

Chain of Custody  
Page 2 of 3



12065 Lebanon Road  
Mt. Juliet, TN 37122

Phone: (800) 767-5859  
Phone: (615) 758-5858  
Fax: (615) 758-5859

Report to:  
Brett Middleton

Email:  
brett.middleton@encana.com

Project Description:  
West Divide Creek - 02E

City/State Collected

Phone: (970) 285-2739  
FAX: (970) 625-4636

Client Project #:

Lab Project #

ENCRCO-WESTDIVIDE

Collected by (print):  
Scotty Mann

Site/Facility ID#:

P.O.#:

Collected by (signature):  
[Signature]

Rush? (Lab MUST Be Notified)

Date Results Needed

Same Day .....200%  
Next Day ..... 100%  
Two Day ..... .50%  
Three Day ..... .25%

Email? \_\_\_No \_\_\_Yes  
FAX? \_\_\_No \_\_\_Yes

No. of Cntrs

CHLORIDE 125mlHDPE-NoPres  
NAICP 500mlHDPE-HNO3 <0  
RSK175 40mlAmb-NoPres  
V8260BTEX 40mlAmb-HCl

Acctnum: ENCRCO (lab use only)  
Template/Prelogin: T73093 P364395  
Cooler #: 8/4/11 [Signature]  
Shipped Via: FedEx Ground

Remarks/Contaminant Sample # (lab only)

| Sample ID    | Comp/Grab | Matrix* | Depth | Date    | Time | No. of Cntrs | CHLORIDE 125mlHDPE-NoPres | NAICP 500mlHDPE-HNO3 | RSK175 40mlAmb-NoPres | V8260BTEX 40mlAmb-HCl | Remarks/Contaminant | Sample # (lab only) |
|--------------|-----------|---------|-------|---------|------|--------------|---------------------------|----------------------|-----------------------|-----------------------|---------------------|---------------------|
| MW-14-091511 | NA        | GW      | NA    | 9/15/11 | 1230 | 7            | X                         | X                    | X                     | X                     |                     | L536687-10          |
| MW-16-091511 |           | GW      |       |         | 1030 | 7            | X                         | X                    | X                     | X                     |                     | -11                 |
| MW-17-091511 |           | GW      |       |         | 1000 | 7            | X                         | X                    | X                     | X                     |                     | -12                 |
| MW-18-091411 |           | GW      |       | 9/14/11 | 1740 | 7            | X                         | X                    | X                     | X                     |                     | -13                 |
| MW-20-091511 |           | GW      |       | 9/15/11 | 1330 | 7            | X                         | X                    | X                     | X                     |                     | -14                 |
| MW-21-091511 |           | GW      |       |         | 1345 | 7            | X                         | X                    | X                     | X                     |                     | -15                 |
| MW-22-091511 |           | GW      |       |         | 1315 | 7            | X                         | X                    | X                     | X                     |                     | -16                 |
| MW-23-091511 |           | GW      |       |         | 0950 | 7            | X                         | X                    | X                     | X                     |                     | -17                 |
| MW-24-091411 |           | GW      |       | 9/14/11 | 1630 | 7            | X                         | X                    | X                     | X                     |                     | -18                 |


\*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks: PLEASE CC: smann@ruleengineering.com

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

|                              |               |            |                                  |                                                                                                                                          |                             |
|------------------------------|---------------|------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Relinquished by: (Signature) | Date: 9/15/11 | Time: 1730 | Received by: (Signature)         | Samples returned via: <input checked="" type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier | Condition: (lab use only)   |
| Relinquished by: (Signature) | Date:         | Time:      | Received by: (Signature)         | Temp: 8.8°C                                                                                                                              | Bottles Received: 175 + STR |
| Relinquished by: (Signature) | Date:         | Time:      | Received for lab by: (Signature) | Date: 9/16/11                                                                                                                            | Time: 0950                  |
|                              |               |            |                                  | COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA                            | pH Checked: 22              |

|                                                                                       |  |                                                                                                                                                                                        |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |
|---------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| <b>Encana</b><br>2717 Co. Rd. 215, Ste 100<br>Parachute, CO 81635                     |  | Billing information:<br>Accounts Payable- Brett Middleton<br>2717 Co. Rd. 215, Ste 100<br>Parachute, CO 81635                                                                          |         | Analysis/Container/Preservative                                                                                                             |         |              |   | Chain of Custody<br>Page <u>3</u> of <u>3</u>                                                                                                                                                                                                         |   |
| Report to: <b>Brett Middleton</b>                                                     |  | Email: <b>brett.middleton@encana.com</b>                                                                                                                                               |         | CHLORIDE 125mlHDPE-NoPres<br>NAICP 500mlHDPE-HNO3<br>RSK175 40mlAmb-NoPres<br>V8260BTEX 40mlAmb-HCI                                         |         |              |   | <br><b>ESC</b><br>L.A.B S.C.I.E.N.C.E.S<br>12065 Lebanon Road<br>Mt. Juliet, TN 37122<br><br>Phone: (800) 767-5859<br>Phone: (615) 758-5858<br>Fax: (615) 758-5859 |   |
| Project Description: <b>West Divide Creek - 02E</b>                                   |  | City/State Collected                                                                                                                                                                   |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |
| Phone: (970) 285-2739<br>FAX: (970) 625-4636                                          |  | Client Project #:                                                                                                                                                                      |         | Lab Project #<br><b>ENCRCO-WESTDIVIDE</b>                                                                                                   |         |              |   |                                                                                                                                                                                                                                                       |   |
| Collected by (print): <i>Scotty Mann</i>                                              |  | Site/Facility ID#:                                                                                                                                                                     |         | P.O.#:                                                                                                                                      |         |              |   |                                                                                                                                                                                                                                                       |   |
| Collected by (signature): <i>[Signature]</i>                                          |  | <b>Rush?</b> (Lab MUST Be Notified)                                                                                                                                                    |         | Date Results Needed                                                                                                                         |         |              |   |                                                                                                                                                                                                                                                       |   |
| Immediately Packed on Ice N <u>  </u> Y <u>  </u> <input checked="" type="checkbox"/> |  | <input type="checkbox"/> Same Day .....200%<br><input type="checkbox"/> Next Day .....100%<br><input type="checkbox"/> Two Day .....50%<br><input type="checkbox"/> Three Day .....25% |         | Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes<br>FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes |         | No. of Cntrs |   |                                                                                                                                                                                                                                                       |   |
| Sample ID                                                                             |  | Comp/Grab                                                                                                                                                                              | Matrix* | Depth                                                                                                                                       | Date    | Time         |   |                                                                                                                                                                                                                                                       |   |
| MW-25-091511                                                                          |  | NA                                                                                                                                                                                     | GW      | NA                                                                                                                                          | 9/15/11 | 1145         | 7 | X                                                                                                                                                                                                                                                     | X |
| MW-26-091511                                                                          |  | ↓                                                                                                                                                                                      | GW      | ↓                                                                                                                                           | ↓       | 1300         | 7 | X                                                                                                                                                                                                                                                     | X |
| MW-27-091511                                                                          |  | ↓                                                                                                                                                                                      | GW      | ↓                                                                                                                                           | ↓       | 0920         | 7 | X                                                                                                                                                                                                                                                     | X |
| EICH2-091511                                                                          |  | ↓                                                                                                                                                                                      | GW      | ↓                                                                                                                                           | ↓       | 1015         | 7 | X                                                                                                                                                                                                                                                     | X |
| DUP-1-091511                                                                          |  | ↓                                                                                                                                                                                      | GW      | -                                                                                                                                           | ✓       | -            | 7 | X                                                                                                                                                                                                                                                     | X |
| DUP-2-091511                                                                          |  | ↓                                                                                                                                                                                      | GW      | -                                                                                                                                           | ✓       | -            | 7 | X                                                                                                                                                                                                                                                     | X |
| DUP-3-091511                                                                          |  | ↓                                                                                                                                                                                      | GW      | -                                                                                                                                           | ✓       | -            | 7 | X                                                                                                                                                                                                                                                     | X |
|                                                                                       |  |                                                                                                                                                                                        | GW      |                                                                                                                                             |         |              | 7 | X                                                                                                                                                                                                                                                     | X |
|                                                                                       |  |                                                                                                                                                                                        | GW      |                                                                                                                                             |         |              | 7 | X                                                                                                                                                                                                                                                     | X |
|                                                                                       |  |                                                                                                                                                                                        | GW      |                                                                                                                                             |         |              | 7 | X                                                                                                                                                                                                                                                     | X |
| Remarks/Contaminant                                                                   |  | Sample # (lab only)                                                                                                                                                                    |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |
|                                                                                       |  | 536627-19                                                                                                                                                                              |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |
|                                                                                       |  | -20                                                                                                                                                                                    |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |
|                                                                                       |  | -21                                                                                                                                                                                    |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |
|                                                                                       |  | -22                                                                                                                                                                                    |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |
|                                                                                       |  | -23                                                                                                                                                                                    |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |
|                                                                                       |  | -24                                                                                                                                                                                    |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |
|                                                                                       |  | -25                                                                                                                                                                                    |         |                                                                                                                                             |         |              |   |                                                                                                                                                                                                                                                       |   |

\*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other \_\_\_\_\_

Remarks: *PLEASE CC: smann@rllceengineering.com*

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

|                                                 |               |            |                                                     |                                                                                                                                                                   |                                                                                                               |
|-------------------------------------------------|---------------|------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Relinquished by: (Signature) <i>[Signature]</i> | Date: 9/15/11 | Time: 1730 | Received by: (Signature) <i>[Signature]</i>         | Samples returned via: <input checked="" type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/> | Condition: <i>OK</i> (lab use only)                                                                           |
| Relinquished by: (Signature) <i>[Signature]</i> | Date:         | Time:      | Received by: (Signature) <i>[Signature]</i>         | Bottles Received: 175 + 310                                                                                                                                       | COC Seal Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA |
| Relinquished by: (Signature) <i>[Signature]</i> | Date:         | Time:      | Received for lab by: (Signature) <i>[Signature]</i> | Date: 9/16-11                                                                                                                                                     | pH Checked: 22                                                                                                |
|                                                 |               |            |                                                     | Time: 0900                                                                                                                                                        | NCF:                                                                                                          |

## **Susan Peach**

---

**From:** Andy Vann  
**Sent:** Friday, September 23, 2011 2:04 PM  
**To:** Jarred Willis; Login; Reporting  
**Cc:** Metals Prep; Due Metals; Due WetLab  
**Subject:** RE: L536627-03 and -07 - \*ENCRCO\* - add analysis

Done.  
Reporting - Please scan with coc. Thanks

---

**From:** Jarred Willis  
**Sent:** Friday, September 23, 2011 11:31 AM  
**To:** Login  
**Cc:** Metals Prep; Due Metals; Due WetLab  
**Subject:** L536627-03 and -07 - \*ENCRCO\* - add analysis

Please add the analysis listed below to L536627-03 and -07 from \*ENCRCO\*. Add to existing L#s and change the due date to 9/30.

KICP, CAICP, MGICP - add to WG555969  
CHLORIDE  
ALKBI  
SULFATE

Thanks,

**Jarred Willis**  
Technical Service Representative (TSR)  
E-mail: [jwillis@esclabsciences.com](mailto:jwillis@esclabsciences.com)  
Phone: 800-767-5859 Ext. 9678  
Direct: (615) 773-9678  
[www.esclabsciences.com](http://www.esclabsciences.com)

<< OLE Object: Picture (Metafile) >>



Lab #: 220759 Job #: 16274  
 Sample Name/Number: MW-2 - 091511  
 Company: Rule Engineering, LLC  
 Date Sampled: 9/15/2011  
 Container: Dissolved Gas Bottle  
 Field/Site Name: West Divide Creek  
 Location:  
 Formation/Depth:  
 Sampling Point:  
 Date Received: 9/19/2011 Date Reported: 10/20/2011

| Component              | Chemical<br>mol. % | $\delta^{13}\text{C}$<br>‰ | $\delta\text{D}$<br>‰ | $\delta^{18}\text{O}$<br>‰ |
|------------------------|--------------------|----------------------------|-----------------------|----------------------------|
| Carbon Monoxide -----  | nd                 |                            |                       |                            |
| Hydrogen Sulfide ----- | na                 |                            |                       |                            |
| Helium -----           | na                 |                            |                       |                            |
| Hydrogen -----         | na                 |                            |                       |                            |
| Argon -----            | 0.481              |                            |                       |                            |
| Oxygen -----           | 0.048              |                            |                       |                            |
| Nitrogen -----         | 23.67              |                            |                       |                            |
| Carbon Dioxide -----   | 3.26               |                            |                       |                            |
| Methane -----          | 61.81              | -40.36                     | -177.7                |                            |
| Ethane -----           | 7.56               | -27.52                     |                       |                            |
| Ethylene -----         | 0.0002             |                            |                       |                            |
| Propane -----          | 2.35               | -25.43                     |                       |                            |
| Iso-butane -----       | 0.332              |                            |                       |                            |
| N-butane -----         | 0.329              |                            |                       |                            |
| Iso-pentane -----      | 0.0782             |                            |                       |                            |
| N-pentane -----        | 0.0400             |                            |                       |                            |
| Hexanes + -----        | 0.0393             |                            |                       |                            |

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 849

Specific gravity, calculated: 0.760

Remarks:

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.55

\*Addition of helium negates the ability to detect native helium or hydrogen.

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen and oxygen are relative to VSMOW. Calculations for BTU and specific gravity per D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 220760 Job #: 16274  
 Sample Name/Number: MW-4 - 091511  
 Company: Rule Engineering, LLC  
 Date Sampled: 9/15/2011  
 Container: Dissolved Gas Bottle  
 Field/Site Name: West Divide Creek  
 Location:  
 Formation/Depth:  
 Sampling Point:  
 Date Received: 9/19/2011 Date Reported: 10/20/2011

| Component              | Chemical<br>mol. % | $\delta^{13}\text{C}$<br>‰ | $\delta\text{D}$<br>‰ | $\delta^{18}\text{O}$<br>‰ |
|------------------------|--------------------|----------------------------|-----------------------|----------------------------|
| Carbon Monoxide -----  | 0.044              |                            |                       |                            |
| Hydrogen Sulfide ----- | na                 |                            |                       |                            |
| Helium -----           | na                 |                            |                       |                            |
| Hydrogen -----         | na                 |                            |                       |                            |
| Argon -----            | 0.478              |                            |                       |                            |
| Oxygen -----           | 0.86               |                            |                       |                            |
| Nitrogen -----         | 24.74              |                            |                       |                            |
| Carbon Dioxide -----   | 2.12               |                            |                       |                            |
| Methane -----          | 61.48              | -40.12                     | -182.8                |                            |
| Ethane -----           | 6.83               | -28.22                     |                       |                            |
| Ethylene -----         | 0.0002             |                            |                       |                            |
| Propane -----          | 2.47               | -25.70                     |                       |                            |
| Iso-butane -----       | 0.385              |                            |                       |                            |
| N-butane -----         | 0.396              |                            |                       |                            |
| Iso-pentane -----      | 0.0932             |                            |                       |                            |
| N-pentane -----        | 0.0537             |                            |                       |                            |
| Hexanes + -----        | 0.0471             |                            |                       |                            |

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 841

Specific gravity, calculated: 0.758

Remarks:

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.42

\*Addition of helium negates the ability to detect native helium or hydrogen.

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen and oxygen are relative to VSMOW. Calculations for BTU and specific gravity per D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 220761 Job #: 16274  
 Sample Name/Number: MW-9 - 091511  
 Company: Rule Engineering, LLC  
 Date Sampled: 9/15/2011  
 Container: Dissolved Gas Bottle  
 Field/Site Name: West Divide Creek  
 Location:  
 Formation/Depth:  
 Sampling Point:  
 Date Received: 9/19/2011 Date Reported: 10/20/2011

| Component              | Chemical<br>mol. % | $\delta^{13}\text{C}$<br>‰ | $\delta\text{D}$<br>‰ | $\delta^{18}\text{O}$<br>‰ |
|------------------------|--------------------|----------------------------|-----------------------|----------------------------|
| Carbon Monoxide -----  | 0.023              |                            |                       |                            |
| Hydrogen Sulfide ----- | na                 |                            |                       |                            |
| Helium -----           | na                 |                            |                       |                            |
| Hydrogen -----         | na                 |                            |                       |                            |
| Argon -----            | 0.992              |                            |                       |                            |
| Oxygen -----           | 3.44               |                            |                       |                            |
| Nitrogen -----         | 53.54              |                            |                       |                            |
| Carbon Dioxide -----   | 6.20               |                            |                       |                            |
| Methane -----          | 32.80              | -48.23                     | -241.1                |                            |
| Ethane -----           | 1.99               | -28.25                     |                       |                            |
| Ethylene -----         | 0.0002             |                            |                       |                            |
| Propane -----          | 0.708              | -25.46                     |                       |                            |
| Iso-butane -----       | 0.133              |                            |                       |                            |
| N-butane -----         | 0.117              |                            |                       |                            |
| Iso-pentane -----      | 0.0361             |                            |                       |                            |
| N-pentane -----        | 0.0075             |                            |                       |                            |
| Hexanes + -----        | 0.0140             |                            |                       |                            |

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 396

Specific gravity, calculated: 0.884

Remarks:

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.52

\*Addition of helium negates the ability to detect native helium or hydrogen.

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen and oxygen are relative to VSMOW. Calculations for BTU and specific gravity per D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 220762 Job #: 16274  
 Sample Name/Number: MW-14 - 091511  
 Company: Rule Engineering, LLC  
 Date Sampled: 9/15/2011  
 Container: Dissolved Gas Bottle  
 Field/Site Name: West Divide Creek  
 Location:  
 Formation/Depth:  
 Sampling Point:  
 Date Received: 9/19/2011 Date Reported: 10/20/2011

| Component              | Chemical<br>mol. % | $\delta^{13}\text{C}$<br>‰ | $\delta\text{D}$<br>‰ | $\delta^{18}\text{O}$<br>‰ |
|------------------------|--------------------|----------------------------|-----------------------|----------------------------|
| Carbon Monoxide -----  | 0.006              |                            |                       |                            |
| Hydrogen Sulfide ----- | na                 |                            |                       |                            |
| Helium -----           | na                 |                            |                       |                            |
| Hydrogen -----         | na                 |                            |                       |                            |
| Argon -----            | 0.953              |                            |                       |                            |
| Oxygen -----           | 0.62               |                            |                       |                            |
| Nitrogen -----         | 45.40              |                            |                       |                            |
| Carbon Dioxide -----   | 10.73              |                            |                       |                            |
| Methane -----          | 38.21              | -41.95                     | -209.7                |                            |
| Ethane -----           | 2.79               | -28.41                     |                       |                            |
| Ethylene -----         | nd                 |                            |                       |                            |
| Propane -----          | 0.916              | -25.72                     |                       |                            |
| Iso-butane -----       | 0.141              |                            |                       |                            |
| N-butane -----         | 0.152              |                            |                       |                            |
| Iso-pentane -----      | 0.0374             |                            |                       |                            |
| N-pentane -----        | 0.0248             |                            |                       |                            |
| Hexanes + -----        | 0.0215             |                            |                       |                            |

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 473 Specific gravity, calculated: 0.885

Remarks:

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.57

\*Addition of helium negates the ability to detect native helium or hydrogen.

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen and oxygen are relative to VSMOW. Calculations for BTU and specific gravity per D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

Lab #: 220763 Job #: 16274  
 Sample Name/Number: MW-17 - 091511  
 Company: Rule Engineering, LLC  
 Date Sampled: 9/15/2011  
 Container: Dissolved Gas Bottle  
 Field/Site Name: West Divide Creek  
 Location:  
 Formation/Depth:  
 Sampling Point:  
 Date Received: 9/19/2011 Date Reported: 10/20/2011

| Component              | Chemical<br>mol. % | $\delta^{13}\text{C}$<br>‰ | $\delta\text{D}$<br>‰ | $\delta^{18}\text{O}$<br>‰ |
|------------------------|--------------------|----------------------------|-----------------------|----------------------------|
| Carbon Monoxide -----  | nd                 |                            |                       |                            |
| Hydrogen Sulfide ----- | na                 |                            |                       |                            |
| Helium -----           | na                 |                            |                       |                            |
| Hydrogen -----         | na                 |                            |                       |                            |
| Argon -----            | 1.27               |                            |                       |                            |
| Oxygen -----           | 0.019              |                            |                       |                            |
| Nitrogen -----         | 66.06              |                            |                       |                            |
| Carbon Dioxide -----   | 4.83               |                            |                       |                            |
| Methane -----          | 25.29              | -44.84                     | -194.0                |                            |
| Ethane -----           | 2.52               | -27.74                     |                       |                            |
| Ethylene -----         | 0.0003             |                            |                       |                            |
| Propane -----          | 0.0078             |                            |                       |                            |
| Iso-butane -----       | nd                 |                            |                       |                            |
| N-butane -----         | nd                 |                            |                       |                            |
| Iso-pentane -----      | nd                 |                            |                       |                            |
| N-pentane -----        | nd                 |                            |                       |                            |
| Hexanes + -----        | 0.0010             |                            |                       |                            |

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 301

Specific gravity, calculated: 0.896

Remarks:

Analysis is of gas extracted from water by headspace equilibration. Analysis has been corrected for helium added to create headspace. Helium dilution factor = 0.60

\*Addition of helium negates the ability to detect native helium or hydrogen.

nd = not detected. na = not analyzed. Isotopic composition of carbon is relative to VPDB. Isotopic composition of hydrogen and oxygen are relative to VSMOW. Calculations for BTU and specific gravity per D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.