



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

Brett Middleton  
Encana  
2717 Co. Rd. 215  
Parachute, CO 81635

## Report Summary

Monday March 22, 2010

Report Number: L449006

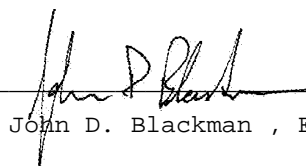
Samples Received: 03/12/10

Client Project:

Description: Moon Quarterly

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:

  
John D. Blackman , 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

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.

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REPORT OF ANALYSIS

Brett Middleton  
Encana  
2717 Co. Rd. 215  
Parachute, CO 81635

March 22, 2010

Date Received : March 12, 2010  
Description : Moon Quarterly

Sample ID : MWMOON1-031110

Collected By : Aaron Stacy  
Collection Date : 03/11/10 12:00

ESC Sample # : L449006-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Bromide	1.4	1.0	mg/l	9056	03/12/10	1
Chloride	82.	1.0	mg/l	9056	03/12/10	1
Fluoride	2.6	0.10	mg/l	9056	03/12/10	1
Nitrate	0.76	0.10	mg/l	9056	03/12/10	1
Nitrite	0.48	0.10	mg/l	9056	03/12/10	1
Sulfate	730	100	mg/l	9056	03/18/10	20
Alkalinity	330	20.	mg/l	2320B	03/16/10	1
Alkalinity,Bicarbonate	350	20.	mg/l	2320B	03/18/10	1
Alkalinity,Carbonate	BDL	20.	mg/l	2320B	03/18/10	1
Ammonia Nitrogen	0.14	0.10	mg/l	350.1	03/18/10	1
pH	8.2		su	9040C	03/13/10	1
Sulfide	BDL	0.050	mg/l	4500-S2 D	03/19/10	1
Specific Conductance	2300		umhos/cm	9050A	03/15/10	1
Dissolved Solids	1500	10.	mg/l	2540C	03/18/10	1
Arsenic,Dissolved	BDL	0.020	mg/l	6010B	03/18/10	1
Barium,Dissolved	0.023	0.0050	mg/l	6010B	03/18/10	1
Cadmium,Dissolved	BDL	0.0050	mg/l	6010B	03/18/10	1
Calcium,Dissolved	22.	0.50	mg/l	6010B	03/18/10	1
Chromium,Dissolved	BDL	0.010	mg/l	6010B	03/18/10	1
Copper,Dissolved	BDL	0.020	mg/l	6010B	03/18/10	1
Iron,Dissolved	BDL	0.10	mg/l	6010B	03/18/10	1
Lead,Dissolved	BDL	0.0050	mg/l	6010B	03/18/10	1
Magnesium,Dissolved	1.7	0.10	mg/l	6010B	03/18/10	1
Manganese,Dissolved	0.010	0.010	mg/l	6010B	03/18/10	1
Potassium,Dissolved	1.9	0.50	mg/l	6010B	03/18/10	1
Selenium,Dissolved	0.068	0.020	mg/l	6010B	03/18/10	1
Silver,Dissolved	BDL	0.010	mg/l	6010B	03/18/10	1
Sodium,Dissolved	500	0.50	mg/l	6010B	03/18/10	1
Benzene	BDL	0.0010	mg/l	8260B	03/14/10	1
Toluene	BDL	0.0050	mg/l	8260B	03/14/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	03/14/10	1
Total Xylenes	BDL	0.0030	mg/l	8260B	03/14/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	03/14/10	1
Surrogate Recovery						
Toluene-d8	103.		% Rec.	8260B	03/14/10	1
Dibromofluoromethane	102.		% Rec.	8260B	03/14/10	1

BDL - Below Detection Limit  
Det. Limit - Practical Quantitation Limit(PQL)  
L449006-01 (PH) - 8.2@16.8c



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March 22, 2010

Date Received : March 12, 2010  
Description : Moon Quarterly

Sample ID : MWMOON1-031110

Collected By : Aaron Stacy  
Collection Date : 03/11/10 12:00

ESC Sample # : L449006-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
4-Bromofluorobenzene	97.7		% Rec.	8260B	03/14/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 03/22/10 09:40 Printed: 03/22/10 12:59  
L449006-01 (PH) - 8.2@16.8c



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Parachute, CO 81635

March 22, 2010

Date Received : March 12, 2010  
Description : Moon Quarterly

Sample ID : MWMOON1-031110

Collected By : Aaron Stacy  
Collection Date : 03/11/10 12:00

ESC Sample # : L449006-02

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Methane	3.6	0.10	mg/l	RSK175	03/12/10	10
Ethane	0.40	0.013	mg/l	RSK175	03/12/10	1
Ethene	BDL	0.013	mg/l	RSK175	03/12/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Encana  
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March 22, 2010

Date Received : March 12, 2010  
Description : Moon Quarterly  
Sample ID : MWMOON1-031110 DUP  
Collected By : Aaron Stacy  
Collection Date : 03/11/10 12:00

ESC Sample # : L449006-03

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Methane	4.1	0.10	mg/l	RSK175	03/12/10	10
Ethane	0.51	0.013	mg/l	RSK175	03/12/10	1
Ethene	BDL	0.013	mg/l	RSK175	03/12/10	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 03/22/10 09:40 Printed: 03/22/10 12:59

Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L449006-01	WG467515	SAMP	pH	R1144823	T8
	WG468449	SAMP	Sulfide	R1151448	Q

Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
Q	(ESC) Sample held beyond the accepted holding time.
T8	(ESC) - Additional method/sample information: Sample(s) received past/too close to holding time expiration.

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.

Summary of Remarks For Samples Printed  
03/22/10 at 12:59:46

TSR Signing Reports: 151  
R5 - Desired TAT

Sample: L449006-01 Account: ENCRCO Received: 03/12/10 09:00 Due Date: 03/19/10 00:00 RPT Date: 03/22/10 09:40

Sample: L449006-02 Account: ENCRCO Received: 03/12/10 09:00 Due Date: 03/12/10 00:00 RPT Date: 03/22/10 09:40

Sample: L449006-03 Account: ENCRCO Received: 03/12/10 09:00 Due Date: 03/12/10 00:00 RPT Date: 03/22/10 09:40



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Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Ethane	< .013	mg/l			WG467434	03/12/10 14:31
Ethene	< .013	mg/l			WG467434	03/12/10 14:31
Methane	< .01	mg/l			WG467434	03/12/10 14:31
Bromide	< 1	mg/l			WG467488	03/12/10 15:09
Chloride	< 1	mg/l			WG467488	03/12/10 15:09
Fluoride	< .1	mg/l			WG467488	03/12/10 15:09
Nitrate	< .1	mg/l			WG467488	03/12/10 15:09
Nitrite	< .1	mg/l			WG467488	03/12/10 15:09
pH	5.00	su			WG467515	03/13/10 10:04
Benzene	< .001	mg/l			WG467643	03/14/10 12:35
Ethylbenzene	< .001	mg/l			WG467643	03/14/10 12:35
Methyl tert-butyl ether	< .001	mg/l			WG467643	03/14/10 12:35
Toluene	< .005	mg/l			WG467643	03/14/10 12:35
Total Xylenes	< .003	mg/l			WG467643	03/14/10 12:35
4-Bromofluorobenzene		% Rec.	95.44	75-128	WG467643	03/14/10 12:35
Dibromofluoromethane		% Rec.	104.3	79-125	WG467643	03/14/10 12:35
Toluene-d8		% Rec.	103.4	87-114	WG467643	03/14/10 12:35
Specific Conductance	1.20	umhos/cm			WG467748	03/15/10 17:28
Alkalinity	< 20	mg/l			WG467905	03/16/10 15:26
Ammonia Nitrogen	< .1	mg/l			WG467992	03/18/10 10:09
Dissolved Solids	< 10	mg/l			WG467798	03/18/10 13:13
Sulfate	< 5	mg/l			WG468210	03/17/10 20:48
Arsenic, Dissolved	< .02	mg/l			WG468036	03/18/10 11:20
Barium, Dissolved	< .005	mg/l			WG468036	03/18/10 11:20
Cadmium, Dissolved	< .005	mg/l			WG468036	03/18/10 11:20
Calcium, Dissolved	< .5	mg/l			WG468036	03/18/10 11:20
Chromium, Dissolved	< .01	mg/l			WG468036	03/18/10 11:20
Copper, Dissolved	< .02	mg/l			WG468036	03/18/10 11:20
Iron, Dissolved	< .1	mg/l			WG468036	03/18/10 11:20
Lead, Dissolved	< .005	mg/l			WG468036	03/18/10 11:20
Magnesium, Dissolved	< .1	mg/l			WG468036	03/18/10 11:20
Manganese, Dissolved	< .01	mg/l			WG468036	03/18/10 11:20
Potassium, Dissolved	< .5	mg/l			WG468036	03/18/10 11:20
Selenium, Dissolved	< .02	mg/l			WG468036	03/18/10 11:20
Silver, Dissolved	< .01	mg/l			WG468036	03/18/10 11:20
Sodium, Dissolved	< .5	mg/l			WG468036	03/18/10 11:20
Sulfide	< .05	mg/l			WG468449	03/19/10 17:28

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



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Analyte	Units	Result	Duplicate		RPD	Limit	Ref Samp	Batch
			Duplicate					
Chloride	mg/l	7.00	7.00		0.428	20	L447932-22	WG467488
Chloride	mg/l	7.50	7.50		0.267	20	L447932-26	WG467488
pH	su	8.80	8.80		0	1	L448898-01	WG467515
pH	su	7.90	7.90		0	1	L449159-01	WG467515
Specific Conductance	umhos/cm	1500	1500		0.266	20	L448989-01	WG467748
Specific Conductance	umhos/cm	67000	67000		0.149	20	L449287-02	WG467748
Alkalinity	mg/l	340.	330.		2.69	20	L449006-01	WG467905
Alkalinity	mg/l	180.	180.		2.20	20	L448989-01	WG467905
Ammonia Nitrogen	mg/l	0.820	0.830		1.70	20	L449217-02	WG467992
Ammonia Nitrogen	mg/l	36.0	36.0		0	20	L447828-01	WG467992
Dissolved Solids	mg/l	70.0	71.0		1.42	5	L448854-08	WG467798
Sulfate	mg/l	70.0	70.0		0.717	20	L449080-01	WG468210
Arsenic,Dissolved	mg/l	0	0		0	20	L448999-01	WG468036
Barium,Dissolved	mg/l	0.0770	0.0750		2.37	20	L448999-01	WG468036
Cadmium,Dissolved	mg/l	0	0		0	20	L448999-01	WG468036
Calcium,Dissolved	mg/l	9.00	8.80		2.36	20	L448999-01	WG468036
Chromium,Dissolved	mg/l	0	0		0	20	L448999-01	WG468036
Copper,Dissolved	mg/l	0.180	0.180		0.554	20	L448999-01	WG468036
Iron,Dissolved	mg/l	0	0		0	20	L448999-01	WG468036
Lead,Dissolved	mg/l	0	0		0	20	L448999-01	WG468036
Magnesium,Dissolved	mg/l	0.200	0.200		0.995	20	L448999-01	WG468036
Manganese,Dissolved	mg/l	0	0		0	20	L448999-01	WG468036
Potassium,Dissolved	mg/l	0.720	0.690		4.53	20	L448999-01	WG468036
Selenium,Dissolved	mg/l	0	0		0	20	L448999-01	WG468036
Silver,Dissolved	mg/l	0	0		0	20	L448999-01	WG468036
Sodium,Dissolved	mg/l	290.	290.		0.345	20	L448999-01	WG468036
Sulfide	mg/l	0	0		0	20	L449902-01	WG468449
Sulfide	mg/l	0	0.0110		NA	20	L449913-04	WG468449

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Ethane	mg/l	.645	0.731	113.	70-130	WG467434
Ethene	mg/l	.635	0.741	117.	70-130	WG467434
Methane	mg/l	.339	0.369	109.	70-130	WG467434
Bromide	mg/l	40	38.1	95.3	90-110	WG467488
Chloride	mg/l	40	38.3	95.8	90-110	WG467488
Fluoride	mg/l	8	7.90	98.8	90-110	WG467488
Nitrate	mg/l	8	8.18	102.	90-110	WG467488
Nitrite	mg/l	8	7.99	99.9	90-110	WG467488

\* Performance of this Analyte is outside of established criteria.  
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Analyte	Units	Laboratory Control	Sample	% Rec	Limit	Batch
		Known Val	Result			
pH	su	6.46	6.40	99.1	97.9-100.8	WG467515
Benzene	mg/l	.025	0.0217	86.9	67-126	WG467643
Ethylbenzene	mg/l	.025	0.0232	92.7	76-129	WG467643
Methyl tert-butyl ether	mg/l	.025	0.0220	88.2	51-142	WG467643
Toluene	mg/l	.025	0.0210	84.1	72-122	WG467643
Total Xylenes	mg/l	.075	0.0681	90.7	75-128	WG467643
4-Bromofluorobenzene				100.8	75-128	WG467643
Dibromofluoromethane				105.5	79-125	WG467643
Toluene-d8				104.0	87-114	WG467643
Specific Conductance	umhos/cm	406	400.	98.5	85-115	WG467748
Alkalinity	mg/l	40	40.7	102.	85-115	WG467905
Ammonia Nitrogen	mg/l	7.5	7.39	98.5	90-110	WG467992
Dissolved Solids	mg/l	8800	8840	100.	85-115	WG467798
Sulfate	mg/l	40	39.9	99.8	90-110	WG468210
Arsenic, Dissolved	mg/l	1.13	1.10	97.3	85-115	WG468036
Barium, Dissolved	mg/l	1.13	1.14	101.	85-115	WG468036
Cadmium, Dissolved	mg/l	1.13	1.15	102.	85-115	WG468036
Calcium, Dissolved	mg/l	11.3	11.4	101.	85-115	WG468036
Chromium, Dissolved	mg/l	1.13	1.14	101.	85-115	WG468036
Copper, Dissolved	mg/l	1.13	1.14	101.	85-115	WG468036
Iron, Dissolved	mg/l	1.13	1.11	98.2	85-115	WG468036
Lead, Dissolved	mg/l	1.13	1.19	105.	85-115	WG468036
Magnesium, Dissolved	mg/l	11.3	11.8	104.	85-115	WG468036
Manganese, Dissolved	mg/l	1.13	1.12	99.1	85-115	WG468036
Potassium, Dissolved	mg/l	11.3	10.9	96.5	85-115	WG468036
Selenium, Dissolved	mg/l	1.13	1.10	97.3	85-115	WG468036
Silver, Dissolved	mg/l	1.13	1.11	98.2	85-115	WG468036
Sodium, Dissolved	mg/l	11.3	11.2	99.1	85-115	WG468036
Sulfide	mg/l	.5	0.532	106.	85-115	WG468449

Analyte	Units	Laboratory Control		Sample Duplicate	Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Ethane	mg/l	0.729	0.731	113.	70-130	0.204	25	WG467434
Ethene	mg/l	0.738	0.741	116.	70-130	0.373	25	WG467434
Methane	mg/l	0.369	0.369	109.	70-130	0.156	25	WG467434
Bromide	mg/l	38.1	38.1	95.0	90-110	0	20	WG467488
Chloride	mg/l	38.4	38.3	96.0	90-110	0.261	20	WG467488
Fluoride	mg/l	7.92	7.90	99.0	90-110	0.253	20	WG467488
Nitrate	mg/l	8.19	8.18	102.	90-110	0.122	20	WG467488
Nitrite	mg/l	8.00	7.99	100.	90-110	0.125	20	WG467488

\* 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**

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Analyte	Laboratory Control Sample Duplicate				Limit	RPD	Limit	Batch
	Units	Result	Ref	%Rec				
pH	su	6.40	6.40	99.0	97.9-100.8	0	20	WG467515
Benzene	mg/l	0.0216	0.0217	86.0	67-126	0.681	20	WG467643
Ethylbenzene	mg/l	0.0239	0.0232	96.0	76-129	3.17	20	WG467643
Methyl tert-butyl ether	mg/l	0.0225	0.0220	90.0	51-142	2.08	20	WG467643
Toluene	mg/l	0.0217	0.0210	87.0	72-122	3.04	20	WG467643
Total Xylenes	mg/l	0.0701	0.0681	93.0	75-128	2.88	20	WG467643
4-Bromofluorobenzene				98.26	75-128			WG467643
Dibromofluoromethane				102.2	79-125			WG467643
Toluene-d8				105.4	87-114			WG467643
Specific Conductance	umhos/	400.	400.	98.0	85-115	0	20	WG467748
Alkalinity	mg/l	41.9	40.7	105.	85-115	2.91	20	WG467905
Ammonia Nitrogen	mg/l	7.40	7.39	99.0	90-110	0.135	20	WG467992
Dissolved Solids	mg/l	8870	8840	101.	85-115	0.361	20	WG467798
Sulfate	mg/l	39.5	39.9	99.0	90-110	1.01	20	WG468210
Sulfide	mg/l	0.537	0.532	107.	85-115	0.935	20	WG468449

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Bromide	mg/l	49.9	2.00	50	95.8	80-120	L448999-01	WG467488
Chloride	mg/l	226.	190.	50	72.0*	80-120	L448999-01	WG467488
Fluoride	mg/l	11.0	6.20	5	96.0	80-120	L448999-01	WG467488
Nitrate	mg/l	4.91	0	5	98.2	80-120	L448999-01	WG467488
Nitrite	mg/l	4.77	0	5	95.4	80-120	L448999-01	WG467488
Benzene	mg/l	0.421	0	.025	84.2	16-158	L448652-02	WG467643
Ethylbenzene	mg/l	0.478	0	.025	95.6	29-150	L448652-02	WG467643
Methyl tert-butyl ether	mg/l	0.530	0.0850	.025	88.9	24-167	L448652-02	WG467643
Toluene	mg/l	0.412	0	.025	82.5	22-152	L448652-02	WG467643
Total Xylenes	mg/l	1.39	0	.075	92.8	27-151	L448652-02	WG467643
4-Bromofluorobenzene					103.7	75-128		WG467643
Dibromofluoromethane					104.7	79-125		WG467643
Toluene-d8					104.0	87-114		WG467643
Alkalinity	mg/l	1810	1200	200	61.0*	80-120	L448997-01	WG467905
Ammonia Nitrogen	mg/l	5.05	0.180	5	97.4	90-110	L449015-01	WG467992
Arsenic, Dissolved	mg/l	1.16	0	1.13	103.	75-125	L448999-01	WG468036
Barium, Dissolved	mg/l	1.20	0.0750	1.13	99.6	75-125	L448999-01	WG468036
Cadmium, Dissolved	mg/l	1.13	0	1.13	100.	75-125	L448999-01	WG468036

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

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



Encana  
Brett Middleton  
2717 Co. Rd. 215  
Parachute, CO 81635

Quality Assurance Report  
Level II

L449006

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(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

March 22, 2010

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Calcium,Dissolved	mg/l	20.1	8.80	11.3	100.	75-125	L448999-01	WG468036
Chromium,Dissolved	mg/l	1.12	0	1.13	99.1	75-125	L448999-01	WG468036
Copper,Dissolved	mg/l	1.36	0.180	1.13	104.	75-125	L448999-01	WG468036
Iron,Dissolved	mg/l	1.12	0	1.13	99.1	75-125	L448999-01	WG468036
Lead,Dissolved	mg/l	1.19	0	1.13	105.	75-125	L448999-01	WG468036
Magnesium,Dissolved	mg/l	11.9	0.200	11.3	104.	75-125	L448999-01	WG468036
Manganese,Dissolved	mg/l	1.11	0	1.13	98.2	75-125	L448999-01	WG468036
Potassium,Dissolved	mg/l	11.3	0.690	11.3	93.9	75-125	L448999-01	WG468036
Selenium,Dissolved	mg/l	1.11	0	1.13	98.2	75-125	L448999-01	WG468036
Silver,Dissolved	mg/l	0.272	0	1.13	24.1*	75-125	L448999-01	WG468036
Sodium,Dissolved	mg/l	304.	290.	11.3	124.	75-125	L448999-01	WG468036
Sulfide	mg/l	1.02	0.0140	1	101.	80-120	L449913-03	WG468449

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Bromide	mg/l	50.2	49.9	96.4	80-120	0.599	20	L448999-01	WG467488
Chloride	mg/l	226.	226.	72.0*	80-120	0	20	L448999-01	WG467488
Fluoride	mg/l	11.0	11.0	96.0	80-120	0	20	L448999-01	WG467488
Nitrate	mg/l	4.94	4.91	98.8	80-120	0.609	20	L448999-01	WG467488
Nitrite	mg/l	4.80	4.77	96.0	80-120	0.627	20	L448999-01	WG467488
Benzene	mg/l	0.420	0.421	83.9	16-158	0.373	21	L448652-02	WG467643
Ethylbenzene	mg/l	0.454	0.478	90.7	29-150	5.20	24	L448652-02	WG467643
Methyl tert-butyl ether	mg/l	0.538	0.530	90.6	24-167	1.58	22	L448652-02	WG467643
Toluene	mg/l	0.405	0.412	81.0	22-152	1.82	22	L448652-02	WG467643
Total Xylenes	mg/l	1.37	1.39	91.4	27-151	1.55	23	L448652-02	WG467643
4-Bromofluorobenzene				102.4	75-128				WG467643
Dibromofluoromethane				103.7	79-125				WG467643
Toluene-d8				103.7	87-114				WG467643
Alkalinity	mg/l	1780	1810	58.0*	80-120	1.67	20	L448997-01	WG467905
Ammonia Nitrogen	mg/l	4.68	5.05	90.0	90-110	7.61	20	L449015-01	WG467992
Arsenic,Dissolved	mg/l	1.11	1.16	98.2	75-125	4.41	20	L448999-01	WG468036
Barium,Dissolved	mg/l	1.18	1.20	97.8	75-125	1.68	20	L448999-01	WG468036
Cadmium,Dissolved	mg/l	1.12	1.13	99.1	75-125	0.889	20	L448999-01	WG468036
Calcium,Dissolved	mg/l	19.9	20.1	98.2	75-125	1.00	20	L448999-01	WG468036
Chromium,Dissolved	mg/l	1.11	1.12	98.2	75-125	0.897	20	L448999-01	WG468036
Copper,Dissolved	mg/l	1.35	1.36	104.	75-125	0.738	20	L448999-01	WG468036
Iron,Dissolved	mg/l	1.15	1.12	102.	75-125	2.64	20	L448999-01	WG468036
Lead,Dissolved	mg/l	1.14	1.19	101.	75-125	4.29	20	L448999-01	WG468036
Magnesium,Dissolved	mg/l	11.8	11.9	103.	75-125	0.844	20	L448999-01	WG468036
Manganese,Dissolved	mg/l	1.10	1.11	97.3	75-125	0.905	20	L448999-01	WG468036
Potassium,Dissolved	mg/l	11.4	11.3	94.8	75-125	0.881	20	L448999-01	WG468036
Selenium,Dissolved	mg/l	1.07	1.11	94.7	75-125	3.67	20	L448999-01	WG468036
Silver,Dissolved	mg/l	0.255	0.272	22.6*	75-125	6.45	20	L448999-01	WG468036
Sodium,Dissolved	mg/l	299.	304.	79.6	75-125	1.66	20	L448999-01	WG468036
Sulfide	mg/l	1.08	1.02	107.	80-120	5.71	20	L449913-03	WG468449

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



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Parachute, CO 81635

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Level II

L449006

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Tax I.D. 62-0814289

Est. 1970

March 22, 2010

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Batch number /Run number / Sample number cross reference

WG467434: R1143588: L449006-02 03  
WG467488: R1144228: L449006-01  
WG467515: R1144823: L449006-01  
WG467643: R1145088: L449006-01  
WG467748: R1146054: L449006-01  
WG467905: R1147968: L449006-01  
WG467992: R1149426: L449006-01  
WG467798: R1149630: L449006-01  
WG468210: R1149631: L449006-01  
WG468036: R1149811: L449006-01  
WG468321: R1150189: L449006-01  
WG468449: R1151448: L449006-01

\* \* Calculations are performed prior to rounding of reported values .  
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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.



<b>Encana</b>  2717 Co. Rd. 215 Parachute, CO 81635				Billing information:  Brett Middleton 2717 Co. Rd 215 Ste 100  Parachute, CO 81635				Analysis/Container/Preservative <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">V8260BTEXM 40mlAmb-NoPres</div> <div style="width: 100%; height: 100%; background-color: #cccccc;"></div> </div>				Chain of Custody Page <u>2</u> of <u>2</u>   <b>ESC</b> 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			
Report to: <b>Brett Middleton</b>				Email: <b>brett.middleton@encana.com</b>											
Project Description: <u>MOON Quarterly</u>				City/State Collected:											
Phone: (970) 285-2739 FAX: (970) 625-4636		Client Project #:		Lab Project #											
				<b>ENCRCO-BM</b>											
Collected by (print): <u>ARON STACY</u>		Site/Facility ID#:		P.O.#:											
Collected by (signature): <u>[Signature]</u>		<b>Rush?</b> (Lab MUST Be Notified) ___ Same Day .....200% ___ Next Day .....100% ___ Two Day .....50% ___ Three Day .....25%		Date Results Needed <u>Standard</u> Email? ___No <u>X</u> Yes FAX? ___No ___Yes		No. of Cntrs									
Immediately Packed on Ice N ___ Y <u>✓</u>															
Sample ID	Comp/Grab	Matrix*	Depth	Date	Time										
<u>mw moon 1 - 031110</u>	<u>Grab</u>	<u>GW</u>	<u>—</u>	<u>03/11/10</u>	<u>1200</u>	<u>10</u>	<u>X</u>								
		<u>GW</u>				<u>2</u>									

Acctnum: **ENCRCO** (lab use only)  
 Template/Prelogin: **T63002/P311577**  
 Cooler #: 2-2210  
 Shipped Via: **FedEX Ground**

Remarks/Contaminant: \_\_\_\_\_ Sample # (lab only): L449006 5/1/02  
03

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

Relinquished by: (Signature) <u>[Signature]</u>	Date: <u>03/11/10</u>	Time: <u>1730</u>	Received by: (Signature) <u>[Signature]</u>	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier <input type="checkbox"/>	Condition: (lab use only)
Relinquished by: (Signature) <u>[Signature]</u>	Date:	Time:	Received by: (Signature) <u>[Signature]</u>	Temp: <u>1.8c</u>	Bottles Received: <u>12 + TB</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date:	Time:	Received for lab by: (Signature) <u>[Signature]</u>	Date: <u>5-12-10</u>	Time: <u>0900</u>
				COC Seal Intact: <u>✓</u> Y ___ N ___ NA	pH Checked: <u>6.2</u> NCF: <u>✓</u>

# ENVIRONMENTAL SCIENCE CORP.

## SAMPLE NON-CONFORMANCE FORM

Sample No. : L449006

Date: 03/12/10

Evaluated by: Phillip Duckett

Client: ENCRCO

### Non-Conformance (check applicable items)

<input type="checkbox"/> Chain of Custody is missing	<input checked="" type="checkbox"/> Login Clarification Needed
<input type="checkbox"/> Improper container type	<input type="checkbox"/> Improper preservation
<input type="checkbox"/> Chain of custody is incomplete	<input type="checkbox"/> Container lid not intact
<input type="checkbox"/> Parameter(s) past holding time	<input type="checkbox"/> Improper temperature
<input type="checkbox"/> Broken container(s) <b>see below</b>	<input type="checkbox"/> Broken container: sufficient sample volume remains for analysis requested
<input type="checkbox"/> Insufficient packing material around container	
<input type="checkbox"/> Insufficient packing material inside cooler	
<input type="checkbox"/> Improper handling by carrier (FedEx / UPS / Courier)	
<input type="checkbox"/> Sample was frozen	

Comments: Client requesting RSK175 on both lines. Both IDs are the same with same time and date. Are these the same sample?

Login Instructions:

TSR Initials: JB

Client informed by call / email / fax / voice mail date: 3/12/10 time: 1242

Client contact:     

**No, please log seperately.**