

NARRATIVE ATTACHMENT

FORM 4 (SUNDRY NOTICE)

Culvert Pit Closure (North Dragon Trail Unit 5002)

Document Date-10/10/2013

Introduction

Encana Oil & Gas (USA) Inc. (Encana) is submitting this Form 4 Sundry Notice to request final closure status for the culvert pit associated with the North Dragon Trail Unit #5002 (COGCC facility #314333, COGCC remediation #TBD). The site investigation was conducted by a third party contractor as authorized by Encana personnel and in accordance with the approved Form 27 previously submitted for this location. All samples were collected in accordance with Encana's Environmental Compliance Group's Sampling Procedures. The analytical results for the respective soil samples are provided in Table 1 and Attachment A of this submittal. The text below provides the details of the site investigation. For a visual description of the site please refer to Figures 1, 2, and 3 – Site Maps.

Assessment Activities

June 27, 2013 - The excavated soil surrounding the culvert pit was screened utilizing a photoionization detector (PID) prior to collecting soil samples for laboratory analysis. The culvert pit (steel ring, soil, no cement bottom) was carefully removed using a trackhoe and placed onsite for later recycling or disposal. It should be noted that there was no liquid/sludge associated with the bottom of the culvert pit during the time of removal. A grab sample was collected directly from the lowest point of the culvert pit after excavation. In addition, four (4) grab samples were collected, one from each excavated sidewall. Approximately 100 cubic yards of excavated material was removed from the pit and laid out in 1.5 foot tall (70' x 22') lift for evaluation of impacts. The excavated material was sampled by way of a nine (9) point composite sample. Four (4) background samples were collected from approximately six (6) inches beneath the grounds surface for analysis with regards to arsenic.

Analytical Review

Sample results indicate that soil within the culvert pit footprint on Encana's North Dragon Trail Unit #5002 well pad, had organic constituent concentrations of the excavated area below or within COGCC Table 910-1 except for Total Petroleum Hydrocarbons (TPH) (1,700 ppm – base and east sidewall – 4,100 ppm). Analytical results indicated the excavated material exceeded COGCC Table 910-1 allowable concentrations for arsenic (2.1 ppm). Though the arsenic concentration in the soil is above the allowable concentration identified in Table 910-1, the concentration is within the range of arsenic background values (2.1 – 9.1 ppm) in this area. Based on these results and footnote 1 to COGCC Table 910-1, Encana requests that the COGCC consider the higher range of background arsenic value(s) as the allowable concentration for this constituent. Please see Table 1 and Attachment A for the analytical results.

The two locations (base and east sidewall) that exceeded COGCC Table 910-1 analytical value for TPH were resampled September 26, 2013 and analytical values indicated that the east sidewall was below or within COGCC Table 910-1 allowable concentrations. The 2nd base sample (1,400 ppm) exceeded the COGCC Table 910-1 allowable concentration however; impenetrable bedrock was reached at 7 feet bgs.



NARRATIVE ATTACHMENT

FORM 4 (SUNDRY NOTICE)

Culvert Pit Closure (North Dragon Trail Unit 5002)

Document Date-10/10/2013

The 2nd base sample also shows a reduction from 1,700 ppm to 1,400 ppm which reflects the natural attenuation process.

Though the elevated arsenic level of the returned spoil material within the excavated footprint area is above the allowable levels identified in Table 910-1; it will be buried greater than three feet bgs of existing pad footprint material to assure that material with an elevated level of arsenic will have no adverse effect on future re-vegetation efforts and receptors in the area. Please see Table 1 and Attachment A for analytical results.

Conclusion

Based on the site investigation and analytical results, the culvert pit associated with the North Dragon Trail Unit #5002 is in compliance with the standards specified within COGCC Table 910-1 with regards to the sidewall samples and excavated material. The base sample exceeds Table 910-1 allowable concentrations however; further removal by excavation could not be completed due to reaching impenetrable bedrock at the base of the pit. We believe the source area has been removed and that the process of natural attenuation will reduce the base concentrations. Groundwater was not encountered during excavation and this location is not within a sensitive area (according to Rule 901e). Encana respectfully requests that final closure be granted for the respective pit, COGCC remediation #TBD.

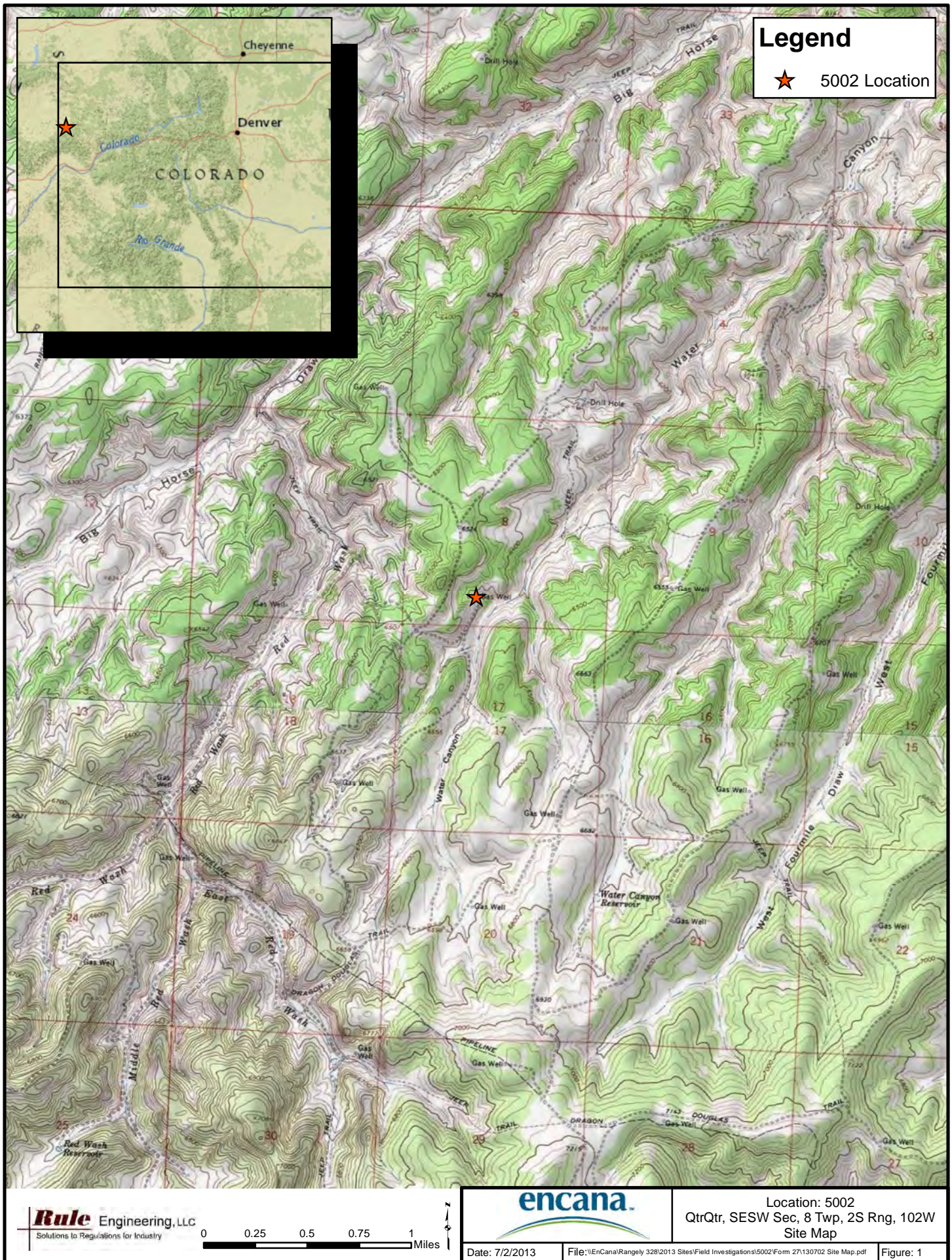
Notification of Completion

This Sundry Notice is also being submitted as the Notification of Completion for Remediation #TBD. If the information provided here is satisfactory, please provide documentation of the closure of this remediation project.

Attachments

Topographic Location Map (Figure 1)
5002 Aerial map with sample locations (Figure 2)
5002 Site Diagram of Excavation and sample locations (Figure 3)
Laboratory Results Summary Table 1 – 5002 Site Investigation (Table 1)
Attachment A- Laboratory Reports





Legend

★ 5002 Location



Legend

★ Soil Sample Location

0 37.5 75 150 225 Feet



Rule Engineering, LLC
Solutions to Regulations for Industry

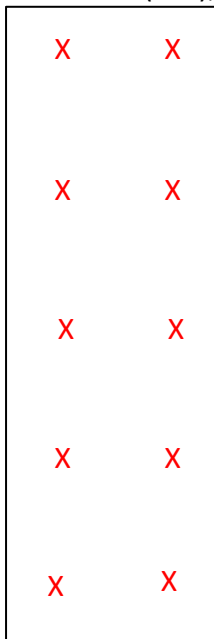


**5002
Sample Location Map**

DATE: 10/4/2013 JG FILE: \\Encana\Rangely 328\2013 Sites\Field Investigations\5002\Form 4\130926 Sample Location Map.pdf FIGURE: 2

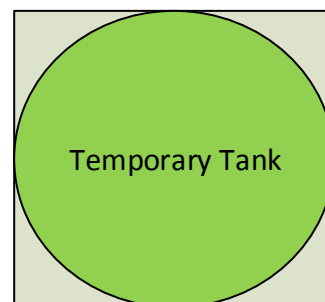


062713-5002(ETS); 3-9"

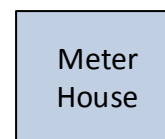
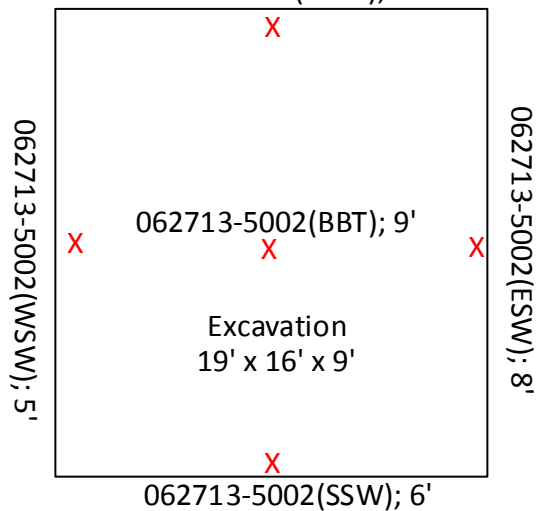


Lift
70' x 22' x 1.5'

Direction of
Flow



062713-5002(NSW); 5'



Legend
X-Sample



Well: Figure 3. 5002 Site Diagram

Area: Dragon Trail Unit

Legal: SESW, Sec 08, 02S, 102W, 6th PM

Date: 07/03/13

Drawn By: Brad Ward

Revision Date:

Scale: None

Appendix A



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

Report Summary

Thursday July 11, 2013

Report Number: L644229


Samples Received: 06/29/13

Client Project: 5002

Description: 5002 - Site Clearance

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:


Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-IN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

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.



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

July 11, 2013

Date Received : June 29, 2013
Description : 5002 - Site Clearance

Sample ID : 062713-5002(NSW)-5FT

Collected By : Brad Ward
Collection Date : 06/27/13 10:15

ESC Sample # : L644229-01

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	07/03/13	5
Toluene	BDL	0.025	mg/kg	8021/8015	07/03/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	07/03/13	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	07/03/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	07/03/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	100.		% Rec.	8021/8015	07/03/13	5
a,a,a-Trifluorotoluene(PID)	98.2		% Rec.	8021/8015	07/03/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	07/11/13	1
Surrogate recovery(%)						
o-Terphenyl	56.9		% Rec.	3546/DRO	07/11/13	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: 07/11/13 17:18 Printed: 07/11/13 17:19



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

July 11, 2013

Date Received : June 29, 2013
Description : 5002 - Site Clearance
Sample ID : 062713-5002(ESW)-8FT
Collected By : Brad Ward
Collection Date : 06/27/13 10:24

ESC Sample # : L644229-02

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	07/03/13	5
Toluene	BDL	0.025	mg/kg	8021/8015	07/03/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	07/03/13	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	07/03/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	07/03/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	98.4		% Rec.	8021/8015	07/03/13	5
a,a,a-Trifluorotoluene(PID)	97.4		% Rec.	8021/8015	07/03/13	5
TPH (GC/FID) High Fraction	4100	200	mg/kg	3546/DRO	07/11/13	50
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	07/11/13	50

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: 07/11/13 17:18 Printed: 07/11/13 17:19



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

July 11, 2013

Date Received : June 29, 2013
Description : 5002 - Site Clearance

Sample ID : 062713-5002(SSW)-6FT

Collected By : Brad Ward
Collection Date : 06/27/13 10:32

ESC Sample # : L644229-03

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	07/04/13	5
Toluene	BDL	0.025	mg/kg	8021/8015	07/04/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	07/04/13	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	07/04/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	07/04/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	96.9		% Rec.	8021/8015	07/04/13	5
a,a,a-Trifluorotoluene(PID)	97.0		% Rec.	8021/8015	07/04/13	5
TPH (GC/FID) High Fraction	7.7	4.0	mg/kg	3546/DRO	07/11/13	1
Surrogate recovery(%)						
o-Terphenyl	64.5		% Rec.	3546/DRO	07/11/13	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: 07/11/13 17:18 Printed: 07/11/13 17:19



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

July 11, 2013

Date Received : June 29, 2013
Description : 5002 - Site Clearance
Sample ID : 062713-5002(WSW)-5FT
Collected By : Brad Ward
Collection Date : 06/27/13 10:43

ESC Sample # : L644229-04

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	07/04/13	5
Toluene	BDL	0.025	mg/kg	8021/8015	07/04/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	07/04/13	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	07/04/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	07/04/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	97.0		% Rec.	8021/8015	07/04/13	5
a,a,a-Trifluorotoluene(PID)	96.6		% Rec.	8021/8015	07/04/13	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	07/11/13	1
Surrogate recovery(%)						
o-Terphenyl	61.8		% Rec.	3546/DRO	07/11/13	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: 07/11/13 17:18 Printed: 07/11/13 17:19



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

July 11, 2013

Date Received : June 29, 2013
Description : 5002 - Site Clearance

Sample ID : 062713-5002(BBT)-9FT

Collected By : Brad Ward
Collection Date : 06/27/13 10:51

ESC Sample # : L644229-05

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	0.039	0.025	mg/kg	8021/8015	07/06/13	50
Toluene	0.37	0.25	mg/kg	8021/8015	07/06/13	50
Ethylbenzene	0.046	0.025	mg/kg	8021/8015	07/06/13	50
Total Xylene	0.32	0.075	mg/kg	8021/8015	07/06/13	50
TPH (GC/FID) Low Fraction	120	5.0	mg/kg	GRO	07/06/13	50
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	97.2		% Rec.	8021/8015	07/06/13	50
a,a,a-Trifluorotoluene(PID)	96.5		% Rec.	8021/8015	07/06/13	50
TPH (GC/FID) High Fraction	1700	80.	mg/kg	3546/DRO	07/11/13	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	07/11/13	20

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: 07/11/13 17:18 Printed: 07/11/13 17:19



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

July 11, 2013

Date Received : June 29, 2013
Description : 5002 - Site Clearance
Sample ID : 062713-5002(ETS)-3-9IN
Collected By : Brad Ward
Collection Date : 06/27/13 15:41

ESC Sample # : L644229-06

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	07/03/13	1
Chromium, Trivalent	11.	0.50	mg/kg	Calc.	07/10/13	1
ORP	150		mV	2580 B-2011	07/03/13	1
pH	8.8		su	9045D	07/05/13	1
Sodium Adsorption Ratio	4.0			Calc.	07/03/13	1
Specific Conductance	590		umhos/cm	9050AMod	07/02/13	1
Mercury	0.026	0.020	mg/kg	7471	07/03/13	1
Arsenic	2.1	1.0	mg/kg	6010B	07/09/13	1
Barium	60.	0.25	mg/kg	6010B	07/09/13	1
Cadmium	BDL	0.25	mg/kg	6010B	07/09/13	1
Chromium	11.	0.50	mg/kg	6010B	07/10/13	1
Copper	6.9	1.0	mg/kg	6010B	07/09/13	1
Lead	7.9	0.25	mg/kg	6010B	07/09/13	1
Nickel	7.5	1.0	mg/kg	6010B	07/10/13	1
Selenium	1.0	1.0	mg/kg	6010B	07/09/13	1
Silver	BDL	0.50	mg/kg	6010B	07/09/13	1
Zinc	51.	1.5	mg/kg	6010B	07/09/13	1
Benzene	BDL	0.0025	mg/kg	8021/8015	07/04/13	5
Toluene	BDL	0.025	mg/kg	8021/8015	07/04/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	07/04/13	5
Total Xylene	0.016	0.0075	mg/kg	8021/8015	07/04/13	5
TPH (GC/FID) Low Fraction	3.2	0.50	mg/kg	GRO	07/04/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	96.4		% Rec.	8021/8015	07/04/13	5
a,a,a-Trifluorotoluene(PID)	96.3		% Rec.	8021/8015	07/04/13	5
TPH (GC/FID) High Fraction	110	4.0	mg/kg	3546/DRO	07/11/13	1
Surrogate recovery(%)						
o-Terphenyl	78.1		% Rec.	3546/DRO	07/11/13	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Acenaphthene	0.0087	0.0060	mg/kg	8270C-SIM	07/05/13	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L644229-06 (PH) - 8.8@21.5c



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

July 11, 2013

Date Received : June 29, 2013
Description : 5002 - Site Clearance
Sample ID : 062713-5002(ETS)-3-9IN
Collected By : Brad Ward
Collection Date : 06/27/13 15:41

ESC Sample # : L644229-06

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Fluorene	0.011	0.0060	mg/kg	8270C-SIM	07/05/13	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
Naphthalene	BDL	0.020	mg/kg	8270C-SIM	07/05/13	1
Phenanthrene	0.024	0.0060	mg/kg	8270C-SIM	07/05/13	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	07/05/13	1
1-Methylnaphthalene	0.044	0.020	mg/kg	8270C-SIM	07/05/13	1
2-Methylnaphthalene	BDL	0.020	mg/kg	8270C-SIM	07/05/13	1
2-Chloronaphthalene	BDL	0.020	mg/kg	8270C-SIM	07/05/13	1
Surrogate Recovery						
Nitrobenzene-d5	102.		% Rec.	8270C-SIM	07/05/13	1
2-Fluorobiphenyl	92.7		% Rec.	8270C-SIM	07/05/13	1
p-Terphenyl-d14	95.6		% Rec.	8270C-SIM	07/05/13	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: 07/11/13 17:18 Printed: 07/11/13 17:19
L644229-06 (PH) - 8.8@21.5c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L644229-02	WG670346	SAMP	o-Terphenyl	R2741441	J7
L644229-05	WG670346	SAMP	o-Terphenyl	R2741441	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

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
07/11/13 at 17:19:15

TSR Signing Reports: 358
R5 - Desired TAT

Sample: L644229-01 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/09/13 00:00 RPT Date: 07/11/13 17:18
Sample: L644229-02 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/09/13 00:00 RPT Date: 07/11/13 17:18
Sample: L644229-03 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/09/13 00:00 RPT Date: 07/11/13 17:18
Sample: L644229-04 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/09/13 00:00 RPT Date: 07/11/13 17:18
Sample: L644229-05 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/09/13 00:00 RPT Date: 07/11/13 17:18
Sample: L644229-06 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/09/13 00:00 RPT Date: 07/11/13 17:18

Company Name/Address *ENCANRCO-RULEENG* Encana Oil & Gas 143 DIAMOND AVE PARACHUTE, CO 81635 *ENCANRCO-RULEENG*				Billing Information Charlie Jensen 143 Diamond Ave Parachute, CO 81635 <hr/> Report to: Charlie Jensen <hr/> E-mail to: Charlie Jensen, Shad Johnson, Brad Ward				Analysis/Container/Preservative <div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEXGRO / DRO - 8260/8015</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">SV8270PAHSIM - 8270SIM</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">SPCON - 9050AMod</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">SAR - Calc.</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">RCRA8 Metals + Cu, Ni, and Zn - 6010/7470</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">CR6SS - 3060A/7196</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">CR3 - Calc.</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">As</div> </div>								Chain of Custody Page 1 of 1 Prepared by: E041 ENVIRONMENTAL SCIENCE CORP 12065 Lebanon Road Mt. Juliet TN 37122 Phone (615)758-5858 Phone (800) 767-5859 FAX (615)758-5859			
Project Description: 5002 - SITE CLEARANCE				Client Project No. 5002				ENCANRCO-RULEENG											
PHONE: 970-285-2735 FAX:				Site/Facility ID# 5002				P.O.#											
Collected by: Brad Ward Collected by (signature):				Rush? (Lab MUST be Notified) <input type="checkbox"/> Same Day.....200% <input type="checkbox"/> Next Day.....100% <input type="checkbox"/> Two Day.....50%				Date Results Needed Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes											
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/> X				No of Cntrs				Shipped Via:											
Sample ID				Comp/Grab	Matrix	Depth	Date	Time	Cntrs	BTEXGRO / DRO	SV8270PAHSIM	SPCON	SAR	RCRA8 Metals + Cu, Ni, and Zn	CR6SS	CR3	As	Remarks/contaminant	Sample # (lab only)
062713-5002(NSW); 5'				GRAB	SS	5'	06/27/13	1015	2	X									L644229-01
062713-5002(ESW); 8'				GRAB	SS	8'		1024	2	X									-02
062713-5002(SSW); 6'				GRAB	SS	6'		1032	2	X									-03
062713-5002(WSW); 5'				GRAB	SS	5'		1043	2	X									-04
062713-5002(BBT); 9'				GRAB	SS	9'		1051	2	X									-05
062713-5002(ETS); 3-9"				COMP	SS	3-9"		1541	3	X	X	X	X	X	X	X			-06

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquisher by: (Signature)		Date: 6/28/13 Time: 0715		Received by: (Signature)		Samples returned via: FedEx <input checked="" type="checkbox"/> UPS <input type="checkbox"/> Other _____		Condition (lab use only) OK	
Relinquisher by: (Signature)		Date: _____ Time: _____		Received by: (Signature)		Temp: 3.6 °C Bottles Received: 13-402		COC Seats Intact <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA	
Relinquisher by: (Signature)		Date: _____ Time: _____		Received for lab by: (Signature)		Date: 6/29/13 Time: 0900		pH Checked: _____ 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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

Report Summary

Monday July 08, 2013

Report Number: L644234


Samples Received: 06/29/13

Client Project: 5002

Description: 5002 - Site Clearance

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:


Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-IN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

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.



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

July 08, 2013

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

Date Received : June 29, 2013
Description : 5002 - Site Clearance
Sample ID : 062713-5002-(BG1N)-6IN
Collected By : Brad Ward
Collection Date : 06/27/13 08:52

ESC Sample # : L644234-01

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	3.3	1.0	mg/kg	6010B	07/05/13	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: 07/08/13 11:19 Printed: 07/08/13 11:19



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

July 08, 2013

Date Received : June 29, 2013
Description : 5002 - Site Clearance
Sample ID : 062713-5002-(BG2E)-6IN
Collected By : Brad Ward
Collection Date : 06/27/13 09:01

ESC Sample # : L644234-02
Site ID : 5002
Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	2.1	1.0	mg/kg	6010B	07/05/13	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: 07/08/13 11:19 Printed: 07/08/13 11:19



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

July 08, 2013

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

Date Received : June 29, 2013
Description : 5002 - Site Clearance
Sample ID : 062713-5002-(BG4W)-6IN
Collected By : Brad Ward
Collection Date : 06/27/13 09:19

ESC Sample # : L644234-03

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	9.1	1.0	mg/kg	6010B	07/05/13	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: 07/08/13 11:19 Printed: 07/08/13 11:19



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

July 08, 2013

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

Date Received : June 29, 2013
Description : 5002 - Site Clearance
Sample ID : 062713-5002-(BG3S)-6IN
Collected By : Brad Ward
Collection Date : 06/27/13 09:10

ESC Sample # : L644234-04

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Arsenic	6.8	1.0	mg/kg	6010B	07/07/13	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: 07/08/13 11:19 Printed: 07/08/13 11:19

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L644234-04	WG670455	SAMP	Arsenic	R2735864	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.

Summary of Remarks For Samples Printed
07/08/13 at 11:19:36

TSR Signing Reports: 358
R5 - Desired TAT

Sample: L644234-01 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/08/13 00:00 RPT Date: 07/08/13 11:19

Sample: L644234-02 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/08/13 00:00 RPT Date: 07/08/13 11:19

Sample: L644234-03 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/08/13 00:00 RPT Date: 07/08/13 11:19

Sample: L644234-04 Account: ENCANRCO Received: 06/29/13 09:00 Due Date: 07/08/13 00:00 RPT Date: 07/08/13 11:19

Company Name/Address *ENCANRCO-RULEENG* Encana Oil & Gas 143 DIAMOND AVE PARACHUTE, CO 81635 *ENCANRCO-RULEENG*				Billing Information Charlie Jensen 143 Diamond Ave Parachute, CO 81635 <hr/> Report to: Charlie Jensen <hr/> E-mail to: Charlie Jensen, Shad Johnson, Brad Ward				Analysis/Container/Preservative						Chain of Custody Page 1 of 1																																																																																																																								
								<div style="display: flex; justify-content: space-between;"> <div> Prepared by: E038 ENVIRONMENTAL SCIENCE CORP 12065 Lebanon Road Mt. Juliet TN 37122 Phone (615)758-5858 Phone (800) 767-5859 FAX (615)758-5859 </div> <div> CoCode (lab use only) *ENCANRCO-RULEENG* Template/Prelogin Shipped Via: </div> </div>																																																																																																																														
Project Description: 5002 - SITE CLEARANCE				Client Project No. 5002		ENCANRCO-RULEENG								<div style="display: flex; justify-content: space-between;"> <div> BTEXGRO / DRO - 8260/8015 SV8270PAHSIM - 8270SIM SPCON - 9050AMod SAR - Calc. RCRA8 Metals + Cu, Ni, and Zn - 6010/7470 CR6SS - 3060A/7196 CR3 - Calc. As </div> <div> No of Cntrs </div> </div>																																																																																																																								
PHONE: 970-285-2735 FAX:		Site/Facility ID# 5602		P.O.#																																																																																																																																		
Collected by: Brad Ward Collected by (signature): Immediately Packed on Ice N Y X		Rush? (Lab MUST be Notified) <input type="checkbox"/> Same Day.....200% <input type="checkbox"/> Next Day.....100% <input type="checkbox"/> Two Day.....50%		Date Results Needed Email? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input type="checkbox"/> No <input type="checkbox"/> Yes																																																																																																																																		
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample ID</th> <th>Comp/Grab</th> <th>Matrix</th> <th>Depth</th> <th>Date</th> <th>Time</th> <th>Cntrs</th> </tr> </thead> <tbody> <tr> <td>062713-5002-(BG1N)-6"</td> <td>GRAB</td> <td>SS</td> <td>6"</td> <td>6/27/13</td> <td>0852</td> <td>1</td> </tr> <tr> <td>062713-5002-(BG2E)-6"</td> <td>GRAB</td> <td>SS</td> <td>6"</td> <td>6/27/13</td> <td>0901</td> <td>1</td> </tr> <tr> <td>132W 6/28/13-(BG3N)-6"</td> <td>GRAB</td> <td>SS</td> <td>6"</td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>062713-5002-(BG4W)-6"</td> <td>GRAB</td> <td>SS</td> <td>6"</td> <td>6/27/13</td> <td>0919</td> <td>1</td> </tr> <tr> <td>062713-5002-(BG3S)-6"</td> <td>Grab</td> <td>SS</td> <td>6"</td> <td>6/27/13</td> <td>0910</td> <td>1</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>				Sample ID	Comp/Grab	Matrix	Depth	Date	Time	Cntrs	062713-5002-(BG1N)-6"	GRAB	SS	6"	6/27/13	0852	1	062713-5002-(BG2E)-6"	GRAB	SS	6"	6/27/13	0901	1	132W 6/28/13-(BG3N)-6"	GRAB	SS	6"			1	062713-5002-(BG4W)-6"	GRAB	SS	6"	6/27/13	0919	1	062713-5002-(BG3S)-6"	Grab	SS	6"	6/27/13	0910	1																																																																<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Remarks/contaminant</th> <th>Sample # (lab only)</th> </tr> </thead> <tbody> <tr> <td> </td> <td>L644234-01</td> </tr> <tr> <td> </td> <td>- 02</td> </tr> <tr> <td> </td> <td>- 03</td> </tr> <tr> <td> </td> <td>- 04</td> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		Remarks/contaminant	Sample # (lab only)		L644234-01		- 02		- 03		- 04														
Sample ID	Comp/Grab	Matrix	Depth	Date	Time	Cntrs																																																																																																																																
062713-5002-(BG1N)-6"	GRAB	SS	6"	6/27/13	0852	1																																																																																																																																
062713-5002-(BG2E)-6"	GRAB	SS	6"	6/27/13	0901	1																																																																																																																																
132W 6/28/13-(BG3N)-6"	GRAB	SS	6"			1																																																																																																																																
062713-5002-(BG4W)-6"	GRAB	SS	6"	6/27/13	0919	1																																																																																																																																
062713-5002-(BG3S)-6"	Grab	SS	6"	6/27/13	0910	1																																																																																																																																
Remarks/contaminant	Sample # (lab only)																																																																																																																																					
	L644234-01																																																																																																																																					
	- 02																																																																																																																																					
	- 03																																																																																																																																					
	- 04																																																																																																																																					

Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other _____

pH _____ Temp _____

Flow _____ Other _____

Remarks:

Relinquisher by: (Signature) Relinquisher by: (Signature) Relinquisher by: (Signature)	Date: 6/28/13 Time: 0715 Date: Time: Date: Time: 	Received by: (Signature) Received by: (Signature) Received for lab by: (Signature)	Samples returned via: FedEx <input checked="" type="checkbox"/> UPS <input type="checkbox"/> Other _____ 554702360937 Temp: 5.6°C Bottles Received: 4-402 Date: 6/29/13 Time: 0900	Condition (lab use only) COC Seals Intact <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA pH Checked: 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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

Report Summary

Monday October 07, 2013

Report Number: L660207


Samples Received: 09/27/13

Client Project: 5002

Description: 5002-Site Clearance

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:


Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-IN-01, KY - 90010, KYUST - 0016,
NC - ENV375/DW21704/BIO041, ND - R-140, NJ - TN002, NJ NELAP - TN002,
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364

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.



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

October 07, 2013

Date Received : September 27, 2013
Description : 5002-Site Clearance
Sample ID : 092613-5002 ESW-8 FT
Collected By : Shad Johnson
Collection Date : 09/26/13 12:40

ESC Sample # : L660207-01

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	10/02/13	5
Toluene	BDL	0.025	mg/kg	8021/8015	10/02/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	10/02/13	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	10/02/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	10/02/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	98.9		% Rec.	8021/8015	10/02/13	5
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021/8015	10/02/13	5
TPH (GC/FID) High Fraction	28.	4.0	mg/kg	3546/DRO	10/05/13	1
Surrogate recovery(%)						
o-Terphenyl	87.6		% Rec.	3546/DRO	10/05/13	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: 10/07/13 20:06 Printed: 10/07/13 20:06



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

Charles Jensen
EnCana Oil & Gas - Rangely, CO
1125 Escalante Drive
Rangely, CO 81648-3600

October 07, 2013

Date Received : September 27, 2013
Description : 5002-Site Clearance
Sample ID : 092613-5002 BBT-9 FT
Collected By : Shad Johnson
Collection Date : 09/26/13 12:50

ESC Sample # : L660207-02

Site ID : 5002

Project # : 5002

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	10/02/13	5
Toluene	BDL	0.025	mg/kg	8021/8015	10/02/13	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	10/02/13	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	10/02/13	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	10/02/13	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.0		% Rec.	8021/8015	10/02/13	5
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021/8015	10/02/13	5
TPH (GC/FID) High Fraction	1400	80.	mg/kg	3546/DRO	10/05/13	20
Surrogate recovery(%)						
o-Terphenyl	87.7		% Rec.	3546/DRO	10/05/13	20

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: 10/07/13 20:06 Printed: 10/07/13 20:06

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L660207-02	WG684882	SAMP	o-Terphenyl	R2837380	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.

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
10/07/13 at 20:06:53

TSR Signing Reports: 358
R5 - Desired TAT

Sample: L660207-01 Account: ENCARNCO Received: 09/27/13 09:30 Due Date: 10/04/13 00:00 RPT Date: 10/07/13 20:06

Sample: L660207-02 Account: ENCARNCO Received: 09/27/13 09:30 Due Date: 10/04/13 00:00 RPT Date: 10/07/13 20:06

ENCANR-CO-RULEENG
Encana Oil & Gas
143 Diamond Avenue
Parachute, CO 81635
ENCANR-CO-RULEENG

Billing Information:
 Charles Jensen
 143 Diamond Ave
 Parachute, CO 81635

Report to: Charles Jensen
 Email to: Charles Jensen, Shad Johnson

Analysis/Container/Preservative

Chain of Custody
 Page 1 of 1



12065 Lebanon Road
 Mt. Juliet, TN 37122

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

E148

Project Description: 5002-Site Clearance
 City/State Collected: CO
 Phone: 970-285-2735
 FAX: 970-285-2735
 Client Project #: 5002
 ESC Key: ENCANR-CO-RULEENG

Collected by: Shad Johnson
 Site/Facility ID#: 5002
 P.O.#:

Collected by (signature): *[Signature]*
 Immediately Packed on Ice - N
 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

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	Cntrs	BTEXGRO / DRO - 8260/8015	SV8270PAHSIM - 8270SIM	SPCON - 9050AMod	SAR - Calc.	RCRA8 Metals + Cu, Ni, and Zn - 6010/7470	CR6SS - 3060A/7196	CR3 - Calc.	Remarks/Contaminant	Sample # (lab only)
092613-5002(ESW)-8FT	Grab	SS	8'	9/26/13	1240	2	X								166520701
092613-5002(BBT)-9FT	Grab	SS	9'	9/26/13	1250	2	X								n

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____ pH _____ Temp _____

Remarks: _____ Flow _____ Other _____

Relinquished by: (Signature) <i>[Signature]</i>	Date: 7-26-13	Time: 1500	Received by: (Signature) <i>[Signature]</i>	Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier	Condition: (lab use only) TO
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 39°	Bottles Received: 402
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) <i>[Signature]</i>	Date: 9/27/13	Time: 10930
				pH Checked:	NCE: