



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

Mr. Dan Prokop
Encana
2717 Co. Rd. 215
Parachute, CO 81635

Report Summary

Friday June 11, 2010

Report Number: L461811

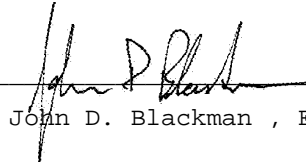
Samples Received: 05/29/10

Client Project: 762129

Description: Hells Hole 9122 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:


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.

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

June 11, 2010

Mr. Dan Prokop
 Encana
 2717 Co. Rd. 215
 Parachute, CO 81635

Date Received : May 29, 2010
 Description : Hells Hole 9122 Clearance
 Sample ID : WEST WALL SOUTH
 Collected By : Brad Kieding
 Collection Date : 05/27/10 11:15

ESC Sample # : L461811-01
 Site ID :
 Project # : 762129

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/02/10	1
Chromium,Trivalent	19.	0.50	mg/kg	Calc.	06/10/10	1
ORP	150		mV	2580	06/01/10	1
pH	8.6		su	9045D	06/02/10	1
Sodium Adsorption Ratio	5.1			Calc.	06/02/10	1
Specific Conductance	720		umhos/cm	9050AMod	06/02/10	1
Mercury	BDL	0.020	mg/kg	7471	06/02/10	1
Arsenic	17.	1.0	mg/kg	6010B	06/10/10	1
Barium	370	0.25	mg/kg	6010B	06/10/10	1
Cadmium	0.28	0.25	mg/kg	6010B	06/10/10	1
Chromium	19.	0.50	mg/kg	6010B	06/10/10	1
Copper	18.	1.0	mg/kg	6010B	06/10/10	1
Lead	8.4	0.25	mg/kg	6010B	06/10/10	1
Nickel	13.	5.0	mg/kg	6010B	06/10/10	5
Selenium	BDL	1.0	mg/kg	6010B	06/10/10	1
Silver	BDL	0.50	mg/kg	6010B	06/10/10	1
Zinc	56.	7.5	mg/kg	6010B	06/10/10	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	06/04/10	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	105.		% Rec.	602/8015	06/04/10	5
Benzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Toluene	BDL	0.025	mg/kg	8260B	06/10/10	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Total Xylenes	BDL	0.015	mg/kg	8260B	06/10/10	5
Surrogate Recovery						
Toluene-d8	92.4		% Rec.	8260B	06/10/10	5
Dibromofluoromethane	83.8		% Rec.	8260B	06/10/10	5
a,a,a-Trifluorotoluene	93.0		% Rec.	8260B	06/10/10	5
4-Bromofluorobenzene	91.5		% Rec.	8260B	06/10/10	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	06/03/10	1
Surrogate recovery(%) o-Terphenyl	72.6		% Rec.	3546/DRO	06/03/10	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L461811-01 (CR6) - reducer
 L461811-01 (PH) - 8.6@26.8c



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

Mr. Dan Prokop
 Encana
 2717 Co. Rd. 215
 Parachute, CO 81635

June 11, 2010

Date Received : May 29, 2010
 Description : Hells Hole 9122 Clearance
 Sample ID : WEST WALL SOUTH
 Collected By : Brad Kieding
 Collection Date : 05/27/10 11:15

ESC Sample # : L461811-01
 Site ID :
 Project # : 762129

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.033	mg/kg	8270C	06/03/10	1
Acenaphthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Acenaphthylene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(a)anthracene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(a)pyrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(b)fluoranthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(g,h,i)perylene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(k)fluoranthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Chrysene	BDL	0.033	mg/kg	8270C	06/03/10	1
Dibenz(a,h)anthracene	BDL	0.033	mg/kg	8270C	06/03/10	1
Fluoranthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Fluorene	BDL	0.033	mg/kg	8270C	06/03/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Naphthalene	BDL	0.033	mg/kg	8270C	06/03/10	1
Phenanthrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Pyrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Surrogate Recovery						
Nitrobenzene-d5	69.6		% Rec.	8270C	06/03/10	1
2-Fluorobiphenyl	57.8		% Rec.	8270C	06/03/10	1
p-Terphenyl-d14	85.0		% Rec.	8270C	06/03/10	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: 06/11/10 11:19 Printed: 06/11/10 13:34
 L461811-01 (CR6) - reducer
 L461811-01 (PH) - 8.6@26.8c



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

Mr. Dan Prokop
Encana
2717 Co. Rd. 215
Parachute, CO 81635

June 11, 2010

Date Received : May 29, 2010
Description : Hells Hole 9122 Clearance
Sample ID : SOUTH WALL
Collected By : Brad Kieding
Collection Date : 05/27/10 11:00

ESC Sample # : L461811-02
Site ID :
Project # : 762129

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/02/10	1
Chromium,Trivalent	20.	0.50	mg/kg	Calc.	06/10/10	1
ORP	140		mV	2580	06/01/10	1
pH	8.6		su	9045D	06/02/10	1
Sodium Adsorption Ratio	9.0			Calc.	06/02/10	1
Specific Conductance	960		umhos/cm	9050AMod	06/02/10	1
Mercury	0.020	0.020	mg/kg	7471	06/02/10	1
Arsenic	30.	1.0	mg/kg	6010B	06/10/10	1
Barium	390	0.25	mg/kg	6010B	06/10/10	1
Cadmium	0.29	0.25	mg/kg	6010B	06/10/10	1
Chromium	20.	0.50	mg/kg	6010B	06/10/10	1
Copper	23.	1.0	mg/kg	6010B	06/10/10	1
Lead	11.	0.25	mg/kg	6010B	06/10/10	1
Nickel	17.	5.0	mg/kg	6010B	06/10/10	5
Selenium	BDL	1.0	mg/kg	6010B	06/10/10	1
Silver	BDL	0.50	mg/kg	6010B	06/10/10	1
Zinc	74.	7.5	mg/kg	6010B	06/10/10	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	06/04/10	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	106.		% Rec.	602/8015	06/04/10	5
Benzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Toluene	BDL	0.025	mg/kg	8260B	06/10/10	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Total Xylenes	BDL	0.015	mg/kg	8260B	06/10/10	5
Surrogate Recovery						
Toluene-d8	89.4		% Rec.	8260B	06/10/10	5
Dibromofluoromethane	83.8		% Rec.	8260B	06/10/10	5
a,a,a-Trifluorotoluene	94.2		% Rec.	8260B	06/10/10	5
4-Bromofluorobenzene	88.5		% Rec.	8260B	06/10/10	5
TPH (GC/FID) High Fraction	6.2	4.0	mg/kg	3546/DRO	06/03/10	1
Surrogate recovery(%) o-Terphenyl	72.8		% Rec.	3546/DRO	06/03/10	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L461811-02 (PH) - 8.6@26.9c



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

Mr. Dan Prokop
 Encana
 2717 Co. Rd. 215
 Parachute, CO 81635

June 11, 2010

Date Received : May 29, 2010
 Description : Hells Hole 9122 Clearance
 Sample ID : SOUTH WALL
 Collected By : Brad Kieding
 Collection Date : 05/27/10 11:00

ESC Sample # : L461811-02
 Site ID :
 Project # : 762129

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.033	mg/kg	8270C	06/03/10	1
Acenaphthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Acenaphthylene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(a)anthracene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(a)pyrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(b)fluoranthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(g,h,i)perylene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(k)fluoranthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Chrysene	BDL	0.033	mg/kg	8270C	06/03/10	1
Dibenz(a,h)anthracene	BDL	0.033	mg/kg	8270C	06/03/10	1
Fluoranthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Fluorene	BDL	0.033	mg/kg	8270C	06/03/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Naphthalene	BDL	0.033	mg/kg	8270C	06/03/10	1
Phenanthrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Pyrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Surrogate Recovery						
Nitrobenzene-d5	84.9		% Rec.	8270C	06/03/10	1
2-Fluorobiphenyl	90.8		% Rec.	8270C	06/03/10	1
p-Terphenyl-d14	71.7		% Rec.	8270C	06/03/10	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: 06/11/10 11:19 Printed: 06/11/10 13:34
 L461811-02 (PH) - 8.6@26.9c



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

June 11, 2010

Mr. Dan Prokop
Encana
2717 Co. Rd. 215
Parachute, CO 81635

Date Received : May 29, 2010
Description : Hells Hole 9122 Clearance
Sample ID : WEST WALL NORTH
Collected By : Brad Kieding
Collection Date : 05/27/10 11:15

ESC Sample # : L461811-03
Site ID :
Project # : 762129

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/02/10	1
Chromium,Trivalent	12.	0.50	mg/kg	Calc.	06/10/10	1
ORP	140		mV	2580	06/01/10	1
pH	8.5		su	9045D	06/02/10	1
Sodium Adsorption Ratio	2.9			Calc.	06/02/10	1
Specific Conductance	1000		umhos/cm	9050AMod	06/02/10	1
Mercury	BDL	0.020	mg/kg	7471	06/02/10	1
Arsenic	15.	1.0	mg/kg	6010B	06/10/10	1
Barium	360	0.25	mg/kg	6010B	06/10/10	1
Cadmium	BDL	0.25	mg/kg	6010B	06/10/10	1
Chromium	12.	0.50	mg/kg	6010B	06/10/10	1
Copper	10.	1.0	mg/kg	6010B	06/10/10	1
Lead	4.8	0.25	mg/kg	6010B	06/10/10	1
Nickel	8.3	5.0	mg/kg	6010B	06/10/10	5
Selenium	BDL	1.0	mg/kg	6010B	06/10/10	1
Silver	BDL	0.50	mg/kg	6010B	06/10/10	1
Zinc	32.	7.5	mg/kg	6010B	06/10/10	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	06/03/10	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	98.5		% Rec.	602/8015	06/03/10	5
Benzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Toluene	BDL	0.025	mg/kg	8260B	06/10/10	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Total Xylenes	BDL	0.015	mg/kg	8260B	06/10/10	5
Surrogate Recovery						
Toluene-d8	91.5		% Rec.	8260B	06/10/10	5
Dibromofluoromethane	84.4		% Rec.	8260B	06/10/10	5
a,a,a-Trifluorotoluene	93.8		% Rec.	8260B	06/10/10	5
4-Bromofluorobenzene	89.2		% Rec.	8260B	06/10/10	5
TPH (GC/FID) High Fraction	15.	4.0	mg/kg	3546/DRO	06/03/10	1
Surrogate recovery(%) o-Terphenyl	77.7		% Rec.	3546/DRO	06/03/10	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
L461811-03 (PH) - 8.5@26.7c



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

June 11, 2010

Mr. Dan Prokop
Encana
2717 Co. Rd. 215
Parachute, CO 81635

Date Received : May 29, 2010
Description : Hells Hole 9122 Clearance
Sample ID : WEST WALL NORTH
Collected By : Brad Kieding
Collection Date : 05/27/10 11:15

ESC Sample # : L461811-03
Site ID :
Project # : 762129

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Lists various chemical compounds and their detection results.

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: 06/11/10 11:19 Printed: 06/11/10 13:34
L461811-03 (PH) - 8.5@26.7c



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

June 11, 2010

Mr. Dan Prokop
 Encana
 2717 Co. Rd. 215
 Parachute, CO 81635

Date Received : May 29, 2010
 Description : Hells Hole 9122 Clearance
 Sample ID : EAST WALL
 Collected By : Brad Kieding
 Collection Date : 05/27/10 10:30

ESC Sample # : L461811-04
 Site ID :
 Project # : 762129

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/02/10	1
Chromium,Trivalent	22.	0.50	mg/kg	Calc.	06/10/10	1
ORP	130		mV	2580	06/01/10	1
pH	8.7		su	9045D	06/02/10	1
Sodium Adsorption Ratio	8.2			Calc.	06/02/10	1
Specific Conductance	1000		umhos/cm	9050AMod	06/02/10	1
Mercury	BDL	0.020	mg/kg	7471	06/02/10	1
Arsenic	28.	1.0	mg/kg	6010B	06/10/10	1
Barium	410	0.25	mg/kg	6010B	06/10/10	1
Cadmium	0.29	0.25	mg/kg	6010B	06/10/10	1
Chromium	22.	0.50	mg/kg	6010B	06/10/10	1
Copper	23.	1.0	mg/kg	6010B	06/10/10	1
Lead	10.	0.25	mg/kg	6010B	06/10/10	1
Nickel	17.	5.0	mg/kg	6010B	06/10/10	5
Selenium	BDL	1.0	mg/kg	6010B	06/10/10	1
Silver	BDL	0.50	mg/kg	6010B	06/10/10	1
Zinc	64.	7.5	mg/kg	6010B	06/10/10	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	06/04/10	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	98.2		% Rec.	602/8015	06/04/10	5
Benzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Toluene	BDL	0.025	mg/kg	8260B	06/10/10	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Total Xylenes	BDL	0.015	mg/kg	8260B	06/10/10	5
Surrogate Recovery						
Toluene-d8	89.8		% Rec.	8260B	06/10/10	5
Dibromofluoromethane	84.6		% Rec.	8260B	06/10/10	5
a,a,a-Trifluorotoluene	89.2		% Rec.	8260B	06/10/10	5
4-Bromofluorobenzene	90.4		% Rec.	8260B	06/10/10	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	06/03/10	1
Surrogate recovery(%) o-Terphenyl	71.0		% Rec.	3546/DRO	06/03/10	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L461811-04 (PH) - 8.7@26.5c



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

June 11, 2010

Mr. Dan Prokop
Encana
2717 Co. Rd. 215
Parachute, CO 81635

Date Received : May 29, 2010
Description : Hells Hole 9122 Clearance
Sample ID : EAST WALL
Collected By : Brad Kieding
Collection Date : 05/27/10 10:30

ESC Sample # : L461811-04
Site ID :
Project # : 762129

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Lists various chemical parameters and their detection results.

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: 06/11/10 11:19 Printed: 06/11/10 13:34
L461811-04 (PH) - 8.7@26.5c



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

June 11, 2010

Mr. Dan Prokop
 Encana
 2717 Co. Rd. 215
 Parachute, CO 81635

Date Received : May 29, 2010
 Description : Hells Hole 9122 Clearance
 Sample ID : NORTH WALL
 Collected By : Brad Kieding
 Collection Date : 05/27/10 10:45

ESC Sample # : L461811-05
 Site ID :
 Project # : 762129

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	10.	mg/kg	3060A/7196A	06/02/10	5
Chromium,Trivalent	14.	0.50	mg/kg	Calc.	06/10/10	1
ORP	150		mV	2580	06/01/10	1
pH	8.4		su	9045D	06/02/10	1
Sodium Adsorption Ratio	4.8			Calc.	06/02/10	1
Specific Conductance	1800		umhos/cm	9050AMod	06/02/10	1
Mercury	BDL	0.020	mg/kg	7471	06/02/10	1
Arsenic	29.	1.0	mg/kg	6010B	06/10/10	1
Barium	450	0.25	mg/kg	6010B	06/10/10	1
Cadmium	BDL	0.25	mg/kg	6010B	06/10/10	1
Chromium	14.	0.50	mg/kg	6010B	06/10/10	1
Copper	13.	1.0	mg/kg	6010B	06/10/10	1
Lead	5.1	0.25	mg/kg	6010B	06/10/10	1
Nickel	5.0	5.0	mg/kg	6010B	06/10/10	5
Selenium	BDL	1.0	mg/kg	6010B	06/10/10	1
Silver	BDL	0.50	mg/kg	6010B	06/10/10	1
Zinc	42.	7.5	mg/kg	6010B	06/10/10	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	06/04/10	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	98.1		% Rec.	602/8015	06/04/10	5
Benzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Toluene	BDL	0.025	mg/kg	8260B	06/10/10	5
Ethylbenzene	BDL	0.0050	mg/kg	8260B	06/10/10	5
Total Xylenes	BDL	0.015	mg/kg	8260B	06/10/10	5
Surrogate Recovery						
Toluene-d8	90.8		% Rec.	8260B	06/10/10	5
Dibromofluoromethane	80.2		% Rec.	8260B	06/10/10	5
a,a,a-Trifluorotoluene	95.7		% Rec.	8260B	06/10/10	5
4-Bromofluorobenzene	92.3		% Rec.	8260B	06/10/10	5
TPH (GC/FID) High Fraction	18.	4.0	mg/kg	3546/DRO	06/03/10	1
Surrogate recovery(%) o-Terphenyl	74.5		% Rec.	3546/DRO	06/03/10	1

Polynuclear Aromatic Hydrocarbons

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L461811-05 (CR6) - diluted due to dark sample color
 L461811-05 (PH) - 8.4@26.7c



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

June 11, 2010

Mr. Dan Prokop
 Encana
 2717 Co. Rd. 215
 Parachute, CO 81635

Date Received : May 29, 2010
 Description : Hells Hole 9122 Clearance
 Sample ID : NORTH WALL
 Collected By : Brad Kieding
 Collection Date : 05/27/10 10:45

ESC Sample # : L461811-05
 Site ID :
 Project # : 762129

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Anthracene	BDL	0.033	mg/kg	8270C	06/03/10	1
Acenaphthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Acenaphthylene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(a)anthracene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(a)pyrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(b)fluoranthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(g,h,i)perylene	BDL	0.033	mg/kg	8270C	06/03/10	1
Benzo(k)fluoranthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Chrysene	BDL	0.033	mg/kg	8270C	06/03/10	1
Dibenz(a,h)anthracene	BDL	0.033	mg/kg	8270C	06/03/10	1
Fluoranthene	BDL	0.033	mg/kg	8270C	06/03/10	1
Fluorene	BDL	0.033	mg/kg	8270C	06/03/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Naphthalene	BDL	0.033	mg/kg	8270C	06/03/10	1
Phenanthrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Pyrene	BDL	0.033	mg/kg	8270C	06/03/10	1
Surrogate Recovery						
Nitrobenzene-d5	78.9		% Rec.	8270C	06/03/10	1
2-Fluorobiphenyl	85.1		% Rec.	8270C	06/03/10	1
p-Terphenyl-d14	112.		% Rec.	8270C	06/03/10	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: 06/11/10 11:19 Printed: 06/11/10 13:34
 L461811-05 (CR6) - diluted due to dark sample color
 L461811-05 (PH) - 8.4@26.7c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L461811-01	WG481053	SAMP	Chromium,Hexavalent	R1240908	J3J6
L461811-03	WG481717	SAMP	TPH (GC/FID) Low Fraction	R1243009	J3
L461811-05	WG481053	SAMP	Chromium,Hexavalent	R1240908	O

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
0	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary 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
06/11/10 at 13:34:43

TSR Signing Reports: 151
RX - Priority Rush

Sample: L461811-01 Account: ENCRCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/11/10 11:19

Sample: L461811-02 Account: ENCRCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/11/10 11:19

Sample: L461811-03 Account: ENCRCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/11/10 11:19

Sample: L461811-04 Account: ENCRCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/11/10 11:19

Sample: L461811-05 Account: ENCRCO Received: 05/29/10 09:00 Due Date: 06/07/10 00:00 RPT Date: 06/11/10 11:19



YOUR LAB OF CHOICE

Encana
 Mr. Dan Prokop
 2717 Co. Rd. 215
 Parachute, CO 81635

Quality Assurance Report
 Level II

L461811

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

June 11, 2010

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Specific Conductance	1.80	umhos/cm			WG481203	06/02/10 08:52
Mercury	< .02	mg/kg			WG481229	06/02/10 10:12
Chromium, Hexavalent	< 2	mg/kg			WG481053	06/02/10 13:27
pH	5.70	su			WG481052	06/02/10 16:11
Acenaphthene	< .033	mg/kg			WG481503	06/03/10 09:12
Acenaphthylene	< .033	mg/kg			WG481503	06/03/10 09:12
Anthracene	< .033	mg/kg			WG481503	06/03/10 09:12
Benzo(a)anthracene	< .033	mg/kg			WG481503	06/03/10 09:12
Benzo(a)pyrene	< .033	mg/kg			WG481503	06/03/10 09:12
Benzo(b)fluoranthene	< .033	mg/kg			WG481503	06/03/10 09:12
Benzo(g,h,i)perylene	< .033	mg/kg			WG481503	06/03/10 09:12
Benzo(k)fluoranthene	< .033	mg/kg			WG481503	06/03/10 09:12
Chrysene	< .033	mg/kg			WG481503	06/03/10 09:12
Dibenz(a,h)anthracene	< .033	mg/kg			WG481503	06/03/10 09:12
Fluoranthene	< .033	mg/kg			WG481503	06/03/10 09:12
Fluorene	< .033	mg/kg			WG481503	06/03/10 09:12
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG481503	06/03/10 09:12
Naphthalene	< .033	mg/kg			WG481503	06/03/10 09:12
Phenanthrene	< .033	mg/kg			WG481503	06/03/10 09:12
Pyrene	< .033	mg/kg			WG481503	06/03/10 09:12
2-Fluorobiphenyl		% Rec.	66.81	37-123	WG481503	06/03/10 09:12
Nitrobenzene-d5		% Rec.	56.31	19-129	WG481503	06/03/10 09:12
p-Terphenyl-d14		% Rec.	80.34	34-149	WG481503	06/03/10 09:12
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG481717	06/03/10 21:22
a,a,a-Trifluorotoluene(FID)		% Rec.	100.6	59-128	WG481717	06/03/10 21:22
TPH (GC/FID) High Fraction	< 4	ppm			WG481369	06/03/10 17:37
o-Terphenyl		% Rec.	69.43	50-150	WG481369	06/03/10 17:37
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG481651	06/04/10 08:19
a,a,a-Trifluorotoluene(FID)		% Rec.	106.4	59-128	WG481651	06/04/10 08:19
Benzene	< .001	mg/kg			WG482741	06/09/10 20:12
Ethylbenzene	< .001	mg/kg			WG482741	06/09/10 20:12
Toluene	< .005	mg/kg			WG482741	06/09/10 20:12
Total Xylenes	< .003	mg/kg			WG482741	06/09/10 20:12
4-Bromofluorobenzene		% Rec.	90.71	59-140	WG482741	06/09/10 20:12
Dibromofluoromethane		% Rec.	81.04	63-139	WG482741	06/09/10 20:12
Toluene-d8		% Rec.	88.03	84-116	WG482741	06/09/10 20:12
a,a,a-Trifluorotoluene		% Rec.	96.27	80-118	WG482741	06/09/10 20:12
Arsenic	< 1	mg/kg			WG481297	06/10/10 13:24
Barium	< .25	mg/kg			WG481297	06/10/10 13:24
Cadmium	< .25	mg/kg			WG481297	06/10/10 13:24
Chromium	< .5	mg/kg			WG481297	06/10/10 13:24

* 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
Mr. Dan Prokop
2717 Co. Rd. 215
Parachute, CO 81635

Quality Assurance Report
Level II

L461811

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

June 11, 2010

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Copper	< 1	mg/kg			WG481297	06/10/10 13:24
Lead	< .25	mg/kg			WG481297	06/10/10 13:24
Nickel	< 1	mg/kg			WG481297	06/10/10 13:24
Selenium	< 1	mg/kg			WG481297	06/10/10 13:24
Silver	< .5	mg/kg			WG481297	06/10/10 13:24
Zinc	< 1.5	mg/kg			WG481297	06/10/10 13:24

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
ORP	mV	36.0	41.0	13.0	20	L461741-07	WG481215
Specific Conductance	umhos/cm	1700	1700	1.17	20	L461328-01	WG481203
Specific Conductance	umhos/cm	1900	1800	4.13	20	L461811-05	WG481203
Mercury	mg/kg	0.0190	0.0200	5.13	20	L461811-02	WG481229
Chromium,Hexavalent	mg/kg	0	0	0	20	L461323-01	WG481053
pH	su	6.90	6.10	12.3*	1	L461900-02	WG481052
pH	su	6.10	6.90	12.3*	1	L461323-01	WG481052
Arsenic	mg/kg	6.00	6.40	5.62	20	L461780-41	WG481297
Barium	mg/kg	100.	99.0	2.99	20	L461780-41	WG481297
Cadmium	mg/kg	0	0.150	NA	20	L461780-41	WG481297
Chromium	mg/kg	9.90	10.0	1.41	20	L461780-41	WG481297
Copper	mg/kg	10.0	10.0	0.995	20	L461780-41	WG481297
Lead	mg/kg	57.0	37.0	42.2*	20	L461780-41	WG481297
Nickel	mg/kg	8.30	8.46	2.03	20	L461780-41	WG481297
Selenium	mg/kg	0	0	0	20	L461780-41	WG481297
Silver	mg/kg	0.920	0.840	9.31	20	L461780-41	WG481297
Zinc	mg/kg	69.0	67.0	3.09	20	L461780-41	WG481297

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
ORP	mV	229	220.	96.1	95.6-104.37	WG481215
Specific Conductance	umhos/cm	406	410.	101.	85-115	WG481203
Mercury	mg/kg	8.77	9.33	106.	71.6-127.7	WG481229
Chromium,Hexavalent	mg/kg	100	91.6	91.6	50-143	WG481053
pH	su	9.63	9.50	98.7	98.4-101.3	WG481052
Acenaphthene	mg/kg	.167	0.140	83.9	44-117	WG481503
Acenaphthylene	mg/kg	.167	0.155	92.7	43-118	WG481503
Anthracene	mg/kg	.167	0.150	89.7	42-127	WG481503

* 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
Mr. Dan Prokop
2717 Co. Rd. 215
Parachute, CO 81635

Quality Assurance Report
Level II

L461811

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

June 11, 2010

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzo(a)anthracene	mg/kg	.167	0.146	87.2	45-127	WG481503
Benzo(a)pyrene	mg/kg	.167	0.148	88.6	46-123	WG481503
Benzo(b)fluoranthene	mg/kg	.167	0.148	88.7	43-126	WG481503
Benzo(g,h,i)perylene	mg/kg	.167	0.146	87.7	43-128	WG481503
Benzo(k)fluoranthene	mg/kg	.167	0.142	85.2	40-126	WG481503
Chrysene	mg/kg	.167	0.151	90.3	44-129	WG481503
Dibenz(a,h)anthracene	mg/kg	.167	0.144	86.5	43-127	WG481503
Fluoranthene	mg/kg	.167	0.155	92.8	44-125	WG481503
Fluorene	mg/kg	.167	0.154	92.4	45-121	WG481503
Indeno(1,2,3-cd)pyrene	mg/kg	.167	0.147	87.9	43-127	WG481503
Naphthalene	mg/kg	.167	0.136	81.5	32-113	WG481503
Phenanthrene	mg/kg	.167	0.148	88.6	43-124	WG481503
Pyrene	mg/kg	.167	0.140	83.9	47-128	WG481503
2-Fluorobiphenyl				86.98	37-123	WG481503
Nitrobenzene-d5				73.49	19-129	WG481503
p-Terphenyl-d14				95.39	34-149	WG481503
TPH (GC/FID) Low Fraction	mg/kg	5.5	4.63	84.1	67-135	WG481717
a,a,a-Trifluorotoluene(FID)				99.98	59-128	WG481717
TPH (GC/FID) High Fraction	ppm	60	47.7	79.5	50-150	WG481369
o-Terphenyl				81.52	50-150	WG481369
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.93	108.	67-135	WG481651
a,a,a-Trifluorotoluene(FID)				97.72	59-128	WG481651
Benzene	mg/kg	.025	0.0203	81.4	65-128	WG482741
Ethylbenzene	mg/kg	.025	0.0236	94.4	74-128	WG482741
Toluene	mg/kg	.025	0.0210	84.1	70-120	WG482741
Total Xylenes	mg/kg	.075	0.0686	91.5	74-127	WG482741
4-Bromofluorobenzene				94.00	59-140	WG482741
Dibromofluoromethane				79.93	63-139	WG482741
Toluene-d8				92.09	84-116	WG482741
a,a,a-Trifluorotoluene				98.04	80-118	WG482741
Arsenic	mg/kg	192	198.	103.	78.6-120.8	WG481297
Barium	mg/kg	420	417.	99.3	78.8-121.4	WG481297
Cadmium	mg/kg	70.1	69.7	99.4	78.5-121.5	WG481297
Chromium	mg/kg	168	170.	101.	80.4-120.2	WG481297
Copper	mg/kg	122	123.	101.	81.6-119.7	WG481297
Lead	mg/kg	113	117.	104.	77.3-122.1	WG481297
Nickel	mg/kg	74.1	86.0	116.	78.8-121.2	WG481297
Selenium	mg/kg	176	185.	105.	75.6-125.0	WG481297
Silver	mg/kg	115	113.	98.3	66-133.9	WG481297
Zinc	mg/kg	437	425.	97.3	78.5-121.7	WG481297

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
ORP	mV	220.	220.	96.0	95.6-104.37	0	20	WG481215
Specific Conductance	umhos/	410.	410.	101.	85-115	0	20	WG481203

* 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
Mr. Dan Prokop
2717 Co. Rd. 215
Parachute, CO 81635

Quality Assurance Report
Level II

L461811

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

June 11, 2010

Analyte	Units	Laboratory Control		Sample Duplicate	Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Chromium,Hexavalent	mg/kg	97.2	91.6	97.0	50-143	5.93	20	WG481053
pH	su	9.60	9.50	100.	98.4-101.3	1.05	20	WG481052
Acenaphthene	mg/kg	0.134	0.140	80.0	44-117	4.39	21	WG481503
Acenaphthylene	mg/kg	0.144	0.155	86.0	43-118	7.38	20	WG481503
Anthracene	mg/kg	0.145	0.150	87.0	42-127	3.23	21	WG481503
Benzo(a)anthracene	mg/kg	0.137	0.146	82.0	45-127	6.40	21	WG481503
Benzo(a)pyrene	mg/kg	0.143	0.148	86.0	46-123	3.30	20	WG481503
Benzo(b)fluoranthene	mg/kg	0.134	0.148	80.0	43-126	9.85	27	WG481503
Benzo(g,h,i)perylene	mg/kg	0.142	0.146	85.0	43-128	2.71	20	WG481503
Benzo(k)fluoranthene	mg/kg	0.139	0.142	83.0	40-126	2.64	32	WG481503
Chrysene	mg/kg	0.154	0.151	92.0	44-129	1.88	22	WG481503
Dibenz(a,h)anthracene	mg/kg	0.143	0.144	85.0	43-127	1.14	20	WG481503
Fluoranthene	mg/kg	0.148	0.155	89.0	44-125	4.31	22	WG481503
Fluorene	mg/kg	0.148	0.154	89.0	45-121	3.98	20	WG481503
Indeno(1,2,3-cd)pyrene	mg/kg	0.143	0.147	86.0	43-127	2.64	21	WG481503
Naphthalene	mg/kg	0.127	0.136	76.0	32-113	6.49	26	WG481503
Phenanthrene	mg/kg	0.143	0.148	85.0	43-124	3.70	21	WG481503
Pyrene	mg/kg	0.140	0.140	84.0	47-128	0.156	20	WG481503
2-Fluorobiphenyl				81.38	37-123			WG481503
Nitrobenzene-d5				70.34	19-129			WG481503
p-Terphenyl-d14				93.25	34-149			WG481503
TPH (GC/FID) Low Fraction	mg/kg	4.71	4.63	86.0	67-135	1.87	20	WG481717
a,a,a-Trifluorotoluene(FID)				100.2	59-128			WG481717
TPH (GC/FID) High Fraction	ppm	48.4	47.7	80.0	50-150	1.33	25	WG481369
o-Terphenyl				81.06	50-150			WG481369
TPH (GC/FID) Low Fraction	mg/kg	5.79	5.93	105.	67-135	2.40	20	WG481651
a,a,a-Trifluorotoluene(FID)				97.21	59-128			WG481651
Benzene	mg/kg	0.0231	0.0203	92.0	65-128	12.9	20	WG482741
Ethylbenzene	mg/kg	0.0262	0.0236	105.	74-128	10.4	20	WG482741
Toluene	mg/kg	0.0242	0.0210	97.0	70-120	14.2	20	WG482741
Total Xylenes	mg/kg	0.0783	0.0686	104.	74-127	13.2	20	WG482741
4-Bromofluorobenzene				94.27	59-140			WG482741
Dibromofluoromethane				77.39	63-139			WG482741
Toluene-d8				90.00	84-116			WG482741
a,a,a-Trifluorotoluene				95.81	80-118			WG482741

Analyte	Units	Matrix Spike			Limit	Ref Samp	Batch
		MS Res	Ref Res	TV			
Mercury	mg/kg	0.260	0.0200	.25	70-130	L461811-02	WG481229
Chromium,Hexavalent	mg/kg	1.59	0	20	50-150	L461811-01	WG481053
TPH (GC/FID) Low Fraction	mg/kg	23.5	0	5.5	55-109	L461811-03	WG481717

* 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
Mr. Dan Prokop
2717 Co. Rd. 215
Parachute, CO 81635

Quality Assurance Report
Level II

L461811

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

June 11, 2010

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
a,a,a-Trifluorotoluene(FID)					102.6	59-128		
TPH (GC/FID) High Fraction	ppm	43.2	0	60	71.9	50-150	L461811-01	WG481369
o-Terphenyl					70.72	50-150		WG481369
Acenaphthene	mg/kg	0.145	0	.167	86.7	38-121	L461820-27	WG481503
Acenaphthylene	mg/kg	0.156	0	.167	93.5	39-120	L461820-27	WG481503
Anthracene	mg/kg	0.161	0	.167	96.4	35-133	L461820-27	WG481503
Benzo(a)anthracene	mg/kg	0.161	0	.167	96.1	35-136	L461820-27	WG481503
Benzo(a)pyrene	mg/kg	0.152	0	.167	91.1	37-131	L461820-27	WG481503
Benzo(b)fluoranthene	mg/kg	0.137	0	.167	82.0	29-145	L461820-27	WG481503
Benzo(g,h,i)perylene	mg/kg	0.130	0	.167	77.6	10-139	L461820-27	WG481503
Benzo(k)fluoranthene	mg/kg	0.148	0	.167	88.4	31-140	L461820-27	WG481503
Chrysene	mg/kg	0.148	0	.167	88.5	34-137	L461820-27	WG481503
Dibenz(a,h)anthracene	mg/kg	0.121	0	.167	72.5	21-132	L461820-27	WG481503
Fluoranthene	mg/kg	0.176	0	.167	105.	34-132	L461820-27	WG481503
Fluorene	mg/kg	0.179	0	.167	107.	38-126	L461820-27	WG481503
Indeno(1,2,3-cd)pyrene	mg/kg	0.128	0	.167	76.6	17-134	L461820-27	WG481503
Naphthalene	mg/kg	0.140	0	.167	83.7	24-122	L461820-27	WG481503
Phenanthrene	mg/kg	0.170	0	.167	102.	38-128	L461820-27	WG481503
Pyrene	mg/kg	0.152	0	.167	90.9	35-141	L461820-27	WG481503
2-Fluorobiphenyl					105.1	37-123		WG481503
Nitrobenzene-d5					71.74	19-129		WG481503
p-Terphenyl-d14					97.05	34-149		WG481503
TPH (GC/FID) Low Fraction	mg/kg	15.5	0	5.5	56.5	55-109	L461687-04	WG481651
Benzene	mg/kg	0.127	0	.025	102.	16-143	L461824-04	WG482741
Ethylbenzene	mg/kg	0.125	0	.025	100.	12-137	L461824-04	WG482741
Toluene	mg/kg	0.124	0	.025	99.5	12-136	L461824-04	WG482741
Total Xylenes	mg/kg	0.373	0	.075	99.4	10-138	L461824-04	WG482741
4-Bromofluorobenzene					88.67	59-140		WG482741
Dibromofluoromethane					82.86	63-139		WG482741
Toluene-d8					92.35	84-116		WG482741
a,a,a-Trifluorotoluene					96.80	80-118		WG482741
Arsenic	mg/kg	57.3	6.40	50	102.	75-125	L461780-41	WG481297
Barium	mg/kg	150.	99.0	50	102.	75-125	L461780-41	WG481297
Cadmium	mg/kg	48.2	0.150	50	96.1	75-125	L461780-41	WG481297
Chromium	mg/kg	58.1	10.0	50	96.2	75-125	L461780-41	WG481297
Copper	mg/kg	60.8	10.0	50	102.	75-125	L461780-41	WG481297
Lead	mg/kg	94.4	37.0	50	115.	75-125	L461780-41	WG481297
Nickel	mg/kg	60.0	8.46	50	103.	75-125	L461780-41	WG481297
Selenium	mg/kg	47.2	0	50	94.4	75-125	L461780-41	WG481297
Silver	mg/kg	48.8	0.840	50	95.9	75-125	L461780-41	WG481297
Zinc	mg/kg	113.	67.0	50	92.0	75-125	L461780-41	WG481297

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Mercury	mg/kg	0.267	0.260	98.8	70-130	2.66	20	L461811-02	WG481229
Chromium,Hexavalent	mg/kg	0.884	1.59	4.42*	50-150	57.1*	20	L461811-01	WG481053

* 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
Mr. Dan Prokop
2717 Co. Rd. 215
Parachute, CO 81635

Quality Assurance Report
Level II

L461811

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

June 11, 2010

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
TPH (GC/FID) Low Fraction	mg/kg	17.6	23.5	64.0	55-109	28.7*	20	L461811-03	WG481717
a,a,a-Trifluorotoluene(FID)				82.06	59-128				WG481717
TPH (GC/FID) High Fraction	ppm	51.1	43.2	85.1	50-150	16.8	25	L461811-01	WG481369
o-Terphenyl				85.15	50-150				WG481369
Acenaphthene	mg/kg	0.140	0.145	83.6	38-121	3.69	23	L461820-27	WG481503
Acenaphthylene	mg/kg	0.140	0.156	84.0	39-120	10.7	22	L461820-27	WG481503
Anthracene	mg/kg	0.163	0.161	97.6	35-133	1.24	23	L461820-27	WG481503
Benzo(a)anthracene	mg/kg	0.159	0.161	95.1	35-136	1.10	23	L461820-27	WG481503
Benzo(a)pyrene	mg/kg	0.144	0.152	86.1	37-131	5.62	22	L461820-27	WG481503
Benzo(b)fluoranthene	mg/kg	0.162	0.137	97.0	29-145	16.7	33	L461820-27	WG481503
Benzo(g,h,i)perylene	mg/kg	0.136	0.130	81.2	10-139	4.58	26	L461820-27	WG481503
Benzo(k)fluoranthene	mg/kg	0.150	0.148	89.7	31-140	1.47	34	L461820-27	WG481503
Chrysene	mg/kg	0.146	0.148	87.6	34-137	1.03	23	L461820-27	WG481503
Dibenz(a,h)anthracene	mg/kg	0.130	0.121	77.7	21-132	6.90	25	L461820-27	WG481503
Fluoranthene	mg/kg	0.176	0.176	105.	34-132	0.212	24	L461820-27	WG481503
Fluorene	mg/kg	0.156	0.179	93.2	38-126	13.9	23	L461820-27	WG481503
Indeno(1,2,3-cd)pyrene	mg/kg	0.133	0.128	79.4	17-134	3.58	25	L461820-27	WG481503
Naphthalene	mg/kg	0.147	0.140	88.3	24-122	5.31	29	L461820-27	WG481503
Phenanthrene	mg/kg	0.160	0.170	95.7	38-128	6.07	25	L461820-27	WG481503
Pyrene	mg/kg	0.153	0.152	91.5	35-141	0.737	25	L461820-27	WG481503
2-Fluorobiphenyl				98.15	37-123				WG481503
Nitrobenzene-d5				68.48	19-129				WG481503
p-Terphenyl-d14				101.0	34-149				WG481503
TPH (GC/FID) Low Fraction	mg/kg	16.7	15.5	60.8	55-109	7.25	20	L461687-04	WG481651
Benzene	mg/kg	0.110	0.127	87.8	16-143	14.8	31	L461824-04	WG482741
Ethylbenzene	mg/kg	0.116	0.125	93.2	12-137	7.29	36	L461824-04	WG482741
Toluene	mg/kg	0.108	0.124	86.7	12-136	13.7	32	L461824-04	WG482741
Total Xylenes	mg/kg	0.335	0.373	89.3	10-138	10.7	36	L461824-04	WG482741
4-Bromofluorobenzene				91.46	59-140				WG482741
Dibromofluoromethane				83.49	63-139				WG482741
Toluene-d8				92.20	84-116				WG482741
a,a,a-Trifluorotoluene				94.90	80-118				WG482741
Arsenic	mg/kg	58.6	57.3	104.	75-125	2.24	20	L461780-41	WG481297
Barium	mg/kg	146.	150.	94.0	75-125	2.70	20	L461780-41	WG481297
Cadmium	mg/kg	49.6	48.2	98.9	75-125	2.86	20	L461780-41	WG481297
Chromium	mg/kg	59.6	58.1	99.2	75-125	2.55	20	L461780-41	WG481297
Copper	mg/kg	61.9	60.8	104.	75-125	1.79	20	L461780-41	WG481297
Lead	mg/kg	93.9	94.4	114.	75-125	0.531	20	L461780-41	WG481297
Nickel	mg/kg	61.1	60.0	105.	75-125	1.82	20	L461780-41	WG481297
Selenium	mg/kg	48.7	47.2	97.4	75-125	3.13	20	L461780-41	WG481297
Silver	mg/kg	50.8	48.8	99.9	75-125	4.02	20	L461780-41	WG481297
Zinc	mg/kg	114.	113.	94.0	75-125	0.881	20	L461780-41	WG481297

Batch number /Run number / Sample number cross reference

WG481215: R1239891: L461811-01 02 03 04 05
 WG481123: R1239899: L461811-01 02 03 04 05
 WG481203: R1240431: L461811-01 02 03 04 05

* 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
Mr. Dan Prokop
2717 Co. Rd. 215

Parachute, CO 81635

Quality Assurance Report
Level II

L461811

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

June 11, 2010

WG481229: R1240649: L461811-01 02 03 04 05
WG481053: R1240908: L461811-01 02 03 04 05
WG481052: R1241270: L461811-01 02 03 04 05
WG481503: R1241748: L461811-01 02 03 04 05
WG481717: R1243009: L461811-03 04 05
WG481369: R1243428: L461811-01 02 03 04 05
WG481651: R1246471: L461811-01 02
WG482741: R1248609: L461811-01 02 03 04 05
WG481297: R1249609: L461811-01 02 03 04 05

* * 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
Mr. Dan Prokop
2717 Co. Rd. 215

Parachute, CO 81635

Quality Assurance Report
Level II

L461811

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

June 11, 2010

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.