



D23 596 (Location: 335672)
North Pit (Facility: 425558)
South Pit (Facility: 425559)
Encana Oil & Gas (USA) Inc. (Operator: 100185)

REPORT OF WORK COMPLETED

- North Pit (425558): Form 27 (Doc: 2232903) (Rem: 7749)
- South Pit (425559): Form 27 (Doc: 2232904) (Rem: 7750)

Encana Oil & Gas (USA) Inc. (Encana) is submitting this Form 4 (Report of Work Completed and Notification of Completion) to document closure of two (2) lined earthen pits on a well pad in the North Parachute area of operation in Garfield County.

Initial pit closure and investigation activities were carried out on July 22, 2010. Both pits were drained, and the liner and above liner solids were removed for offsite disposal. Following removal of the pit liner, composite samples were collected from the bottom of each pit and sent to the lab to be analyzed for COGCC Table 910-1 constituents of concern. Upon receipt of laboratory results identifying TPH concentrations above the allowable limit, heavy equipment was used to remove potentially impacted material from each pit excavation. Excavated materials from each pit were stockpiled separately and characterized with composite samples on August 26, 2010. Following receipt of lab results confirming TPH concentrations in pit excavations and stockpiles, the location was allowed to rest through the winter.

On March 31, 2011 the pit excavations and stockpiles were characterized with composite samples. The south pit and stockpile complied with the allowable concentration for TPH. The south pit stockpile was placed in the south pit excavation and the pit was backfilled to grade with native material.

On May 24, 2011 an environmental contractor using a hydrocarbon field screening test kit supported removal of remaining soil impacts from the north pit. When field screening results indicated clearance of TPH impacts, a grab sample was collected of remaining material and sent to the lab for confirmation. Seven (7) discreet grab samples were collected from the cleared pit bottom. Material excavated from the pit was added to the existing stockpile of material, and the stockpile was laid out on location to support natural attenuation of residual hydrocarbon impacts.

On June 10, 2011 the stockpiled material laid out on location was characterized using a combination of field screening with a photo-ionizing detector supported by laboratory analysis. Field screening and laboratory results showed that materials on the north end of the stockpile were heavily impacted, while the southern end of the stockpile had relatively light TPH concentrations. July 1 composite samples confirmed clearance of the southern end of the stockpile, which was placed in the pit excavation at the direction of the environmental contractor.

Active remediation of stockpiled material began in mid-June, 2011 with fertilizer application, and bi-weekly watering and rotation of the stockpile with a tractor. Field screening and laboratory results demonstrated the effectiveness of these efforts as concentrations continued to decline in sample results from August to November, 2011. In preparation for winter weather and operations, the remaining impacted material was placed in the north pit excavation with fertilizer and water in November, 2011.

In December, 2011 a stockpile of material was discovered on the adjacent A15 596 well pad (Location ID: 335800). In support of pit construction activities at that location, approximately 600 yards of material was transported to the D23 location for remediation and final disposal. Both locations and associated road infrastructure occur on Encana owned surface. The transported material appeared to be associated with



the operation of a previous pit on the A15, and consisted primarily of drill cuttings. The stockpiled A15 material was characterized initially on December 12, 2011.

On April 25, 2012 the stockpile of material placed in the north pit excavation prior to winter operations was removed from the pit excavation and characterized with a composite sample. The material left in the pit was cleared with a grab sample at the perceived low point that existed before the material was added to the excavation the previous fall. The clearance point had minor TPH exceedences of COGCC Table 910-1 upon receipt of lab results. A subsequent sample on June 5, 2012 demonstrated compliance with TPH concentrations.

NOTIFICATION OF COMPLETION

Clearance samples collected from the pit excavations and soil stockpiles were within COGCC Table 910-1 allowable concentration for TPH. The arsenic concentrations are above the allowable concentration in Table 910-1, but are within the range of background values for 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 values as the allowable concentration for this constituent. With regards to the inorganic constituents (SAR, EC, pH), the soils represented by these samples are within the former pit footprint, are greater than five feet below the current working surface, and will be at an even greater depth below the final reclaimed working surface where the constituents will have no effect on revegetation efforts.

After receipt of laboratory results demonstrating compliance for the pit excavations and soil stockpiles, the stockpiled materials were returned to the respective pits. An additional 600 yards of material from the A15 well pad was also placed in the north pit excavation. Both excavations were backfilled to grade with native material.

If the information provided here is satisfactory, please close the associated remediation projects, and pit facilities, and provide documentation of these record closures.

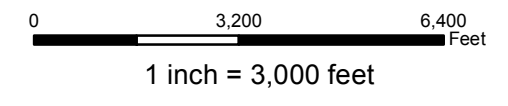
ATTACHMENTS

1. Topographic Location Map
2. Laboratory Results Summary Table
3. Laboratory Reports

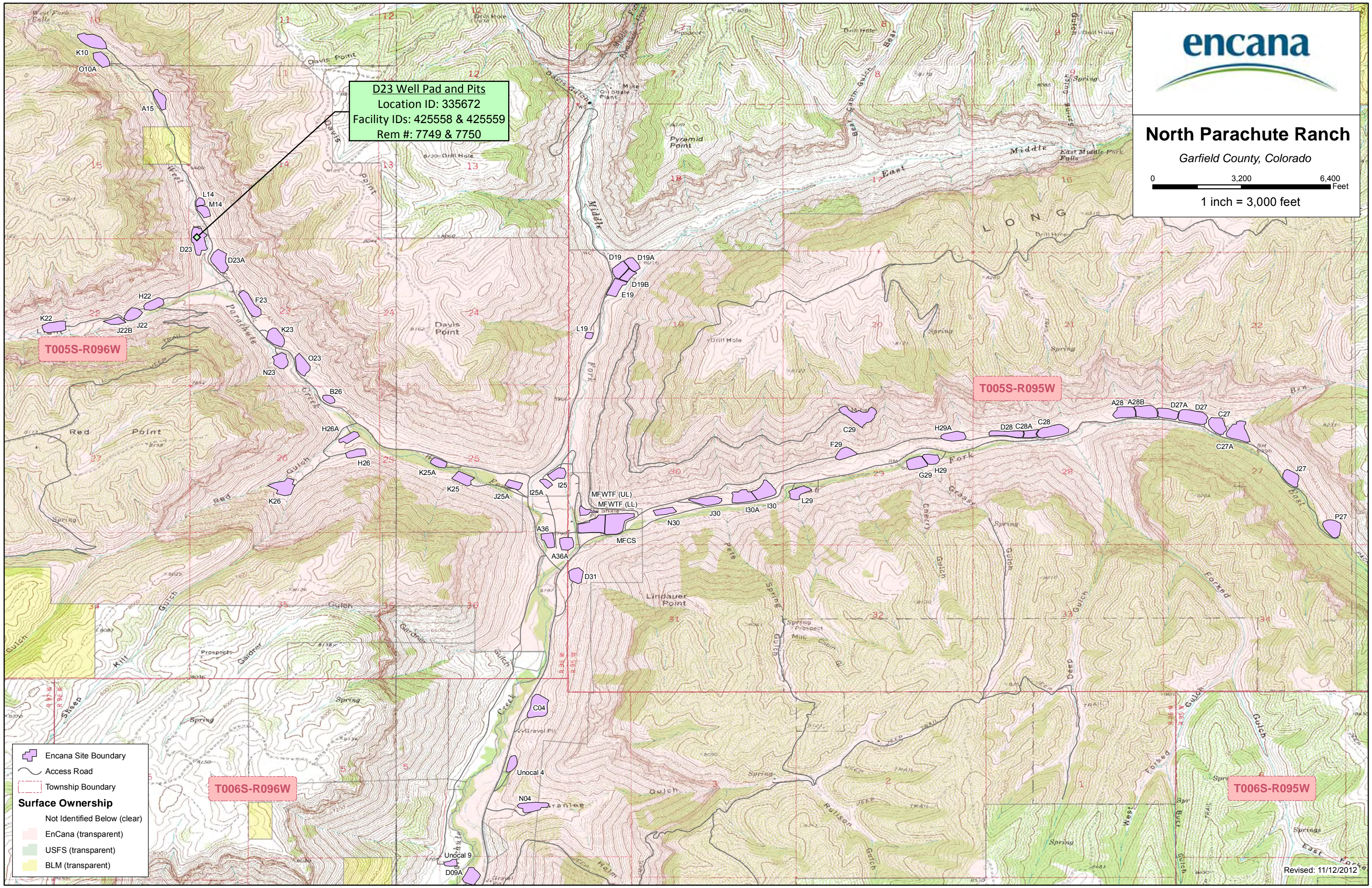


North Parachute Ranch

Garfield County, Colorado



D23 Well Pad and Pits
Location ID: 335672
Facility IDs: 425558 & 425559
Rem #: 7749 & 7750



Encana Site Boundary
 Access Road
 Township Boundary

Surface Ownership

- Not Identified Below (clear)
- EnCana (transparent)
- USFS (transparent)
- BLM (transparent)

Location	Sample Date:	Sample Matrix	Matrix Notes	Organic Compounds in Soil (mg/kg [ppm])																	Inorganics in Soil			Metals in Soil (mg/kg [ppm])																
				TPH (total volatile and extractable petroleum hydrocarbons)	TPH-GRO (C6-C10) Low Fraction	TPH-DRO (C10-C36) High Fraction	Benzene	Toluene	Ethylbenzene	Xylenes - total	Acenaphthene	Anthracene	Benzo(A)anthracene	Benzo(B)fluoranthene	Benzo(K)fluoranthene	Benzo(A)pyrene	Chrysene	Dibenzo(A,H)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-C,D)pyrene	Naphthalene	Pyrene	EC (<4 mmhos/cm or 2x background)	SAR (calculation)	pH	Arsenic	Barium - EPA Total Barium	Cadmium	Chromium (III)	Chromium (VI)	Copper	Lead (inorganic)	Mercury	Nickel (soluble salts)	Selenium	Silver	Zinc		
Allowable Concentration -->				500			0.17	85	100	175	1000	1000	0.22	0.22	2.2	0.022	22	0.022	1000	1000	0.22	23	1000		<12)	(6-9)	0.39	15000	70	120000	23	3100	400	23	1600	390	390	23000		
D23	04/25/12	MOI	A15 spoil 1 [SW]	190	BDL	190																																		
D23	04/25/12	MOI	A15 spoil 2 [MID S]	270	BDL	270																																		
D23	04/25/12	MOI	A15 spoil 3 [SE]	300	BDL	300																																		
D23	04/25/12	MOI	A15 spoil 4 [NE]	410.59	0.59	410																																		
D23	04/25/12	MOI	A15 spoil 5 [MID N]	310	BDL	310																																		
D23	04/25/12	MOI	A15 spoil 6 [NW]	260	BDL	260																																		
D23	04/25/12	Pit	N pit - composite (post-winter clearance)	240	BDL	240																																		
D23	04/25/12	Pit	N pit - low spot (post-winter clearance)	681.4	1.4	680																																		
D23	04/25/12	Pit	N pit - low spot (TPH rerun)	580		580																																		
D23	06/05/12	Pit	N pit - low spot (post-winter clearance)	180	BDL	180																																		



Technical Report for

EnCana

D23 Pit Closure

Accutest Job Number: D15555

Sampling Date: 07/22/10

Report to:

EnCana

christopher.hines@encana.com

ATTN: Chris Hines

Total number of pages in report: 80



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Jesse L. Smith
Laboratory Director

Client Service contact: Amanda Kissell 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW) UT (NELAP CO00049)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.



Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	8
3.1: D15555-1: D23-S.PIT-072210	9
3.2: D15555-1A: D23-S.PIT-072210	15
3.3: D15555-2: D23-N.PIT-072210	17
3.4: D15555-2A: D23-N.PIT-072210	23
Section 4: Misc. Forms	25
4.1: Chain of Custody	26
Section 5: GC/MS Volatiles - QC Data Summaries	28
5.1: Method Blank Summary	29
5.2: Blank Spike Summary	30
5.3: Matrix Spike/Matrix Spike Duplicate Summary	31
Section 6: GC/MS Semi-volatiles - QC Data Summaries	32
6.1: Method Blank Summary	33
6.2: Blank Spike Summary	34
6.3: Matrix Spike/Matrix Spike Duplicate Summary	35
Section 7: GC Volatiles - QC Data Summaries	36
7.1: Method Blank Summary	37
7.2: Blank Spike Summary	38
7.3: Matrix Spike/Matrix Spike Duplicate Summary	39
Section 8: GC Semi-volatiles - QC Data Summaries	40
8.1: Method Blank Summary	41
8.2: Blank Spike Summary	42
8.3: Matrix Spike/Matrix Spike Duplicate Summary	43
Section 9: Metals Analysis - QC Data Summaries	44
9.1: Prep QC MP2433: Ba,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn	45
9.2: Prep QC MP2434: As	55
9.3: Prep QC MP2439: Hg	60
9.4: Prep QC MP2440: Ca,Mg,Na,Sodium Adsorption Ratio	64
Section 10: General Chemistry - QC Data Summaries	72
10.1: Method Blank and Spike Results Summary	73
Section 11: Misc. Forms (Accutest Labs of New England, Inc.)	74
11.1: Chain of Custody	75
Section 12: General Chemistry - QC Data (Accutest Labs of New England, Inc.)	77
12.1: Method Blank and Spike Results Summary	78
12.2: Duplicate Results Summary	79
12.3: Matrix Spike Results Summary	80



Sample Summary

EnCana

Job No: D15555

D23 Pit Closure

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D15555-1	07/22/10	12:00 BR	07/23/10	SO	Soil	D23-S.PIT-072210
D15555-1A	07/22/10	12:00 BR	07/23/10	SO	Soil	D23-S.PIT-072210
D15555-2	07/22/10	12:45 BR	07/23/10	SO	Soil	D23-N.PIT-072210
D15555-2A	07/22/10	12:45 BR	07/23/10	SO	Soil	D23-N.PIT-072210

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: EnCana

Job No D15555

Site: D23 Pit Closure

Report Dat 8/3/2010 6:17:04 PM

On 07/23/2010, 2 sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 5.8 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D15555 was assigned to the project. The lab sample IDs, client sample IDs, and dates of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO	Batch ID: V3V320
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- Sample(s) D15555-1MS, D15555-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270C BY SIM

Matrix SO	Batch ID: OP2227
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- Sample(s) D15516-4MS, D15516-4MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for MSD for Fluoranthene, Pyrene are outside control limits for sample OP2227-MSD. High RPD due to possible sample nonhomogeneity.

Volatiles by GC By Method SW846 8015B

Matrix SO	Batch ID: GGA468
------------------	-------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D15555-1MS, D15555-1MSD were used as the QC samples indicated.
- Sample(s) D15555-1, D15555-2, D15555-1MS, D15555-1MSD, have surrogates outside control limits. Probable cause due to matrix interference.

Extractables by GC By Method SW846-8015

Matrix SO	Batch ID: OP2224
------------------	-------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals By Method SW846 6010B

Matrix AQ **Batch ID:** MP2440

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D15557-13AMS, D15557-13AMSD were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Sodium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Matrix SO **Batch ID:** MP2433

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D15524-1MS, D15524-1MSD, D15524-1SDL were used as the QC samples for metals.
- Matrix Spike Recovery(s) for Cadmium, Chromium, Lead, Nickel, Selenium, Zinc are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- Matrix Spike Recovery(s) for Barium are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- RPD(s) for Serial Dilution for Cadmium, Selenium, Silver, Barium, Nickel, Zinc are outside control limits for sample MP2433-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method SW846 6020

Matrix SO **Batch ID:** MP2434

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D15524-1MS, D15524-1MSD, D15524-1SDL were used as the QC samples for metals.

Metals By Method SW846 7471A

Matrix SO **Batch ID:** MP2439

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D15517-1MSD, D15517-1MS were used as the QC samples for metals.
- Matrix Spike and Matrix Spike Duplicate Recovery(s) for Mercury are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

Wet Chemistry By Method ASTM E1498-76M

Matrix SO **Batch ID:** M:GN32460

- The data for ASTM E1498-76M meets quality control requirements.
- The following samples were run outside of holding time for method ASTM E1498-76M: D15555-1, D15555-2.
- Redox Potential Vs H2: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method LADNR29B

Matrix SO **Batch ID:** MP2440

- Sodium Adsorption Ratio: Calculated as: $(Na \text{ meq/L}) / \sqrt{((Ca \text{ meq/L}) + (Mg \text{ meq/L})/2)}$

Wet Chemistry By Method SM19 2540B M

Matrix SO **Batch ID:** GN5538

- The data for SM19 2540B M meets quality control requirements.

Wet Chemistry By Method SW846 3060/7196A M

Matrix SO	Batch ID: R3568
------------------	------------------------

- The data for SW846 3060/7196A M meets quality control requirements.
- Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO	Batch ID: M:GP11844
------------------	----------------------------

- The data for SW846 3060A/7196A meets quality control requirements.
- Chromium, Hexavalent: Analysis performed at Accutest Laboratories, Marlborough, MA.

Wet Chemistry By Method SW846 9045C

Matrix SO	Batch ID: GN5531
------------------	-------------------------

- The following samples were run outside of holding time for method SW846 9045C: D15555-1, D15555-2.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest Mountain States

Job No D15555

Site: ENCACOP: D23 Pit Closure

Report Date 8/2/2010 12:47:26 PM

2 Sample(s) were collected on 07/22/2010 and were received at Accutest on 07/23/2010 properly preserved, at 1.2 Deg. C and intact. These Samples received an Accutest job number of D15555. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Wet Chemistry By Method ASTM E1498-76M

Matrix SO

Batch ID: GN32460

- Sample(s) D15516-2DUP were used as the QC samples for Redox Potential Vs H2.

Wet Chemistry By Method SW846 3060A/7196A

Matrix SO

Batch ID: GP11844

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D15516-3MS, D15516-3DUP were used as the QC samples for Chromium, Hexavalent.
- RPD(s) for Duplicate for Chromium, Hexavalent are outside control limits for sample GP11844-D1. RPD acceptable due to low duplicate and sample concentrations.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(D15555).



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: D23-S.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-1	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 75.3
Method: SW846 8260B	
Project: D23 Pit Closure	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V06106.D	1	07/29/10	DC	n/a	n/a	V3V320
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	80.3	150	45	ug/kg	J
108-88-3	Toluene	548	300	150	ug/kg	
100-41-4	Ethylbenzene	273	300	60	ug/kg	J
	m,p-Xylene	2990	600	100	ug/kg	
95-47-6	o-Xylene	541	300	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	91%		70-130%
460-00-4	4-Bromofluorobenzene	100%		70-130%
17060-07-0	1,2-Dichloroethane-D4	85%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: D23-S.PIT-072210	
Lab Sample ID: D15555-1	Date Sampled: 07/22/10
Matrix: SO - Soil	Date Received: 07/23/10
Method: SW846 8270C BY SIM SW846 3540C	Percent Solids: 75.3
Project: D23 Pit Closure	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G01603.D	5	07/28/10	TMB	07/26/10	OP2227	E3G43
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	44	41	ug/kg	
208-96-8	Acenaphthylene	ND	220	45	ug/kg	
120-12-7	Anthracene	ND	44	28	ug/kg	
56-55-3	Benzo(a)anthracene	ND	44	43	ug/kg	
50-32-8	Benzo(a)pyrene	ND	44	28	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	44	32	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	44	28	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	44	28	ug/kg	
218-01-9	Chrysene	ND	44	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	44	33	ug/kg	
206-44-0	Fluoranthene	ND	44	27	ug/kg	
86-73-7	Fluorene	58.8	44	43	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	44	29	ug/kg	
90-12-0	1-Methylnaphthalene	121	44	39	ug/kg	
91-57-6	2-Methylnaphthalene	269	220	67	ug/kg	
91-20-3	Naphthalene	115	220	49	ug/kg	J
85-01-8	Phenanthrene	80.6	44	35	ug/kg	
129-00-0	Pyrene	ND	44	30	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		10-193%
321-60-8	2-Fluorobiphenyl	77%		20-138%
1718-51-0	Terphenyl-d14	77%		17-174%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: D23-S.PIT-072210	
Lab Sample ID: D15555-1	Date Sampled: 07/22/10
Matrix: SO - Soil	Date Received: 07/23/10
Method: SW846 8015B	Percent Solids: 75.3
Project: D23 Pit Closure	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA7980.D	1	08/02/10	CK	n/a	n/a	GGA468
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	751	30	30	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	146% ^a		60-140%		

(a) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: D23-S.PIT-072210	
Lab Sample ID: D15555-1	Date Sampled: 07/22/10
Matrix: SO - Soil	Date Received: 07/23/10
Method: SW846-8015B SW846 3550B	Percent Solids: 75.3
Project: D23 Pit Closure	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FE3466.D	1	07/27/10	CP	07/26/10	OP2224	GFE202
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	1440	18	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	121%		63-130%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: D23-S.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-1	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 75.3
Project: D23 Pit Closure	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	4.2	0.46	mg/kg	5	07/28/10	07/28/10 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	8640	11	mg/kg	10	07/28/10	07/29/10 JM	SW846 6010B ⁴	SW846 3050B ⁵
Cadmium	< 1.1	1.1	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	20.2	1.1	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	23.1	0.57	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	28.5	5.7	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	0.16	0.082	mg/kg	1	07/28/10	07/28/10 RN	SW846 7471A ¹	SW846 3050B ⁷
Nickel	13.2	3.4	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 5.7	5.7	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.4	3.4	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	44.6	3.4	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵

- (1) Instrument QC Batch: MA855
- (2) Instrument QC Batch: MA856
- (3) Instrument QC Batch: MA857
- (4) Instrument QC Batch: MA858
- (5) Prep QC Batch: MP2433
- (6) Prep QC Batch: MP2434
- (7) Prep QC Batch: MP2439

RL = Reporting Limit

Report of Analysis

Client Sample ID: D23-S.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-1	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 75.3
Project: D23 Pit Closure	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.6	2.6	mg/kg	1	07/30/10 13:41	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	18.9	3.7	mg/kg	1	07/30/10 13:41	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	279		mv	1	07/28/10	AMA	ASTM E1498-76M
Solids, Percent	75.3		%	1	07/26/10	CJ	SM19 2540B M
Specific Conductivity	1870	1.0	umhos/cm	1	07/28/10	JD	DEPT.OF AG, BOOK N9
pH	9.66		su	1	07/25/10 05:15	JK	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID: D23-S.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-1A	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 75.3
Project: D23 Pit Closure	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	20.8	2.0	mg/l	1	07/28/10	07/29/10 JM	SW846 6010B ¹	EPA 200.7 ³
Magnesium	3.43	1.0	mg/l	1	07/28/10	07/29/10 JM	SW846 6010B ¹	EPA 200.7 ³
Sodium	407	2.0	mg/l	1	07/28/10	07/29/10 JM	SW846 6010B ²	EPA 200.7 ³

- (1) Instrument QC Batch: MA856
- (2) Instrument QC Batch: MA858
- (3) Prep QC Batch: MP2440

RL = Reporting Limit

Report of Analysis

Client Sample ID: D23-S.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-1A	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 75.3
Project: D23 Pit Closure	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	21.8		ratio	1	07/29/10 10:33	JM	LADNR29B

(a) Calculated as: $(Na \text{ meq/L}) / \sqrt{[(Ca \text{ meq/L}) + (Mg \text{ meq/L})/2]}$

RL = Reporting Limit

Report of Analysis

Client Sample ID: D23-N.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-2	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 76.6
Method: SW846 8260B	
Project: D23 Pit Closure	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V06109.D	1	07/29/10	DC	n/a	n/a	V3V320
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	10.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	150	44	ug/kg	
108-88-3	Toluene	ND	290	150	ug/kg	
100-41-4	Ethylbenzene	ND	290	58	ug/kg	
	m,p-Xylene	4230	580	100	ug/kg	
95-47-6	o-Xylene	1380	290	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	95%		70-130%
460-00-4	4-Bromofluorobenzene	118%		70-130%
17060-07-0	1,2-Dichloroethane-D4	74%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	D23-N.PIT-072210	
Lab Sample ID:	D15555-2	Date Sampled: 07/22/10
Matrix:	SO - Soil	Date Received: 07/23/10
Method:	SW846 8270C BY SIM SW846 3540C	Percent Solids: 76.6
Project:	D23 Pit Closure	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G01612.D	20	07/28/10	TMB	07/26/10	OP2227	E3G43
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.0 g	2.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	350	330	ug/kg	
208-96-8	Acenaphthylene	ND	1700	360	ug/kg	
120-12-7	Anthracene	ND	350	220	ug/kg	
56-55-3	Benzo(a)anthracene	ND	350	340	ug/kg	
50-32-8	Benzo(a)pyrene	ND	350	220	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	350	250	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	350	220	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	350	220	ug/kg	
218-01-9	Chrysene	ND	350	170	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	350	260	ug/kg	
206-44-0	Fluoranthene	ND	350	210	ug/kg	
86-73-7	Fluorene	2440	350	340	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	350	230	ug/kg	
90-12-0	1-Methylnaphthalene	2780	350	310	ug/kg	
91-57-6	2-Methylnaphthalene	6730	1700	530	ug/kg	
91-20-3	Naphthalene	ND	1700	380	ug/kg	
85-01-8	Phenanthrene	1570	350	280	ug/kg	
129-00-0	Pyrene	ND	350	230	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	47%		10-193%
321-60-8	2-Fluorobiphenyl	103%		20-138%
1718-51-0	Terphenyl-d14	125%		17-174%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: D23-N.PIT-072210	
Lab Sample ID: D15555-2	Date Sampled: 07/22/10
Matrix: SO - Soil	Date Received: 07/23/10
Method: SW846 8015B	Percent Solids: 76.6
Project: D23 Pit Closure	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GA7981.D	1	08/02/10	CK	n/a	n/a	GGA468
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	767	29	29	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	282% ^a		60-140%		

(a) Outside control limits due to matrix interference.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: D23-N.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-2	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 76.6
Method: SW846-8015B SW846 3550B	
Project: D23 Pit Closure	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FE3475.D	100	07/27/10	CP	07/26/10	OP2224	GFE202
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (C10-C28)	23000	1700	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	109%		63-130%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: D23-N.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-2	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 76.6
Project: D23 Pit Closure	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	11.3	0.52	mg/kg	5	07/28/10	07/28/10 GJ	SW846 6020 ³	SW846 3050B ⁶
Barium	6630	13	mg/kg	10	07/28/10	07/29/10 JM	SW846 6010B ⁴	SW846 3050B ⁵
Cadmium	< 1.3	1.3	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Chromium	24.0	1.3	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Copper	54.3	0.65	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Lead	21.1	6.5	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Mercury	0.35	0.076	mg/kg	1	07/28/10	07/28/10 RN	SW846 7471A ¹	SW846 3050B ⁷
Nickel	18.4	3.9	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Selenium	< 6.5	6.5	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Silver	< 3.9	3.9	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵
Zinc	56.0	3.9	mg/kg	1	07/28/10	07/28/10 JM	SW846 6010B ²	SW846 3050B ⁵

- (1) Instrument QC Batch: MA855
- (2) Instrument QC Batch: MA856
- (3) Instrument QC Batch: MA857
- (4) Instrument QC Batch: MA858
- (5) Prep QC Batch: MP2433
- (6) Prep QC Batch: MP2434
- (7) Prep QC Batch: MP2439

RL = Reporting Limit

Report of Analysis

Client Sample ID: D23-N.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-2	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 76.6
Project: D23 Pit Closure	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent ^a	< 2.5	2.5	mg/kg	1	07/30/10 13:41	AMA	SW846 3060A/7196A
Chromium, Trivalent ^b	22.7	3.8	mg/kg	1	07/30/10 13:41	AMA	SW846 3060/7196A M
Redox Potential Vs H2 ^a	256		mv	1	07/28/10	AMA	ASTM E1498-76M
Solids, Percent	76.6		%	1	07/26/10	CJ	SM19 2540B M
Specific Conductivity	4860	1.0	umhos/cm	1	07/28/10	JD	DEPT.OF AG, BOOK N9
pH	8.75		su	1	07/25/10 05:15	JK	SW846 9045C

(a) Analysis performed at Accutest Laboratories, Marlborough, MA.

(b) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

Report of Analysis

Client Sample ID: D23-N.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-2A	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 76.6
Project: D23 Pit Closure	

SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	233	2.0	mg/l	1	07/28/10	07/29/10 JM	SW846 6010B ¹	EPA 200.7 ³
Magnesium	47.0	1.0	mg/l	1	07/28/10	07/29/10 JM	SW846 6010B ¹	EPA 200.7 ³
Sodium	796	2.0	mg/l	1	07/28/10	07/29/10 JM	SW846 6010B ²	EPA 200.7 ³

- (1) Instrument QC Batch: MA856
- (2) Instrument QC Batch: MA858
- (3) Prep QC Batch: MP2440

RL = Reporting Limit

Report of Analysis

Client Sample ID: D23-N.PIT-072210	Date Sampled: 07/22/10
Lab Sample ID: D15555-2A	Date Received: 07/23/10
Matrix: SO - Soil	Percent Solids: 76.6
Project: D23 Pit Closure	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	12.4		ratio	1	07/29/10 10:40	JM	LADNR29B

(a) Calculated as: $(\text{Na meq/L}) / \sqrt{[(\text{Ca meq/L}) + (\text{Mg meq/L})/2]}$

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

D15555

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job #

Client / Reporting Information		Project Information		Requested Analyses		Matrix Codes										
Company Name EnCana Oil & Gas (USA) Inc.		Project Name / No. D23 Pit Closure				DW - Drinking Water GW - Ground Water WW - Wastewater SO - Soil SL - Sludge OL - Oil LIQ - Other Liquid SOL - Other Solid										
Project Contact Chris Hines E-Mail: christopher.hines@encana.com Address: 2717 County Road 215, Suite 100 City: Parachute, CO 81635		Bill to Invoice Attn. Address City: State: Zip:														
Phone No. 970.285.2653 Fax No.		Phone No. Fax No.														
Samplers Name: Blair Rollins		Client Purchase Order #														
Accutest Sample #	Field ID / Point of Collection	Collection		Number of preserved bottles										LAB USE ONLY		
		Date	Time	Matrix	# of bottles	HCl	HNO3	H2SO4	HNO3/H2SO4	MEOH	None	Other	Other			
D23 - S. Pit - 072210		07/22/2010	1200	SO	3									X	X	
D23 - N. Pit - 072210		07/22/2010	1245	SO	3									X	X	81 82

Please see attached

Turnaround Time (Business days)	Data Deliverable Information	Comments / Remarks
<input checked="" type="checkbox"/> 14 Day STANDARD <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 4 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> Other	Approved By/ Date: _____ <input type="checkbox"/> Commercial "A" <input type="checkbox"/> State Forms <input type="checkbox"/> Commercial "B" <input type="checkbox"/> EDD Format <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Other <input type="checkbox"/> Full Data Package Commercial "A" = Results Only Commercial "B" = Results & Standard QC	Client Needs Units In: _____ _____ _____

Real time analytical data available via Lablink

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

Relinquished by Sampler: <i>[Signature]</i>	Date Time: 7/22/10 1:40P	Received By: <i>J. Parsons</i> (Sentinel Express)	Relinquished By: <i>[Signature]</i>	Date Time: 7-21-10 17:00	Received By: <i>[Signature]</i> 7/22/10 3:40
Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
Relinquished by:	Date Time:	Received By:	Custody Seal # 4	Preserved where applicable <input type="checkbox"/>	On Ice <input checked="" type="checkbox"/> Cooler Temp. 5.8°C

4.1 4





GC/MS Volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V320-MB1	3V06104.D	1	07/29/10	DC	n/a	n/a	V3V320

The QC reported here applies to the following samples:

Method: SW846 8260B

D15555-1, D15555-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	100	30	ug/kg	
100-41-4	Ethylbenzene	ND	200	40	ug/kg	
108-88-3	Toluene	ND	200	100	ug/kg	
	m,p-Xylene	ND	400	70	ug/kg	
95-47-6	o-Xylene	ND	200	70	ug/kg	

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	87% 70-130%
460-00-4	4-Bromofluorobenzene	80% 70-130%
17060-07-0	1,2-Dichloroethane-D4	87% 70-130%

Blank Spike Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V320-BS1	3V06105.D	1	07/29/10	DC	n/a	n/a	V3V320

The QC reported here applies to the following samples:

Method: SW846 8260B

D15555-1, D15555-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	48.8	98	68-130
100-41-4	Ethylbenzene	50	53.3	107	70-130
108-88-3	Toluene	50	52.0	104	70-130
	m,p-Xylene	50	45.5	91	53-130
95-47-6	o-Xylene	50	47.3	95	61-130

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	86%	70-130%
460-00-4	4-Bromofluorobenzene	83%	70-130%
17060-07-0	1,2-Dichloroethane-D4	80%	70-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D15555-1MS	3V06107.D	1	07/29/10	DC	n/a	n/a	V3V320
D15555-1MSD	3V06108.D	1	07/29/10	DC	n/a	n/a	V3V320
D15555-1	3V06106.D	1	07/29/10	DC	n/a	n/a	V3V320

The QC reported here applies to the following samples:

Method: SW846 8260B

D15555-1, D15555-2

CAS No.	Compound	D15555-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	80.3	J	7460	7310	97	7080	94	3	55-140/30
100-41-4	Ethylbenzene	273	J	7460	8570	111	8330	108	3	56-139/30
108-88-3	Toluene	548		7460	8510	107	8360	105	2	57-144/30
	m,p-Xylene	2990		7460	9930	93	9720	90	2	47-130/30
95-47-6	o-Xylene	541		7460	7730	96	7670	96	1	51-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D15555-1	Limits
2037-26-5	Toluene-D8	88%	89%	91%	70-130%
460-00-4	4-Bromofluorobenzene	99%	98%	100%	70-130%
17060-07-0	1,2-Dichloroethane-D4	81%	77%	85%	70-130%

5.3.1
5



GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2227-MB	3G01584.D	1	07/27/10	TMB	07/26/10	OP2227	E3G43

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D15555-1, D15555-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	6.7	6.2	ug/kg	
208-96-8	Acenaphthylene	ND	33	6.9	ug/kg	
120-12-7	Anthracene	ND	6.7	4.3	ug/kg	
56-55-3	Benzo(a)anthracene	ND	6.7	6.5	ug/kg	
50-32-8	Benzo(a)pyrene	ND	6.7	4.2	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	6.7	4.8	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	6.7	4.2	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	6.7	4.2	ug/kg	
218-01-9	Chrysene	ND	6.7	3.3	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	6.7	4.9	ug/kg	
206-44-0	Fluoranthene	ND	6.7	4.1	ug/kg	
86-73-7	Fluorene	ND	6.7	6.5	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	6.7	4.4	ug/kg	
90-12-0	1-Methylnaphthalene	ND	6.7	5.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	10	ug/kg	
91-20-3	Naphthalene	ND	33	7.4	ug/kg	
85-01-8	Phenanthrene	ND	6.7	5.3	ug/kg	
129-00-0	Pyrene	ND	6.7	4.5	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
4165-60-0	Nitrobenzene-d5	72%	10-193%
321-60-8	2-Fluorobiphenyl	69%	20-138%
1718-51-0	Terphenyl-d14	103%	17-174%

Blank Spike Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2227-BS	3G01585.D	1	07/27/10	TMB	07/26/10	OP2227	E3G43

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D15555-1, D15555-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	83.3	55.2	66	40-136
208-96-8	Acenaphthylene	83.3	54.3	65	42-139
120-12-7	Anthracene	83.3	60.9	73	40-141
56-55-3	Benzo(a)anthracene	83.3	67.0	80	38-143
50-32-8	Benzo(a)pyrene	83.3	67.6	81	39-145
205-99-2	Benzo(b)fluoranthene	83.3	63.0	76	38-151
191-24-2	Benzo(g,h,i)perylene	83.3	63.4	76	35-136
207-08-9	Benzo(k)fluoranthene	83.3	79.9	96	38-147
218-01-9	Chrysene	83.3	66.1	79	39-137
53-70-3	Dibenzo(a,h)anthracene	83.3	64.1	77	35-139
206-44-0	Fluoranthene	83.3	67.7	81	34-132
86-73-7	Fluorene	83.3	57.3	69	41-136
193-39-5	Indeno(1,2,3-cd)pyrene	83.3	68.7	82	31-144
90-12-0	1-Methylnaphthalene	83.3	51.6	62	36-130
91-57-6	2-Methylnaphthalene	83.3	53.3	64	40-131
91-20-3	Naphthalene	83.3	55.2	66	36-130
85-01-8	Phenanthrene	83.3	60.3	72	40-135
129-00-0	Pyrene	83.3	64.5	77	29-157

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	70%	10-193%
321-60-8	2-Fluorobiphenyl	64%	20-138%
1718-51-0	Terphenyl-d14	82%	17-174%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2227-MS	3G01593.D	2	07/27/10	TMB	07/26/10	OP2227	E3G43
OP2227-MSD	3G01598.D	2	07/28/10	TMB	07/26/10	OP2227	E3G43
D15516-4	3G01611.D	2	07/28/10	TMB	07/26/10	OP2227	E3G43

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

D15555-1, D15555-2

CAS No.	Compound	D15516-4 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		96.1	84.8	88	70.2	73	19	20-151/30
208-96-8	Acenaphthylene	ND		96.1	82.5	86	71.7	75	14	23-156/30
120-12-7	Anthracene	ND		96.1	87.5	91	72.1	75	19	25-149/30
56-55-3	Benzo(a)anthracene	ND		96.1	91.4	95	77.6	81	16	22-157/30
50-32-8	Benzo(a)pyrene	15.0		96.1	82.6	86	72.4	75	13	23-153/30
205-99-2	Benzo(b)fluoranthene	ND		96.1	76.4	79	64.2	67	17	22-161/30
191-24-2	Benzo(g,h,i)perylene	ND		96.1	83.2	87	70.3	73	17	20-158/30
207-08-9	Benzo(k)fluoranthene	ND		96.1	82.2	86	70.3	73	16	17-161/30
218-01-9	Chrysene	8.0	J	96.1	83.5	87	75.7	79	10	16-159/30
53-70-3	Dibenzo(a,h)anthracene	ND		96.1	82.6	86	66.7	69	21	21-154/30
206-44-0	Fluoranthene	ND		96.1	103	107	70.5	73	37* a	16-140/30
86-73-7	Fluorene	29.0		96.1	109	83	104	77	5	15-153/30
193-39-5	Indeno(1,2,3-cd)pyrene	ND		96.1	109	113	82.3	86	28	21-159/30
90-12-0	1-Methylnaphthalene	27.7		96.1	103	79	129	106	22	10-148/30
91-57-6	2-Methylnaphthalene	51.5	J	96.1	128	75	128	75	0	10-181/30
91-20-3	Naphthalene	ND		96.1	87.7	91	71.3	74	21	10-176/30
85-01-8	Phenanthrene	28.2		96.1	110	85	103	78	7	22-152/30
129-00-0	Pyrene	ND		96.1	99.1	103	71.5	74	32* a	10-200/30

CAS No.	Surrogate Recoveries	MS	MSD	D15516-4	Limits
4165-60-0	Nitrobenzene-d5	81%	63%	63%	10-193%
321-60-8	2-Fluorobiphenyl	84%	74%	72%	20-138%
1718-51-0	Terphenyl-d14	112%	77%	82%	17-174%

(a) High RPD due to possible sample nonhomogeneity.



GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA468-MB	GA7976.D	1	08/02/10	CK	n/a	n/a	GGA468

The QC reported here applies to the following samples:

Method: SW846 8015B

D15555-1, D15555-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	20	20	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	92% 60-140%

7.1.1
7

Blank Spike Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGA468-BS	GA7977.D	1	08/02/10	CK	n/a	n/a	GGA468

The QC reported here applies to the following samples:

Method: SW846 8015B

D15555-1, D15555-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	220	219	100	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	101%	60-140%

7.2.1
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D15555-1MS	GA7978.D	1	08/02/10	CK	n/a	n/a	GGA468
D15555-1MSD	GA7979.D	1	08/02/10	CK	n/a	n/a	GGA468
D15555-1	GA7980.D	1	08/02/10	CK	n/a	n/a	GGA468

The QC reported here applies to the following samples:

Method: SW846 8015B

D15555-1, D15555-2

CAS No.	Compound	D15555-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	751	328	1120	112	1060	94	6	62-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D15555-1	Limits
120-82-1	1,2,4-Trichlorobenzene	164%* a	143%* a	146%* a	60-140%

(a) Outside control limits due to matrix interference.

7.3.1
7



GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2224-MB	FE3450.D	1	07/26/10	CP	07/26/10	OP2224	GFE202

The QC reported here applies to the following samples:

Method: SW846-8015

D15555-1, D15555-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	Diesel Fuel (No. 2)	ND	13	13	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	108% 63-130%

Blank Spike Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2224-BS	FE3451.D	1	07/26/10	CP	07/26/10	OP2224	GFE202

The QC reported here applies to the following samples:

Method: SW846-8015

D15555-1, D15555-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	Diesel Fuel (No. 2)	667	754	113	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	116%	63-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D15555
Account: ENCACOP EnCana
Project: D23 Pit Closure

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2224-MS	FE3452.D	1	07/26/10	CP	07/26/10	OP2224	GFE202
OP2224-MSD	FE3453.D	1	07/26/10	CP	07/26/10	OP2224	GFE202
D15516-1	FE3454.D	1	07/26/10	CP	07/26/10	OP2224	GFE202

The QC reported here applies to the following samples:

Method: SW846-8015

D15555-1, D15555-2

CAS No.	Compound	D15516-1 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	Diesel Fuel (No. 2)	130	724	814	94	997	119	20	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D15516-1	Limits
84-15-1	o-Terphenyl	96%	118%	106%	63-130%

8.3.1
8



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2433
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 07/28/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.7	2		
Antimony	3.0	.17	.5		
Arsenic	2.5	.28	.72		
Barium	1.0	.014	.05	0.060	<1.0
Beryllium	1.0	.14	.21		
Boron	5.0	.35	.91		
Cadmium	1.0	.022	.12	0.040	<1.0
Calcium	40	1.7	2.7		
Chromium	1.0	.027	.18	0.040	<1.0
Cobalt	0.50	.048	.058		
Copper	0.50	.16	.38	0.41	<0.50
Iron	7.0	.77	.91		
Lead	5.0	.13	.24	0.19	<5.0
Lithium	0.20	.076	.09		
Magnesium	20	.58	.93		
Manganese	0.50	.021	.028		
Molybdenum	1.0	.041	.16		
Nickel	3.0	.038	.075	-0.020	<3.0
Phosphorus	10	1.5	3.5		
Potassium	200	38	130		
Selenium	5.0	.28	.54	-0.18	<5.0
Silicon	5.0	1.2	.68		
Silver	3.0	.098	.068	0.10	<3.0
Sodium	40	23	6.3		
Strontium	5.0	.0091	.02		
Thallium	1.0	.31	.21		
Tin	5.0	1.4	.56		
Titanium	1.0	.0098	.041		
Uranium	5.0	.22	.53		
Vanadium	1.0	.027	.034		
Zinc	3.0	.076	.49	0.20	<3.0

Associated samples MP2433: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2433
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2433
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 07/28/10

Metal	D15524-1 Original MS		SpikeLot MPICPALL % Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	1540	1630	230	39.1 (a) 75-125
Beryllium				
Boron				
Cadmium	0.21	42.3	57.6	73.1N(b) 75-125
Calcium				
Chromium	11.4	53.5	57.6	73.1N(b) 75-125
Cobalt				
Copper	11.3	56.5	57.6	78.5 75-125
Iron				
Lead	10.5	96.0	115	74.2N(b) 75-125
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	11.8	49.1	57.6	64.8N(b) 75-125
Phosphorus				
Potassium				
Selenium	1.6	82.0	115	69.8N(b) 75-125
Silicon				
Silver	0.23	18.1	23	77.6 75-125
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	41.9	72.1	57.6	52.5N(b) 75-125

Associated samples MP2433: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

9.1.2
 9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2433
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2433
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 07/28/10

Metal	D15524-1 Original MSD		SpikeLot MPICPAL % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium	1540	1760	226	97.4	7.7	20
Beryllium						
Boron						
Cadmium	0.21	48.7	56.5	85.8	14.1	20
Calcium						
Chromium	11.4	61.0	56.5	87.8	13.1	20
Cobalt						
Copper	11.3	65.6	56.5	96.1	14.9	20
Iron						
Lead	10.5	105	113	83.6	9.0	20
Lithium						
Magnesium						
Manganese						
Molybdenum						
Nickel	11.8	57.4	56.5	80.7	15.6	20
Phosphorus						
Potassium						
Selenium	1.6	93.2	113	81.1	12.8	20
Silicon						
Silver	0.23	20.8	22.6	91.0	13.9	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	41.9	86.3	56.5	78.6	17.9	20

Associated samples MP2433: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

9.1.2
 9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2433
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2433
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 07/28/10

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	206	200	103.0	80-120
Beryllium				
Boron				
Cadmium	47.8	50	95.6	80-120
Calcium				
Chromium	49.3	50	98.6	80-120
Cobalt				
Copper	51.5	50	103.0	80-120
Iron				
Lead	95.9	100	95.9	80-120
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	46.3	50	92.6	80-120
Phosphorus				
Potassium				
Selenium	91.3	100	91.3	80-120
Silicon				
Silver	20.1	20	100.5	80-120
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	45.5	50	91.0	80-120

Associated samples MP2433: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

9.1.3
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2433
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

Metal

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2433
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: ug/l

Prep Date: 07/28/10

Metal	D15524-1 Original SDL 1:5		%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	13300	15000	12.6*(a)	0-10
Beryllium				
Boron				
Cadmium	1.80	1.50	16.7 (b)	0-10
Calcium				
Chromium	98.9	106	7.2	0-10
Cobalt				
Copper	97.7	95.5	2.3	0-10
Iron				
Lead	91.5	100	9.3	0-10
Lithium				
Magnesium				
Manganese				
Molybdenum				
Nickel	103	117	13.7*(a)	0-10
Phosphorus				
Potassium				
Selenium	14.3	26.5	85.3 (b)	0-10
Silicon				
Silver	2.00	5.00	150.0(b)	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	364	420	15.4*(a)	0-10

Associated samples MP2433: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

9.1.4
9

SERIAL DILUTION RESULTS SUMMARY

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2433
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

- (anr) Analyte not requested
- (a) Serial dilution indicates possible matrix interference.
- (b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2434
Matrix Type: SOLID

Methods: SW846 6020
Units: mg/kg

Prep Date: 07/28/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	25	.14	.89		
Antimony	0.20	.001	.045		
Arsenic	0.40	.049	.26	0.0081	<0.40
Barium	1.0	.0035	.17		
Beryllium	0.10	.0075	.014		
Boron	20	.97	2		
Cadmium	0.050	.023	.048		
Calcium	200	1.8	6.1		
Chromium	1.0	.021	.23		
Cobalt	0.10	.0033	.088		
Copper	1.0	.011	.14		
Iron	20	.81	6.1		
Lead	0.25	.0012	.18		
Magnesium	50	.067	1.3		
Manganese	0.50	.007	.089		
Molybdenum	0.50	.0044	.2		
Nickel	1.0	.0029	.074		
Phosphorus	30	1.8	5.6		
Potassium	100	2	9.1		
Selenium	0.20	.075	.14		
Silver	0.050	.0008	.029		
Sodium	250	.8	1.8		
Strontium	10	.004	.047		
Thallium	0.10	.015	.071		
Tin	5.0	.006	.17		
Titanium	1.0	.035	.071		
Uranium	0.25	.00038	.12		
Vanadium	2.0	.052	.99		
Zinc	5.0	.039	.53		

Associated samples MP2434: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

9.2.1
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2434
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 07/28/10

Metal	D15524-1 Original MS		SpikeLot MPICPALL % Rec		QC Limits
Aluminum					
Antimony					
Arsenic	5.2	122	115	101.4	60-119
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP2434: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

9.2.2
 9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2434
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 07/28/10

Metal	D15524-1 Original	MSD	SpikeLot MPICPAL	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	5.2	104	113	87.4	15.9	20
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP2434: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

9.2.2
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2434
 Matrix Type: SOLID

Methods: SW846 6020
 Units: mg/kg

Prep Date: 07/28/10

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	101	100	101.0	80-120
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP2434: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

9.2.3
 9

SERIAL DILUTION RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2434
 Matrix Type: SOLID

Methods: SW846 6020
 Units: ug/l

Prep Date: 07/28/10

Metal	D15524-1 Original	SDL 5:25	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	44.8	41.7	6.9	0-10
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP2434: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

9.2.4
 9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2439
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 07/28/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.080	.00084	.00098	-0.0036	<0.080

Associated samples MP2439: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2439
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 07/28/10

Metal	D15517-1 Original MS	Spike HGWSR1	lot % Rec	QC Limits
-------	-------------------------	-----------------	--------------	--------------

Mercury 0.013 0.32 0.403 76.2N(a) 85-115

Associated samples MP2439: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2439
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 07/28/10

Metal	D15517-1 Original MSD	SpikeLot HGWSR1	% Rec	MSD RPD	QC Limit
Mercury	0.013	0.32	0.41	74.9N(a) 0.0	20

Associated samples MP2439: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2439
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 07/28/10

Metal	BSP Result	Spikelot HGWSR1	% Rec	QC Limits
Mercury	0.31	0.4	80.0	80-120

Associated samples MP2439: D15555-1, D15555-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date: 07/28/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	500	35	250		
Antimony	150	8.5	65		
Arsenic	130	14	33		
Barium	50	.7	12		
Beryllium	50	7	22		
Boron	250	18	93		
Cadmium	50	1.1	6		
Calcium	2000	85	46	-59	<2000
Chromium	50	1.4	8		
Cobalt	25	2.4	1.5		
Copper	25	8	14		
Iron	350	39	50		
Lead	250	6.5	16		
Lithium	10	3.8	8		
Magnesium	1000	29	62	36.5	<1000
Manganese	25	1.1	3.5		
Molybdenum	50	2.1	6		
Nickel	150	1.9	3		
Phosphorus	500	75	270		
Potassium	5000	1900	2700		
Selenium	250	14	36		
Silicon	250	60	100		
Silver	150	4.9	1.5		
Sodium	2000	1200	110	-470	<2000
Strontium	25	.46	17		
Thallium	50	16	11		
Tin	250	70	22		
Titanium	50	.49	3.5		
Uranium	250	11	20		
Vanadium	50	1.4	1.5		
Zinc	150	3.8	8.5		

Associated samples MP2440: D15555-1A, D15555-2A

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

9.4.1
9

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

9.4.1

9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2440
 Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
 Units: ug/l

Prep Date: 07/28/10

Metal	D15557-13A Original MS		SpikeLot MPICPALL % Rec		QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium	10400	143000	125000	106.1	75-125
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Lithium					
Magnesium	1340	124000	125000	98.1	75-125
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silicon					
Silver					
Sodium	1460000	1490000	125000	24.0 (a)	75-125
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP2440: D15555-1A, D15555-2A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

9.4.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date:

Metal

- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2440
 Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
 Units: ug/l

Prep Date: 07/28/10

Metal	D15557-13A Original MSD		SpikeLot MPICPALL % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium	10400	140000	125000	103.7	2.1	20
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Lithium						
Magnesium	1340	121000	125000	95.7	2.4	20
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silicon						
Silver						
Sodium	1460000	1520000	125000	48.0 (a)	2.0	20
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP2440: D15555-1A, D15555-2A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

9.4.2
9

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date:

Metal

- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D15555
 Account: ENCACOP - EnCana
 Project: D23 Pit Closure

QC Batch ID: MP2440
 Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
 Units: ug/l

Prep Date: 07/28/10

Metal	BSP Result	Spikelot MPICPALL	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	131000	125000	104.8	80-120
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	118000	125000	94.4	80-120
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	137000	125000	109.6	80-120
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP2440: D15555-1A, D15555-2A

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits

9.4.3
 9

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

QC Batch ID: MP2440
Matrix Type: AQUEOUS

Methods: LADNR29B, SW846 6010B
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested



General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D15555
Account: ENCACOP - EnCana
Project: D23 Pit Closure

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Specific Conductivity	GP2439/GN5605			umhos/cm	9985	9940	99.5	90-110%
pH	GN5531			su	8.00	8.01	100.1	99.3-100.7%
pH	GN5531			su	8.00	8.01	100.1	99.3-100.7%

Associated Samples:

Batch GN5531: D15555-1, D15555-2

Batch GP2439: D15555-1, D15555-2

(*) Outside of QC limits

10.1
10



Misc. Forms

Custody Documents and Other Forms

(Accutest Labs of New England, Inc.)

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

4036 Youngfield St., Wheat Ridge, CO 80033
303-425-6021 FAX: 303-425-6854

Accutest Job #:	D15555
Accutest Quote #:	
AMS P.O. #:	
Project No.:	

Client Information			Subcontract Laboratory Information										Analytical Information				Comments
Name			Name														
Accutest Mountain States (AMS)			Accutest - New England														
Address			Address														
4036 Youngfield St.			495 Technology Center West, BLDG O														
City	State	Zip	City	State	Zip												
Wheat Ridge,	CO	80033	Marlborough	MA	01752												
Send Report to:			Contact:														
Tiffany Pham			Sample Management														
Any questions contact:			Phone:														
Amanda Kissell			(508) 481-6200														
Phone/Fax #:																	
(303) 425-6021; (303) 425-6854																	
Field ID / Point of Collection		Date	Time	Matrix	# of bottles	HCL	NaOH	HNO3	H2SO4	None	XGRA	EH					
D15555 -1		7/22/10	12:00 PM	Soil	1						X	X					
-2			12:45 PM	Soil	1						X	X					
Turnaround Information			Data Deliverable Information										Comments / Remarks				
<input checked="" type="checkbox"/> 3 - 5 Business Day Rush <input type="checkbox"/> Other _____ (Days)			Approved By: _____			<input type="checkbox"/> Commercial "A" <input type="checkbox"/> Commercial "B" <input type="checkbox"/> Commercial "BN" <input type="checkbox"/> Reduced Tier 1 <input type="checkbox"/> Full Tier 1		<input type="checkbox"/> PDF <input type="checkbox"/> Compact Disk Deliverable <input type="checkbox"/> Electronic Delivery: <input type="checkbox"/> State Forms <input type="checkbox"/> Other (Specify) _____			Please use Colorado regulations and RLs. 3 C						
10 Day Turnaround Hardcopy, RUSH is FAX Data unless previously approved.																	
Sample Custody must be documented below each time samples change possession, including courier delivery.										For Subcontract Laboratory Use Only							
Relinquished by:	Date & Time:	Received By:	Date & Time:	Seal #:	Headspace:												
1	7/22/10	1 FedEx	1	1	Yes <input type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>												
Relinquished by:	Date & Time:	Received By:	Date & Time:	Preserved where applicable:													
2	7/27/10 9:30	2 [Signature]	2 7/27/10 9:30	<input type="checkbox"/>													
Relinquished by:	Date & Time:	Received By:	Date & Time:	Temperature °C				On Ice									
3		3	3	1.2°				<input checked="" type="checkbox"/>									

D15555: Chain of Custody
Page 1 of 2
Accutest Labs of New England, Inc.



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D15555

Client: AMS

Immediate Client Services Action Required: No

Date / Time Received: 7/27/2010 9:30:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: N/A

Airbill #'s: N/A

<u>Cooler Security</u>	<u>Y</u>	<u>or</u>	<u>N</u>		<u>Y</u>	<u>or</u>	<u>N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Cooler temp verification:			Infrared gun
3. Cooler media:			Ice (bag)

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	
3. Samples preserved property:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:			Intact

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume rec'd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Accutest Laboratories
V:508.481.6200

495 Technology Center West, Bldg One
F: 608.481.7753

Marlborough, MA
www.accutest.com

11.1
11



General Chemistry

QC Data Summaries

(Accutest Labs of New England, Inc.)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
 GENERAL CHEMISTRY

Login Number: D15555
 Account: ALMS - Accutest Mountain States
 Project: ENCACOP: D23 Pit Closure

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP11844/GN32467	2.0	0.51	mg/kg	40	40.1	100.3	80-120%
Chromium, Hexavalent	GP11844/GN32467			mg/kg	708	663	93.6	80-120%

Associated Samples:

Batch GP11844: D15555-1, D15555-2

(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D15555
Account: ALMS - Accutest Mountain States
Project: ENCACOP: D23 Pit Closure

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP11844/GN32467	D15516-3	mg/kg	1.2	0.83	36.5(a)	0-20%
Redox Potential Vs H2	GN32460	D15516-2	mv	352	353	0.3	0-20%

Associated Samples:

Batch GN32460: D15555-1, D15555-2

Batch GP11844: D15555-1, D15555-2

(*) Outside of QC limits

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D15555
Account: ALMS - Accutest Mountain States
Project: ENCACOP: D23 Pit Closure

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP11844/GN32467	D15516-3	mg/kg	1.2	46.2	41.6	87.4	75-125%
Chromium, Hexavalent	GP11844/GN32467	D15516-3	mg/kg	1.2	855	859	100.3	75-125%

Associated Samples:

Batch GP11844: D15555-1, D15555-2

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

12.3
12



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

Chris Hines or Brad Kieding
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Tuesday September 07, 2010

Report Number: L476142

Samples Received: 08/28/10

Client Project: D23 PIT CLOSURE

Description: D23 Pit Closure

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 - 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

September 07, 2010

Chris Hines or Brad Kieding
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L476142-01

Date Received : August 28, 2010
 Description : D23 Pit Closure

Site ID :

Sample ID : D23-S STS-082610

Project # : D23 PIT CLOSURE

Collected By : Blair Rollins
 Collection Date : 08/26/10 14:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	4.1	2.0	mg/kg	3060A/7196A	08/28/10	1
Chromium,Trivalent	20.	0.50	mg/kg	Calc.	08/30/10	1
ORP	44.		mV	2580	08/31/10	1
pH	7.0		su	9045D	09/03/10	1
Sodium Adsorption Ratio	30.			Calc.	08/29/10	1
Specific Conductance	2600		umhos/cm	9050AMod	09/02/10	1
Mercury	0.15	0.020	mg/kg	7471	08/31/10	1
Arsenic	4.7	1.0	mg/kg	6010B	08/30/10	1
Barium	5700	0.25	mg/kg	6010B	08/30/10	1
Cadmium	0.32	0.25	mg/kg	6010B	08/30/10	1
Chromium	24.	0.50	mg/kg	6010B	08/30/10	1
Copper	22.	1.0	mg/kg	6010B	08/30/10	1
Lead	12.	0.25	mg/kg	6010B	08/30/10	1
Nickel	9.0	1.0	mg/kg	6010B	08/30/10	1
Selenium	BDL	1.0	mg/kg	6010B	08/30/10	1
Silver	BDL	0.50	mg/kg	6010B	08/30/10	1
Zinc	45.	1.5	mg/kg	6010B	08/30/10	1
Benzene	0.0050	0.0025	mg/kg	8021/8015	08/29/10	5
Toluene	BDL	0.025	mg/kg	8021/8015	08/29/10	5
Ethylbenzene	0.016	0.0025	mg/kg	8021/8015	08/29/10	5
Total Xylene	0.045	0.0075	mg/kg	8021/8015	08/29/10	5
TPH (GC/FID) Low Fraction	6.1	0.50	mg/kg	GRO	08/29/10	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	89.3		% Rec.	8021/8015	08/29/10	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	08/29/10	5
TPH (GC/FID) High Fraction	880	80.	mg/kg	3546/DRO	08/31/10	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	08/31/10	20
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	09/01/10	1
Acenaphthene	0.039	0.0060	mg/kg	8270C-SIM	09/01/10	1
Acenaphthylene	0.021	0.0060	mg/kg	8270C-SIM	09/01/10	1
Benzo(a)anthracene	0.023	0.0060	mg/kg	8270C-SIM	09/01/10	1
Benzo(a)pyrene	0.015	0.0060	mg/kg	8270C-SIM	09/01/10	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L476142-01 (PH) - 7.0@20.2c



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

September 07, 2010

Chris Hines or Brad Kieding
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : August 28, 2010
 Description : D23 Pit Closure
 Sample ID : D23-S STS-082610
 Collected By : Blair Rollins
 Collection Date : 08/26/10 14:30

ESC Sample # : L476142-01

Site ID :

Project # : D23 PIT CLOSURE

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	0.034	0.0060	mg/kg	8270C-SIM	09/01/10	1
Benzo(g,h,i)perylene	0.0095	0.0060	mg/kg	8270C-SIM	09/01/10	1
Benzo(k)fluoranthene	0.034	0.0060	mg/kg	8270C-SIM	09/01/10	1
Chrysene	0.033	0.0060	mg/kg	8270C-SIM	09/01/10	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	09/01/10	1
Fluoranthene	0.053	0.0060	mg/kg	8270C-SIM	09/01/10	1
Fluorene	0.058	0.0060	mg/kg	8270C-SIM	09/01/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	09/01/10	1
Naphthalene	0.20	0.12	mg/kg	8270C-SIM	09/03/10	20
Phenanthrene	0.18	0.0060	mg/kg	8270C-SIM	09/01/10	1
Pyrene	0.035	0.0060	mg/kg	8270C-SIM	09/01/10	1
1-Methylnaphthalene	0.33	0.12	mg/kg	8270C-SIM	09/03/10	20
2-Methylnaphthalene	0.55	0.12	mg/kg	8270C-SIM	09/03/10	20
2-Chloronaphthalene	BDL	0.0060	mg/kg	8270C-SIM	09/01/10	1
Surrogate Recovery						
Nitrobenzene-d5	0.00		% Rec.	8270C-SIM	09/03/10	20
2-Fluorobiphenyl	45.5		% Rec.	8270C-SIM	09/01/10	1
p-Terphenyl-d14	84.3		% Rec.	8270C-SIM	09/01/10	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: 09/07/10 12:04 Printed: 09/07/10 12:04
 L476142-01 (PH) - 7.0@20.2c



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

September 07, 2010

Chris Hines or Brad Kieding
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L476142-02

Date Received : August 28, 2010
 Description : D23 Pit Closure

Site ID :

Sample ID : D23-S STS-082610

Project : D23 PIT CLOSURE

Collected By : Blair Rollins
 Collection Date : 08/26/10 14:30

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
Corrosivity	Non-Corrosiv				9045D	08/31/10 1555	MCH	1
Ignitability	See Footnote		Deg. F		D93/101	09/01/10 1110	AAS	1
Paint Filter Test	See Footnote		%		9095B	09/02/10 1500	AAS	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg		9012B	09/01/10 1534	CWP	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg		9034/90	08/31/10 1600	TWF	1
TCLP Extraction	-				1311	08/31/10 0855	AJN	1
Mercury	BDL	0.0010	mg/l	0.20	7470A	09/01/10 1439	WC	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	09/01/10 1632	DMM	1
Barium	2.1	0.15	mg/l	100	6010B	09/01/10 1632	DMM	1
Cadmium	BDL	0.050	mg/l	1.0	6010B	09/01/10 1632	DMM	1
Chromium	BDL	0.050	mg/l	5.0	6010B	09/01/10 1632	DMM	1
Lead	BDL	0.050	mg/l	5.0	6010B	09/01/10 1632	DMM	1
Selenium	BDL	0.050	mg/l	1.0	6010B	09/01/10 1632	DMM	1
Silver	BDL	0.050	mg/l	5.0	6010B	09/01/10 1632	DMM	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 09/07/10 12:04 Printed: 09/07/10 12:04

L476142-02 (PAINT) - Contains No Free Liquid

L476142-02 (IGNITABILITY) - Did Not Ignite @ 170 F



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

September 07, 2010

Chris Hines or Brad Kieding
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L476142-03

Date Received : August 28, 2010
 Description : D23 Pit Closure

Site ID :

Sample ID : D23-N STS-082610

Project # : D23 PIT CLOSURE

Collected By : Blair Rollins
 Collection Date : 08/26/10 15:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	4.7	2.0	mg/kg	3060A/7196A	08/28/10	1
Chromium, Trivalent	33.	0.50	mg/kg	Calc.	08/30/10	1
ORP	49.		mV	2580	08/31/10	1
pH	6.9		su	9045D	09/03/10	1
Sodium Adsorption Ratio	13.			Calc.	08/29/10	1
Specific Conductance	3800		umhos/cm	9050AMod	09/02/10	1
Mercury	7.7	1.0	mg/kg	7471	08/31/10	50
Arsenic	4.6	1.0	mg/kg	6010B	08/30/10	1
Barium	8700	1.2	mg/kg	6010B	08/30/10	5
Cadmium	0.39	0.25	mg/kg	6010B	08/30/10	1
Chromium	37.	0.50	mg/kg	6010B	08/30/10	1
Copper	75.	1.0	mg/kg	6010B	08/30/10	1
Lead	24.	0.25	mg/kg	6010B	08/30/10	1
Nickel	16.	1.0	mg/kg	6010B	08/30/10	1
Selenium	BDL	1.0	mg/kg	6010B	08/30/10	1
Silver	BDL	0.50	mg/kg	6010B	08/30/10	1
Zinc	45.	1.5	mg/kg	6010B	08/30/10	1
Benzene	BDL	1.2	mg/kg	8021/8015	08/30/10	2500
Toluene	BDL	12.	mg/kg	8021/8015	08/30/10	2500
Ethylbenzene	2.3	1.2	mg/kg	8021/8015	08/30/10	2500
Total Xylene	59.	3.8	mg/kg	8021/8015	08/30/10	2500
TPH (GC/FID) Low Fraction	820	250	mg/kg	GRO	08/30/10	2500
Surrogate Recovery-%						
a, a, a-Trifluorotoluene(FID)	113.		% Rec.	8021/8015	08/30/10	2500
a, a, a-Trifluorotoluene(PID)	95.2		% Rec.	8021/8015	08/30/10	2500
TPH (GC/FID) High Fraction	14000	400	mg/kg	3546/DRO	08/31/10	100
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	08/31/10	100
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.15	mg/kg	8270C-SIM	09/03/10	25
Acenaphthene	BDL	0.15	mg/kg	8270C-SIM	09/03/10	25
Acenaphthylene	BDL	0.15	mg/kg	8270C-SIM	09/03/10	25
Benzo(a)anthracene	BDL	0.15	mg/kg	8270C-SIM	09/03/10	25
Benzo(a)pyrene	BDL	0.15	mg/kg	8270C-SIM	09/03/10	25

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L476142-03 (PH) - 6.9@19.9c
 L476142-03 (SV8270PAHSIM) - Dilution due to matrix



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

September 07, 2010

Chris Hines or Brad Kieding
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L476142-03

Date Received : August 28, 2010
Description : D23 Pit Closure

Site ID :

Sample ID : D23-N STS-082610

Project # : D23 PIT CLOSURE

Collected By : Blair Rollins
Collection Date : 08/26/10 15:00

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include various PAHs like Benzo(b)fluoranthene, Benzo(g,h,i)perylene, etc., and surrogate recovery 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: 09/07/10 12:04 Printed: 09/07/10 12:04
L476142-03 (PH) - 6.9@19.9c
L476142-03 (SV8270PAHSIM) - Dilution due to matrix



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

September 07, 2010

Chris Hines or Brad Kieding
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L476142-04

Date Received : August 28, 2010
 Description : D23 Pit Closure

Site ID :

Sample ID : D23-N STS-082610

Project : D23 PIT CLOSURE

Collected By : Blair Rollins
 Collection Date : 08/26/10 15:00

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
Corrosivity	Non-Corrosiv				9045D	08/31/10 1555	MCH	1
Ignitability	See Footnote		Deg. F		D93/101	09/01/10 1110	AAS	1
Paint Filter Test	See Footnote		%		9095B	09/02/10 1500	AAS	1
Reactive CN (SW846 7.3.3.2)	BDL	0.125	mg/kg		9012B	09/01/10 1535	CWP	1
Reactive Sulf.(SW846 7.3.4.1)	BDL	25.	mg/kg		9034/90	08/31/10 1600	TWF	1
TCLP Extraction	-				1311	08/31/10 0855	AJN	1
Mercury	BDL	0.0010	mg/l	0.20	7470A	09/01/10 1441	WC	1
Arsenic	BDL	0.050	mg/l	5.0	6010B	09/01/10 1636	DMM	1
Barium	4.0	0.15	mg/l	100	6010B	09/01/10 1636	DMM	1
Cadmium	BDL	0.050	mg/l	1.0	6010B	09/01/10 1636	DMM	1
Chromium	BDL	0.050	mg/l	5.0	6010B	09/01/10 1636	DMM	1
Lead	BDL	0.050	mg/l	5.0	6010B	09/01/10 1636	DMM	1
Selenium	BDL	0.050	mg/l	1.0	6010B	09/01/10 1636	DMM	1
Silver	BDL	0.050	mg/l	5.0	6010B	09/01/10 1636	DMM	1

BDL - Below Detection Limit

Det. Limit - Estimated Quantitation Limit(EQL)

Limit - Maximum Contaminant Level as established by the US EPA

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 09/07/10 12:04 Printed: 09/07/10 12:04

L476142-04 (PAINT) - Contains No Free Liquid

L476142-04 (IGNITABILITY) - Did Not Ignite @ 170 F

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L476142-01	WG495979	SAMP	Nitrobenzene-d5	R1357888	J7
	WG495975	SAMP	o-Terphenyl	R1357070	J7
L476142-03	WG495979	SAMP	Nitrobenzene-d5	R1357888	J7
	WG495979	SAMP	2-Fluorobiphenyl	R1357888	J7
	WG495979	SAMP	p-Terphenyl-d14	R1357888	J7
	WG495975	SAMP	o-Terphenyl	R1357070	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

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
09/07/10 at 12:04:47

TSR Signing Reports: 358
R5 - Desired TAT

Create p-keys for projects. Enter project name as Project Number and Project Name. Log all samples to separate L#s. See L471333 when COC says see attached list. PAHs = SV8270PAHSIM. BTEX = 8021.

Sample: L476142-01 Account: ENCANACO Received: 08/28/10 09:00 Due Date: 09/03/10 00:00 RPT Date: 09/07/10 12:04
Changed to std TAT - MB 8/30/10
Sample: L476142-02 Account: ENCANACO Received: 08/28/10 09:00 Due Date: 09/03/10 00:00 RPT Date: 09/07/10 12:04
Sample: L476142-03 Account: ENCANACO Received: 08/28/10 09:00 Due Date: 09/03/10 00:00 RPT Date: 09/07/10 12:04
Sample: L476142-04 Account: ENCANACO Received: 08/28/10 09:00 Due Date: 09/03/10 00:00 RPT Date: 09/07/10 12:04



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L476142

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

September 07, 2010

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Chromium,Hexavalent	< 2	mg/kg			WG495738	08/28/10 14:12
Benzene	< .0005	mg/kg			WG495922	08/28/10 23:40
Ethylbenzene	< .0005	mg/kg			WG495922	08/28/10 23:40
Toluene	< .005	mg/kg			WG495922	08/28/10 23:40
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG495922	08/28/10 23:40
Total Xylene	< .0015	mg/kg			WG495922	08/28/10 23:40
a,a,a-Trifluorotoluene(FID)		% Rec.	99.23	59-128	WG495922	08/28/10 23:40
a,a,a-Trifluorotoluene(PID)		% Rec.	104.0	54-144	WG495922	08/28/10 23:40
Benzene	< .0005	mg/kg			WG495942	08/30/10 12:45
Ethylbenzene	< .0005	mg/kg			WG495942	08/30/10 12:45
Toluene	< .005	mg/kg			WG495942	08/30/10 12:45
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG495942	08/30/10 12:45
Total Xylene	< .0015	mg/kg			WG495942	08/30/10 12:45
a,a,a-Trifluorotoluene(FID)		% Rec.	113.0	59-128	WG495942	08/30/10 12:45
a,a,a-Trifluorotoluene(PID)		% Rec.	95.54	54-144	WG495942	08/30/10 12:45
Arsenic	< 1	mg/kg			WG495939	08/30/10 11:10
Barium	< .25	mg/kg			WG495939	08/30/10 11:10
Cadmium	< .25	mg/kg			WG495939	08/30/10 11:10
Chromium	< .5	mg/kg			WG495939	08/30/10 11:10
Copper	< 1	mg/kg			WG495939	08/30/10 11:10
Lead	< .25	mg/kg			WG495939	08/30/10 11:10
Nickel	< 1	mg/kg			WG495939	08/30/10 11:10
Selenium	< 1	mg/kg			WG495939	08/30/10 11:10
Silver	< .5	mg/kg			WG495939	08/30/10 11:10
Zinc	< 1.5	mg/kg			WG495939	08/30/10 11:10
Corrosivity	7.60				WG495928	08/31/10 15:55
Reactive Sulf.(SW846 7.3.4.1)	< 25	mg/kg			WG496030	08/31/10 16:00
Mercury	< .02	mg/kg			WG495907	08/31/10 09:25
TPH (GC/FID) High Fraction	< 4	ppm			WG495975	08/31/10 05:54
o-Terphenyl		% Rec.	73.28	50-150	WG495975	08/31/10 05:54
1-Methylnaphthalene	< .006	mg/kg			WG495979	09/01/10 11:37
2-Chloronaphthalene	< .006	mg/kg			WG495979	09/01/10 11:37
2-Methylnaphthalene	< .006	mg/kg			WG495979	09/01/10 11:37
Acenaphthene	< .006	mg/kg			WG495979	09/01/10 11:37
Acenaphthylene	< .006	mg/kg			WG495979	09/01/10 11:37
Anthracene	< .006	mg/kg			WG495979	09/01/10 11:37
Benzo(a)anthracene	< .006	mg/kg			WG495979	09/01/10 11:37
Benzo(a)pyrene	< .006	mg/kg			WG495979	09/01/10 11:37
Benzo(b)fluoranthene	< .006	mg/kg			WG495979	09/01/10 11:37
Benzo(g,h,i)perylene	< .006	mg/kg			WG495979	09/01/10 11:37
Benzo(k)fluoranthene	< .006	mg/kg			WG495979	09/01/10 11:37
Chrysene	< .006	mg/kg			WG495979	09/01/10 11:37
Dibenz(a,h)anthracene	< .006	mg/kg			WG495979	09/01/10 11:37

* 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 Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L476142

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

September 07, 2010

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Fluoranthene	< .006	mg/kg			WG495979	09/01/10 11:37
Fluorene	< .006	mg/kg			WG495979	09/01/10 11:37
Indeno(1,2,3-cd)pyrene	< .006	mg/kg			WG495979	09/01/10 11:37
Naphthalene	< .006	mg/kg			WG495979	09/01/10 11:37
Phenanthrene	< .006	mg/kg			WG495979	09/01/10 11:37
Pyrene	< .006	mg/kg			WG495979	09/01/10 11:37
2-Fluorobiphenyl		% Rec.	60.94	21-120	WG495979	09/01/10 11:37
Nitrobenzene-d5		% Rec.	59.28	33-114	WG495979	09/01/10 11:37
p-Terphenyl-d14		% Rec.	85.22	18-142	WG495979	09/01/10 11:37
Reactive CN (SW846 7.3.3.2)	< .125	mg/kg			WG496031	09/01/10 15:30
Mercury	< .0002	mg/l			WG496209	09/01/10 13:19
Arsenic	< .05	mg/l			WG496207	09/01/10 15:20
Barium	< .15	mg/l			WG496207	09/01/10 15:20
Cadmium	< .05	mg/l			WG496207	09/01/10 15:20
Chromium	< .05	mg/l			WG496207	09/01/10 15:20
Lead	< .05	mg/l			WG496207	09/01/10 15:20
Selenium	< .05	mg/l			WG496207	09/01/10 15:20
Silver	< .05	mg/l			WG496207	09/01/10 15:20
Specific Conductance	1.20	umhos/cm			WG496556	09/02/10 09:05
pH	4.50	su			WG496499	09/03/10 08:29

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Chromium,Hexavalent	mg/kg	0	0	0	20	L475460-04	WG495738
Barium	mg/kg	63.0	95.0	39.9*	20	L476168-10	WG495939
Cadmium	mg/kg	0.540	0.590	9.78	20	L476168-10	WG495939
Chromium	mg/kg	14.0	16.0	11.2	20	L476168-10	WG495939
Copper	mg/kg	13.0	14.6	10.1	20	L476168-10	WG495939
Lead	mg/kg	12.0	13.0	9.68	20	L476168-10	WG495939
Nickel	mg/kg	10.0	14.5	33.9*	20	L476168-10	WG495939
Selenium	mg/kg	0	0	0	20	L476168-10	WG495939
Silver	mg/kg	0	0	0	20	L476168-10	WG495939
Zinc	mg/kg	41.0	46.8	13.2	20	L476168-10	WG495939
Arsenic	mg/kg	9.20	13.0	34.1*	20	L476168-10	WG495939
ORP	mV	43.0	46.0	6.74	20	L475515-01	WG496085
ORP	mV	18.0	17.0	5.71	20	L476230-19	WG496085
Corrosivity		0	0	0	10	L475487-01	WG495928
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	0	0	0	20	L476142-04	WG496030

* 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 Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L476142

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

September 07, 2010

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Mercury	mg/kg	0	0	0	20	L476168-02	WG495907
Ignitability	Deg. F	0	0	0	10	L475844-02	WG496248
Ignitability	Deg. F	0	0	0	10	L476365-02	WG496248
Reactive CN (SW846 7.3.3.2)	mg/kg	0	0	0	20	L476142-04	WG496031
Mercury	mg/l	0	0	0	20	L476179-02	WG496209
Arsenic	mg/l	0	0	0	20	L476179-02	WG496207
Barium	mg/l	0.720	0.730	1.66	20	L476179-02	WG496207
Cadmium	mg/l	0	0	0	20	L476179-02	WG496207
Chromium	mg/l	0	0	0	20	L476179-02	WG496207
Lead	mg/l	0	0	0	20	L476179-02	WG496207
Selenium	mg/l	0	0	0	20	L476179-02	WG496207
Silver	mg/l	0	0	0	20	L476179-02	WG496207
Specific Conductance	umhos/cm	2700	2600	5.06	20	L476142-01	WG496556
Specific Conductance	umhos/cm	95.0	110.	14.5	20	L476696-01	WG496556
Paint Filter Test	%	0	0	0	20	L476646-01	WG496550
pH	su	6.90	6.80	1.46*	1	L476106-02	WG496499
pH	su	7.90	7.10	10.7*	1	L476230-17	WG496499

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Chromium, Hexavalent	mg/kg	100	66.8	66.8	50-143	WG495738
Benzene	mg/kg	.05	0.0460	92.0	76-113	WG495922
Ethylbenzene	mg/kg	.05	0.0515	103.	78-115	WG495922
Toluene	mg/kg	.05	0.0492	98.5	76-114	WG495922
Total Xylene	mg/kg	.15	0.161	108.	81-118	WG495922
a,a,a-Trifluorotoluene (FID)				98.52	59-128	WG495922
a,a,a-Trifluorotoluene (PID)				102.6	54-144	WG495922
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.21	113.	67-135	WG495922
a,a,a-Trifluorotoluene (FID)				95.17	59-128	WG495922
a,a,a-Trifluorotoluene (PID)				107.3	54-144	WG495922
Benzene	mg/kg	.05	0.0483	96.6	76-113	WG495942
Ethylbenzene	mg/kg	.05	0.0479	95.7	78-115	WG495942
Toluene	mg/kg	.05	0.0472	94.4	76-114	WG495942
Total Xylene	mg/kg	.15	0.140	93.5	81-118	WG495942
a,a,a-Trifluorotoluene (PID)				93.56	54-144	WG495942
TPH (GC/FID) Low Fraction	mg/kg	5.5	4.65	84.6	67-135	WG495942
a,a,a-Trifluorotoluene (FID)				76.64	59-128	WG495942
Arsenic	mg/kg	192	182.	94.8	78.6-120.8	WG495939

* 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 Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L476142

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

September 07, 2010

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Barium	mg/kg	420	394.	93.8	78.8-121.4	WG495939
Cadmium	mg/kg	70.1	66.4	94.7	78.5-121.5	WG495939
Chromium	mg/kg	168	164.	97.6	80.4-120.2	WG495939
Copper	mg/kg	122	122.	100.	81.6-119.7	WG495939
Lead	mg/kg	113	108.	95.6	77.3-122.1	WG495939
Nickel	mg/kg	74.1	68.8	92.8	78.8-121.2	WG495939
Selenium	mg/kg	176	169.	96.0	75.6-125.0	WG495939
Silver	mg/kg	115	105.	91.3	66-133.9	WG495939
Zinc	mg/kg	437	412.	94.3	78.5-121.7	WG495939
ORP	mV	229	220.	96.1	95.6-104.37	WG496085
Corrosivity		9.36	9.40	100.	98.9-102.0	WG495928
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	100	71.0	71.0	70-130	WG496030
Mercury	mg/kg	8.77	10.9	124.	71.6-127.7	WG495907
TPH (GC/FID) High Fraction	ppm	60	46.4	77.4	50-150	WG495975
o-Terphenyl				84.08	50-150	WG495975
1-Methylnaphthalene	mg/kg	.033	0.0210	63.5	41-110	WG495979
2-Chloronaphthalene	mg/kg	.033	0.0238	72.1	43-109	WG495979
2-Methylnaphthalene	mg/kg	.033	0.0214	64.8	38-104	WG495979
Acenaphthene	mg/kg	.033	0.0212	64.3	48-103	WG495979
Acenaphthylene	mg/kg	.033	0.0205	62.2	43-106	WG495979
Anthracene	mg/kg	.033	0.0245	74.4	51-110	WG495979
Benzo(a)anthracene	mg/kg	.033	0.0215	65.1	38-126	WG495979
Benzo(a)pyrene	mg/kg	.033	0.0236	71.6	47-118	WG495979
Benzo(b)fluoranthene	mg/kg	.033	0.0240	72.8	47-118	WG495979
Benzo(g,h,i)perylene	mg/kg	.033	0.0220	66.6	40-125	WG495979
Benzo(k)fluoranthene	mg/kg	.033	0.0228	69.0	45-121	WG495979
Chrysene	mg/kg	.033	0.0236	71.4	35-135	WG495979
Dibenz(a,h)anthracene	mg/kg	.033	0.0230	69.6	41-124	WG495979
Fluoranthene	mg/kg	.033	0.0250	75.8	50-114	WG495979
Fluorene	mg/kg	.033	0.0230	69.7	49-109	WG495979
Indeno(1,2,3-cd)pyrene	mg/kg	.033	0.0228	69.1	40-126	WG495979
Naphthalene	mg/kg	.033	0.0192	58.2	36-100	WG495979
Phenanthrene	mg/kg	.033	0.0228	69.0	46-108	WG495979
Pyrene	mg/kg	.033	0.0229	69.4	30-136	WG495979
2-Fluorobiphenyl				65.44	21-120	WG495979
Nitrobenzene-d5				61.01	33-114	WG495979
p-Terphenyl-d14				85.34	18-142	WG495979
Ignitability	Deg. F	82	82.0	100.	93-107	WG496248
Mercury	mg/l	.003	0.00275	91.7	85-115	WG496209
Arsenic	mg/l	1.13	1.14	101.	85-115	WG496207
Barium	mg/l	1.13	1.07	94.7	85-115	WG496207

* 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 Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L476142

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

September 07, 2010

Analyte	Units	Laboratory Control		Sample	% Rec	Limit	Batch
		Known Val	Result	Result			
Cadmium	mg/l	1.13	1.13	1.13	100.	85-115	WG496207
Chromium	mg/l	1.13	1.13	1.14	101.	85-115	WG496207
Lead	mg/l	1.13	1.13	1.14	101.	85-115	WG496207
Selenium	mg/l	1.13	1.13	1.18	104.	85-115	WG496207
Silver	mg/l	1.13	1.13	1.11	98.2	85-115	WG496207
Specific Conductance	umhos/cm	406	406	420.	103.	85-115	WG496556
pH	su	9.36	9.36	9.30	99.4	98.9-102.0	WG496499

Analyte	Units	Laboratory Control		Sample	%Rec	Limit	RPD	Limit	Batch
		Result	Ref	Duplicate					
Chromium, Hexavalent	mg/kg	61.6	66.8	62.0	62.0	50-143	8.10	20	WG495738
Benzene	mg/kg	0.0478	0.0460	96.0	96.0	76-113	3.81	20	WG495922
Ethylbenzene	mg/kg	0.0544	0.0515	109.	109.	78-115	5.31	20	WG495922
Toluene	mg/kg	0.0507	0.0492	101.	101.	76-114	3.01	20	WG495922
Total Xylene	mg/kg	0.169	0.161	112.	112.	81-118	4.48	20	WG495922
a,a,a-Trifluorotoluene(FID)				98.51	98.51	59-128			WG495922
a,a,a-Trifluorotoluene(PID)				101.7	101.7	54-144			WG495922
TPH (GC/FID) Low Fraction	mg/kg	6.06	6.21	110.	110.	67-135	2.35	20	WG495922
a,a,a-Trifluorotoluene(FID)				93.51	93.51	59-128			WG495922
a,a,a-Trifluorotoluene(PID)				107.9	107.9	54-144			WG495922
TPH (GC/FID) Low Fraction	mg/kg	4.62	4.65	84.0	84.0	67-135	0.790	20	WG495942
a,a,a-Trifluorotoluene(FID)				77.59	77.59	59-128			WG495942
Benzene	mg/kg	0.0462	0.0483	92.0	92.0	76-113	4.49	20	WG495942
Ethylbenzene	mg/kg	0.0456	0.0479	91.0	91.0	78-115	4.89	20	WG495942
Toluene	mg/kg	0.0454	0.0472	91.0	91.0	76-114	3.89	20	WG495942
Total Xylene	mg/kg	0.134	0.140	89.0	89.0	81-118	4.87	20	WG495942
a,a,a-Trifluorotoluene(PID)				94.52	94.52	54-144			WG495942
ORP	mV	220.	220.	96.0	96.0	95.6-104.37	0	20	WG496085
Corrosivity		9.40	9.40	100.	100.	98.9-102.0	0	10	WG495928
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	71.0	71.0	71.0	71.0	70-130	0	20	WG496030
TPH (GC/FID) High Fraction	ppm	43.7	46.4	73.0	73.0	50-150	5.91	20	WG495975
o-Terphenyl				82.06	82.06	50-150			WG495975
1-Methylnaphthalene	mg/kg	0.0192	0.0210	58.0	58.0	41-110	8.67	24	WG495979
2-Chloronaphthalene	mg/kg	0.0214	0.0238	65.0	65.0	43-109	10.6	21	WG495979
2-Methylnaphthalene	mg/kg	0.0191	0.0214	58.0	58.0	38-104	11.5	24	WG495979
Acenaphthene	mg/kg	0.0220	0.0212	66.0	66.0	48-103	3.41	20	WG495979
Acenaphthylene	mg/kg	0.0207	0.0205	63.0	63.0	43-106	1.02	20	WG495979
Anthracene	mg/kg	0.0234	0.0245	71.0	71.0	51-110	4.58	22	WG495979
Benzo(a)anthracene	mg/kg	0.0214	0.0215	65.0	65.0	38-126	0.171	20	WG495979
Benzo(a)pyrene	mg/kg	0.0223	0.0236	68.0	68.0	47-118	5.75	20	WG495979

* 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 Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L476142

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

September 07, 2010

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzo(b)fluoranthene	mg/kg	0.0239	0.0240	72.0	47-118	0.661	29	WG495979
Benzo(g,h,i)perylene	mg/kg	0.0212	0.0220	64.0	40-125	3.53	20	WG495979
Benzo(k)fluoranthene	mg/kg	0.0220	0.0228	67.0	45-121	3.27	31	WG495979
Chrysene	mg/kg	0.0226	0.0236	68.0	35-135	4.34	20	WG495979
Dibenz(a,h)anthracene	mg/kg	0.0217	0.0230	66.0	41-124	5.51	20	WG495979
Fluoranthene	mg/kg	0.0235	0.0250	71.0	50-114	6.02	20	WG495979
Fluorene	mg/kg	0.0224	0.0230	68.0	49-109	2.68	19	WG495979
Indeno(1,2,3-cd)pyrene	mg/kg	0.0217	0.0228	66.0	40-126	4.72	20	WG495979
Naphthalene	mg/kg	0.0180	0.0192	54.0	36-100	6.75	24	WG495979
Phenanthrene	mg/kg	0.0210	0.0228	64.0	46-108	8.12	21	WG495979
Pyrene	mg/kg	0.0220	0.0229	67.0	30-136	3.81	20	WG495979
2-Fluorobiphenyl				62.27	21-120			WG495979
Nitrobenzene-d5				52.80	33-114			WG495979
p-Terphenyl-d14				79.12	18-142			WG495979
Ignitability	Deg. F	82.0	82.0	100.	93-107	0	20	WG496248
Specific Conductance	umhos/	420.	420.	103.	85-115	0	20	WG496556
pH	su	9.30	9.30	99.0	98.9-102.0	0	20	WG496499

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Chromium, Hexavalent	mg/kg	11.8	0	20	59.0	50-150	L475472-01	WG495738
Benzene	mg/kg	0.193	0	.05	77.2	32-137	L476148-01	WG495922
Ethylbenzene	mg/kg	0.201	0.00770	.05	77.4	10-150	L476148-01	WG495922
Toluene	mg/kg	0.203	0	.05	81.3	20-142	L476148-01	WG495922
Total Xylene	mg/kg	0.622	0	.15	82.9	16-141	L476148-01	WG495922
a,a,a-Trifluorotoluene(FID)					97.46	59-128		WG495922
a,a,a-Trifluorotoluene(PID)					102.0	54-144		WG495922
TPH (GC/FID) Low Fraction	mg/kg	19.6	1.70	5.5	65.2	55-109	L476148-01	WG495922
a,a,a-Trifluorotoluene(FID)					93.71	59-128		WG495922
a,a,a-Trifluorotoluene(PID)					103.5	54-144		WG495922
Benzene	mg/kg	0.0405	0.0250	.05	31.0*	32-137	L476108-29	WG495942
Ethylbenzene	mg/kg	0.0362	0.0390	.05	0*	10-150	L476108-29	WG495942
Toluene	mg/kg	0.0381	0.0320	.05	12.3*	20-142	L476108-29	WG495942
Total Xylene	mg/kg	0.114	0.0730	.15	27.6	16-141	L476108-29	WG495942
a,a,a-Trifluorotoluene(PID)					89.65	54-144		WG495942
TPH (GC/FID) Low Fraction	mg/kg	4.10	6.66	5.5	0*	55-109	L476108-29	WG495942
a,a,a-Trifluorotoluene(FID)					83.29	59-128		WG495942
Barium	mg/kg	121.	95.0	50	52.0*	75-125	L476168-10	WG495939
Cadmium	mg/kg	45.7	0.590	50	90.2	75-125	L476168-10	WG495939
Chromium	mg/kg	61.8	16.0	50	91.6	75-125	L476168-10	WG495939
Copper	mg/kg	64.6	14.6	50	100.	75-125	L476168-10	WG495939
Lead	mg/kg	58.7	13.0	50	91.4	75-125	L476168-10	WG495939
Nickel	mg/kg	58.4	14.5	50	87.8	75-125	L476168-10	WG495939
Selenium	mg/kg	44.7	0	50	89.4	75-125	L476168-10	WG495939
Silver	mg/kg	47.8	0	50	95.6	75-125	L476168-10	WG495939
Zinc	mg/kg	95.5	46.8	50	97.4	75-125	L476168-10	WG495939

* 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 Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L476142

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

September 07, 2010

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Arsenic	mg/kg	65.3	13.0	50	20.9*	75-125	L476168-10	WG495939
Mercury	mg/kg	0.274	0	.25	110.	70-130	L476168-02	WG495907
TPH (GC/FID) High Fraction o-Terphenyl	ppm	46.5	0	60	77.5 88.38	50-150 50-150	L475739-05	WG495975 WG495975
Mercury	mg/l	0.00309	0	.003	103.	70-130	L476179-02	WG496209
Arsenic	mg/l	1.15	0	1.13	102.	75-125	L476179-02	WG496207
Barium	mg/l	1.76	0.730	1.13	91.2	75-125	L476179-02	WG496207
Cadmium	mg/l	1.13	0	1.13	100.	75-125	L476179-02	WG496207
Chromium	mg/l	1.12	0	1.13	99.1	75-125	L476179-02	WG496207
Lead	mg/l	1.13	0	1.13	100.	75-125	L476179-02	WG496207
Selenium	mg/l	1.16	0	1.13	103.	75-125	L476179-02	WG496207
Silver	mg/l	0.144	0	1.13	12.7*	75-125	L476179-02	WG496207

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Chromium,Hexavalent	mg/kg	13.0	11.8	65.0	50-150	9.68	20	L475472-01	WG495738
Benzene	mg/kg	0.198	0.193	79.4	32-137	2.83	39	L476148-01	WG495922
Ethylbenzene	mg/kg	0.204	0.201	78.5	10-150	1.34	44	L476148-01	WG495922
Toluene	mg/kg	0.204	0.203	81.7	20-142	0.530	42	L476148-01	WG495922
Total Xylene	mg/kg	0.631	0.622	84.2	16-141	1.46	46	L476148-01	WG495922
a,a,a-Trifluorotoluene(FID)				97.75	59-128				WG495922
a,a,a-Trifluorotoluene(PID)				101.1	54-144				WG495922
TPH (GC/FID) Low Fraction	mg/kg	22.3	19.6	75.0	55-109	12.8	20	L476148-01	WG495922
a,a,a-Trifluorotoluene(FID)				93.37	59-128				WG495922
a,a,a-Trifluorotoluene(PID)				104.6	54-144				WG495922
Benzene	mg/kg	0.0475	0.0405	44.9	32-137	15.8	39	L476108-29	WG495942
Ethylbenzene	mg/kg	0.0437	0.0362	9.39*	10-150	18.7	44	L476108-29	WG495942
Toluene	mg/kg	0.0443	0.0381	24.7	20-142	15.1	42	L476108-29	WG495942
Total Xylene	mg/kg	0.138	0.114	43.4	16-141	18.8	46	L476108-29	WG495942
a,a,a-Trifluorotoluene(PID)				93.04	54-144				WG495942
TPH (GC/FID) Low Fraction	mg/kg	4.02	4.10	0*	55-109	2.00	20	L476108-29	WG495942
a,a,a-Trifluorotoluene(FID)				82.26	59-128				WG495942
Barium	mg/kg	112.	121.	34.0*	75-125	7.73	20	L476168-10	WG495939
Cadmium	mg/kg	43.4	45.7	85.6	75-125	5.16	20	L476168-10	WG495939
Chromium	mg/kg	60.3	61.8	88.6	75-125	2.46	20	L476168-10	WG495939
Copper	mg/kg	62.0	64.6	94.8	75-125	4.11	20	L476168-10	WG495939
Lead	mg/kg	58.0	58.7	90.0	75-125	1.20	20	L476168-10	WG495939
Nickel	mg/kg	55.3	58.4	81.6	75-125	5.45	20	L476168-10	WG495939
Selenium	mg/kg	44.4	44.7	88.8	75-125	0.673	20	L476168-10	WG495939
Silver	mg/kg	46.3	47.8	92.6	75-125	3.19	20	L476168-10	WG495939
Zinc	mg/kg	95.8	95.5	98.0	75-125	0.314	20	L476168-10	WG495939
Arsenic	mg/kg	66.2	65.3	21.3*	75-125	1.37	20	L476168-10	WG495939

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



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

EnCana Oil & Gas Inc. - CO
 Chris Hines or Brad Kieding
 2717 County Road 215, Suite 100

Quality Assurance Report
 Level II

Parachute, CO 81635

September 07, 2010

L476142

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Mercury	mg/kg	0.292	0.274	117.	70-130	6.36	20	L476168-02	WG495907
TPH (GC/FID) High Fraction o-Terphenyl	ppm	48.1	46.5	80.2 99.57	50-150 50-150	3.39	25	L475739-05	WG495975 WG495975
Mercury	mg/l	0.00302	0.00309	101.	70-130	2.29	20	L476179-02	WG496209
Arsenic	mg/l	1.13	1.15	100.	75-125	1.75	20	L476179-02	WG496207
Barium	mg/l	1.70	1.76	85.8	75-125	3.47	20	L476179-02	WG496207
Cadmium	mg/l	1.10	1.13	97.3	75-125	2.69	20	L476179-02	WG496207
Chromium	mg/l	1.10	1.12	97.3	75-125	1.80	20	L476179-02	WG496207
Lead	mg/l	1.11	1.13	98.2	75-125	1.79	20	L476179-02	WG496207
Selenium	mg/l	1.15	1.16	102.	75-125	0.866	20	L476179-02	WG496207
Silver	mg/l	0.118	0.144	10.4*	75-125	19.8	20	L476179-02	WG496207

Batch number /Run number / Sample number cross reference

WG495738: R1351108: L476142-01 03
 WG495922: R1351388: L476142-01
 WG495942: R1354089: L476142-03
 WG495939: R1354289: L476142-01 03
 WG496085: R1355748: L476142-01 03
 WG495928: R1355888: L476142-02 04
 WG496068: R1356031: L476142-02 04
 WG496030: R1356033: L476142-02 04
 WG495907: R1356190: L476142-01 03
 WG495990: R1356890: L476142-01 03
 WG495975: R1357070: L476142-01 03
 WG495979: R1357888: L476142-01 03
 WG496248: R1358028: L476142-02 04
 WG496031: R1358328: L476142-02 04
 WG496209: R1358968: L476142-02 04
 WG496207: R1359268: L476142-02 04
 WG496556: R1360528: L476142-01 03
 WG496550: R1361051: L476142-02 04
 WG496499: R1362429: L476142-01 03

* * 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 Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L476142

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

September 07, 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.



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

Chris Hines or Brad Kieding
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Tuesday April 05, 2011

Report Number: L509169


Samples Received: 04/01/11

Client Project:

Description: D23

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

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

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

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

April 05, 2011

Chris Hines or Brad Kieding
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L509169-01

Date Received : April 01, 2011
Description : D23

Site ID :

Sample ID : D23-PBN-033111

Project # :

Collected By : Jake Harris
Collection Date : 03/31/11 10:20

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include TPH (GC/FID) Low Fraction, Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID), TPH (GC/FID) High Fraction, and Surrogate recovery(%) o-Terphenyl.

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: 04/05/11 09:11 Printed: 04/05/11 09:18



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

April 05, 2011

Chris Hines or Brad Kieding
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L509169-02

Date Received : April 01, 2011
Description : D23

Site ID :

Sample ID : D23-PBS-033111

Project # :

Collected By : Jake Harris
Collection Date : 03/31/11 10:30

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include TPH (GC/FID) Low Fraction, Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID), TPH (GC/FID) High Fraction, and Surrogate recovery(%) o-Terphenyl.

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: 04/05/11 09:11 Printed: 04/05/11 09:18



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

April 05, 2011

Chris Hines or Brad Kieding
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L509169-03

Date Received : April 01, 2011
Description : D23

Site ID :

Sample ID : D23-STSN-033111

Project # :

Collected By : Jake Harris
Collection Date : 03/31/11 10:40

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include TPH (GC/FID) Low Fraction, Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID), TPH (GC/FID) High Fraction, and Surrogate recovery(%) o-Terphenyl.

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: 04/05/11 09:11 Printed: 04/05/11 09:18



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

April 05, 2011

Chris Hines or Brad Kieding
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L509169-04

Date Received : April 01, 2011
Description : D23

Site ID :

Sample ID : D23-STSS-033111

Project # :

Collected By : Jake Harris
Collection Date : 03/31/11 10:50

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	04/01/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	105.		% Rec.	602/8015	04/01/11	5
TPH (GC/FID) High Fraction	210	4.0	mg/kg	3546/DRO	04/04/11	1
Surrogate recovery(%) o-Terphenyl	54.8		% Rec.	3546/DRO	04/04/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 04/05/11 09:11 Printed: 04/05/11 09:18

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L509169-01	WG529149	SAMP	o-Terphenyl	R1636211	J7
L509169-03	WG529149	SAMP	o-Terphenyl	R1636211	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

Qualifier Report Information

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

Definitions

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



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L509169

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

April 05, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG529101	04/01/11 18:49
a,a,a-Trifluorotoluene(FID)		% Rec.	106.3	59-128	WG529101	04/01/11 18:49
TPH (GC/FID) High Fraction	< 4	ppm			WG529149	04/04/11 13:41
o-Terphenyl		% Rec.	73.07	50-150	WG529149	04/04/11 13:41

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.97	127.	67-135	WG529101
a,a,a-Trifluorotoluene(FID)				95.46	59-128	WG529101
TPH (GC/FID) High Fraction	ppm	60	44.8	74.6	50-150	WG529149
o-Terphenyl				72.53	50-150	WG529149

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) Low Fraction	mg/kg	7.10	6.97	129.	67-135	1.89	20	WG529101
a,a,a-Trifluorotoluene(FID)				94.75	59-128			WG529101
TPH (GC/FID) High Fraction	ppm	41.7	44.8	69.0	50-150	7.08	25	WG529149
o-Terphenyl				68.27	50-150			WG529149

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
TPH (GC/FID) Low Fraction	mg/kg	29.9	0	5.5	108.	55-109	L509013-02	WG529101
a,a,a-Trifluorotoluene(FID)					96.28	59-128		WG529101

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
TPH (GC/FID) Low Fraction	mg/kg	26.7	29.9	97.0	55-109	11.2	20	L509013-02	WG529101
a,a,a-Trifluorotoluene(FID)				97.66	59-128				WG529101

Batch number /Run number / Sample number cross reference

WG529101: R1634670: L509169-01 02 03 04
WG529149: R1636211: L509169-01 02 03 04

* * 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 Oil & Gas Inc. - CO
Chris Hines or Brad Kieding
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L509169

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

April 05, 2011

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

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

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

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



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

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Thursday June 02, 2011

Report Number: L517500


Samples Received: 05/25/11

Client Project: D23

Description:

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

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

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

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

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

June 02, 2011

Date Received : May 25, 2011
 Description :
 Sample ID : D23-NW PIT BOTTOM 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 13:53

ESC Sample # : L517500-01
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/01/11	1
Chromium,Trivalent	15.	2.0	mg/kg	Calc.	05/26/11	1
ORP	130		mV	2580	05/26/11	1
pH	8.9		su	9045D	05/27/11	1
Sodium Adsorption Ratio	6.1			Calc.	05/26/11	1
Specific Conductance	540		umhos/cm	9050AMod	05/28/11	1
Mercury	BDL	0.020	mg/kg	7471	05/27/11	1
Arsenic	13.	5.0	mg/kg	6010B	05/26/11	5
Barium	280	0.25	mg/kg	6010B	05/26/11	1
Cadmium	0.42	0.25	mg/kg	6010B	05/26/11	1
Chromium	15.	0.50	mg/kg	6010B	05/26/11	1
Copper	20.	1.0	mg/kg	6010B	05/26/11	1
Lead	9.9	0.25	mg/kg	6010B	05/26/11	1
Nickel	16.	5.0	mg/kg	6010B	05/26/11	5
Selenium	BDL	1.0	mg/kg	6010B	05/26/11	1
Silver	BDL	0.50	mg/kg	6010B	05/26/11	1
Zinc	36.	1.5	mg/kg	6010B	05/26/11	1
Benzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	05/26/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	05/26/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	05/26/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.0		% Rec.	8021/8015	05/26/11	5
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021/8015	05/26/11	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	05/28/11	1
Surrogate recovery(%)						
o-Terphenyl	57.2		% Rec.	3546/DRO	05/28/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L517500-01 (PH) - 8.9@20.9c



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

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

June 02, 2011

Date Received : May 25, 2011
 Description :
 Sample ID : D23-NW PIT BOTTOM 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 13:53

ESC Sample # : L517500-01
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Naphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
1-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Chloronaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Surrogate Recovery						
Nitrobenzene-d5	90.6		% Rec.	8270C-SIM	05/27/11	1
2-Fluorobiphenyl	93.6		% Rec.	8270C-SIM	05/27/11	1
p-Terphenyl-d14	100.		% Rec.	8270C-SIM	05/27/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 06/02/11 14:59 Printed: 06/02/11 16:50
 L517500-01 (PH) - 8.9@20.9c



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

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

June 02, 2011

Date Received : May 25, 2011
 Description :
 Sample ID : D23-W CENTER PIT BOTTOM 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 14:11

ESC Sample # : L517500-02
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/01/11	1
Chromium,Trivalent	22.	2.0	mg/kg	Calc.	05/26/11	1
ORP	140		mV	2580	05/26/11	1
pH	8.3		su	9045D	05/27/11	1
Sodium Adsorption Ratio	5.9			Calc.	05/26/11	1
Specific Conductance	470		umhos/cm	9050AMod	05/28/11	1
Mercury	BDL	0.020	mg/kg	7471	05/27/11	1
Arsenic	14.	2.0	mg/kg	6010B	05/26/11	2
Barium	260	0.25	mg/kg	6010B	05/26/11	1
Cadmium	0.58	0.25	mg/kg	6010B	05/26/11	1
Chromium	22.	0.50	mg/kg	6010B	05/26/11	1
Copper	25.	1.0	mg/kg	6010B	05/26/11	1
Lead	13.	0.25	mg/kg	6010B	05/26/11	1
Nickel	16.	2.0	mg/kg	6010B	05/26/11	2
Selenium	1.7	1.0	mg/kg	6010B	05/26/11	1
Silver	BDL	0.50	mg/kg	6010B	05/26/11	1
Zinc	43.	1.5	mg/kg	6010B	05/26/11	1
Benzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	05/26/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	05/26/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	05/26/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	98.7		% Rec.	8021/8015	05/26/11	5
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021/8015	05/26/11	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	05/28/11	1
Surrogate recovery(%)						
o-Terphenyl	60.6		% Rec.	3546/DRO	05/28/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L517500-02 (PH) - 8.3@20.9c



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

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

June 02, 2011

Date Received : May 25, 2011
 Description :
 Sample ID : D23-W CENTER PIT BOTTOM 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 14:11

ESC Sample # : L517500-02
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Naphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
1-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Chloronaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Surrogate Recovery						
Nitrobenzene-d5	82.8		% Rec.	8270C-SIM	05/27/11	1
2-Fluorobiphenyl	94.1		% Rec.	8270C-SIM	05/27/11	1
p-Terphenyl-d14	101.		% Rec.	8270C-SIM	05/27/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 06/02/11 14:59 Printed: 06/02/11 16:50
 L517500-02 (PH) - 8.3@20.9c



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

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

June 02, 2011

Date Received : May 25, 2011
 Description :
 Sample ID : D23-E CENTER PIT BOTTOM 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 13:59

ESC Sample # : L517500-03
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/01/11	1
Chromium,Trivalent	17.	2.0	mg/kg	Calc.	05/26/11	1
ORP	130		mV	2580	05/26/11	1
pH	8.9		su	9045D	05/27/11	1
Sodium Adsorption Ratio	17.			Calc.	05/26/11	1
Specific Conductance	630		umhos/cm	9050AMod	05/28/11	1
Mercury	0.022	0.020	mg/kg	7471	05/27/11	1
Arsenic	16.	5.0	mg/kg	6010B	05/26/11	5
Barium	1300	0.25	mg/kg	6010B	05/26/11	1
Cadmium	0.33	0.25	mg/kg	6010B	05/26/11	1
Chromium	17.	0.50	mg/kg	6010B	05/26/11	1
Copper	34.	1.0	mg/kg	6010B	05/26/11	1
Lead	8.9	0.25	mg/kg	6010B	05/26/11	1
Nickel	21.	5.0	mg/kg	6010B	05/26/11	5
Selenium	4.7	1.0	mg/kg	6010B	05/26/11	1
Silver	BDL	0.50	mg/kg	6010B	05/26/11	1
Zinc	62.	1.5	mg/kg	6010B	05/26/11	1
Benzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	05/26/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	05/26/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	05/26/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.2		% Rec.	8021/8015	05/26/11	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	05/26/11	5
TPH (GC/FID) High Fraction	65.	4.0	mg/kg	3546/DRO	05/28/11	1
Surrogate recovery(%)						
o-Terphenyl	69.4		% Rec.	3546/DRO	05/28/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L517500-03 (PH) - 8.9@20.8c



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

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

June 02, 2011

Date Received : May 25, 2011
 Description :
 Sample ID : D23-E CENTER PIT BOTTOM 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 13:59

ESC Sample # : L517500-03
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Naphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
1-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Methylnaphthalene	0.0092	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Chloronaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Surrogate Recovery						
Nitrobenzene-d5	92.4		% Rec.	8270C-SIM	05/27/11	1
2-Fluorobiphenyl	99.0		% Rec.	8270C-SIM	05/27/11	1
p-Terphenyl-d14	104.		% Rec.	8270C-SIM	05/27/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 06/02/11 14:59 Printed: 06/02/11 16:50
 L517500-03 (PH) - 8.9@20.8c



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

June 02, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : May 25, 2011
 Description :
 Sample ID : D23-S PIT WALL 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 14:17

ESC Sample # : L517500-04
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/01/11	1
Chromium,Trivalent	21.	2.0	mg/kg	Calc.	05/27/11	1
ORP	130		mV	2580	05/26/11	1
pH	8.2		su	9045D	05/27/11	1
Sodium Adsorption Ratio	11.			Calc.	05/26/11	1
Specific Conductance	990		umhos/cm	9050AMod	05/28/11	1
Mercury	BDL	0.020	mg/kg	7471	05/27/11	1
Arsenic	19.	5.0	mg/kg	6010B	05/28/11	5
Barium	310	0.25	mg/kg	6010B	05/27/11	1
Cadmium	0.62	0.25	mg/kg	6010B	05/27/11	1
Chromium	21.	0.50	mg/kg	6010B	05/27/11	1
Copper	25.	1.0	mg/kg	6010B	05/27/11	1
Lead	13.	0.25	mg/kg	6010B	05/27/11	1
Nickel	18.	5.0	mg/kg	6010B	05/28/11	5
Selenium	2.8	1.0	mg/kg	6010B	05/27/11	1
Silver	BDL	0.50	mg/kg	6010B	05/27/11	1
Zinc	47.	1.5	mg/kg	6010B	05/27/11	1
Benzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	05/26/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	05/26/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	05/26/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.5		% Rec.	8021/8015	05/26/11	5
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021/8015	05/26/11	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	05/28/11	1
Surrogate recovery(%)						
o-Terphenyl	59.2		% Rec.	3546/DRO	05/28/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L517500-04 (PH) - 8.2@20.8c



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

June 02, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : May 25, 2011
 Description :
 Sample ID : D23-S PIT WALL 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 14:17

ESC Sample # : L517500-04
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Naphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
1-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Chloronaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Surrogate Recovery						
Nitrobenzene-d5	90.3		% Rec.	8270C-SIM	05/27/11	1
2-Fluorobiphenyl	93.4		% Rec.	8270C-SIM	05/27/11	1
p-Terphenyl-d14	97.1		% Rec.	8270C-SIM	05/27/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 06/02/11 14:59 Printed: 06/02/11 16:50
 L517500-04 (PH) - 8.2@20.8c



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

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

June 02, 2011

Date Received : May 25, 2011
 Description :
 Sample ID : D23-SE PIT WALL 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 14:30

ESC Sample # : L517500-05
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/01/11	1
Chromium,Trivalent	16.	2.0	mg/kg	Calc.	05/27/11	1
ORP	120		mV	2580	05/26/11	1
pH	8.8		su	9045D	05/28/11	1
Sodium Adsorption Ratio	21.			Calc.	05/26/11	1
Specific Conductance	620		umhos/cm	9050AMod	05/28/11	1
Mercury	BDL	0.020	mg/kg	7471	05/27/11	1
Arsenic	19.	5.0	mg/kg	6010B	05/28/11	5
Barium	320	0.25	mg/kg	6010B	05/27/11	1
Cadmium	0.57	0.25	mg/kg	6010B	05/27/11	1
Chromium	16.	0.50	mg/kg	6010B	05/27/11	1
Copper	26.	1.0	mg/kg	6010B	05/27/11	1
Lead	13.	0.25	mg/kg	6010B	05/27/11	1
Nickel	16.	5.0	mg/kg	6010B	05/28/11	5
Selenium	2.3	1.0	mg/kg	6010B	05/27/11	1
Silver	BDL	0.50	mg/kg	6010B	05/27/11	1
Zinc	56.	1.5	mg/kg	6010B	05/27/11	1
Benzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	05/26/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	05/26/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	05/26/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	05/26/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.2		% Rec.	8021/8015	05/26/11	5
a,a,a-Trifluorotoluene(PID)	103.		% Rec.	8021/8015	05/26/11	5
TPH (GC/FID) High Fraction	6.8	4.0	mg/kg	3546/DRO	05/28/11	1
Surrogate recovery(%)						
o-Terphenyl	62.4		% Rec.	3546/DRO	05/28/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L517500-05 (PH) - 8.8@21.9c



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 02, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : May 25, 2011
 Description :
 Sample ID : D23-SE PIT WALL 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 14:30

ESC Sample # : L517500-05
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Naphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
1-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
2-Chloronaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/27/11	1
Surrogate Recovery						
Nitrobenzene-d5	97.8		% Rec.	8270C-SIM	05/27/11	1
2-Fluorobiphenyl	95.4		% Rec.	8270C-SIM	05/27/11	1
p-Terphenyl-d14	75.9		% Rec.	8270C-SIM	05/27/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 06/02/11 14:59 Printed: 06/02/11 16:50
 L517500-05 (PH) - 8.8@21.9c



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

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

June 02, 2011

Date Received : May 25, 2011
 Description :
 Sample ID : D23-N PIT WALL 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 14:21

ESC Sample # : L517500-06
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/01/11	1
Chromium,Trivalent	18.	2.0	mg/kg	Calc.	05/28/11	1
ORP	130		mV	2580	05/26/11	1
pH	8.0		su	9045D	05/28/11	1
Sodium Adsorption Ratio	1.5			Calc.	05/26/11	1
Specific Conductance	1000		umhos/cm	9050AMod	05/28/11	1
Mercury	BDL	0.020	mg/kg	7471	05/27/11	1
Arsenic	17.	5.0	mg/kg	6010B	05/28/11	5
Barium	440	0.25	mg/kg	6010B	05/28/11	1
Cadmium	0.60	0.25	mg/kg	6010B	05/28/11	1
Chromium	18.	0.50	mg/kg	6010B	05/28/11	1
Copper	22.	1.0	mg/kg	6010B	05/28/11	1
Lead	13.	0.25	mg/kg	6010B	05/28/11	1
Nickel	16.	5.0	mg/kg	6010B	05/28/11	5
Selenium	1.9	1.0	mg/kg	6010B	05/28/11	1
Silver	BDL	0.50	mg/kg	6010B	05/28/11	1
Zinc	37.	1.5	mg/kg	6010B	05/28/11	1
Benzene	BDL	0.0025	mg/kg	8021/8015	05/27/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	05/27/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	05/27/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	05/27/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	05/27/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.9		% Rec.	8021/8015	05/27/11	5
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021/8015	05/27/11	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	05/27/11	1
Surrogate recovery(%)						
o-Terphenyl	67.7		% Rec.	3546/DRO	05/27/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Benzo(a)anthracene	0.012	0.0060	mg/kg	8270C-SIM	05/29/11	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L517500-06 (PH) - 8.0@22.3c



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 02, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L517500-06

Date Received : May 25, 2011
 Description :

Site ID : D23

Sample ID : D23-N PIT WALL 052411

Project # : D23

Collected By : Bob Stockton
 Collection Date : 05/24/11 14:21

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Fluorene	0.014	0.0060	mg/kg	8270C-SIM	05/29/11	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Naphthalene	0.095	0.0060	mg/kg	8270C-SIM	05/29/11	1
Phenanthrene	0.056	0.0060	mg/kg	8270C-SIM	05/29/11	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
1-Methylnaphthalene	0.17	0.0060	mg/kg	8270C-SIM	05/29/11	1
2-Methylnaphthalene	0.26	0.0060	mg/kg	8270C-SIM	05/29/11	1
2-Chloronaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Surrogate Recovery						
Nitrobenzene-d5	97.5		% Rec.	8270C-SIM	05/31/11	1
2-Fluorobiphenyl	98.8		% Rec.	8270C-SIM	05/31/11	1
p-Terphenyl-d14	78.4		% Rec.	8270C-SIM	05/31/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 06/02/11 14:59 Printed: 06/02/11 16:51

L517500-06 (PH) - 8.0@22.3c



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 02, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L517500-07

Date Received : May 25, 2011
 Description :

Site ID : D23

Sample ID : D23-NW PIT WALL 052411

Project # : D23

Collected By : Bob Stockton
 Collection Date : 05/24/11 14:38

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/01/11	1
Chromium,Trivalent	23.	2.0	mg/kg	Calc.	05/27/11	1
ORP	140		mV	2580	05/26/11	1
pH	8.0		su	9045D	05/28/11	1
Sodium Adsorption Ratio	2.9			Calc.	05/26/11	1
Specific Conductance	1100		umhos/cm	9050AMod	05/28/11	1
Mercury	BDL	0.020	mg/kg	7471	05/27/11	1
Arsenic	BDL	5.0	mg/kg	6010B	05/27/11	5
Barium	540	0.25	mg/kg	6010B	05/27/11	1
Cadmium	0.60	0.25	mg/kg	6010B	05/27/11	1
Chromium	23.	0.50	mg/kg	6010B	05/27/11	1
Copper	29.	1.0	mg/kg	6010B	05/27/11	1
Lead	14.	0.25	mg/kg	6010B	05/27/11	1
Nickel	BDL	5.0	mg/kg	6010B	05/27/11	5
Selenium	4.4	1.0	mg/kg	6010B	05/27/11	1
Silver	BDL	0.50	mg/kg	6010B	05/27/11	1
Zinc	50.	1.5	mg/kg	6010B	05/27/11	1
Benzene	BDL	0.0025	mg/kg	8021/8015	05/27/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	05/27/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	05/27/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	05/27/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	05/27/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	100.		% Rec.	8021/8015	05/27/11	5
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021/8015	05/27/11	5
TPH (GC/FID) High Fraction	BDL	4.0	mg/kg	3546/DRO	05/27/11	1
Surrogate recovery(%)						
o-Terphenyl	60.5		% Rec.	3546/DRO	05/27/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Acenaphthene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Acenaphthylene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L517500-07 (PH) - 8.0@22.3c



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 02, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : May 25, 2011
 Description :
 Sample ID : D23-NW PIT WALL 052411
 Collected By : Bob Stockton
 Collection Date : 05/24/11 14:38

ESC Sample # : L517500-07
 Site ID : D23
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Fluorene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Naphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Phenanthrene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Pyrene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
1-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
2-Methylnaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
2-Chloronaphthalene	BDL	0.0060	mg/kg	8270C-SIM	05/29/11	1
Surrogate Recovery						
Nitrobenzene-d5	93.0		% Rec.	8270C-SIM	05/31/11	1
2-Fluorobiphenyl	94.8		% Rec.	8270C-SIM	05/31/11	1
p-Terphenyl-d14	78.9		% Rec.	8270C-SIM	05/31/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 06/02/11 14:59 Printed: 06/02/11 16:51
 L517500-07 (PH) - 8.0@22.3c

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L517500-02	WG537330	SAMP	Barium	R1702529	V
	WG537330	SAMP	Cadmium	R1702529	J6
	WG537330	SAMP	Chromium	R1702529	J3J6
L517500-07	WG537373	SAMP	Arsenic	R1704210	OP1J5
	WG537373	SAMP	Barium	R1704210	J3V
	WG537373	SAMP	Chromium	R1704210	J3
	WG537373	SAMP	Nickel	R1704210	OP1J5
	WG537373	SAMP	Selenium	R1704210	J6
	WG537373	SAMP	Zinc	R1704210	J6

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
O	(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.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	(ESC) - Additional QC Info: The sample concentration is too high to evaluate accurate spike recoveries.

Qualifier Report Information

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

Definitions

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



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L517500

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 02, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/kg			WG537642	05/26/11 16:30
Ethylbenzene	< .0005	mg/kg			WG537642	05/26/11 16:30
Toluene	< .005	mg/kg			WG537642	05/26/11 16:30
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG537642	05/26/11 16:30
Total Xylene	< .0015	mg/kg			WG537642	05/26/11 16:30
a,a,a-Trifluorotoluene(FID)		% Rec.	99.82	59-128	WG537642	05/26/11 16:30
a,a,a-Trifluorotoluene(PID)		% Rec.	104.6	54-144	WG537642	05/26/11 16:30
Arsenic	< 1	mg/kg			WG537330	05/26/11 17:21
Barium	< .25	mg/kg			WG537330	05/26/11 17:21
Cadmium	< .25	mg/kg			WG537330	05/26/11 17:21
Chromium	< .5	mg/kg			WG537330	05/26/11 17:21
Copper	< 1	mg/kg			WG537330	05/26/11 17:21
Lead	< .25	mg/kg			WG537330	05/26/11 17:21
Nickel	< 1	mg/kg			WG537330	05/26/11 17:21
Selenium	< 1	mg/kg			WG537330	05/26/11 17:21
Silver	< .5	mg/kg			WG537330	05/26/11 17:21
Zinc	< 1.5	mg/kg			WG537330	05/26/11 17:21
TPH (GC/FID) High Fraction	< 4	ppm			WG537670	05/27/11 04:58
o-Terphenyl		% Rec.	69.11	50-150	WG537670	05/27/11 04:58
Mercury	< .02	mg/kg			WG537502	05/27/11 11:53
1-Methylnaphthalene	< .006	mg/kg			WG537404	05/27/11 09:29
2-Chloronaphthalene	< .006	mg/kg			WG537404	05/27/11 09:29
2-Methylnaphthalene	< .006	mg/kg			WG537404	05/27/11 09:29
Acenaphthene	< .006	mg/kg			WG537404	05/27/11 09:29
Acenaphthylene	< .006	mg/kg			WG537404	05/27/11 09:29
Anthracene	< .006	mg/kg			WG537404	05/27/11 09:29
Benzo(a)anthracene	< .006	mg/kg			WG537404	05/27/11 09:29
Benzo(a)pyrene	< .006	mg/kg			WG537404	05/27/11 09:29
Benzo(b)fluoranthene	< .006	mg/kg			WG537404	05/27/11 09:29
Benzo(g,h,i)perylene	< .006	mg/kg			WG537404	05/27/11 09:29
Benzo(k)fluoranthene	< .006	mg/kg			WG537404	05/27/11 09:29
Chrysene	< .006	mg/kg			WG537404	05/27/11 09:29
Dibenz(a,h)anthracene	< .006	mg/kg			WG537404	05/27/11 09:29
Fluoranthene	< .006	mg/kg			WG537404	05/27/11 09:29
Fluorene	< .006	mg/kg			WG537404	05/27/11 09:29
Indeno(1,2,3-cd)pyrene	< .006	mg/kg			WG537404	05/27/11 09:29
Naphthalene	< .006	mg/kg			WG537404	05/27/11 09:29
Phenanthrene	< .006	mg/kg			WG537404	05/27/11 09:29
Pyrene	< .006	mg/kg			WG537404	05/27/11 09:29
2-Fluorobiphenyl		% Rec.	74.29	21-120	WG537404	05/27/11 09:29
Nitrobenzene-d5		% Rec.	74.70	33-114	WG537404	05/27/11 09:29
p-Terphenyl-d14		% Rec.	82.79	18-142	WG537404	05/27/11 09:29
pH	3.70	su			WG537706	05/27/11 11:15
1-Methylnaphthalene	< .033	mg/kg			WG537761	05/28/11 08:18
2-Methylnaphthalene	< .033	mg/kg			WG537761	05/28/11 08:18
Acenaphthene	< .033	mg/kg			WG537761	05/28/11 08:18
Acenaphthylene	< .033	mg/kg			WG537761	05/28/11 08:18

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L517500

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 02, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Anthracene	< .033	mg/kg			WG537761	05/28/11 08:18
Benzo(a)anthracene	< .033	mg/kg			WG537761	05/28/11 08:18
Benzo(a)pyrene	< .033	mg/kg			WG537761	05/28/11 08:18
Benzo(b)fluoranthene	< .033	mg/kg			WG537761	05/28/11 08:18
Benzo(g,h,i)perylene	< .033	mg/kg			WG537761	05/28/11 08:18
Benzo(k)fluoranthene	< .033	mg/kg			WG537761	05/28/11 08:18
Chrysene	< .033	mg/kg			WG537761	05/28/11 08:18
Dibenz(a,h)anthracene	< .033	mg/kg			WG537761	05/28/11 08:18
Fluoranthene	< .033	mg/kg			WG537761	05/28/11 08:18
Fluorene	< .033	mg/kg			WG537761	05/28/11 08:18
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG537761	05/28/11 08:18
Naphthalene	< .033	mg/kg			WG537761	05/28/11 08:18
Phenanthrene	< .033	mg/kg			WG537761	05/28/11 08:18
Pyrene	< .033	mg/kg			WG537761	05/28/11 08:18
2-Fluorobiphenyl		% Rec.	76.08	37-123	WG537761	05/28/11 08:18
Nitrobenzene-d5		% Rec.	74.71	19-129	WG537761	05/28/11 08:18
p-Terphenyl-d14		% Rec.	88.11	34-149	WG537761	05/28/11 08:18
TPH (GC/FID) High Fraction	< 4	ppm			WG537401	05/28/11 10:28
o-Terphenyl		% Rec.	64.60	50-150	WG537401	05/28/11 10:28
Arsenic	< 1	mg/kg			WG537373	05/28/11 01:29
Barium	< .25	mg/kg			WG537373	05/28/11 01:29
Cadmium	< .25	mg/kg			WG537373	05/28/11 01:29
Chromium	< .5	mg/kg			WG537373	05/28/11 01:29
Copper	< 1	mg/kg			WG537373	05/28/11 01:29
Nickel	< 1	mg/kg			WG537373	05/28/11 01:29
Selenium	< 1	mg/kg			WG537373	05/28/11 01:29
Silver	< .5	mg/kg			WG537373	05/28/11 01:29
Zinc	< 1.5	mg/kg			WG537373	05/28/11 01:29
Lead	< .25	mg/kg			WG537373	05/28/11 09:53
pH	4.40	su			WG537894	05/28/11 13:29
Specific Conductance	2.60	umhos/cm			WG537906	05/28/11 13:18
Chromium,Hexavalent	< 2	mg/kg			WG537901	06/01/11 11:16

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
ORP	mV	150.	150.	1.32	20	L517347-04	WG537428
ORP	mV	140.	130.	4.51	20	L517500-06	WG537428
Barium	mg/kg	280.	260.	8.47	20	L517500-02	WG537330
Cadmium	mg/kg	0.620	0.580	6.67	20	L517500-02	WG537330
Chromium	mg/kg	18.0	22.0	20.0	20	L517500-02	WG537330
Copper	mg/kg	24.0	25.0	6.19	20	L517500-02	WG537330
Lead	mg/kg	14.0	13.0	6.69	20	L517500-02	WG537330
Selenium	mg/kg	1.70	1.70	2.38	20	L517500-02	WG537330
Silver	mg/kg	0	0	0	20	L517500-02	WG537330
Zinc	mg/kg	43.0	43.0	0.700	20	L517500-02	WG537330
Arsenic	mg/kg	15.0	14.0	5.56	20	L517500-02	WG537330

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L517500

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 02, 2011

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Nickel	mg/kg	16.0	16.0	1.24	20	L517500-02	WG537330
Mercury	mg/kg	0	0	0	20	L517500-01	WG537502
pH	su	7.30	7.30	0	1	L517347-02	WG537706
pH	su	8.30	8.30	0	1	L517500-02	WG537706
Barium	mg/kg	350.	540.	43.2*	20	L517500-07	WG537373
Cadmium	mg/kg	0.640	0.600	6.92	20	L517500-07	WG537373
Chromium	mg/kg	19.0	23.0	21.2*	20	L517500-07	WG537373
Copper	mg/kg	25.0	29.0	14.0	20	L517500-07	WG537373
Lead	mg/kg	13.0	14.0	5.88	20	L517500-07	WG537373
Selenium	mg/kg	3.60	4.40	20.6*	20	L517500-07	WG537373
Silver	mg/kg	0	0	0	20	L517500-07	WG537373
Zinc	mg/kg	54.0	50.0	7.14	20	L517500-07	WG537373
Arsenic	mg/kg	17.0	0	NA	20	L517500-07	WG537373
Nickel	mg/kg	19.0	0	NA	20	L517500-07	WG537373
pH	su	6.60	6.60	0	1	L517496-01	WG537894
pH	su	6.40	6.40	0	1	L517848-03	WG537894
Specific Conductance	umhos/cm	470.	410.	13.6	20	L517413-01	WG537906
Chromium,Hexavalent	mg/kg	0	0	0	20	L517500-07	WG537901
Chromium,Hexavalent	mg/kg	0	0	0	20	L518325-02	WG537901

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
ORP	mV	229	220.	96.1	95.6-104.37	WG537428
Benzene	mg/kg	.05	0.0520	104.	76-113	WG537642
Ethylbenzene	mg/kg	.05	0.0514	103.	78-115	WG537642
Toluene	mg/kg	.05	0.0510	102.	76-114	WG537642
Total Xylene	mg/kg	.15	0.153	102.	81-118	WG537642
a,a,a-Trifluorotoluene(PID)				102.3	54-144	WG537642
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.68	103.	67-135	WG537642
a,a,a-Trifluorotoluene(FID)				106.0	59-128	WG537642
Arsenic	mg/kg	192	176.	91.7	78.6-120.8	WG537330
Barium	mg/kg	420	395.	94.0	78.8-121.4	WG537330
Cadmium	mg/kg	70.1	63.8	91.0	78.5-121.5	WG537330
Chromium	mg/kg	168	162.	96.4	80.4-120.2	WG537330
Copper	mg/kg	122	120.	98.4	81.6-119.7	WG537330
Lead	mg/kg	113	105.	92.9	77.3-122.1	WG537330
Nickel	mg/kg	74.1	73.6	99.3	78.8-121.2	WG537330
Selenium	mg/kg	176	170.	96.6	75.6-125.0	WG537330
Silver	mg/kg	115	107.	93.0	66-133.9	WG537330
Zinc	mg/kg	437	397.	90.8	78.5-121.7	WG537330

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L517500

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 02, 2011

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) High Fraction	ppm	60	42.4	70.6	50-150	WG537670
o-Terphenyl				69.63	50-150	WG537670
Mercury	mg/kg	8.77	8.92	102.	71.6-127.7	WG537502
1-Methylnaphthalene	mg/kg	.033	0.0296	89.6	41-110	WG537404
2-Chloronaphthalene	mg/kg	.033	0.0303	91.8	43-109	WG537404
2-Methylnaphthalene	mg/kg	.033	0.0299	90.8	38-104	WG537404
Acenaphthene	mg/kg	.033	0.0299	90.6	48-103	WG537404
Acenaphthylene	mg/kg	.033	0.0300	90.8	43-106	WG537404
Anthracene	mg/kg	.033	0.0320	97.1	51-110	WG537404
Benzo(a)anthracene	mg/kg	.033	0.0296	89.6	38-126	WG537404
Benzo(a)pyrene	mg/kg	.033	0.0357	108.	47-118	WG537404
Benzo(b)fluoranthene	mg/kg	.033	0.0346	105.	47-118	WG537404
Benzo(g,h,i)perylene	mg/kg	.033	0.0376	114.	40-125	WG537404
Benzo(k)fluoranthene	mg/kg	.033	0.0339	103.	45-121	WG537404
Chrysene	mg/kg	.033	0.0354	107.	35-135	WG537404
Dibenz(a,h)anthracene	mg/kg	.033	0.0366	111.	41-124	WG537404
Fluoranthene	mg/kg	.033	0.0350	106.	50-114	WG537404
Fluorene	mg/kg	.033	0.0313	94.8	49-109	WG537404
Indeno(1,2,3-cd)pyrene	mg/kg	.033	0.0374	113.	40-126	WG537404
Naphthalene	mg/kg	.033	0.0287	87.0	36-100	WG537404
Phenanthrene	mg/kg	.033	0.0326	98.9	46-108	WG537404
Pyrene	mg/kg	.033	0.0330	100.	30-136	WG537404
2-Fluorobiphenyl				84.41	33-114	WG537404
Nitrobenzene-d5				78.57	21-120	WG537404
p-Terphenyl-d14				98.98	18-142	WG537404
pH	su	6.3	6.20	98.4	97.98-102.02	WG537706
1-Methylnaphthalene	mg/kg	.167	0.118	70.7	38-115	WG537761
2-Methylnaphthalene	mg/kg	.167	0.119	71.2	38-115	WG537761
Acenaphthene	mg/kg	.167	0.122	73.0	44-117	WG537761
Acenaphthylene	mg/kg	.167	0.128	76.5	43-118	WG537761
Anthracene	mg/kg	.167	0.122	73.2	42-127	WG537761
Benzo(a)anthracene	mg/kg	.167	0.123	73.6	45-127	WG537761
Benzo(a)pyrene	mg/kg	.167	0.126	75.3	46-123	WG537761
Benzo(b)fluoranthene	mg/kg	.167	0.132	79.1	43-126	WG537761
Benzo(g,h,i)perylene	mg/kg	.167	0.0926	55.4	43-128	WG537761
Benzo(k)fluoranthene	mg/kg	.167	0.127	76.0	40-126	WG537761
Chrysene	mg/kg	.167	0.127	76.1	44-129	WG537761
Dibenz(a,h)anthracene	mg/kg	.167	0.102	60.9	43-127	WG537761
Fluoranthene	mg/kg	.167	0.124	74.4	44-125	WG537761
Fluorene	mg/kg	.167	0.127	76.1	45-121	WG537761
Indeno(1,2,3-cd)pyrene	mg/kg	.167	0.0998	59.8	43-127	WG537761
Naphthalene	mg/kg	.167	0.116	69.3	32-113	WG537761
Phenanthrene	mg/kg	.167	0.119	71.4	43-124	WG537761
Pyrene	mg/kg	.167	0.126	75.5	47-128	WG537761
2-Fluorobiphenyl				74.25	37-123	WG537761
Nitrobenzene-d5				70.06	19-129	WG537761
p-Terphenyl-d14				82.05	34-149	WG537761
TPH (GC/FID) High Fraction	ppm	60	42.2	70.4	50-150	WG537401
o-Terphenyl				60.88	50-150	WG537401

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L517500

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 02, 2011

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Arsenic	mg/kg	192	175.	91.1	78.6-120.8	WG537373
Barium	mg/kg	420	385.	91.7	78.8-121.4	WG537373
Cadmium	mg/kg	70.1	62.8	89.6	78.5-121.5	WG537373
Chromium	mg/kg	168	158.	94.0	80.4-120.2	WG537373
Copper	mg/kg	122	118.	96.7	81.6-119.7	WG537373
Lead	mg/kg	113	105.	92.9	77.3-122.1	WG537373
Nickel	mg/kg	74.1	73.0	98.5	78.8-121.2	WG537373
Selenium	mg/kg	176	171.	97.2	75.6-125.0	WG537373
Silver	mg/kg	115	107.	93.0	66-133.9	WG537373
Zinc	mg/kg	437	394.	90.2	78.5-121.7	WG537373
pH	su	6.3	6.20	98.4	97.98-102.02	WG537894
Specific Conductance	umhos/cm	556	560.	101.	85-115	WG537906
Chromium,Hexavalent	mg/kg	132	100.	75.8	50-150	WG537901

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	WG537428
Benzene	mg/kg	0.0490	0.0520	98.0	76-113	5.89	20	WG537642
Ethylbenzene	mg/kg	0.0544	0.0514	109.	78-115	5.67	20	WG537642
Toluene	mg/kg	0.0512	0.0510	102.	76-114	0.290	20	WG537642
Total Xylene	mg/kg	0.160	0.153	107.	81-118	4.75	20	WG537642
a,a,a-Trifluorotoluene(PID)				105.9	54-144			WG537642
TPH (GC/FID) Low Fraction	mg/kg	5.76	5.68	105.	67-135	1.44	20	WG537642
a,a,a-Trifluorotoluene(FID)				106.2	59-128			WG537642
TPH (GC/FID) High Fraction	ppm	41.8	42.4	70.0	50-150	1.48	25	WG537670
o-Terphenyl				68.24	50-150			WG537670
1-Methylnaphthalene	mg/kg	0.0269	0.0296	82.0	41-110	9.38	24	WG537404
2-Chloronaphthalene	mg/kg	0.0273	0.0303	83.0	43-109	10.3	21	WG537404
2-Methylnaphthalene	mg/kg	0.0275	0.0299	83.0	38-104	8.70	24	WG537404
Acenaphthene	mg/kg	0.0286	0.0299	87.0	48-103	4.44	20	WG537404
Acenaphthylene	mg/kg	0.0277	0.0300	84.0	43-106	7.81	20	WG537404
Anthracene	mg/kg	0.0293	0.0320	89.0	51-110	8.89	22	WG537404
Benzo(a)anthracene	mg/kg	0.0290	0.0296	88.0	38-126	1.86	20	WG537404
Benzo(a)pyrene	mg/kg	0.0295	0.0357	89.0	47-118	18.9	20	WG537404
Benzo(b)fluoranthene	mg/kg	0.0291	0.0346	88.0	47-118	17.0	29	WG537404
Benzo(g,h,i)perylene	mg/kg	0.0333	0.0376	101.	40-125	12.1	20	WG537404
Benzo(k)fluoranthene	mg/kg	0.0326	0.0339	99.0	45-121	3.87	31	WG537404
Chrysene	mg/kg	0.0303	0.0354	92.0	35-135	15.3	20	WG537404
Dibenz(a,h)anthracene	mg/kg	0.0327	0.0366	99.0	41-124	11.3	20	WG537404
Fluoranthene	mg/kg	0.0324	0.0350	98.0	50-114	7.67	20	WG537404
Fluorene	mg/kg	0.0281	0.0313	85.0	49-109	10.7	19	WG537404
Indeno(1,2,3-cd)pyrene	mg/kg	0.0332	0.0374	101.	40-126	12.0	20	WG537404
Naphthalene	mg/kg	0.0257	0.0287	78.0	36-100	11.0	24	WG537404
Phenanthrene	mg/kg	0.0293	0.0326	89.0	46-108	10.8	21	WG537404
Pyrene	mg/kg	0.0307	0.0330	93.0	30-136	7.24	20	WG537404
2-Fluorobiphenyl				78.12	33-114			WG537404

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L517500

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 02, 2011

Analyte	Units	Laboratory Control		Sample Duplicate		Limit	RPD	Limit	Batch
		Result	Ref	%Rec					
Nitrobenzene-d5				73.54		21-120			
p-Terphenyl-d14				88.22		18-142			
pH	su	6.20	6.20	98.0		97.98-102.02	0	20	WG537706
1-Methylnaphthalene	mg/kg	0.123	0.118	74.0		38-115	3.95	22	WG537761
2-Methylnaphthalene	mg/kg	0.115	0.119	69.0		38-115	3.09	23	WG537761
Acenaphthene	mg/kg	0.120	0.122	72.0		44-117	1.91	21	WG537761
Acenaphthylene	mg/kg	0.116	0.128	70.0		43-118	9.34	20	WG537761
Anthracene	mg/kg	0.115	0.122	69.0		42-127	6.23	21	WG537761
Benzo(a)anthracene	mg/kg	0.125	0.123	75.0		45-127	1.61	21	WG537761
Benzo(a)pyrene	mg/kg	0.119	0.126	71.0		46-123	5.35	20	WG537761
Benzo(b)fluoranthene	mg/kg	0.115	0.132	69.0		43-126	14.0	27	WG537761
Benzo(g,h,i)perylene	mg/kg	0.0928	0.0926	56.0		43-128	0.284	20	WG537761
Benzo(k)fluoranthene	mg/kg	0.123	0.127	73.0		40-126	3.49	32	WG537761
Chrysene	mg/kg	0.126	0.127	76.0		44-129	0.608	22	WG537761
Dibenz(a,h)anthracene	mg/kg	0.110	0.102	66.0		43-127	8.28	20	WG537761
Fluoranthene	mg/kg	0.118	0.124	71.0		44-125	4.94	22	WG537761
Fluorene	mg/kg	0.118	0.127	71.0		45-121	7.03	20	WG537761
Indeno(1,2,3-cd)pyrene	mg/kg	0.103	0.0998	62.0		43-127	3.33	21	WG537761
Naphthalene	mg/kg	0.110	0.116	66.0		32-113	4.90	26	WG537761
Phenanthrene	mg/kg	0.114	0.119	68.0		43-124	4.41	21	WG537761
Pyrene	mg/kg	0.126	0.126	75.0		47-128	0.0865	20	WG537761
2-Fluorobiphenyl				69.88		37-123			WG537761
Nitrobenzene-d5				70.75		19-129			WG537761
p-Terphenyl-d14				81.04		34-149			WG537761
TPH (GC/FID) High Fraction	ppm	45.9	42.2	76.0		50-150	8.45	25	WG537401
o-Terphenyl				64.33		50-150			WG537401
pH	su	6.20	6.20	98.0		97.98-102.02	0	20	WG537894
Specific Conductance	umhos	560.	560.	101.		85-115	0	20	WG537906
Chromium,Hexavalent	mg/kg	100.	100.	76.0		50-150	0	20	WG537901

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/kg	0.203	0	.05	81.3	32-137	L517635-01	WG537642
Ethylbenzene	mg/kg	0.205	0	.05	81.8	10-150	L517635-01	WG537642
Toluene	mg/kg	0.208	0	.05	83.0	20-142	L517635-01	WG537642
Total Xylene	mg/kg	0.625	0	.15	83.4	16-141	L517635-01	WG537642
a,a,a-Trifluorotoluene(PID)					101.4	54-144		WG537642
TPH (GC/FID) Low Fraction	mg/kg	22.0	0	5.5	79.9	55-109	L517635-01	WG537642
a,a,a-Trifluorotoluene(FID)					102.9	59-128		WG537642
Barium	mg/kg	320.	260.	50	120.	75-125	L517500-02	WG537330
Cadmium	mg/kg	36.2	0.580	50	71.2*	75-125	L517500-02	WG537330
Chromium	mg/kg	57.8	22.0	50	71.6*	75-125	L517500-02	WG537330
Copper	mg/kg	68.6	25.0	50	87.2	75-125	L517500-02	WG537330
Lead	mg/kg	51.4	13.0	50	76.8	75-125	L517500-02	WG537330
Selenium	mg/kg	39.9	1.70	50	76.4	75-125	L517500-02	WG537330
Silver	mg/kg	42.2	0	50	84.4	75-125	L517500-02	WG537330

* 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 Oil & Gas Inc. - CO
Chris Hines
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L517500

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 02, 2011

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Zinc	mg/kg	83.4	43.0	50	80.8	75-125	L517500-02	WG537330
Arsenic	mg/kg	57.9	14.0	25	87.8	75-125	L517500-02	WG537330
Nickel	mg/kg	57.4	16.0	25	82.8	75-125	L517500-02	WG537330
TPH (GC/FID) High Fraction o-Terphenyl	ppm	41.7	0	60	69.6 65.61	50-150 50-150	L517635-01	WG537670 WG537670
Mercury	mg/kg	0.260	0	.25	104.	70-130	L517500-01	WG537502
1-Methylnaphthalene	mg/kg	0.0954	0	.167	57.1	28-124	L517766-04	WG537761
2-Methylnaphthalene	mg/kg	0.0970	0	.167	58.1	25-128	L517766-04	WG537761
Acenaphthene	mg/kg	0.108	0	.167	64.9	38-121	L517766-04	WG537761
Acenaphthylene	mg/kg	0.114	0	.167	68.3	39-120	L517766-04	WG537761
Anthracene	mg/kg	0.0986	0	.167	59.0	35-133	L517766-04	WG537761
Benzo(a)anthracene	mg/kg	0.105	0	.167	63.1	35-136	L517766-04	WG537761
Benzo(a)pyrene	mg/kg	0.109	0	.167	65.2	37-131	L517766-04	WG537761
Benzo(b)fluoranthene	mg/kg	0.0909	0	.167	54.4	29-145	L517766-04	WG537761
Benzo(g,h,i)perylene	mg/kg	0.0795	0	.167	47.6	10-139	L517766-04	WG537761
Benzo(k)fluoranthene	mg/kg	0.108	0	.167	64.8	31-140	L517766-04	WG537761
Chrysene	mg/kg	0.0938	0	.167	56.2	34-137	L517766-04	WG537761
Dibenz(a,h)anthracene	mg/kg	0.0910	0	.167	54.5	21-132	L517766-04	WG537761
Fluoranthene	mg/kg	0.0979	0	.167	58.6	34-132	L517766-04	WG537761
Fluorene	mg/kg	0.111	0	.167	66.5	38-126	L517766-04	WG537761
Indeno(1,2,3-cd)pyrene	mg/kg	0.0943	0	.167	56.5	17-134	L517766-04	WG537761
Naphthalene	mg/kg	0.0941	0	.167	56.3	24-122	L517766-04	WG537761
Phenanthrene	mg/kg	0.103	0	.167	62.0	38-128	L517766-04	WG537761
Pyrene	mg/kg	0.125	0	.167	75.0	35-141	L517766-04	WG537761
2-Fluorobiphenyl					63.52	37-123		WG537761
Nitrobenzene-d5					80.42	19-129		WG537761
p-Terphenyl-d14					64.02	34-149		WG537761
2-Chloronaphthalene	mg/kg	0.0829	0.0470	.033	21.8*	38-117	L516632-05	WG537404
2-Methylnaphthalene	mg/kg	0.0720	0	.033	43.6	18-125	L516632-05	WG537404
Benzo(a)anthracene	mg/kg	0.182	0.0790	.033	62.4	32-131	L516632-05	WG537404
Benzo(a)pyrene	mg/kg	0.0989	0.0410	.033	35.1	28-130	L516632-05	WG537404
Benzo(b)fluoranthene	mg/kg	0.0732	0	.033	44.3	37-130	L516632-05	WG537404
Benzo(g,h,i)perylene	mg/kg	0.0480	0	.033	29.1	10-134	L516632-05	WG537404
Benzo(k)fluoranthene	mg/kg	0.0194	0	.033	11.7*	31-129	L516632-05	WG537404
Chrysene	mg/kg	0.194	0.100	.033	57.0	25-137	L516632-05	WG537404
Dibenz(a,h)anthracene	mg/kg	0.0390	0	.033	23.6	20-134	L516632-05	WG537404
Indeno(1,2,3-cd)pyrene	mg/kg	0.0354	0	.033	21.5	16-135	L516632-05	WG537404
Naphthalene	mg/kg	0.268	0.130	.033	83.7	22-121	L516632-05	WG537404
Pyrene	mg/kg	0.504	0.280	.033	135.*	22-133	L516632-05	WG537404
Nitrobenzene-d5					47.30	21-120		WG537404
p-Terphenyl-d14					79.25	18-142		WG537404
TPH (GC/FID) High Fraction o-Terphenyl	ppm	57.3	1.27	60	93.4 75.33	50-150 50-150	L517429-03	WG537401 WG537401
Barium	mg/kg	392.	540.	50	0*	75-125	L517500-07	WG537373
Cadmium	mg/kg	42.4	0.600	50	83.6	75-125	L517500-07	WG537373
Chromium	mg/kg	63.7	23.0	50	81.4	75-125	L517500-07	WG537373
Copper	mg/kg	74.0	29.0	50	90.0	75-125	L517500-07	WG537373

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L517500

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 02, 2011

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Lead	mg/kg	55.4	14.0	50	82.8	75-125	L517500-07	WG537373
Selenium	mg/kg	45.9	4.40	50	83.0	75-125	L517500-07	WG537373
Silver	mg/kg	46.6	0	50	93.2	75-125	L517500-07	WG537373
Zinc	mg/kg	92.9	50.0	50	85.8	75-125	L517500-07	WG537373
Arsenic	mg/kg	65.0	0	50	26.0*	75-125	L517500-07	WG537373
Nickel	mg/kg	69.3	0	50	27.7*	75-125	L517500-07	WG537373
1-Methylnaphthalene	mg/kg	3.78	2.60	.033	3570*	19-131	L516632-05	WG537404
Acenaphthene	mg/kg	1.62	0.870	.033	2280*	31-120	L516632-05	WG537404
Acenaphthylene	mg/kg	0.414	0	.033	1260*	34-116	L516632-05	WG537404
Anthracene	mg/kg	4.34	0	.033	13100*	32-131	L516632-05	WG537404
Fluoranthene	mg/kg	0.126	0	.033	381.*	27-138	L516632-05	WG537404
Fluorene	mg/kg	1.34	0.750	.033	1780*	26-136	L516632-05	WG537404
Phenanthrene	mg/kg	4.38	2.40	.033	5990*	27-133	L516632-05	WG537404
2-Fluorobiphenyl					320.4*	33-114		WG537404
Chromium,Hexavalent	mg/kg	14.0	0	20	70.0	50-150	L517500-06	WG537901

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/kg	0.249	0.203	99.5	32-137	20.1	39	L517635-01	WG537642
Ethylbenzene	mg/kg	0.253	0.205	101.	10-150	21.3	44	L517635-01	WG537642
Toluene	mg/kg	0.247	0.208	98.8	20-142	17.4	42	L517635-01	WG537642
Total Xylene	mg/kg	0.773	0.625	103.	16-141	21.1	46	L517635-01	WG537642
a,a,a-Trifluorotoluene(PID)				104.3	54-144				WG537642
TPH (GC/FID) Low Fraction	mg/kg	24.4	22.0	88.7	55-109	10.4	20	L517635-01	WG537642
a,a,a-Trifluorotoluene(FID)				103.8	59-128				WG537642
Barium	mg/kg	363.	320.	206.*	75-125	12.6	20	L517500-02	WG537330
Cadmium	mg/kg	39.6	36.2	78.0	75-125	8.97	20	L517500-02	WG537330
Chromium	mg/kg	62.6	57.8	81.2	75-125	7.97	20	L517500-02	WG537330
Copper	mg/kg	73.9	68.6	97.8	75-125	7.44	20	L517500-02	WG537330
Lead	mg/kg	56.3	51.4	86.6	75-125	9.10	20	L517500-02	WG537330
Selenium	mg/kg	43.8	39.9	84.2	75-125	9.32	20	L517500-02	WG537330
Silver	mg/kg	45.9	42.2	91.8	75-125	8.40	20	L517500-02	WG537330
Zinc	mg/kg	85.5	83.4	85.0	75-125	2.49	20	L517500-02	WG537330
Arsenic	mg/kg	67.1	57.9	106.	75-125	14.7	20	L517500-02	WG537330
Nickel	mg/kg	60.4	57.4	88.8	75-125	5.09	20	L517500-02	WG537330
TPH (GC/FID) High Fraction	ppm	43.7	41.7	72.8	50-150	4.53	25	L517635-01	WG537670
o-Terphenyl				68.64	50-150				WG537670
Mercury	mg/kg	0.263	0.260	105.	70-130	1.15	20	L517500-01	WG537502
1-Methylnaphthalene	mg/kg	0.115	0.0954	68.7	28-124	18.4	26	L517766-04	WG537761
2-Methylnaphthalene	mg/kg	0.120	0.0970	71.7	25-128	21.0	27	L517766-04	WG537761
Acenaphthene	mg/kg	0.123	0.108	73.9	38-121	13.0	23	L517766-04	WG537761
Acenaphthylene	mg/kg	0.135	0.114	80.8	39-120	16.7	22	L517766-04	WG537761
Anthracene	mg/kg	0.113	0.0986	67.6	35-133	13.5	23	L517766-04	WG537761
Benzo(a)anthracene	mg/kg	0.112	0.105	67.1	35-136	6.08	23	L517766-04	WG537761
Benzo(a)pyrene	mg/kg	0.115	0.109	68.6	37-131	5.03	22	L517766-04	WG537761
Benzo(b)fluoranthene	mg/kg	0.102	0.0909	60.9	29-145	11.3	33	L517766-04	WG537761

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L517500

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 02, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzo(g,h,i)perylene	mg/kg	0.0958	0.0795	57.4	10-139	18.6	26	L517766-04	WG537761
Benzo(k)fluoranthene	mg/kg	0.120	0.108	71.6	31-140	10.0	34	L517766-04	WG537761
Chrysene	mg/kg	0.113	0.0938	67.6	34-137	18.4	23	L517766-04	WG537761
Dibenz(a,h)anthracene	mg/kg	0.100	0.0910	60.1	21-132	9.82	25	L517766-04	WG537761
Fluoranthene	mg/kg	0.113	0.0979	67.8	34-132	14.5	24	L517766-04	WG537761
Fluorene	mg/kg	0.132	0.111	79.1	38-126	17.3	23	L517766-04	WG537761
Indeno(1,2,3-cd)pyrene	mg/kg	0.100	0.0943	60.1	17-134	6.17	25	L517766-04	WG537761
Naphthalene	mg/kg	0.116	0.0941	69.7	24-122	21.2	29	L517766-04	WG537761
Phenanthrene	mg/kg	0.121	0.103	72.7	38-128	15.9	25	L517766-04	WG537761
Pyrene	mg/kg	0.149	0.125	89.5	35-141	17.7	25	L517766-04	WG537761
2-Fluorobiphenyl				74.66	37-123				WG537761
Nitrobenzene-d5				108.3	19-129				WG537761
p-Terphenyl-d14				80.33	34-149				WG537761
2-Chloronaphthalene	mg/kg	0.105	0.0829	175.*	38-117	23.2	26	L516632-05	WG537404
2-Methylnaphthalene	mg/kg	0.0645	0.0720	196.*	18-125	10.9	29	L516632-05	WG537404
Benzo(a)anthracene	mg/kg	0.158	0.182	240.*	32-131	14.0	31	L516632-05	WG537404
Benzo(a)pyrene	mg/kg	0.0919	0.0989	154.*	28-130	7.31	28	L516632-05	WG537404
Benzo(b)fluoranthene	mg/kg	0.0640	0.0732	194.*	37-130	13.3	41	L516632-05	WG537404
Benzo(g,h,i)perylene	mg/kg	0.0436	0.0480	132.	10-134	9.67	26	L516632-05	WG537404
Benzo(k)fluoranthene	mg/kg	0.0236	0.0194	71.4	31-129	19.6	42	L516632-05	WG537404
Chrysene	mg/kg	0.184	0.194	253.*	25-137	5.59	22	L516632-05	WG537404
Dibenz(a,h)anthracene	mg/kg	0.0351	0.0390	106.	20-134	10.5	25	L516632-05	WG537404
Indeno(1,2,3-cd)pyrene	mg/kg	0.0321	0.0354	97.4	16-135	9.66	26	L516632-05	WG537404
Naphthalene	mg/kg	0.238	0.268	327.*	22-121	11.9	30	L516632-05	WG537404
Pyrene	mg/kg	0.466	0.504	562.*	22-133	7.83	33	L516632-05	WG537404
Nitrobenzene-d5				46.85	21-120				WG537404
p-Terphenyl-d14				61.58	18-142				WG537404
TPH (GC/FID) High Fraction	ppm	42.6	57.3	68.9	50-150	29.4*	25	L517429-03	WG537401
o-Terphenyl				57.49	50-150				WG537401
Barium	mg/kg	302.	392.	0*	75-125	25.9*	20	L517500-07	WG537373
Cadmium	mg/kg	41.3	42.4	81.4	75-125	2.63	20	L517500-07	WG537373
Chromium	mg/kg	62.1	63.7	78.2	75-125	2.54	20	L517500-07	WG537373
Copper	mg/kg	69.3	74.0	80.6	75-125	6.56	20	L517500-07	WG537373
Lead	mg/kg	56.0	55.4	84.0	75-125	1.08	20	L517500-07	WG537373
Selenium	mg/kg	41.0	45.9	73.2*	75-125	11.3	20	L517500-07	WG537373
Silver	mg/kg	46.3	46.6	92.6	75-125	0.646	20	L517500-07	WG537373
Zinc	mg/kg	86.8	92.9	73.6*	75-125	6.79	20	L517500-07	WG537373
Arsenic	mg/kg	65.6	65.0	26.2*	75-125	0.919	20	L517500-07	WG537373
Nickel	mg/kg	65.4	69.3	26.2*	75-125	5.79	20	L517500-07	WG537373
1-Methylnaphthalene	mg/kg	3.65	3.78	318.*	19-131	3.45	30	L516632-05	WG537404
Acenaphthene	mg/kg	1.53	1.62	201.*	31-120	5.79	30	L516632-05	WG537404
Acenaphthylene	mg/kg	0.365	0.414	111.	34-116	12.6	29	L516632-05	WG537404
Anthracene	mg/kg	1.29	4.34	390.*	32-131	109.*	26	L516632-05	WG537404
Fluoranthene	mg/kg	0.128	0.126	38.7	27-138	1.52	35	L516632-05	WG537404
Fluorene	mg/kg	1.34	1.34	180.*	26-136	0.355	30	L516632-05	WG537404
Phenanthrene	mg/kg	4.17	4.38	535.*	27-133	4.91	36	L516632-05	WG537404
2-Fluorobiphenyl				269.7*	33-114				WG537404
Chromium,Hexavalent	mg/kg	13.0	14.0	65.0	50-150	7.41	20	L517500-06	WG537901

* 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 Oil & Gas Inc. - CO
Chris Hines
2717 County Road 215, Suite 100
Parachute, CO 81635

Quality Assurance Report
Level II

L517500

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 02, 2011

Batch number /Run number / Sample number cross reference

WG537428: R1701549: L517500-01 02 03 04 05 06 07
WG537642: R1702410: L517500-01 02 03 04 05 06 07
WG537331: R1702469: L517500-01 02 03 04 05 06 07
WG537330: R1702529: L517500-01 02 03
WG537670: R1702571: L517500-06 07
WG537502: R1702910: L517500-01 02 03 04 05 06 07
WG537404: R1702990: L517500-01 02 03 04 05
WG537706: R1703109: L517500-01 02 03 04
WG537761: R1703791: L517500-06 07
WG537401: R1703891: L517500-01 02 03 04 05
WG537373: R1704209 R1704210: L517500-04 04 05 06 07
WG537894: R1704716: L517500-05 06 07
WG537906: R1704770: L517500-01 02 03 04 05 06 07
WG537901: R1706609: L517500-01 02 03 04 05 06 07

* * 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 Oil & Gas Inc. - CO
Chris Hines
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L517500

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 02, 2011

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

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

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

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



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

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Thursday June 16, 2011

Report Number: L520671

Samples Received: 06/14/11

Client Project:

Description: D23 Soil Spoil

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: _____

Darren Reeder , ESC Representative

Laboratory Certification Numbers

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

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 16, 2011

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Date Received : June 14, 2011
Description : D23 Soil Spoil
Sample ID : D23-SP-10-061011
Collected By : SRM
Collection Date : 06/10/11 16:15

ESC Sample # : L520671-01
Site ID : D23 PAD
Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	93.	0.50	mg/kg	8015D/GRO	06/14/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	99.7		% Rec.	602/8015	06/14/11	5
TPH (GC/FID) High Fraction	7100	400	mg/kg	3546/DRO	06/16/11	100
Surrogate recovery(%) o-Terphenyl	0.00		% Rec.	3546/DRO	06/16/11	100

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: 06/16/11 15:52 Printed: 06/16/11 15:52



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 16, 2011

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Date Received : June 14, 2011
Description : D23 Soil Spoil
Sample ID : D23-SP-15-061011
Collected By : SRM
Collection Date : 06/10/11 16:30

ESC Sample # : L520671-02
Site ID : D23 PAD
Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	54.	0.50	mg/kg	8015D/GRO	06/14/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	102.		% Rec.	602/8015	06/14/11	5
TPH (GC/FID) High Fraction	10000	400	mg/kg	3546/DRO	06/16/11	100
Surrogate recovery(%) o-Terphenyl	0.00		% Rec.	3546/DRO	06/16/11	100

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: 06/16/11 15:52 Printed: 06/16/11 15:52



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 16, 2011

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Date Received : June 14, 2011
Description : D23 Soil Spoil
Sample ID : D23-SP-17-061011
Collected By : SRM
Collection Date : 06/10/11 16:45

ESC Sample # : L520671-03
Site ID : D23 PAD
Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	45.	0.50	mg/kg	8015D/GRO	06/14/11	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	100.		% Rec.	602/8015	06/14/11	5
TPH (GC/FID) High Fraction	5600	200	mg/kg	3546/DRO	06/15/11	50
Surrogate recovery(%) o-Terphenyl	0.00		% Rec.	3546/DRO	06/15/11	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: 06/16/11 15:52 Printed: 06/16/11 15:52



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 16, 2011

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L520671-04

Date Received : June 14, 2011
Description : D23 Soil Spoil

Site ID : D23 PAD

Sample ID : D23-SP-23-061011

Project # :

Collected By : SRM
Collection Date : 06/10/11 17:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	450	5.0	mg/kg	8015D/GRO	06/15/11	50
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	99.8		% Rec.	602/8015	06/15/11	50
TPH (GC/FID) High Fraction	6800	400	mg/kg	3546/DRO	06/15/11	100
Surrogate recovery(%) o-Terphenyl	0.00		% Rec.	3546/DRO	06/15/11	100

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: 06/16/11 15:52 Printed: 06/16/11 15:52



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 16, 2011

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Date Received : June 14, 2011
Description : D23 Soil Spoil
Sample ID : D23-SP-29-061011
Collected By : SRM
Collection Date : 06/10/11 17:15

ESC Sample # : L520671-05
Site ID : D23 PAD
Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	1600	50.	mg/kg	8015D/GRO	06/15/11	500
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	102.		% Rec.	602/8015	06/15/11	500
TPH (GC/FID) High Fraction	12000	400	mg/kg	3546/DRO	06/15/11	100
Surrogate recovery(%) o-Terphenyl	0.00		% Rec.	3546/DRO	06/15/11	100

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: 06/16/11 15:52 Printed: 06/16/11 15:52

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L520671-01	WG540408	SAMP	o-Terphenyl	R1724076	J7
L520671-02	WG540408	SAMP	o-Terphenyl	R1724076	J7
L520671-03	WG540408	SAMP	o-Terphenyl	R1724076	J7
L520671-04	WG540408	SAMP	o-Terphenyl	R1724076	J7
L520671-05	WG540408	SAMP	o-Terphenyl	R1724076	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

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
06/16/11 at 15:52:58

TSR Signing Reports: 358
R3 - Rush: Two Day

Log all samples beginning with different sample numbers to separate reports. Ex.- M34 N PIT and M34 S PIT go on one L#, but M34 S PIT and E34 S PIT go on separate L #s. TPH=GRO and DRO ALWAYS

Sample: L520671-01 Account: ENCANACO Received: 06/14/11 09:00 Due Date: 06/16/11 00:00 RPT Date: 06/16/11 15:52

Sample: L520671-02 Account: ENCANACO Received: 06/14/11 09:00 Due Date: 06/16/11 00:00 RPT Date: 06/16/11 15:52

Sample: L520671-03 Account: ENCANACO Received: 06/14/11 09:00 Due Date: 06/16/11 00:00 RPT Date: 06/16/11 15:52

Sample: L520671-04 Account: ENCANACO Received: 06/14/11 09:00 Due Date: 06/16/11 00:00 RPT Date: 06/16/11 15:52

Sample: L520671-05 Account: ENCANACO Received: 06/14/11 09:00 Due Date: 06/16/11 00:00 RPT Date: 06/16/11 15:52



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L520671

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 16, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	< .1	mg/kg	104.5	59-128	WG540367	06/14/11 15:50
		% Rec.			WG540367	06/14/11 15:50
TPH (GC/FID) High Fraction o-Terphenyl	< 4	ppm	75.50	50-150	WG540408	06/15/11 10:00
		% Rec.			WG540408	06/15/11 10:00
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	< .1	mg/kg	106.2	59-128	WG540574	06/15/11 14:34
		% Rec.			WG540574	06/15/11 14:34

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5.5	5.90	107. 100.7	67-135 59-128	WG540367 WG540367
TPH (GC/FID) High Fraction o-Terphenyl	ppm	60	48.7	81.2 70.33	50-150 50-150	WG540408 WG540408
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5.5	5.98	109. 101.7	67-135 59-128	WG540574 WG540574

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5.76	5.90	105. 99.70	67-135 59-128	2.34	20	WG540367 WG540367
TPH (GC/FID) High Fraction o-Terphenyl	ppm	46.2	48.7	77.0 66.93	50-150 50-150	5.44	25	WG540408 WG540408
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	5.70	5.98	104. 100.2	67-135 59-128	4.81	20	WG540574 WG540574

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	22.3	0	5.5	81.0 108.4	55-109 59-128	L520392-04	WG540367 WG540367
TPH (GC/FID) High Fraction o-Terphenyl	ppm	45.4	0	60	75.6 58.03	50-150 50-150	L520643-06	WG540408 WG540408
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	20.4	0	5.5	74.2 106.1	55-109 59-128	L520374-03	WG540574 WG540574

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
TPH (GC/FID) Low Fraction a,a,a-Trifluorotoluene(FID)	mg/kg	19.0	22.3	69.2 108.5	55-109 59-128	15.7	20	L520392-04	WG540367 WG540367

* 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 Oil & Gas Inc. - CO
Chris Hines
2717 County Road 215, Suite 100
Parachute, CO 81635

Quality Assurance Report
Level II

L520671

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 16, 2011

Table with columns: Analyte, Units, MSD, Matrix Spike Ref, Duplicate %Rec, Limit, RPD, Limit Ref Samp, Batch. Rows include TPH (GC/FID) High Fraction and Low Fraction, and a,a,a-Trifluorotoluene(FID).

Batch number /Run number / Sample number cross reference

WG540367: R1723309: L520671-01 02 03
WG540408: R1724076: L520671-01 02 03 04 05
WG540574: R1724629: L520671-04 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 Oil & Gas Inc. - CO
Chris Hines
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L520671

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 16, 2011

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

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

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

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



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

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Friday July 08, 2011

Report Number: L524179


Samples Received: 07/02/11

Client Project: D23

Description: D23 Soil Spoil

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

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

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

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

July 08, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : July 02, 2011
 Description : D23 Soil Spoil
 Sample ID : D23-SS-1-070111 0-2FT
 Collected By : SRM
 Collection Date : 07/01/11 10:00

ESC Sample # : L524179-01
 Site ID :
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	07/03/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	07/03/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	07/03/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	07/03/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	07/03/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	103.		% Rec.	8021/8015	07/03/11	5
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021/8015	07/03/11	5
TPH (GC/FID) High Fraction	160	4.0	mg/kg	3546/DRO	07/07/11	1
Surrogate recovery(%)						
o-Terphenyl	53.7		% Rec.	3546/DRO	07/07/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 07/07/11 17:06 Revised: 07/08/11 09:07



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

July 08, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L524179-02

Date Received : July 02, 2011
 Description : D23 Soil Spoil

Site ID :

Sample ID : D23-SS-2-070111 0-3FT

Project # : D23

Collected By : SRM
 Collection Date : 07/01/11 10:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	07/03/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	07/03/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	07/03/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	07/03/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	07/03/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	102.		% Rec.	8021/8015	07/03/11	5
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021/8015	07/03/11	5
TPH (GC/FID) High Fraction	320	4.0	mg/kg	3546/DRO	07/07/11	1
Surrogate recovery(%)						
o-Terphenyl	54.2		% Rec.	3546/DRO	07/07/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 07/07/11 17:06 Revised: 07/08/11 09:07



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L524179

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

July 08, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/kg			WG543943	07/03/11 01:20
Ethylbenzene	< .0005	mg/kg			WG543943	07/03/11 01:20
Toluene	< .005	mg/kg			WG543943	07/03/11 01:20
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG543943	07/03/11 01:20
Total Xylene	< .0015	mg/kg			WG543943	07/03/11 01:20
a,a,a-Trifluorotoluene(FID)		% Rec.	104.6	59-128	WG543943	07/03/11 01:20
a,a,a-Trifluorotoluene(PID)		% Rec.	108.4	54-144	WG543943	07/03/11 01:20
TPH (GC/FID) High Fraction	< 4	ppm			WG544042	07/07/11 12:42
o-Terphenyl		% Rec.	84.17	50-150	WG544042	07/07/11 12:42

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.18	94.2	67-135	WG543943
a,a,a-Trifluorotoluene(FID)				105.1	59-128	WG543943
Benzene	mg/kg	.05	0.0556	111.	76-113	WG543943
Ethylbenzene	mg/kg	.05	0.0570	114.	78-115	WG543943
Toluene	mg/kg	.05	0.0551	110.	76-114	WG543943
Total Xylene	mg/kg	.15	0.174	116.	81-118	WG543943
a,a,a-Trifluorotoluene(PID)				106.5	54-144	WG543943
TPH (GC/FID) High Fraction	ppm	60	49.9	83.2	50-150	WG544042
o-Terphenyl				78.39	50-150	WG544042

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) Low Fraction	mg/kg	5.37	5.18	98.0	67-135	3.57	20	WG543943
a,a,a-Trifluorotoluene(FID)				106.3	59-128			WG543943
Benzene	mg/kg	0.0498	0.0556	100.	76-113	11.1	20	WG543943
Ethylbenzene	mg/kg	0.0515	0.0570	103.	78-115	10.3	20	WG543943
Toluene	mg/kg	0.0499	0.0551	100.	76-114	9.81	20	WG543943
Total Xylene	mg/kg	0.158	0.174	105.	81-118	9.94	20	WG543943
a,a,a-Trifluorotoluene(PID)				106.2	54-144			WG543943
TPH (GC/FID) High Fraction	ppm	53.5	49.9	89.0	50-150	6.81	25	WG544042
o-Terphenyl				82.68	50-150			WG544042

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/kg	0.254	0	.05	102.	32-137	L524179-01	WG543943
Ethylbenzene	mg/kg	0.235	0	.05	93.8	10-150	L524179-01	WG543943
Toluene	mg/kg	0.238	0	.05	95.2	20-142	L524179-01	WG543943
Total Xylene	mg/kg	0.717	0	.15	95.6	16-141	L524179-01	WG543943
a,a,a-Trifluorotoluene(PID)					105.4	54-144		WG543943
TPH (GC/FID) Low Fraction	mg/kg	19.7	0	5.5	71.6	55-109	L524179-01	WG543943
a,a,a-Trifluorotoluene(FID)					108.5	59-128		WG543943
TPH (GC/FID) High Fraction	ppm	43.0	0	60	71.7	50-150	L523669-07	WG544042
o-Terphenyl					46.21*	50-150		WG544042

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L524179

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

July 08, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/kg	0.262	0.254	105.	32-137	3.15	39	L524179-01	WG543943
Ethylbenzene	mg/kg	0.228	0.235	91.1	10-150	2.93	44	L524179-01	WG543943
Toluene	mg/kg	0.235	0.238	93.9	20-142	1.34	42	L524179-01	WG543943
Total Xylene	mg/kg	0.700	0.717	93.3	16-141	2.46	46	L524179-01	WG543943
a,a,a-Trifluorotoluene(PID)				105.8	54-144				WG543943
TPH (GC/FID) Low Fraction	mg/kg	18.9	19.7	68.8	55-109	3.87	20	L524179-01	WG543943
a,a,a-Trifluorotoluene(FID)				107.6	59-128				WG543943
TPH (GC/FID) High Fraction	ppm	44.4	43.0	74.0	50-150	3.13	25	L523669-07	WG544042
o-Terphenyl				41.20*	50-150				WG544042

Batch number /Run number / Sample number cross reference

WG543943: R1749650: L524179-01 02
 WG544042: R1751989: L524179-01 02

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



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L524179

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

July 08, 2011

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

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

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

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



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

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Tuesday August 23, 2011

Report Number: L531925


Samples Received: 08/19/11

Client Project:

Description: D23

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

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

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

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

August 23, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : August 19, 2011
 Description : D23
 Sample ID : D23-SS-1-081811
 Collected By : Tracy Loftus
 Collection Date : 08/18/11 10:15

ESC Sample # : L531925-01
 Site ID :
 Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	08/19/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	08/19/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	08/19/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	08/19/11	5
TPH (GC/FID) Low Fraction	0.64	0.50	mg/kg	GRO	08/19/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	95.5		% Rec.	8021/8015	08/19/11	5
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021/8015	08/19/11	5
TPH (GC/FID) High Fraction	890	20.	mg/kg	3546/DRO	08/22/11	5
Surrogate recovery(%)						
o-Terphenyl	85.5		% Rec.	3546/DRO	08/22/11	5

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: 08/23/11 12:04 Printed: 08/23/11 12:05



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

August 23, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : August 19, 2011
 Description : D23
 Sample ID : D23-SS-2-081811
 Collected By : Tracy Loftus
 Collection Date : 08/18/11 10:30

ESC Sample # : L531925-02
 Site ID :
 Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	08/19/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	08/19/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	08/19/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	08/19/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	08/19/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	96.2		% Rec.	8021/8015	08/19/11	5
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021/8015	08/19/11	5
TPH (GC/FID) High Fraction	490	20.	mg/kg	3546/DRO	08/22/11	5
Surrogate recovery(%)						
o-Terphenyl	88.8		% Rec.	3546/DRO	08/22/11	5

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: 08/23/11 12:04 Printed: 08/23/11 12:05



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

August 23, 2011

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L531925-03

Date Received : August 19, 2011
Description : D23

Site ID :

Sample ID : D23-SS-3-081811

Project # :

Collected By : Tracy Loftus
Collection Date : 08/18/11 10:45

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include Benzene, Toluene, Ethylbenzene, Total Xylene, TPH (GC/FID) Low Fraction, Surrogate Recovery-%, a,a,a-Trifluorotoluene(FID), a,a,a-Trifluorotoluene(PID), TPH (GC/FID) High Fraction, Surrogate recovery(%), o-Terphenyl.

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: 08/23/11 12:04 Printed: 08/23/11 12:05



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

August 23, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : August 19, 2011
 Description : D23
 Sample ID : D23-SS-4-081811
 Collected By : Tracy Loftus
 Collection Date : 08/18/11 11:00

ESC Sample # : L531925-04
 Site ID :
 Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	08/19/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	08/19/11	5
Ethylbenzene	0.012	0.0025	mg/kg	8021/8015	08/19/11	5
Total Xylene	0.041	0.0075	mg/kg	8021/8015	08/19/11	5
TPH (GC/FID) Low Fraction	6.7	0.50	mg/kg	GRO	08/19/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	96.5		% Rec.	8021/8015	08/19/11	5
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021/8015	08/19/11	5
TPH (GC/FID) High Fraction	3400	80.	mg/kg	3546/DRO	08/22/11	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	08/22/11	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: 08/23/11 12:04 Printed: 08/23/11 12:05



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

August 23, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : August 19, 2011
 Description : D23
 Sample ID : D23-SS-5-081811
 Collected By : Tracy Loftus
 Collection Date : 08/18/11 11:15

ESC Sample # : L531925-05
 Site ID :
 Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	08/19/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	08/19/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	08/19/11	5
Total Xylene	0.017	0.0075	mg/kg	8021/8015	08/19/11	5
TPH (GC/FID) Low Fraction	5.6	0.50	mg/kg	GRO	08/19/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	95.0		% Rec.	8021/8015	08/19/11	5
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021/8015	08/19/11	5
TPH (GC/FID) High Fraction	3000	80.	mg/kg	3546/DRO	08/22/11	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	08/22/11	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: 08/23/11 12:04 Printed: 08/23/11 12:05



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

August 23, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : August 19, 2011
 Description : D23
 Sample ID : D23-SS-6-081811
 Collected By : Tracy Loftus
 Collection Date : 08/18/11 11:30

ESC Sample # : L531925-06

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	08/19/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	08/19/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	08/19/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	08/19/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	08/19/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	95.5		% Rec.	8021/8015	08/19/11	5
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021/8015	08/19/11	5
TPH (GC/FID) High Fraction	1000	40.	mg/kg	3546/DRO	08/22/11	10
Surrogate recovery(%)						
o-Terphenyl	110.		% Rec.	3546/DRO	08/22/11	10

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: 08/23/11 12:04 Printed: 08/23/11 12:05

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L531925-04	WG551435	SAMP	o-Terphenyl	R1822751	J7
L531925-05	WG551435	SAMP	o-Terphenyl	R1822751	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

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
08/23/11 at 12:05:14

TSR Signing Reports: 358
R3 - Rush: Two Day

If COC says TPH, then please log for GRO and DRO.

Sample: L531925-01 Account: ENCANACO Received: 08/19/11 10:15 Due Date: 08/23/11 00:00 RPT Date: 08/23/11 12:04
Sample: L531925-02 Account: ENCANACO Received: 08/19/11 10:15 Due Date: 08/23/11 00:00 RPT Date: 08/23/11 12:04
Sample: L531925-03 Account: ENCANACO Received: 08/19/11 10:15 Due Date: 08/23/11 00:00 RPT Date: 08/23/11 12:04
Sample: L531925-04 Account: ENCANACO Received: 08/19/11 10:15 Due Date: 08/23/11 00:00 RPT Date: 08/23/11 12:04
Sample: L531925-05 Account: ENCANACO Received: 08/19/11 10:15 Due Date: 08/23/11 00:00 RPT Date: 08/23/11 12:04
Sample: L531925-06 Account: ENCANACO Received: 08/19/11 10:15 Due Date: 08/23/11 00:00 RPT Date: 08/23/11 12:04



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L531925

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

August 23, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/kg			WG551369	08/19/11 17:00
Ethylbenzene	< .0005	mg/kg			WG551369	08/19/11 17:00
Toluene	< .005	mg/kg			WG551369	08/19/11 17:00
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG551369	08/19/11 17:00
Total Xylene	< .0015	mg/kg			WG551369	08/19/11 17:00
a,a,a-Trifluorotoluene(FID)		% Rec.	97.33	59-128	WG551369	08/19/11 17:00
a,a,a-Trifluorotoluene(PID)		% Rec.	107.2	54-144	WG551369	08/19/11 17:00
TPH (GC/FID) High Fraction	< 4	ppm			WG551242	08/21/11 10:06
o-Terphenyl		% Rec.	77.93	50-150	WG551242	08/21/11 10:06
TPH (GC/FID) High Fraction	< 4	ppm			WG551435	08/21/11 10:34
o-Terphenyl		% Rec.	94.55	50-150	WG551435	08/21/11 10:34

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/kg	.05	0.0417	83.4	76-113	WG551369
Ethylbenzene	mg/kg	.05	0.0434	86.8	78-115	WG551369
Toluene	mg/kg	.05	0.0427	85.4	76-114	WG551369
Total Xylene	mg/kg	.15	0.128	85.0	81-118	WG551369
a,a,a-Trifluorotoluene(PID)				106.7	54-144	WG551369
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.50	100.	67-135	WG551369
a,a,a-Trifluorotoluene(FID)				103.3	59-128	WG551369
TPH (GC/FID) High Fraction	ppm	60	50.2	83.7	50-150	WG551242
o-Terphenyl				71.75	50-150	WG551242
TPH (GC/FID) High Fraction	ppm	60	54.0	90.1	50-150	WG551435
o-Terphenyl				80.79	50-150	WG551435

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/kg	0.0438	0.0417	88.0	76-113	5.00	20	WG551369
Ethylbenzene	mg/kg	0.0460	0.0434	92.0	78-115	5.83	20	WG551369
Toluene	mg/kg	0.0445	0.0427	89.0	76-114	4.09	20	WG551369
Total Xylene	mg/kg	0.134	0.128	90.0	81-118	5.16	20	WG551369
a,a,a-Trifluorotoluene(PID)				106.6	54-144			WG551369
TPH (GC/FID) Low Fraction	mg/kg	5.58	5.50	101.	67-135	1.40	20	WG551369
a,a,a-Trifluorotoluene(FID)				101.8	59-128			WG551369
TPH (GC/FID) High Fraction	ppm	52.8	50.2	88*	-	4.95	20	WG551242
o-Terphenyl				69.27	50-150			WG551242
TPH (GC/FID) High Fraction	ppm	52.3	54.0	87.0	50-150	3.27	25	WG551435
o-Terphenyl				78.59	50-150			WG551435

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/kg	0.174	0	.05	69.8	32-137	L531925-01	WG551369
Ethylbenzene	mg/kg	0.176	0	.05	70.4	10-150	L531925-01	WG551369

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L531925

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

August 23, 2011

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Toluene	mg/kg	0.177	0	.05	70.8	20-142	L531925-01	WG551369
Total Xylene	mg/kg	0.518	0	.15	69.0	16-141	L531925-01	WG551369
a,a,a-Trifluorotoluene(PID)					105.2	54-144		WG551369
TPH (GC/FID) Low Fraction	mg/kg	16.1	0.640	5.5	56.1	55-109	L531925-01	WG551369
a,a,a-Trifluorotoluene(FID)					98.07	59-128		WG551369
TPH (GC/FID) High Fraction	ppm	49.5	0.268	60	82.0	50-150	L531789-01	WG551242
o-Terphenyl					58.77	50-150		WG551242
TPH (GC/FID) High Fraction	ppm	100.	37.0	60	106.	50-150	L532074-01	WG551435
o-Terphenyl					85.24	50-150		WG551435

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/kg	0.182	0.174	72.7	32-137	4.09	39	L531925-01	WG551369
Ethylbenzene	mg/kg	0.168	0.176	67.3	10-150	4.55	44	L531925-01	WG551369
Toluene	mg/kg	0.171	0.177	68.3	20-142	3.69	42	L531925-01	WG551369
Total Xylene	mg/kg	0.488	0.518	65.0	16-141	5.99	46	L531925-01	WG551369
a,a,a-Trifluorotoluene(PID)				106.0	54-144				WG551369
TPH (GC/FID) Low Fraction	mg/kg	15.8	16.1	55.3	55-109	1.40	20	L531925-01	WG551369
a,a,a-Trifluorotoluene(FID)				99.00	59-128				WG551369
TPH (GC/FID) High Fraction	ppm	49.0	49.5	81.2	50-150	0.936	20	L531789-01	WG551242
o-Terphenyl				56.23	50-150				WG551242
TPH (GC/FID) High Fraction	ppm	89.5	100.	87.6	50-150	11.4	25	L532074-01	WG551435
o-Terphenyl				95.51	50-150				WG551435

Batch number /Run number / Sample number cross reference

WG551369: R1822131: L531925-01 02 03 04 05 06
 WG551242: R1822750: L531925-01 02
 WG551435: R1822751: L531925-03 04 05 06

* * 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 Oil & Gas Inc. - CO
Chris Hines
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L531925

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

August 23, 2011

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

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

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

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



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

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Thursday September 15, 2011

Report Number: L535793


Samples Received: 09/14/11

Client Project: 311.001

Description: D23-Soil Spoil

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

Entire Report Reviewed By:


Jared Willis , ESC Representative

Laboratory Certification Numbers

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

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

September 15, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L535793-01

Date Received : September 14, 2011
 Description : D23-Soil Spoil

Site ID :

Sample ID : D23-SS-1-091311

Project # : 311.001

Collected By : TL/JB
 Collection Date : 09/13/11 15:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.050	mg/kg	8021/8015	09/14/11	100
Toluene	BDL	0.50	mg/kg	8021/8015	09/14/11	100
Ethylbenzene	0.15	0.050	mg/kg	8021/8015	09/14/11	100
Total Xylene	BDL	0.15	mg/kg	8021/8015	09/14/11	100
TPH (GC/FID) Low Fraction	110	10.	mg/kg	GRO	09/14/11	100
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	93.8		% Rec.	8021/8015	09/14/11	100
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021/8015	09/14/11	100
TPH (GC/FID) High Fraction	1600	80.	mg/kg	3546/DRO	09/15/11	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	09/15/11	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: 09/15/11 16:52 Printed: 09/15/11 16:52



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

September 15, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L535793-02

Date Received : September 14, 2011
 Description : D23-Soil Spoil

Site ID :

Sample ID : D23-SS-2-091311

Project # : 311.001

Collected By : TL/JB
 Collection Date : 09/13/11 15:15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	09/14/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	09/14/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	09/14/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	09/14/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	09/14/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	94.8		% Rec.	8021/8015	09/14/11	5
a,a,a-Trifluorotoluene(PID)	98.1		% Rec.	8021/8015	09/14/11	5
TPH (GC/FID) High Fraction	230	20.	mg/kg	3546/DRO	09/15/11	5
Surrogate recovery(%)						
o-Terphenyl	76.8		% Rec.	3546/DRO	09/15/11	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 09/15/11 16:52 Printed: 09/15/11 16:52



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

September 15, 2011

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L535793-03

Date Received : September 14, 2011
Description : D23-Soil Spoil

Site ID :

Sample ID : D23-SS-3-091311

Project # : 311.001

Collected By : TL/JB
Collection Date : 09/13/11 15:30

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include Benzene, Toluene, Ethylbenzene, Total Xylene, TPH (GC/FID) Low Fraction, Surrogate Recovery-%, a,a,a-Trifluorotoluene(FID), a,a,a-Trifluorotoluene(PID), TPH (GC/FID) High Fraction, Surrogate recovery(%), o-Terphenyl.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 09/15/11 16:52 Printed: 09/15/11 16:52



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

September 15, 2011

Chris Hines
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L535793-04

Date Received : September 14, 2011
Description : D23-Soil Spoil

Site ID :

Sample ID : D23-SS-4-091311

Project # : 311.001

Collected By : TL/JB
Collection Date : 09/13/11 15:45

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include Benzene, Toluene, Ethylbenzene, Total Xylene, TPH (GC/FID) Low Fraction, Surrogate Recovery-%, a,a,a-Trifluorotoluene(FID), a,a,a-Trifluorotoluene(PID), TPH (GC/FID) High Fraction, Surrogate recovery(%), o-Terphenyl.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 09/15/11 16:52 Printed: 09/15/11 16:52



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

September 15, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L535793-05

Date Received : September 14, 2011
 Description : D23-Soil Spoil

Site ID :

Sample ID : D23-SS-5-091311

Project # : 311.001

Collected By : TL/JB
 Collection Date : 09/13/11 16:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	09/14/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	09/14/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	09/14/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	09/14/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	09/14/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	95.3		% Rec.	8021/8015	09/14/11	5
a,a,a-Trifluorotoluene(PID)	99.2		% Rec.	8021/8015	09/14/11	5
TPH (GC/FID) High Fraction	520	20.	mg/kg	3546/DRO	09/15/11	5
Surrogate recovery(%)						
o-Terphenyl	112.		% Rec.	3546/DRO	09/15/11	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 09/15/11 16:52 Printed: 09/15/11 16:52



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

September 15, 2011

Chris Hines
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : September 14, 2011
 Description : D23-Soil Spoil
 Sample ID : D23-SS-6-091311
 Collected By : TL/JB
 Collection Date : 09/13/11 16:15

ESC Sample # : L535793-06
 Site ID :
 Project # : 311.001

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	09/14/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	09/14/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	09/14/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	09/14/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	09/14/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	95.1		% Rec.	8021/8015	09/14/11	5
a,a,a-Trifluorotoluene(PID)	98.3		% Rec.	8021/8015	09/14/11	5
TPH (GC/FID) High Fraction	190	20.	mg/kg	3546/DRO	09/15/11	5
Surrogate recovery(%)						
o-Terphenyl	93.3		% Rec.	3546/DRO	09/15/11	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 09/15/11 16:52 Printed: 09/15/11 16:52

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L535793-01	WG555104	SAMP	o-Terphenyl	R1858212	J7
L535793-04	WG555104	SAMP	o-Terphenyl	R1858212	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

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
09/15/11 at 16:52:42

TSR Signing Reports: 358
R2 - Rush: Next Day

If COC says TPH, then please log for GRO and DRO.

Sample: L535793-01 Account: ENCANACO Received: 09/14/11 09:00 Due Date: 09/15/11 00:00 RPT Date: 09/15/11 16:52

Sample: L535793-02 Account: ENCANACO Received: 09/14/11 09:00 Due Date: 09/15/11 00:00 RPT Date: 09/15/11 16:52

Sample: L535793-03 Account: ENCANACO Received: 09/14/11 09:00 Due Date: 09/15/11 00:00 RPT Date: 09/15/11 16:52

Sample: L535793-04 Account: ENCANACO Received: 09/14/11 09:00 Due Date: 09/15/11 00:00 RPT Date: 09/15/11 16:52

Sample: L535793-05 Account: ENCANACO Received: 09/14/11 09:00 Due Date: 09/15/11 00:00 RPT Date: 09/15/11 16:52

Sample: L535793-06 Account: ENCANACO Received: 09/14/11 09:00 Due Date: 09/15/11 00:00 RPT Date: 09/15/11 16:52



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L535793

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

September 15, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
TPH (GC/FID) High Fraction	< 4	ppm			WG555104	09/14/11 17:16
o-Terphenyl		% Rec.	71.82	50-150	WG555104	09/14/11 17:16
Benzene	< .0005	mg/kg			WG555049	09/14/11 16:31
Ethylbenzene	< .0005	mg/kg			WG555049	09/14/11 16:31
Toluene	< .005	mg/kg			WG555049	09/14/11 16:31
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG555049	09/14/11 16:31
Total Xylene	< .0015	mg/kg			WG555049	09/14/11 16:31
a,a,a-Trifluorotoluene(FID)		% Rec.	95.73	59-128	WG555049	09/14/11 16:31
a,a,a-Trifluorotoluene(PID)		% Rec.	98.66	54-144	WG555049	09/14/11 16:31

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) High Fraction	ppm	60	46.8	78.0	50-150	WG555104
o-Terphenyl				75.90	50-150	WG555104
Benzene	mg/kg	.05	0.0470	94.0	76-113	WG555049
Ethylbenzene	mg/kg	.05	0.0492	98.4	78-115	WG555049
Toluene	mg/kg	.05	0.0516	103.	76-114	WG555049
Total Xylene	mg/kg	.15	0.144	96.1	81-118	WG555049
a,a,a-Trifluorotoluene(PID)				98.00	54-144	WG555049
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.59	120.	67-135	WG555049
a,a,a-Trifluorotoluene(FID)				100.7	59-128	WG555049

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) High Fraction	ppm	46.3	46.8	77.0	50-150	0.985	25	WG555104
o-Terphenyl				76.80	50-150			WG555104
Benzene	mg/kg	0.0474	0.0470	95.0	76-113	0.840	20	WG555049
Ethylbenzene	mg/kg	0.0491	0.0492	98.0	78-115	0.180	20	WG555049
Toluene	mg/kg	0.0519	0.0516	104.	76-114	0.550	20	WG555049
Total Xylene	mg/kg	0.142	0.144	95.0	81-118	1.56	20	WG555049
a,a,a-Trifluorotoluene(PID)				98.70	54-144			WG555049
TPH (GC/FID) Low Fraction	mg/kg	6.42	6.59	117.	67-135	2.64	20	WG555049
a,a,a-Trifluorotoluene(FID)				100.4	59-128			WG555049

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/kg	0.224	0	.05	89.5	32-137	L535793-06	WG555049
Ethylbenzene	mg/kg	0.219	0	.05	87.6	10-150	L535793-06	WG555049
Toluene	mg/kg	0.242	0	.05	96.9	20-142	L535793-06	WG555049
Total Xylene	mg/kg	0.639	0	.15	85.3	16-141	L535793-06	WG555049
a,a,a-Trifluorotoluene(PID)					97.25	54-144		WG555049
TPH (GC/FID) Low Fraction	mg/kg	20.9	0	5.5	76.1	55-109	L535793-06	WG555049
a,a,a-Trifluorotoluene(FID)					97.54	59-128		WG555049
TPH (GC/FID) High Fraction	ppm	48.9	0	60	81.5	50-150	L535282-01	WG555104
o-Terphenyl					69.99	50-150		WG555104

* 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 Oil & Gas Inc. - CO
 Chris Hines
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Quality Assurance Report
 Level II

L535793

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

September 15, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/kg	0.223	0.224	89.2	32-137	0.250	39	L535793-06	WG555049
Ethylbenzene	mg/kg	0.205	0.219	82.1	10-150	6.49	44	L535793-06	WG555049
Toluene	mg/kg	0.231	0.242	92.6	20-142	4.60	42	L535793-06	WG555049
Total Xylene	mg/kg	0.593	0.639	79.0	16-141	7.61	46	L535793-06	WG555049
a,a,a-Trifluorotoluene(PID)				97.56	54-144				WG555049
TPH (GC/FID) Low Fraction	mg/kg	21.2	20.9	77.0	55-109	1.16	20	L535793-06	WG555049
a,a,a-Trifluorotoluene(FID)				98.00	59-128				WG555049
TPH (GC/FID) High Fraction	ppm	47.3	48.9	78.9	50-150	3.27	25	L535282-01	WG555104
o-Terphenyl				69.00	50-150				WG555104

Batch number /Run number / Sample number cross reference

WG555104: R1858212: L535793-01 02 03 04 05 06
 WG555049: R1858252: L535793-01 02 03 04 05 06

* * 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 Oil & Gas Inc. - CO
Chris Hines
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L535793

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

September 15, 2011

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

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

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

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



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

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Monday October 31, 2011

Report Number: L542825


Samples Received: 10/21/11

Client Project: D23

Description: D23 Soil Spoil

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

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

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

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

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

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



YOUR LAB OF CHOICE

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

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 31, 2011

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L542825-01

Date Received : October 21, 2011
Description : D23 Soil Spoil

Site ID :

Sample ID : D23-SS-N1-102011 3-6IN

Project # : D23

Collected By : SRM
Collection Date : 10/20/11 09:15

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include Benzene, Toluene, Ethylbenzene, Total Xylene, TPH (GC/FID) Low Fraction, Surrogate Recovery-%, a,a,a-Trifluorotoluene(FID), a,a,a-Trifluorotoluene(PID), TPH (GC/FID) High Fraction, Surrogate recovery(%), o-Terphenyl.

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: 10/31/11 08:45 Printed: 10/31/11 08:45



YOUR LAB OF CHOICE

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

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

October 31, 2011

Date Received : October 21, 2011
 Description : D23 Soil Spoil
 Sample ID : D23-SS-N2-102011 3-6IN
 Collected By : SRM
 Collection Date : 10/20/11 09:30

ESC Sample # : L542825-02

Site ID :

Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	10/24/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	10/24/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	10/24/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	10/24/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	10/24/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.9		% Rec.	8021/8015	10/24/11	5
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021/8015	10/24/11	5
TPH (GC/FID) High Fraction	310	4.0	mg/kg	3546/DRO	10/27/11	1
Surrogate recovery(%)						
o-Terphenyl	88.1		% Rec.	3546/DRO	10/27/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 10/31/11 08:45 Printed: 10/31/11 08:45



YOUR LAB OF CHOICE

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

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 31, 2011

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L542825-03

Date Received : October 21, 2011
 Description : D23 Soil Spoil

Site ID :

Sample ID : D23-SS-N3-102011 3-6IN

Project # : D23

Collected By : SRM
 Collection Date : 10/20/11 09:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	10/24/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	10/24/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	10/24/11	5
Total Xylene	0.022	0.0075	mg/kg	8021/8015	10/24/11	5
TPH (GC/FID) Low Fraction	1.7	0.50	mg/kg	GRO	10/24/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.2		% Rec.	8021/8015	10/24/11	5
a,a,a-Trifluorotoluene(PID)	105.		% Rec.	8021/8015	10/24/11	5
TPH (GC/FID) High Fraction	1200	80.	mg/kg	3546/DRO	10/27/11	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	10/27/11	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: 10/31/11 08:45 Printed: 10/31/11 08:45



YOUR LAB OF CHOICE

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

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 31, 2011

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L542825-04

Date Received : October 21, 2011
 Description : D23 Soil Spoil

Site ID :

Sample ID : D23-SS-N4-102011 3-6IN

Project # : D23

Collected By : SRM
 Collection Date : 10/20/11 10:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	10/24/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	10/24/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	10/24/11	5
Total Xylene	0.012	0.0075	mg/kg	8021/8015	10/24/11	5
TPH (GC/FID) Low Fraction	1.1	0.50	mg/kg	GRO	10/24/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	99.8		% Rec.	8021/8015	10/24/11	5
a,a,a-Trifluorotoluene(PID)	106.		% Rec.	8021/8015	10/24/11	5
TPH (GC/FID) High Fraction	660	20.	mg/kg	3546/DRO	10/27/11	5
Surrogate recovery(%)						
o-Terphenyl	112.		% Rec.	3546/DRO	10/27/11	5

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: 10/31/11 08:45 Printed: 10/31/11 08:45

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L542825-01	WG562345	SAMP	o-Terphenyl	R1911394	J7
L542825-03	WG562345	SAMP	o-Terphenyl	R1911394	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out

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
10/31/11 at 08:45:55

TSR Signing Reports: 358
R5 - Desired TAT

If COC says TPH, then please log for GRO and DRO.

Sample: L542825-01 Account: ENCANACO Received: 10/21/11 09:00 Due Date: 10/28/11 00:00 RPT Date: 10/31/11 08:45

Sample: L542825-02 Account: ENCANACO Received: 10/21/11 09:00 Due Date: 10/28/11 00:00 RPT Date: 10/31/11 08:45

Sample: L542825-03 Account: ENCANACO Received: 10/21/11 09:00 Due Date: 10/28/11 00:00 RPT Date: 10/31/11 08:45

Sample: L542825-04 Account: ENCANACO Received: 10/21/11 09:00 Due Date: 10/28/11 00:00 RPT Date: 10/31/11 08:45



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L542825

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

October 31, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/kg			WG562035	10/23/11 23:33
Ethylbenzene	< .0005	mg/kg			WG562035	10/23/11 23:33
Toluene	< .005	mg/kg			WG562035	10/23/11 23:33
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG562035	10/23/11 23:33
Total Xylene	< .0015	mg/kg			WG562035	10/23/11 23:33
a,a,a-Trifluorotoluene(FID)		% Rec.	100.4	59-128	WG562035	10/23/11 23:33
a,a,a-Trifluorotoluene(PID)		% Rec.	106.8	54-144	WG562035	10/23/11 23:33
TPH (GC/FID) High Fraction	< 4	ppm			WG562345	10/27/11 12:24
o-Terphenyl		% Rec.	70.06	50-150	WG562345	10/27/11 12:24

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/kg	.05	0.0460	92.0	76-113	WG562035
Ethylbenzene	mg/kg	.05	0.0542	108.	78-115	WG562035
Toluene	mg/kg	.05	0.0501	100.	76-114	WG562035
Total Xylene	mg/kg	.15	0.162	108.	81-118	WG562035
a,a,a-Trifluorotoluene(PID)				105.1	54-144	WG562035
TPH (GC/FID) Low Fraction	mg/kg	5.5	5.75	105.	67-135	WG562035
a,a,a-Trifluorotoluene(FID)				102.1	59-128	WG562035
TPH (GC/FID) High Fraction	ppm	60	40.6	67.6	50-150	WG562345
o-Terphenyl				68.50	50-150	WG562345

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/kg	0.0465	0.0460	93.0	76-113	1.13	20	WG562035
Ethylbenzene	mg/kg	0.0539	0.0542	108.	78-115	0.540	20	WG562035
Toluene	mg/kg	0.0497	0.0501	99.0	76-114	0.710	20	WG562035
Total Xylene	mg/kg	0.161	0.162	107.	81-118	1.00	20	WG562035
a,a,a-Trifluorotoluene(PID)				105.1	54-144			WG562035
TPH (GC/FID) Low Fraction	mg/kg	5.53	5.75	101.	67-135	3.80	20	WG562035
a,a,a-Trifluorotoluene(FID)				101.5	59-128			WG562035
TPH (GC/FID) High Fraction	ppm	45.8	40.6	76.0	50-150	12.1	20	WG562345
o-Terphenyl				77.51	50-150			WG562345

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/kg	0.213	0	.05	85.1	32-137	L542824-06	WG562035
Ethylbenzene	mg/kg	0.239	0	.05	95.4	10-150	L542824-06	WG562035
Toluene	mg/kg	0.230	0	.05	92.1	20-142	L542824-06	WG562035
Total Xylene	mg/kg	0.726	0	.15	96.8	16-141	L542824-06	WG562035
a,a,a-Trifluorotoluene(PID)					103.8	54-144		WG562035
TPH (GC/FID) Low Fraction	mg/kg	20.5	0.600	5.5	72.4	55-109	L542824-06	WG562035
a,a,a-Trifluorotoluene(FID)					105.4	59-128		WG562035

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/kg	0.214	0.213	85.6	32-137	0.590	39	L542824-06	WG562035
Ethylbenzene	mg/kg	0.224	0.239	89.6	10-150	6.26	44	L542824-06	WG562035
Toluene	mg/kg	0.220	0.230	88.1	20-142	4.41	42	L542824-06	WG562035

* 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 Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L542825

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

October 31, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Total Xylene	mg/kg	0.656	0.726	87.5	16-141	10.0	46	L542824-06	WG562035
a,a,a-Trifluorotoluene(PID)				103.2	54-144				WG562035
TPH (GC/FID) Low Fraction	mg/kg	20.6	20.5	72.8	55-109	0.410	20	L542824-06	WG562035
a,a,a-Trifluorotoluene(FID)				99.24	59-128				WG562035

Batch number /Run number / Sample number cross reference

WG562035: R1905992: L542825-01 02 03 04
WG562345: R1911394: L542825-01 02 03 04

* * 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 Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L542825

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

October 31, 2011

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

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

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

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



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

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Wednesday November 30, 2011

Report Number: L548239

Samples Received: 11/10/11

Client Project:

Description: D23

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

Entire Report Reviewed By:

Jared Willis , ESC Representative

Laboratory Certification Numbers

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

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

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

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



YOUR LAB OF CHOICE

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

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

November 30, 2011

Date Received : November 10, 2011
Description : D23
Sample ID : D23 SS2-110911
Collected By : G. Waltsak
Collection Date : 11/09/11 09:05

ESC Sample # : L548239-01

Site ID :

Project # :

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include Corrosivity, Ignitability, Oil & Grease (Hexane Extr), Paint Filter Test, Reactive CN (SW846 7.3.3.2), and Reactive Sulf. (SW846 7.3.4.1).

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: 11/30/11 09:14 Printed: 11/30/11 09:15
L548239-01 (IGNITABILITY) - Did Not Ignite @ 170 F
L548239-01 (PAINT) - Contains no free liquid



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

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

November 30, 2011

Date Received : November 10, 2011
 Description : D23
 Sample ID : D23 SS2-110911
 Collected By : G. Waltsak
 Collection Date : 11/09/11 09:35

ESC Sample # : L548239-02

Site ID :

Project :

Parameter	Result	Det. Limit	Units	Limit	Method	Date/Time	By	Dil
TCLP ZHE Extraction	-				1311	11/27/11 0833	MVE	1
TCLP Volatiles								
Benzene	BDL	0.050	mg/l	0.50	8260B	11/28/11 0822	CJR	1
Toluene	BDL	0.050	mg/l		8260B	11/28/11 0822	CJR	1
Ethylbenzene	BDL	0.050	mg/l		8260B	11/28/11 0822	CJR	1
Total Xylenes	0.32	0.15	mg/l		8260B	11/28/11 0822	CJR	1
Surrogate Recovery								
Toluene-d8	101.		% Rec.	114.	8260B	11/28/11 0822	CJR	1
Dibromofluoromethane	100.		% Rec.	125.	8260B	11/28/11 0822	CJR	1
a,a,a-Trifluorotoluene	105.		% Rec.	114.	8260B	11/28/11 0822	CJR	1
4-Bromofluorobenzene	103.		% Rec.	128.	8260B	11/28/11 0822	CJR	1

BDL - Below Detection Limit
 Det. Limit - Estimated Quantitation Limit(EQL)
 Limit - Maximum Contaminant Level as established by the US EPA
 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: 11/30/11 09:14 Printed: 11/30/11 09:15

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L548239-01	WG567145	SAMP	Reactive Sulf.(SW846 7.3.4.1)	R1944112	T8

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
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
11/30/11 at 09:15:18

TSR Signing Reports: 358
R5 - Desired TAT

Try not to report benzene as BDL above a 250x dilution.

Sample: L548239-01 Account: ENCANACO Received: 11/10/11 09:00 Due Date: 12/01/11 00:00 RPT Date: 11/30/11 09:14
Relogged from L546009-01

Sample: L548239-02 Account: ENCANACO Received: 11/10/11 09:00 Due Date: 12/01/11 00:00 RPT Date: 11/30/11 09:14
Relogged from L546009-01



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L548239

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

Tax I.D. 62-0814289

Est. 1970

November 30, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Reactive Sulf. (SW846 7.3.4.1)	< 25	mg/kg			WG567145	11/23/11 19:24
Reactive CN (SW846 7.3.3.2)	< .125	mg/kg			WG567144	11/25/11 16:42
Corrosivity	5.90				WG567329	11/26/11 15:17
Benzene	< .05	mg/l			WG567471	11/28/11 05:55
Ethylbenzene	< .05	mg/l			WG567471	11/28/11 05:55
Toluene	< .25	mg/l			WG567471	11/28/11 05:55
Total Xylenes	< .15	mg/l			WG567471	11/28/11 05:55
4-Bromofluorobenzene		% Rec.	103.9	82-120	WG567471	11/28/11 05:55
Dibromofluoromethane		% Rec.	97.28	82-126	WG567471	11/28/11 05:55
Toluene-d8		% Rec.	103.0	92-112	WG567471	11/28/11 05:55
a,a,a-Trifluorotoluene		% Rec.	106.9	90-116	WG567471	11/28/11 05:55
Oil & Grease (Hexane Extr)	< 100	mg/kg			WG567604	11/29/11 17:02

Analyte	Units	Duplicate			Limit	Ref Samp	Batch
		Result	Duplicate	RPD			
Ignitability	Deg. F	0	0	0	10	L547680-01	WG566501
Ignitability	Deg. F	0	0	0	10	L547812-01	WG566501
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	0	0	0	20	L548196-01	WG567145
Reactive CN (SW846 7.3.3.2)	mg/kg	0	0	0	20	L548196-01	WG567144
Corrosivity		0	0	0	10	L548196-01	WG567329
Oil & Grease (Hexane Extr)	mg/kg	180.	170.	5.71	20	L548312-11	WG567604

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Ignitability	Deg. F	82	81.0	98.8	93-107	WG566501
Reactive Sulf. (SW846 7.3.4.1)	mg/kg	100	71.0	71.0	70-130	WG567145
Corrosivity		7.98	8.00	100.	98-101	WG567329
Benzene	mg/l	.025	0.0198	79.0	72-119	WG567471
Ethylbenzene	mg/l	.025	0.0231	92.5	77-124	WG567471
Toluene	mg/l	.025	0.0203	81.3	75-114	WG567471
Total Xylenes	mg/l	.075	0.0689	91.8	77-123	WG567471
4-Bromofluorobenzene				104.1	82-120	WG567471
Dibromofluoromethane				93.67	82-126	WG567471
Toluene-d8				100.9	92-112	WG567471
a,a,a-Trifluorotoluene				106.1	90-116	WG567471

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



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

EnCana Oil & Gas Inc. - CO
 Chris Hines / Matt Kasten
 2717 County Road 215, Suite 100

Quality Assurance Report
 Level II

Parachute, CO 81635

November 30, 2011

L548239

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Oil & Grease (Hexane Extr)	mg/kg	4000	3980	99.5	85-115	WG567604

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Ignitability	Deg. F	81.0	81.0	99.0	93-107	0	20	WG566501
Reactive Sulf.(SW846 7.3.4.1)	mg/kg	77.0	71.0	77.0	70-130	8.11	20	WG567145
Corrosivity		8.00	8.00	100.	98-101	0	10	WG567329
Benzene	mg/l	0.0199	0.0198	80.0	72-119	0.660	20	WG567471
Ethylbenzene	mg/l	0.0225	0.0231	90.0	77-124	2.83	20	WG567471
Toluene	mg/l	0.0211	0.0203	84.0	75-114	4.03	20	WG567471
Total Xylenes	mg/l	0.0673	0.0689	90.0	77-123	2.24	20	WG567471
4-Bromofluorobenzene				101.9	82-120			WG567471
Dibromofluoromethane				93.59	82-126			WG567471
Toluene-d8				102.4	92-112			WG567471
a,a,a-Trifluorotoluene				106.2	90-116			WG567471
Oil & Grease (Hexane Extr)	mg/kg	3880	3980	97.0	85-115	2.54	20	WG567604

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Benzene	mg/l	3.01	2.00	1.25	80.8	51-134	L547958-01	WG567471
Ethylbenzene	mg/l	1.38	0.211	1.25	93.2	64-135	L547958-01	WG567471
Toluene	mg/l	10.6	9.59	1.25	84.2	61-126	L547958-01	WG567471
Total Xylenes	mg/l	3.61	0.169	3.75	91.7	64-133	L547958-01	WG567471
4-Bromofluorobenzene					102.9	82-120		WG567471
Dibromofluoromethane					94.42	82-126		WG567471
Toluene-d8					100.8	92-112		WG567471
a,a,a-Trifluorotoluene					105.7	90-116		WG567471
Oil & Grease (Hexane Extr)	mg/kg	4020	210.	4000	95.2	80-120	L548312-12	WG567604

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
Benzene	mg/l	3.03	3.01	82.7	51-134	0.800	20	L547958-01	WG567471
Ethylbenzene	mg/l	1.27	1.38	84.5	64-135	8.22	20	L547958-01	WG567471
Toluene	mg/l	11.1	10.6	124.	61-126	4.55	20	L547958-01	WG567471
Total Xylenes	mg/l	3.42	3.61	86.6	64-133	5.48	20	L547958-01	WG567471
4-Bromofluorobenzene				100.6	82-120				WG567471
Dibromofluoromethane				96.00	82-126				WG567471
Toluene-d8				101.1	92-112				WG567471
a,a,a-Trifluorotoluene				106.3	90-116				WG567471
Oil & Grease (Hexane Extr)	mg/kg	3940	4020	93.2	80-120	2.12	20	L548312-12	WG567604

Batch number /Run number / Sample number cross reference

* 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 Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L548239

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

Tax I.D. 62-0814289

Est. 1970

November 30, 2011

WG566501: R1943557: L548239-01
WG567225: R1944094: L548239-01
WG567145: R1944112: L548239-01
WG567382: R1946394: L548239-02
WG567144: R1946398: L548239-01
WG567329: R1946433: L548239-01
WG567471: R1947173: L548239-02
WG567604: R1949152: L548239-01

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

* Performance of this Analyte is outside of established criteria.

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



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L548239

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

Tax I.D. 62-0814289

Est. 1970

November 30, 2011

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

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

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

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



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

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Friday November 25, 2011

Report Number: L548248


Samples Received: 11/23/11

Client Project: D23

Description: D23 Waste Pit

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

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

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

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

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

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



YOUR LAB OF CHOICE

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

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

November 25, 2011

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L548248-01

Date Received : November 23, 2011
Description : D23 Waste Pit

Site ID :

Sample ID : D23-WP-S-SS2 2 FT-112211

Project # : D23

Collected By : SRM
Collection Date : 11/22/11 12:30

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include Benzene, Toluene, Ethylbenzene, Total Xylene, TPH (GC/FID) Low Fraction, Surrogate Recovery-%, a,a,a-Trifluorotoluene(FID), a,a,a-Trifluorotoluene(PID), TPH (GC/FID) High Fraction, Surrogate recovery(%), o-Terphenyl.

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: 11/25/11 11:07 Printed: 11/25/11 11:07



YOUR LAB OF CHOICE

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

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

November 25, 2011

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : November 23, 2011
 Description : D23 Waste Pit
 Sample ID : D23-WP-N-SS1 2 FT-112211
 Collected By : SRM
 Collection Date : 11/22/11 12:15

ESC Sample # : L548248-02
 Site ID :
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.0025	mg/kg	8021/8015	11/23/11	5
Toluene	BDL	0.025	mg/kg	8021/8015	11/23/11	5
Ethylbenzene	BDL	0.0025	mg/kg	8021/8015	11/23/11	5
Total Xylene	BDL	0.0075	mg/kg	8021/8015	11/23/11	5
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	11/23/11	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	96.6		% Rec.	8021/8015	11/23/11	5
a,a,a-Trifluorotoluene(PID)	97.7		% Rec.	8021/8015	11/23/11	5
TPH (GC/FID) High Fraction	20.	4.0	mg/kg	3546/DRO	11/24/11	1
Surrogate recovery(%)						
o-Terphenyl	70.3		% Rec.	3546/DRO	11/24/11	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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

Reported: 11/25/11 11:07 Printed: 11/25/11 11:07

Summary of Remarks For Samples Printed
11/25/11 at 11:07:47

TSR Signing Reports: 358
R3 - Rush: Two Day

If COC says TPH, then please log for GRO and DRO.

Sample: L548248-01 Account: ENCANACO Received: 11/23/11 09:00 Due Date: 11/28/11 00:00 RPT Date: 11/25/11 11:07

Sample: L548248-02 Account: ENCANACO Received: 11/23/11 09:00 Due Date: 11/28/11 00:00 RPT Date: 11/25/11 11:07



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L548248

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

Tax I.D. 62-0814289

Est. 1970

November 25, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Benzene	< .0005	mg/kg			WG567106	11/23/11 15:02
Ethylbenzene	< .0005	mg/kg			WG567106	11/23/11 15:02
Toluene	< .005	mg/kg			WG567106	11/23/11 15:02
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG567106	11/23/11 15:02
Total Xylene	< .0015	mg/kg			WG567106	11/23/11 15:02
a,a,a-Trifluorotoluene(FID)		% Rec.	100.2	59-128	WG567106	11/23/11 15:02
a,a,a-Trifluorotoluene(PID)		% Rec.	101.2	54-144	WG567106	11/23/11 15:02
TPH (GC/FID) High Fraction	< 4	ppm			WG567171	11/24/11 02:17
o-Terphenyl		% Rec.	76.41	50-150	WG567171	11/24/11 02:17

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Benzene	mg/kg	.05	0.0504	101.	76-113	WG567106
Ethylbenzene	mg/kg	.05	0.0543	109.	78-115	WG567106
Toluene	mg/kg	.05	0.0543	109.	76-114	WG567106
Total Xylene	mg/kg	.15	0.161	107.	81-118	WG567106
a,a,a-Trifluorotoluene(PID)				98.55	54-144	WG567106
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.22	113.	67-135	WG567106
a,a,a-Trifluorotoluene(FID)				102.9	59-128	WG567106
TPH (GC/FID) High Fraction	ppm	60	47.1	78.5	50-150	WG567171
o-Terphenyl				82.47	50-150	WG567171

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzene	mg/kg	0.0443	0.0504	89.0	76-113	12.9	20	WG567106
Ethylbenzene	mg/kg	0.0477	0.0543	95.0	78-115	12.9	20	WG567106
Toluene	mg/kg	0.0475	0.0543	95.0	76-114	13.5	20	WG567106
Total Xylene	mg/kg	0.141	0.161	94.0	81-118	13.2	20	WG567106
a,a,a-Trifluorotoluene(PID)				100.6	54-144			WG567106
TPH (GC/FID) Low Fraction	mg/kg	5.92	6.22	108.	67-135	4.96	20	WG567106
a,a,a-Trifluorotoluene(FID)				100.5	59-128			WG567106
TPH (GC/FID) High Fraction	ppm	46.6	47.1	78.0	50-150	1.01	25	WG567171
o-Terphenyl				82.53	50-150			WG567171

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
Benzene	mg/kg	0.230	0	.05	92.1	32-137	L548121-01	WG567106
Ethylbenzene	mg/kg	0.250	0	.05	100.	10-150	L548121-01	WG567106
Toluene	mg/kg	0.251	0	.05	100.	20-142	L548121-01	WG567106
Total Xylene	mg/kg	0.743	0	.15	99.0	16-141	L548121-01	WG567106
a,a,a-Trifluorotoluene(PID)					101.3	54-144		WG567106
TPH (GC/FID) Low Fraction	mg/kg	26.7	0	5.5	97.0	55-109	L548121-01	WG567106
a,a,a-Trifluorotoluene(FID)					102.9	59-128		WG567106
TPH (GC/FID) High Fraction	ppm	37.3	0	60	62.2	50-150	L548284-13	WG567171
o-Terphenyl					63.46	50-150		WG567171

* 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 Oil & Gas Inc. - CO
 Chris Hines / Matt Kasten
 2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
 Level II

L548248

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

Tax I.D. 62-0814289

Est. 1970

November 25, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Benzene	mg/kg	0.205	0.230	82.0	32-137	11.7	39	L548121-01	WG567106
Ethylbenzene	mg/kg	0.217	0.250	86.8	10-150	14.1	44	L548121-01	WG567106
Toluene	mg/kg	0.219	0.251	87.5	20-142	13.9	42	L548121-01	WG567106
Total Xylene	mg/kg	0.643	0.743	85.7	16-141	14.4	46	L548121-01	WG567106
a,a,a-Trifluorotoluene(PID)				99.61	54-144				WG567106
TPH (GC/FID) Low Fraction	mg/kg	25.8	26.7	93.8	55-109	3.35	20	L548121-01	WG567106
a,a,a-Trifluorotoluene(FID)				102.8	59-128				WG567106
TPH (GC/FID) High Fraction	ppm	33.0	37.3	55.0	50-150	12.2	25	L548284-13	WG567171
o-Terphenyl				55.66	50-150				WG567171

Batch number /Run number / Sample number cross reference

WG567106: R1943712: L548248-01 02
 WG567171: R1943893: L548248-01 02

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



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L548248

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

Tax I.D. 62-0814289

Est. 1970

November 25, 2011

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

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

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

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



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

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Friday December 16, 2011

Report Number: L551177


Samples Received: 12/13/11

Client Project: D23

Description: D23-A15-Soil Spoil

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

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

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

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

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

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



YOUR LAB OF CHOICE

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

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

December 16, 2011

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : December 13, 2011
 Description : D23-A15-Soil Spoil
 Sample ID : D23-A15-SS1-121211
 Collected By : SRM
 Collection Date : 12/12/11 12:15

ESC Sample # : L551177-01
 Site ID :
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.050	mg/kg	8021/8015	12/14/11	100
Toluene	BDL	0.50	mg/kg	8021/8015	12/14/11	100
Ethylbenzene	0.45	0.050	mg/kg	8021/8015	12/14/11	100
Total Xylene	0.39	0.15	mg/kg	8021/8015	12/14/11	100
TPH (GC/FID) Low Fraction	140	10.	mg/kg	GRO	12/14/11	100
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	92.6		% Rec.	8021/8015	12/14/11	100
a,a,a-Trifluorotoluene(PID)	99.3		% Rec.	8021/8015	12/14/11	100
TPH (GC/FID) High Fraction	910	80.	mg/kg	3546/DRO	12/14/11	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	12/14/11	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: 12/16/11 15:18 Printed: 12/16/11 15:20



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

December 16, 2011

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

ESC Sample # : L551177-02

Date Received : December 13, 2011
 Description : D23-A15-Soil Spoil

Site ID :

Sample ID : D23-A15-SS2-121211

Project # : D23

Collected By : SRM
 Collection Date : 12/12/11 12:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium,Hexavalent	BDL	2.0	mg/kg	3060A/7196A	12/14/11	1
Chromium,Trivalent	25.	2.0	mg/kg	Calc.	12/14/11	1
ORP	21.		mV	2580	12/14/11	1
pH	8.0		su	9045D	12/16/11	1
Sodium Adsorption Ratio	7.4			Calc.	12/15/11	1
Specific Conductance	2000		umhos/cm	9050AMod	12/14/11	1
Mercury	0.12	0.020	mg/kg	7471	12/14/11	1
Arsenic	19.	1.0	mg/kg	6010B	12/14/11	1
Barium	4300	1.2	mg/kg	6010B	12/14/11	5
Cadmium	0.42	0.25	mg/kg	6010B	12/14/11	1
Chromium	25.	0.50	mg/kg	6010B	12/14/11	1
Copper	25.	5.0	mg/kg	6010B	12/14/11	5
Lead	15.	0.25	mg/kg	6010B	12/15/11	1
Nickel	16.	1.0	mg/kg	6010B	12/14/11	1
Selenium	2.3	1.0	mg/kg	6010B	12/14/11	1
Silver	BDL	2.5	mg/kg	6010B	12/14/11	5
Zinc	51.	1.5	mg/kg	6010B	12/14/11	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	0.023	0.0060	mg/kg	8270C-SIM	12/14/11	1
Acenaphthene	0.072	0.0060	mg/kg	8270C-SIM	12/14/11	1
Acenaphthylene	0.11	0.0060	mg/kg	8270C-SIM	12/14/11	1
Benzo(a)anthracene	BDL	0.0060	mg/kg	8270C-SIM	12/14/11	1
Benzo(a)pyrene	BDL	0.0060	mg/kg	8270C-SIM	12/14/11	1
Benzo(b)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	12/14/11	1
Benzo(g,h,i)perylene	BDL	0.0060	mg/kg	8270C-SIM	12/14/11	1
Benzo(k)fluoranthene	BDL	0.0060	mg/kg	8270C-SIM	12/14/11	1
Chrysene	BDL	0.0060	mg/kg	8270C-SIM	12/14/11	1
Dibenz(a,h)anthracene	BDL	0.0060	mg/kg	8270C-SIM	12/14/11	1
Fluoranthene	0.0064	0.0060	mg/kg	8270C-SIM	12/14/11	1
Fluorene	0.23	0.0060	mg/kg	8270C-SIM	12/14/11	1
Indeno(1,2,3-cd)pyrene	BDL	0.0060	mg/kg	8270C-SIM	12/14/11	1
Naphthalene	0.29	0.12	mg/kg	8270C-SIM	12/14/11	20
Phenanthrene	0.15	0.0060	mg/kg	8270C-SIM	12/14/11	1
Pyrene	0.012	0.0060	mg/kg	8270C-SIM	12/14/11	1
1-Methylnaphthalene	0.35	0.12	mg/kg	8270C-SIM	12/14/11	20
2-Methylnaphthalene	1.1	0.12	mg/kg	8270C-SIM	12/14/11	20

BDL - Below Detection Limit
 Det. Limit - Practical Quantitation Limit(PQL)
 L551177-02 (PH) - 7.95@18.9c



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

December 16, 2011

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L551177-02

Date Received : December 13, 2011
Description : D23-A15-Soil Spoil

Site ID :

Sample ID : D23-A15-SS2-121211

Project # : D23

Collected By : SRM
Collection Date : 12/12/11 12:45

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include 2-Chloronaphthalene, Surrogate Recovery, Nitrobenzene-d5, 2-Fluorobiphenyl, and p-Terphenyl-d14.

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: 12/16/11 15:18 Printed: 12/16/11 15:20
L551177-02 (PH) - 7.95@18.9c



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

December 16, 2011

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : December 13, 2011
 Description : D23-A15-Soil Spoil
 Sample ID : D23-A15-SS2-121211
 Collected By : SRM
 Collection Date : 12/12/11 12:45

ESC Sample # : L551177-03
 Site ID :
 Project # : D23

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.050	mg/kg	8021/8015	12/14/11	100
Toluene	0.72	0.50	mg/kg	8021/8015	12/14/11	100
Ethylbenzene	0.98	0.050	mg/kg	8021/8015	12/14/11	100
Total Xylene	1.8	0.15	mg/kg	8021/8015	12/14/11	100
TPH (GC/FID) Low Fraction	320	10.	mg/kg	GRO	12/14/11	100
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	93.7		% Rec.	8021/8015	12/14/11	100
a,a,a-Trifluorotoluene(PID)	99.2		% Rec.	8021/8015	12/14/11	100
TPH (GC/FID) High Fraction	810	80.	mg/kg	3546/DRO	12/14/11	20
Surrogate recovery(%)						
o-Terphenyl	0.00		% Rec.	3546/DRO	12/14/11	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: 12/16/11 15:18 Printed: 12/16/11 15:20

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L551177-01	WG569759	SAMP	o-Terphenyl	R1965575	J7
L551177-02	WG569766	SAMP	Silver	R1967074	O
	WG569801	SAMP	Nitrobenzene-d5	R1966173	J7
	WG570065	SAMP	pH	R1969016	T8
	WG569795	SAMP	ORP	R1966193	T8
L551177-03	WG569759	SAMP	o-Terphenyl	R1965575	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out
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.
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
12/16/11 at 15:20:10

TSR Signing Reports: 358
R2 - Rush: Next Day

Try not to report benzene as BDL above a 250x dilution.

Sample: L551177-01 Account: ENCANACO Received: 12/13/11 09:00 Due Date: 12/15/11 00:00 RPT Date: 12/16/11 15:18

Sample: L551177-02 Account: ENCANACO Received: 12/13/11 09:00 Due Date: 12/16/11 00:00 RPT Date: 12/16/11 15:18

Sample: L551177-03 Account: ENCANACO Received: 12/13/11 09:00 Due Date: 12/15/11 00:00 RPT Date: 12/16/11 15:18
Use containers from -02. Moved BTEXGRO/DRO from -02 per JW. AV 12/13



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L551177

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

December 16, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
TPH (GC/FID) High Fraction	< 4	ppm			WG569759	12/13/11 16:13
o-Terphenyl		% Rec.	75.71	50-150	WG569759	12/13/11 16:13
Mercury	< .02	mg/kg			WG569738	12/14/11 10:31
1-Methylnaphthalene	< .006	mg/kg			WG569801	12/14/11 13:39
2-Chloronaphthalene	< .006	mg/kg			WG569801	12/14/11 13:39
2-Methylnaphthalene	< .006	mg/kg			WG569801	12/14/11 13:39
Acenaphthene	< .006	mg/kg			WG569801	12/14/11 13:39
Acenaphthylene	< .006	mg/kg			WG569801	12/14/11 13:39
Anthracene	< .006	mg/kg			WG569801	12/14/11 13:39
Benzo(a)anthracene	< .006	mg/kg			WG569801	12/14/11 13:39
Benzo(a)pyrene	< .006	mg/kg			WG569801	12/14/11 13:39
Benzo(b)fluoranthene	< .006	mg/kg			WG569801	12/14/11 13:39
Benzo(g,h,i)perylene	< .006	mg/kg			WG569801	12/14/11 13:39
Benzo(k)fluoranthene	< .006	mg/kg			WG569801	12/14/11 13:39
Chrysene	< .006	mg/kg			WG569801	12/14/11 13:39
Dibenz(a,h)anthracene	< .006	mg/kg			WG569801	12/14/11 13:39
Fluoranthene	< .006	mg/kg			WG569801	12/14/11 13:39
Fluorene	< .006	mg/kg			WG569801	12/14/11 13:39
Indeno(1,2,3-cd)pyrene	< .006	mg/kg			WG569801	12/14/11 13:39
Naphthalene	< .006	mg/kg			WG569801	12/14/11 13:39
Phenanthrene	< .006	mg/kg			WG569801	12/14/11 13:39
Pyrene	< .006	mg/kg			WG569801	12/14/11 13:39
2-Fluorobiphenyl		% Rec.	64.21	34-129	WG569801	12/14/11 13:39
Nitrobenzene-d5		% Rec.	64.26	14-141	WG569801	12/14/11 13:39
p-Terphenyl-d14		% Rec.	69.03	25-139	WG569801	12/14/11 13:39
Benzene	< .0005	mg/kg			WG569819	12/14/11 14:52
Ethylbenzene	< .0005	mg/kg			WG569819	12/14/11 14:52
Toluene	< .005	mg/kg			WG569819	12/14/11 14:52
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG569819	12/14/11 14:52
Total Xylene	< .0015	mg/kg			WG569819	12/14/11 14:52
a,a,a-Trifluorotoluene(FID)		% Rec.	92.37	59-128	WG569819	12/14/11 14:52
a,a,a-Trifluorotoluene(PID)		% Rec.	97.85	54-144	WG569819	12/14/11 14:52
Chromium,Hexavalent	< 2	mg/kg			WG569159	12/14/11 18:02
Specific Conductance	2.20	umhos/cm			WG569964	12/14/11 21:20
Arsenic	< 1	mg/kg			WG569766	12/14/11 17:56
Barium	< .25	mg/kg			WG569766	12/14/11 17:56
Cadmium	< .25	mg/kg			WG569766	12/14/11 17:56
Chromium	< .5	mg/kg			WG569766	12/14/11 17:56
Copper	< 1	mg/kg			WG569766	12/14/11 17:56
Nickel	< 1	mg/kg			WG569766	12/14/11 17:56
Selenium	< 1	mg/kg			WG569766	12/14/11 17:56
Silver	< .5	mg/kg			WG569766	12/14/11 17:56
Zinc	< 1.5	mg/kg			WG569766	12/14/11 17:56
Lead	< .25	mg/kg			WG570108	12/15/11 20:41

* 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 Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L551177

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

December 16, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
pH	5.10	su			WG570065	12/16/11 10:15

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Mercury	mg/kg	0.0170	0.0110	42.9*	20	L551135-01	WG569738
ORP	mV	110.	110.	1.80	20	L550538-07	WG569795
ORP	mV	0	0	0	20	L550837-01	WG569795
Chromium, Hexavalent	mg/kg	0	0	0	20	L551186-01	WG569159
Chromium, Hexavalent	mg/kg	0	0	0	20	L550538-04	WG569159
Specific Conductance	umhos/cm	1800	1900	5.41	20	L551278-06	WG569964
Arsenic	mg/kg	4.10	4.20	2.17	20	L551143-02	WG569766
Barium	mg/kg	160.	150.	4.56	20	L551143-02	WG569766
Cadmium	mg/kg	0.290	0.280	2.12	20	L551143-02	WG569766
Chromium	mg/kg	14.0	13.0	5.97	20	L551143-02	WG569766
Copper	mg/kg	12.0	12.0	3.28	20	L551143-02	WG569766
Nickel	mg/kg	10.0	9.40	5.79	20	L551143-02	WG569766
Selenium	mg/kg	0.750	0.620	19.4	20	L551143-02	WG569766
Silver	mg/kg	1.30	1.10	14.3	20	L551143-02	WG569766
Zinc	mg/kg	42.0	40.0	4.64	20	L551143-02	WG569766
Lead	mg/kg	7.20	7.60	5.41	20	L551143-01	WG570108
pH	su	6.00	6.00	0.167	1	L550991-01	WG570065
pH	su	5.30	5.40	1.12*	1	L551405-02	WG570065

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) High Fraction	ppm	60	44.3	73.8	50-150	WG569759
o-Terphenyl				91.53	50-150	WG569759
Mercury	mg/kg	3.77	4.67	124.	71.6-128	WG569738
1-Methylnaphthalene	mg/kg	.033	0.0219	66.2	48-113	WG569801
2-Chloronaphthalene	mg/kg	.033	0.0220	66.7	51-114	WG569801
2-Methylnaphthalene	mg/kg	.033	0.0220	66.7	44-109	WG569801
Acenaphthene	mg/kg	.033	0.0238	72.2	52-108	WG569801
Acenaphthylene	mg/kg	.033	0.0241	73.0	51-110	WG569801
Anthracene	mg/kg	.033	0.0244	74.0	58-120	WG569801
Benzo(a)anthracene	mg/kg	.033	0.0249	75.4	54-110	WG569801
Benzo(a)pyrene	mg/kg	.033	0.0259	78.5	56-118	WG569801
Benzo(b)fluoranthene	mg/kg	.033	0.0240	72.9	55-114	WG569801
Benzo(g,h,i)perylene	mg/kg	.033	0.0264	80.1	48-130	WG569801
Benzo(k)fluoranthene	mg/kg	.033	0.0276	83.7	55-122	WG569801
Chrysene	mg/kg	.033	0.0265	80.3	57-118	WG569801

* 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 Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L551177

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

December 16, 2011

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Dibenz(a,h)anthracene	mg/kg	.033	0.0285	86.4	53-122	WG569801
Fluoranthene	mg/kg	.033	0.0262	79.4	58-118	WG569801
Fluorene	mg/kg	.033	0.0244	74.0	54-109	WG569801
Indeno(1,2,3-cd)pyrene	mg/kg	.033	0.0279	84.6	51-125	WG569801
Naphthalene	mg/kg	.033	0.0209	63.4	45-105	WG569801
Phenanthrene	mg/kg	.033	0.0251	76.1	53-114	WG569801
Pyrene	mg/kg	.033	0.0259	78.4	53-121	WG569801
2-Fluorobiphenyl				65.48	34-129	WG569801
Nitrobenzene-d5				65.35	14-141	WG569801
p-Terphenyl-d14				72.85	25-139	WG569801
ORP	mV	229	230.	100.	95.6-104.37	WG569795
Benzene	mg/kg	.05	0.0475	95.0	76-113	WG569819
Ethylbenzene	mg/kg	.05	0.0517	103.	78-115	WG569819
Toluene	mg/kg	.05	0.0524	105.	76-114	WG569819
Total Xylene	mg/kg	.15	0.151	101.	81-118	WG569819
a,a,a-Trifluorotoluene(PID)				97.82	54-144	WG569819
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.03	110.	67-135	WG569819
a,a,a-Trifluorotoluene(FID)				98.30	59-128	WG569819
Chromium,Hexavalent	mg/kg	203	155.	76.4	50-150	WG569159
Specific Conductance	umhos/cm	427	420.	98.4	85-115	WG569964
Arsenic	mg/kg	92.6	87.3	94.3	82.9-117	WG569766
Barium	mg/kg	169	161.	95.3	82.8-117	WG569766
Cadmium	mg/kg	61.8	58.7	95.0	83.3-117	WG569766
Chromium	mg/kg	71.3	68.1	95.5	81.8-118	WG569766
Copper	mg/kg	81.2	79.4	97.8	83.9-116	WG569766
Nickel	mg/kg	59.1	53.2	90.0	83.8-116	WG569766
Selenium	mg/kg	89.5	84.4	94.3	79-121	WG569766
Silver	mg/kg	34.4	33.0	95.9	66.3-134	WG569766
Zinc	mg/kg	141	134.	95.0	80.9-119	WG569766
Lead	mg/kg	92.4	87.1	94.3	83.3-117	WG570108
pH	su	7.98	8.00	100.	98-101	WG570065

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) High Fraction	ppm	45.8	44.3	76.0	50-150	3.44	25	WG569759
o-Terphenyl				91.21	50-150			WG569759
1-Methylnaphthalene	mg/kg	0.0175	0.0219	53.0	48-113	22.3	24	WG569801
2-Chloronaphthalene	mg/kg	0.0186	0.0220	56.0	51-114	16.8	24	WG569801
2-Methylnaphthalene	mg/kg	0.0190	0.0220	57.0	44-109	14.8	24	WG569801
Acenaphthene	mg/kg	0.0194	0.0238	59.0	52-108	20.6	22	WG569801
Acenaphthylene	mg/kg	0.0212	0.0241	64.0	51-110	12.6	21	WG569801
Anthracene	mg/kg	0.0234	0.0244	71.0	58-120	4.10	20	WG569801

* 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 Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L551177

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

December 16, 2011

Analyte	Units	Laboratory Control		Sample Duplicate		Limit	RPD	Limit	Batch
		Result	Ref	%Rec					
Benzo(a)anthracene	mg/kg	0.0242	0.0249	73.0		54-110	2.62	22	WG569801
Benzo(a)pyrene	mg/kg	0.0240	0.0259	73.0		56-118	7.68	21	WG569801
Benzo(b)fluoranthene	mg/kg	0.0232	0.0240	70.0		55-114	3.76	20	WG569801
Benzo(g,h,i)perylene	mg/kg	0.0243	0.0264	74.0		48-130	8.43	20	WG569801
Benzo(k)fluoranthene	mg/kg	0.0247	0.0276	75.0		55-122	11.1	25	WG569801
Chrysene	mg/kg	0.0235	0.0265	71.0		57-118	11.8	20	WG569801
Dibenz(a,h)anthracene	mg/kg	0.0263	0.0285	80.0		53-122	8.02	20	WG569801
Fluoranthene	mg/kg	0.0241	0.0262	73.0		58-118	8.45	20	WG569801
Fluorene	mg/kg	0.0219	0.0244	66.0		54-109	10.8	20	WG569801
Indeno(1,2,3-cd)pyrene	mg/kg	0.0257	0.0279	78.0		51-125	8.28	21	WG569801
Naphthalene	mg/kg	0.0189	0.0209	57.0		45-105	10.2	24	WG569801
Phenanthrene	mg/kg	0.0223	0.0251	68.0		53-114	11.6	20	WG569801
Pyrene	mg/kg	0.0240	0.0259	73.0		53-121	7.59	20	WG569801
2-Fluorobiphenyl				55.83		34-129			WG569801
Nitrobenzene-d5				52.74		14-141			WG569801
p-Terphenyl-d14				66.95		25-139			WG569801
ORP	mV	230.	230.	100.		95.6-104.37	0	20	WG569795
Benzene	mg/kg	0.0479	0.0475	96.0		76-113	0.780	20	WG569819
Ethylbenzene	mg/kg	0.0517	0.0517	103.		78-115	0.0400	20	WG569819
Toluene	mg/kg	0.0521	0.0524	104.		76-114	0.590	20	WG569819
Total Xylene	mg/kg	0.150	0.151	100.		81-118	0.400	20	WG569819
a,a,a-Trifluorotoluene(PID)				97.91		54-144			WG569819
TPH (GC/FID) Low Fraction	mg/kg	6.02	6.03	109.		67-135	0.220	20	WG569819
a,a,a-Trifluorotoluene(FID)				98.27		59-128			WG569819
Chromium,Hexavalent	mg/kg	142.	155.	70.0		50-150	8.75	20	WG569159
Specific Conductance	umhos/	420.	420.	98.0		85-115	0	20	WG569964
pH	su	8.00	8.00	100.		98-101	0	20	WG570065

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
TPH (GC/FID) High Fraction	ppm	355.	390.	60	0*	50-150	L551240-01	WG569759
o-Terphenyl					91.30	50-150		WG569759
Mercury	mg/kg	0.271	0.0110	.25	104.	70-130	L551135-01	WG569738
Benzene	mg/kg	0.0240	0	.05	47.9	32-137	L551139-01	WG569819
Ethylbenzene	mg/kg	0.0148	0	.05	29.6	10-150	L551139-01	WG569819
Toluene	mg/kg	0.0215	0	.05	43.0	20-142	L551139-01	WG569819
Total Xylene	mg/kg	0.0457	0	.15	30.5	16-141	L551139-01	WG569819
a,a,a-Trifluorotoluene(PID)					96.20	54-144		WG569819
TPH (GC/FID) Low Fraction	mg/kg	1.44	0.0483	5.5	25.3*	55-109	L551139-01	WG569819
a,a,a-Trifluorotoluene(FID)					93.03	59-128		WG569819
a,a,a-Trifluorotoluene(PID)					99.14	54-144		WG569819
Chromium,Hexavalent	mg/kg	22.1	0	20	110.	50-150	L550993-01	WG569159

* 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 Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L551177

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

December 16, 2011

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Arsenic	mg/kg	50.6	4.20	50	92.8	75-125	L551143-02	WG569766
Barium	mg/kg	208.	150.	50	116.	75-125	L551143-02	WG569766
Cadmium	mg/kg	47.3	0.280	50	94.0	75-125	L551143-02	WG569766
Chromium	mg/kg	62.2	13.0	50	98.4	75-125	L551143-02	WG569766
Copper	mg/kg	62.6	12.0	50	101.	75-125	L551143-02	WG569766
Nickel	mg/kg	53.4	9.40	50	88.0	75-125	L551143-02	WG569766
Selenium	mg/kg	44.3	0.620	50	87.4	75-125	L551143-02	WG569766
Silver	mg/kg	49.0	1.10	50	95.8	75-125	L551143-02	WG569766
Zinc	mg/kg	89.5	40.0	50	99.0	75-125	L551143-02	WG569766
1-Methylnaphthalene	mg/kg	0.0236	0.00150	.033	67.1	25-155	L551135-01	WG569801
2-Chloronaphthalene	mg/kg	0.0228	0	.033	69.1	31-153	L551135-01	WG569801
2-Methylnaphthalene	mg/kg	0.0292	0.00400	.033	76.3	22-172	L551135-01	WG569801
Acenaphthene	mg/kg	0.0220	0	.033	66.8	43-133	L551135-01	WG569801
Acenaphthylene	mg/kg	0.0238	0	.033	72.0	42-146	L551135-01	WG569801
Anthracene	mg/kg	0.0235	0	.033	71.3	38-153	L551135-01	WG569801
Benzo(a)anthracene	mg/kg	0.0247	0	.033	74.8	31-142	L551135-01	WG569801
Benzo(a)pyrene	mg/kg	0.0239	0	.033	72.5	26-152	L551135-01	WG569801
Benzo(b)fluoranthene	mg/kg	0.0230	0	.033	69.8	10-188	L551135-01	WG569801
Benzo(g,h,i)perylene	mg/kg	0.0180	0	.033	54.5	10-176	L551135-01	WG569801
Benzo(k)fluoranthene	mg/kg	0.0249	0	.033	75.5	22-163	L551135-01	WG569801
Chrysene	mg/kg	0.0228	0	.033	69.0	26-146	L551135-01	WG569801
Dibenz(a,h)anthracene	mg/kg	0.0219	0	.033	66.5	10-160	L551135-01	WG569801
Fluoranthene	mg/kg	0.0236	0	.033	71.4	23-160	L551135-01	WG569801
Fluorene	mg/kg	0.0253	0	.033	76.7	44-143	L551135-01	WG569801
Indeno(1,2,3-cd)pyrene	mg/kg	0.0212	0	.033	64.4	10-157	L551135-01	WG569801
Naphthalene	mg/kg	0.0225	0.00130	.033	64.1	22-156	L551135-01	WG569801
Phenanthrene	mg/kg	0.0242	0.00110	.033	70.0	23-164	L551135-01	WG569801
Pyrene	mg/kg	0.0235	0	.033	71.3	12-170	L551135-01	WG569801
2-Fluorobiphenyl					67.58	34-129		WG569801
Nitrobenzene-d5					62.68	14-141		WG569801
p-Terphenyl-d14					67.39	25-139		WG569801
Lead	mg/kg	53.5	7.60	50	91.8	75-125	L551143-01	WG570108

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
TPH (GC/FID) High Fraction	ppm	454.	355.	106.	50-150	24.4	25	L551240-01	WG569759
o-Terphenyl				126.6	50-150				WG569759
Mercury	mg/kg	0.278	0.271	107.	70-130	2.55	20	L551135-01	WG569738
Benzene	mg/kg	0.00975	0.0240	19.5*	32-137	84.3*	39	L551139-01	WG569819
Ethylbenzene	mg/kg	0.00251	0.0148	5.03*	10-150	142.*	44	L551139-01	WG569819
Toluene	mg/kg	0.00522	0.0215	10.4*	20-142	122.*	42	L551139-01	WG569819
Total Xylene	mg/kg	0.00732	0.0457	4.88*	16-141	145.*	46	L551139-01	WG569819
a,a,a-Trifluorotoluene(FID)				91.92	59-128				WG569819
a,a,a-Trifluorotoluene(PID)				96.96	54-144				WG569819
TPH (GC/FID) Low Fraction	mg/kg	1.06	1.44	18.4*	55-109	30.3*	20	L551139-01	WG569819
a,a,a-Trifluorotoluene(FID)				90.38	59-128				WG569819
a,a,a-Trifluorotoluene(PID)				98.68	54-144				WG569819
Chromium,Hexavalent	mg/kg	23.5	22.1	118.	50-150	6.14	20	L550993-01	WG569159

* 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 Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L551177

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

December 16, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit Ref	Samp	Batch
			Ref	%Rec					
Arsenic	mg/kg	50.0	50.6	91.6	75-125	1.19	20	L551143-02	WG569766
Barium	mg/kg	210.	208.	120.	75-125	0.957	20	L551143-02	WG569766
Cadmium	mg/kg	47.2	47.3	93.8	75-125	0.212	20	L551143-02	WG569766
Chromium	mg/kg	61.5	62.2	97.0	75-125	1.13	20	L551143-02	WG569766
Copper	mg/kg	62.5	62.6	101.	75-125	0.160	20	L551143-02	WG569766
Nickel	mg/kg	53.1	53.4	87.4	75-125	0.563	20	L551143-02	WG569766
Selenium	mg/kg	44.6	44.3	88.0	75-125	0.675	20	L551143-02	WG569766
Silver	mg/kg	48.4	49.0	94.6	75-125	1.23	20	L551143-02	WG569766
Zinc	mg/kg	88.9	89.5	97.8	75-125	0.673	20	L551143-02	WG569766
1-Methylnaphthalene	mg/kg	0.0238	0.0236	67.6	25-155	0.764	27	L551135-01	WG569801
2-Chloronaphthalene	mg/kg	0.0237	0.0228	71.8	31-153	3.83	22	L551135-01	WG569801
2-Methylnaphthalene	mg/kg	0.0276	0.0292	71.5	22-172	5.63	29	L551135-01	WG569801
Acenaphthene	mg/kg	0.0216	0.0220	65.3	43-133	2.25	26	L551135-01	WG569801
Acenaphthylene	mg/kg	0.0247	0.0238	74.7	42-146	3.73	22	L551135-01	WG569801
Anthracene	mg/kg	0.0250	0.0235	75.7	38-153	6.05	27	L551135-01	WG569801
Benzo(a)anthracene	mg/kg	0.0236	0.0247	71.6	31-142	4.39	31	L551135-01	WG569801
Benzo(a)pyrene	mg/kg	0.0245	0.0239	74.2	26-152	2.27	32	L551135-01	WG569801
Benzo(b)fluoranthene	mg/kg	0.0234	0.0230	70.9	10-188	1.63	33	L551135-01	WG569801
Benzo(g,h,i)perylene	mg/kg	0.0183	0.0180	55.6	10-176	2.03	30	L551135-01	WG569801
Benzo(k)fluoranthene	mg/kg	0.0262	0.0249	79.3	22-163	4.88	29	L551135-01	WG569801
Chrysene	mg/kg	0.0237	0.0228	71.9	26-146	4.04	30	L551135-01	WG569801
Dibenz(a,h)anthracene	mg/kg	0.0230	0.0219	69.7	10-160	4.72	39	L551135-01	WG569801
Fluoranthene	mg/kg	0.0251	0.0236	76.1	23-160	6.38	22	L551135-01	WG569801
Fluorene	mg/kg	0.0246	0.0253	74.5	44-143	3.02	23	L551135-01	WG569801
Indeno(1,2,3-cd)pyrene	mg/kg	0.0216	0.0212	65.5	10-157	1.78	40	L551135-01	WG569801
Naphthalene	mg/kg	0.0237	0.0225	67.9	22-156	5.39	27	L551135-01	WG569801
Phenanthrene	mg/kg	0.0244	0.0242	70.6	23-164	0.868	25	L551135-01	WG569801
Pyrene	mg/kg	0.0246	0.0235	74.4	12-170	4.30	24	L551135-01	WG569801
2-Fluorobiphenyl				64.00	34-129				WG569801
Nitrobenzene-d5				61.96	14-141				WG569801
p-Terphenyl-d14				70.15	25-139				WG569801
Lead	mg/kg	54.2	53.5	93.2	75-125	1.30	20	L551143-01	WG570108

Batch number /Run number / Sample number cross reference

WG569759: R1965575: L551177-01 03
 WG569738: R1965915: L551177-02
 WG569801: R1966173: L551177-02
 WG569795: R1966193: L551177-02
 WG569819: R1966517: L551177-01 03
 WG569159: R1966592: L551177-02
 WG569964: R1966972: L551177-02
 WG569766: R1967074: L551177-02
 WG569753: R1967873: L551177-02
 WG570108: R1968514: L551177-02
 WG570065: R1969016: L551177-02

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



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L551177

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

December 16, 2011

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

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

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

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



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

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Wednesday May 09, 2012

Report Number: L572154


Samples Received: 04/27/12

Client Project: D23 REMEDIATION

Description: D23-A15-MOI

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

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-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

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

May 09, 2012

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L572154-01

Date Received : April 27, 2012
Description : D23-A15-MOI

Site ID : D23

Sample ID : D23-A15-MOI-PIT-LS-042512 9IN

Project # : D23 REMEDIATION

Collected By : SJ
Collection Date : 04/25/12 14:40

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include TPH (GC/FID) Low Fraction, Surrogate Recovery-%, a,a,a-Trifluorotoluene(FID), a,a,a-Trifluorotoluene(PID), TPH (GC/FID) High Fraction, Surrogate recovery(%), o-Terphenyl.

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: 05/02/12 11:16 Revised: 05/09/12 11:43



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

May 09, 2012

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L572154-02

Date Received : April 27, 2012
Description : D23-A15-MOI

Site ID : D23

Sample ID : D23-A15-MOI-C-042512 3-12IN

Project # : D23 REMEDIATION

Collected By : SJ
Collection Date : 04/25/12 16:00

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include TPH (GC/FID) Low Fraction, Surrogate Recovery-%, a,a,a-Trifluorotoluene(FID), a,a,a-Trifluorotoluene(PID), TPH (GC/FID) High Fraction, Surrogate recovery(%), o-Terphenyl.

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: 05/02/12 11:16 Revised: 05/09/12 11:43



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

May 09, 2012

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L572154-03

Date Received : April 27, 2012
Description : D23-A15-MOI
Sample ID : D23-A15-MOI-N1-042512 3-12IN

Site ID : D23

Collected By : SJ
Collection Date : 04/25/12 15:00

Project # : D23 REMEDIATION

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	04/30/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	93.1		% Rec.	8021/8015	04/30/12	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	04/30/12	5
TPH (GC/FID) High Fraction	190	4.0	mg/kg	3546/DRO	04/30/12	1
Surrogate recovery(%)						
o-Terphenyl	86.4		% Rec.	3546/DRO	04/30/12	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: 05/02/12 11:16 Revised: 05/09/12 11:43



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

May 09, 2012

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L572154-04

Date Received : April 27, 2012
Description : D23-A15-MOI

Site ID : D23

Sample ID : D23-A15-MOI-N2-042512 3-12IN

Project # : D23 REMEDIATION

Collected By : SJ
Collection Date : 04/25/12 15:10

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include TPH (GC/FID) Low Fraction, Surrogate Recovery-%, a,a,a-Trifluorotoluene(FID), a,a,a-Trifluorotoluene(PID), TPH (GC/FID) High Fraction, Surrogate recovery(%), o-Terphenyl.

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: 05/02/12 11:16 Revised: 05/09/12 11:43



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

May 09, 2012

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : April 27, 2012
 Description : D23-A15-MOI
 Sample ID : D23-A15-MOI-N3-042512 3-12IN
 Collected By : SJ
 Collection Date : 04/25/12 15:20

ESC Sample # : L572154-05
 Site ID : D23
 Project # : D23 REMEDIATION

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	04/30/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	93.5		% Rec.	8021/8015	04/30/12	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	04/30/12	5
TPH (GC/FID) High Fraction	300	4.0	mg/kg	3546/DRO	04/30/12	1
Surrogate recovery(%)						
o-Terphenyl	89.3		% Rec.	3546/DRO	04/30/12	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: 05/02/12 11:16 Revised: 05/09/12 11:43



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

May 09, 2012

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

ESC Sample # : L572154-06

Date Received : April 27, 2012
Description : D23-A15-MOI
Sample ID : D23-A15-MOI-N4-042512 3-12IN

Site ID : D23

Project # : D23 REMEDIATION

Collected By : SJ
Collection Date : 04/25/12 15:30

Table with 7 columns: Parameter, Result, Det. Limit, Units, Method, Date, Dil. Rows include TPH (GC/FID) Low Fraction, Surrogate Recovery-%, a,a,a-Trifluorotoluene(FID), a,a,a-Trifluorotoluene(PID), TPH (GC/FID) High Fraction, Surrogate recovery(%), o-Terphenyl.

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: 05/02/12 11:16 Revised: 05/09/12 11:43



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

May 09, 2012

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

Date Received : April 27, 2012
 Description : D23-A15-MOI
 Sample ID : D23-A15-MOI-N5-042512 3-12IN
 Collected By : SJ
 Collection Date : 04/25/12 15:40

ESC Sample # : L572154-07
 Site ID : D23
 Project # : D23 REMEDIATION

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	04/30/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	93.1		% Rec.	8021/8015	04/30/12	5
a,a,a-Trifluorotoluene(PID)	101.		% Rec.	8021/8015	04/30/12	5
TPH (GC/FID) High Fraction	310	4.0	mg/kg	3546/DRO	04/30/12	1
Surrogate recovery(%)						
o-Terphenyl	112.		% Rec.	3546/DRO	04/30/12	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: 05/02/12 11:16 Revised: 05/09/12 11:43



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

Chris Hines / Matt Kasten
 EnCana Oil & Gas Inc. - CO
 2717 County Road 215, Suite 100
 Parachute, CO 81635

May 09, 2012

Date Received : April 27, 2012
 Description : D23-A15-MOI
 Sample ID : D23-A15-MOI-N6-042512 3-12IN
 Collected By : SJ
 Collection Date : 04/25/12 15:50

ESC Sample # : L572154-08
 Site ID : D23
 Project # : D23 REMEDIATION

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	GRO	04/30/12	5
Surrogate Recovery-%						
a,a,a-Trifluorotoluene(FID)	94.0		% Rec.	8021/8015	04/30/12	5
a,a,a-Trifluorotoluene(PID)	102.		% Rec.	8021/8015	04/30/12	5
TPH (GC/FID) High Fraction	260	4.0	mg/kg	3546/DRO	04/30/12	1
Surrogate recovery(%)						
o-Terphenyl	96.3		% Rec.	3546/DRO	04/30/12	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: 05/02/12 11:16 Revised: 05/09/12 11:43



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L572154

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

May 09, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG590016	04/29/12 19:10
a,a,a-Trifluorotoluene(FID)		% Rec.	94.25	59-128	WG590016	04/29/12 19:10
a,a,a-Trifluorotoluene(PID)		% Rec.	103.2	54-144	WG590016	04/29/12 19:10
TPH (GC/FID) High Fraction	< 4	ppm			WG590122	04/30/12 18:36
o-Terphenyl		% Rec.	78.97	50-150	WG590122	04/30/12 18:36

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.34	115.	67-135	WG590016
a,a,a-Trifluorotoluene(FID)				100.1	59-128	WG590016
TPH (GC/FID) High Fraction	ppm	60	38.1	63.6	50-150	WG590122
o-Terphenyl				75.90	50-150	WG590122

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) Low Fraction	mg/kg	6.45	6.34	117.	67-135	1.70	20	WG590016
a,a,a-Trifluorotoluene(FID)				100.9	59-128			WG590016
TPH (GC/FID) High Fraction	ppm	43.1	38.1	72.0	50-150	12.3	25	WG590122
o-Terphenyl				85.49	50-150			WG590122

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
TPH (GC/FID) Low Fraction	mg/kg	19.4	0	5.5	70.4	55-109	L572144-01	WG590016
a,a,a-Trifluorotoluene(FID)					97.70	59-128		WG590016
TPH (GC/FID) High Fraction	ppm	651.	640.	60	18.9*	50-150	L572144-09	WG590122
o-Terphenyl					94.70	50-150		WG590122

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
TPH (GC/FID) Low Fraction	mg/kg	21.7	19.4	79.0	55-109	11.4	20	L572144-01	WG590016
a,a,a-Trifluorotoluene(FID)				98.59	59-128				WG590016
TPH (GC/FID) High Fraction	ppm	635.	651.	0*	50-150	2.56	25	L572144-09	WG590122
o-Terphenyl				98.00	50-150				WG590122

Batch number /Run number / Sample number cross reference

WG590016: R2148433: L572154-01 02 03 04 05 06 07 08
WG590122: R2151256: L572154-01 02 03 04 05 06 07 08

* * 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 Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L572154

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

May 09, 2012

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.



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

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Wednesday May 09, 2012

Report Number: L572958


Samples Received: 04/27/12

Client Project: D23 REMEDIATION

Description: D23-A15-MOI

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

Entire Report Reviewed By:


Jared Willis, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-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

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

May 09, 2012

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Date Received : April 27, 2012
Description : D23-A15-MOI
Sample ID : D23-A15-MOI-PIT-LS-042512 9IN
Collected By : SJ
Collection Date : 04/25/12 14:50

ESC Sample # : L572958-01
Site ID : D23
Project # : D23 REMEDIATION

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) High Fraction	580	40.	mg/kg	3546/DRO	05/07/12	10
Surrogate recovery(%) o-Terphenyl	81.7		% Rec.	3546/DRO	05/07/12	10

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: 05/08/12 09:53 Revised: 05/09/12 11:43



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L572958

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

May 09, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
TPH (GC/FID) High Fraction	< 4	ppm			WG590852	05/07/12 11:14
o-Terphenyl		% Rec.	70.24	50-150	WG590852	05/07/12 11:14

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) High Fraction	ppm	60	54.4	90.6	50-150	WG590852
o-Terphenyl				78.22	50-150	WG590852

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) High Fraction	ppm	51.8	54.4	86.0	50-150	4.91	25	WG590852
o-Terphenyl				72.63	50-150			WG590852

Analyte	Units	MS Res	Matrix Spike			Limit	Ref Samp	Batch
			Ref Res	TV	% Rec			
TPH (GC/FID) High Fraction	ppm	113.	62.0	60	84.8	50-150	L572903-02	WG590852
o-Terphenyl					54.50	50-150		WG590852

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
TPH (GC/FID) High Fraction	ppm	125.	113.	105.	50-150	10.3	25	L572903-02	WG590852
o-Terphenyl				49.83*	50-150				WG590852

Batch number /Run number / Sample number cross reference

WG590852: R2158593: L572958-01

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



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L572958

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

May 09, 2012

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.



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

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Report Summary

Friday June 08, 2012

Report Number: L578675


Samples Received: 06/06/12

Client Project: D23-A15

Description: D23-Pit-A15-MOI

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-TN-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

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 08, 2012

Chris Hines / Matt Kasten
EnCana Oil & Gas Inc. - CO
2717 County Road 215, Suite 100
Parachute, CO 81635

Date Received : June 06, 2012
Description : D23-Pit-A15-MOI
Sample ID : D23-PIT-A15-M01-LS-W-060512 .5 IN
Collected By : Shad Johnson
Collection Date : 06/05/12 08:40

ESC Sample # : L578675-01
Site ID : D23
Project # : D23-A15

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
TPH (GC/FID) Low Fraction	BDL	0.50	mg/kg	8015D/GRO	06/06/12	5
Surrogate Recovery (70-130) a,a,a-Trifluorotoluene(FID)	92.5		% Rec.	602/8015	06/06/12	5
TPH (GC/FID) High Fraction	180	4.0	mg/kg	3546/DRO	06/07/12	1
Surrogate recovery(%) o-Terphenyl	62.8		% Rec.	3546/DRO	06/07/12	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: 06/08/12 08:56 Printed: 06/08/12 09:14



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L578675

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 08, 2012

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
TPH (GC/FID) Low Fraction	< .1	mg/kg			WG596399	06/06/12 15:51
a,a,a-Trifluorotoluene(FID)		% Rec.	93.28	59-128	WG596399	06/06/12 15:51
TPH (GC/FID) High Fraction	< 4	ppm			WG596486	06/07/12 11:26
o-Terphenyl		% Rec.	72.67	50-150	WG596486	06/07/12 11:26

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
TPH (GC/FID) Low Fraction	mg/kg	5.5	6.43	117.	67-135	WG596399
a,a,a-Trifluorotoluene(FID)				99.09	59-128	WG596399
TPH (GC/FID) High Fraction	ppm	60	50.3	83.9	50-150	WG596486
o-Terphenyl				81.47	50-150	WG596486

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
TPH (GC/FID) Low Fraction	mg/kg	6.59	6.43	120.	67-135	2.43	20	WG596399
a,a,a-Trifluorotoluene(FID)				99.75	59-128			WG596399
TPH (GC/FID) High Fraction	ppm	53.7	50.3	90.0	50-150	6.51	23	WG596486
o-Terphenyl				84.44	50-150			WG596486

Analyte	Units	Matrix Spike				Limit	Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec			
TPH (GC/FID) Low Fraction	mg/kg	24.8	1.10	5.5	86.4	55-109	L578672-01	WG596399
a,a,a-Trifluorotoluene(FID)					97.08	59-128		WG596399
TPH (GC/FID) High Fraction	ppm	35.4	0	60	59.0	50-150	L578481-02	WG596486
o-Terphenyl					47.98*	50-150		WG596486

Analyte	Units	Matrix Spike Duplicate			Limit	RPD	Limit	Ref Samp	Batch
		MSD	Ref	%Rec					
TPH (GC/FID) Low Fraction	mg/kg	23.5	24.8	81.6	55-109	5.46	20	L578672-01	WG596399
a,a,a-Trifluorotoluene(FID)				96.72	59-128				WG596399
TPH (GC/FID) High Fraction	ppm	37.9	35.4	63.2	50-150	6.86	25	L578481-02	WG596486
o-Terphenyl				51.35	50-150				WG596486

Batch number /Run number / Sample number cross reference

WG596399: R2200093: L578675-01
WG596486: R2201355: L578675-01

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



YOUR LAB OF CHOICE

EnCana Oil & Gas Inc. - CO
Chris Hines / Matt Kasten
2717 County Road 215, Suite 100

Parachute, CO 81635

Quality Assurance Report
Level II

L578675

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 08, 2012

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.