

Analytes (BDL = Below Detection Limit; ND = Non Detect)

				Organic Compounds in Soil (mg/kg [ppm])																			Inorganics in Soil			Metals in Soil (mg/kg [ppm])													
Allowable Concentration -->				500	TPH (total volatile and extractable petroleum hydrocarbons)	TPH-GRO (C6-C10) Low Fraction	TPH-DRO (C10-C36) High Fraction	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
Location	Sample Date:	Sample Matrix	Matrix Notes					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	Napthalene	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
PK21	09/23/09	Cuttings		70.41	3.81	66.6	0.0013	0.0019	ND	ND	ND	ND	ND	ND	0.0048	ND	ND	ND	26.5	ND	0.005	ND	2.06	13.6	10.6	5.7		0.53	14.7	1.2	20.6	16	0.055	15.8	0.54	0.19	60.4		



10/13/09

Technical Report for

ENCANA

EnCana Oil & Gas (USA) Inc.

EnCana PK21 STS & Cuttings

Accutest Job Number: T38250

Sampling Date: 09/23/09

Report to:

EnCana
2717 Co. Rd. 215
Parachute, CO 81635
brett.middleton@encana.com; christopher.hines@encana.com

ATTN: Chris Hines

Total number of pages in report: 92



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.

Paul K Canevaro

Paul Canevaro
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-06-TX) AR (88-0756) FL (E87628) KS (E-10366) LA (85695/04004)
OK (9103) UT(7132714700)

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: Sample Results	4
2.1: T38250-1: ENCANA_STS_NORTH_092309	5
2.2: T38250-2: ENCANA_STS_SOUTH_092309	10
2.3: T38250-3: ENCANA_CUTTINGS_092309	15
2.4: T38250-3A: ENCANA_CUTTINGS_092309	21
2.5: T38250-3B: ENCANA_CUTTINGS_092309	22
2.6: T38250-3C: ENCANA_CUTTINGS_092309	23
Section 3: Misc. Forms	25
3.1: Chain of Custody	26
Section 4: GC/MS Volatiles - QC Data Summaries	29
4.1: Method Blank Summary	30
4.2: Blank Spike Summary	33
4.3: Matrix Spike/Matrix Spike Duplicate Summary	36
Section 5: GC/MS Semi-volatiles - QC Data Summaries	39
5.1: Method Blank Summary	40
5.2: Blank Spike Summary	41
5.3: Matrix Spike/Matrix Spike Duplicate Summary	42
Section 6: GC Volatiles - QC Data Summaries	43
6.1: Method Blank Summary	44
6.2: Blank Spike Summary	47
6.3: Blank Spike/Blank Spike Duplicate Summary	48
6.4: Matrix Spike/Matrix Spike Duplicate Summary	50
Section 7: GC Semi-volatiles - QC Data Summaries	51
7.1: Method Blank Summary	52
7.2: Blank Spike Summary	54
7.3: Matrix Spike/Matrix Spike Duplicate Summary	56
Section 8: Metals Analysis - QC Data Summaries	58
8.1: Prep QC MP10360: As,Ba,Cd,Cr,Pb,Se,Ag	59
8.2: Prep QC MP10393: Ca,Mg,Na,Sodium Adsorption Ratio	64
8.3: Prep QC MP10395: Ba	66
8.4: Prep QC MP10403: B	71
8.5: Prep QC MP10404: Hg	76
8.6: Prep QC MP10412: As,Cd,Cr,Cu,Pb,Ni,Se,Ag,Zn	80
8.7: Prep QC MP10415: Hg	85
Section 9: General Chemistry - QC Data Summaries	89
9.1: Method Blank and Spike Results Summary	90
9.2: Duplicate Results Summary	91
9.3: Matrix Spike Results Summary	92



Sample Summary

ENCANA

Job No: T38250

EnCana Oil & Gas (USA) Inc.
Project No: EnCana PK21 STS & Cuttings

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T38250-1	09/23/09	08:30	09/24/09	SO	Soil	ENCANA_STS_NORTH_092309
T38250-2	09/23/09	09:30	09/24/09	SO	Soil	ENCANA_STS_SOUTH_092309
T38250-3	09/23/09	09:15	09/24/09	SO	Soil	ENCANA_CUTTINGS_092309
T38250-3A	09/23/09	09:15	09/24/09	SO	Soil	ENCANA_CUTTINGS_092309
T38250-3B	09/23/09	09:15	09/24/09	SO	Soil	ENCANA_CUTTINGS_092309
T38250-3C	09/23/09	09:15	09/24/09	SO	Soil	ENCANA_CUTTINGS_092309

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



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	ENCANA_STS_NORTH_092309			Date Sampled:	09/23/09					
Lab Sample ID:	T38250-1			Date Received:	09/24/09					
Matrix:	SO - Soil			Percent Solids:	87.9					
Method:	SW846 8260B									
Project:	EnCana Oil & Gas (USA) Inc.									

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z0052684.D	1	10/01/09	AH	n/a	n/a	VZ2619
Run #2	Z0052706.D	4	10/02/09	JL	n/a	n/a	VZ2620

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.03 g	5.0 ml	100 ul
Run #2	5.03 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	717	320	44	ug/kg	
108-88-3	Toluene	12500 ^a	1300	240	ug/kg	
100-41-4	Ethylbenzene	4560	320	57	ug/kg	
1330-20-7	Xylene (total)	83300 ^a	3800	530	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	113%	70-121%
2037-26-5	Toluene-D8	142% ^b	129%	76-132%
460-00-4	4-Bromofluorobenzene	227% ^b	145%	73-165%
17060-07-0	1,2-Dichloroethane-D4	85%	102%	57-122%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

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:	ENCANA_STS_NORTH_092309			Date Sampled:	09/23/09					
Lab Sample ID:	T38250-1			Date Received:	09/24/09					
Matrix:	SO - Soil			Percent Solids:	87.9					
Method:	SW846 8015									
Project:	EnCana Oil & Gas (USA) Inc.									

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE048091.D	100	10/02/09	FI	n/a	n/a	GEE2439
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.03 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1520	630	38	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	111%		46-127%
98-08-8	aaa-Trifluorotoluene	109%		44-120%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ENCANA_STS_NORTH_092309				
Lab Sample ID:	T38250-1			Date Sampled:	09/23/09
Matrix:	SO - Soil			Date Received:	09/24/09
Method:	SW846 8015 M SW846 3550B			Percent Solids:	87.9
Project:	EnCana Oil & Gas (USA) Inc.				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC215374.D	25	09/30/09	SS	09/29/09	OP13119	GCC966
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	6700	240	78	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	0% ^a		33-115%		

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: ENCANA_STS_NORTH_092309**Lab Sample ID:** T38250-1**Date Sampled:** 09/23/09**Matrix:** SO - Soil**Date Received:** 09/24/09**Percent Solids:** 87.9**Project:** EnCana Oil & Gas (USA) Inc.**Metals Analysis, TCLP Leachate SW846 1311**

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0088 B	D004	5.0	0.50	0.0020	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Barium	16.7	D005	100	1.0	0.0027	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Cadmium	0.00033 B	D006	1.0	0.0050	0.00030	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Chromium	0.0031 B	D007	5.0	0.010	0.0019	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Lead	0.0043 B	D008	5.0	0.50	0.0017	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Mercury	0.0013 U	D009	0.20	0.0020	0.0013	mg/l	1	10/07/09	10/07/09	NS SW846 7470A ²
Selenium	0.0084 B	D010	1.0	0.50	0.0032	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Silver	0.0018 B	D011	5.0	0.010	0.00080	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹

(1) Instrument QC Batch: MA4318

(2) Instrument QC Batch: MA4324

(3) Prep QC Batch: MP10360

(4) Prep QC Batch: MP10404

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

MCL = Maximum Contamination Level (40 CFR 261.6/96)

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	ENCANA_STS_NORTH_092309			Date Sampled:	09/23/09	
Lab Sample ID:	T38250-1			Date Received:	09/24/09	
Matrix:	SO - Soil			Percent Solids:	87.9	
Project:	EnCana Oil & Gas (USA) Inc.					

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.1			1	09/30/09 14:30	CV	SW846 CHAP7
Ignitability (Flashpoint)	> 210		Deg. F	1	10/08/09 11:00	EV	SW846 1010
Solids, Percent	87.9		%	1	10/02/09	MR	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID:	ENCANA_STS_SOUTH_092309			Date Sampled:	09/23/09
Lab Sample ID:	T38250-2			Date Received:	09/24/09
Matrix:	SO - Soil			Percent Solids:	94.9
Method:	SW846 8260B				
Project:	EnCana Oil & Gas (USA) Inc.				

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z0052705.D	1	10/02/09	JL	n/a	n/a	VZ2620
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	280	39	ug/kg	
108-88-3	Toluene	138	280	52	ug/kg	J
100-41-4	Ethylbenzene	ND	280	50	ug/kg	
1330-20-7	Xylene (total)	389	830	120	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		70-121%
2037-26-5	Toluene-D8	123%		76-132%
460-00-4	4-Bromofluorobenzene	127%		73-165%
17060-07-0	1,2-Dichloroethane-D4	102%		57-122%

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:	ENCANA_STS_SOUTH_092309		Date Sampled:	09/23/09
Lab Sample ID:	T38250-2		Date Received:	09/24/09
Matrix:	SO - Soil		Percent Solids:	94.9
Method:	SW846 8015			
Project:	EnCana Oil & Gas (USA) Inc.			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE048106.D	2	10/02/09	FI	n/a	n/a	GEE2440
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	45.0	11	0.66	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	118%		46-127%
98-08-8	aaa-Trifluorotoluene	111%		44-120%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ENCANA_STS_SOUTH_092309			
Lab Sample ID:	T38250-2	Date Sampled:	09/23/09	
Matrix:	SO - Soil	Date Received:	09/24/09	
Method:	SW846 8015 M SW846 3550B	Percent Solids:	94.9	
Project:	EnCana Oil & Gas (USA) Inc.			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC215430.D	10	10/02/09	SS	10/01/09	OP13152	GCC966
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1110	87	29	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	0% ^a		33-115%		

(a) Outside control limits due to dilution.

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: ENCANA_STS_SOUTH_092309**Lab Sample ID:** T38250-2**Date Sampled:** 09/23/09**Matrix:** SO - Soil**Date Received:** 09/24/09**Percent Solids:** 94.9**Project:** EnCana Oil & Gas (USA) Inc.**Metals Analysis, TCLP Leachate SW846 1311**

Analyte	Result	HW#	MCL	RL	MDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0069 B	D004	5.0	0.50	0.0020	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Barium	3.1	D005	100	1.0	0.0027	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Cadmium	0.011	D006	1.0	0.0050	0.00030	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Chromium	0.0019 U	D007	5.0	0.010	0.0019	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Lead	0.0026 B	D008	5.0	0.50	0.0017	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Mercury	0.0013 U	D009	0.20	0.0020	0.0013	mg/l	1	10/07/09	10/07/09	NS SW846 7470A ²
Selenium	0.012 B	D010	1.0	0.50	0.0032	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹
Silver	0.00080 U	D011	5.0	0.010	0.00080	mg/l	1	09/30/09	10/01/09	NS SW846 6010B ¹

(1) Instrument QC Batch: MA4318

(2) Instrument QC Batch: MA4324

(3) Prep QC Batch: MP10360

(4) Prep QC Batch: MP10404

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

MCL = Maximum Contamination Level (40 CFR 261.6/96)

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	ENCANA_STS_SOUTH_092309		
Lab Sample ID:	T38250-2	Date Sampled:	09/23/09
Matrix:	SO - Soil	Date Received:	09/24/09
		Percent Solids:	94.9
Project:	EnCana Oil & Gas (USA) Inc.		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	8.2			1	09/30/09 14:30	CV	SW846 CHAP7
Ignitability (Flashpoint)	> 210		Deg. F	1	10/08/09 11:00	EV	SW846 1010
Solids, Percent	94.9		%	1	10/02/09	MR	SM 2540 G

RL = Reporting Limit

Report of Analysis

Client Sample ID: ENCANA_CUTTINGS_092309
Lab Sample ID: T38250-3
Matrix: SO - Soil
Method: SW846 8260B
Project: EnCana Oil & Gas (USA) Inc.

Date Sampled: 09/23/09
Date Received: 09/24/09
Percent Solids: 83.0

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0055949.D	1	10/05/09	JL	n/a	n/a	VX307
Run #2							

	Initial Weight	Final Volume
Run #1	5.26 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.3	5.7	0.80	ug/kg	J
108-88-3	Toluene	1.9	5.7	1.1	ug/kg	J
100-41-4	Ethylbenzene	ND	5.7	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	17	2.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		70-121%
2037-26-5	Toluene-D8	90%		76-132%
460-00-4	4-Bromofluorobenzene	85%		73-165%
17060-07-0	1,2-Dichloroethane-D4	95%		57-122%

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:	ENCANA_CUTTINGS_092309		
Lab Sample ID:	T38250-3	Date Sampled:	09/23/09
Matrix:	SO - Soil	Date Received:	09/24/09
Method:	SW846 8270C BY SIM SW846 3550B	Percent Solids:	83.0
Project:	EnCana Oil & Gas (USA) Inc.		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	P06423.D	2	10/06/09	GJ	10/05/09	OP13178	EP313
Run #2 ^b	P06424.D	20	10/06/09	GJ	10/05/09	OP13178	EP313

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.2 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	16	2.7	ug/kg	
208-96-8	Acenaphthylene	ND	16	5.6	ug/kg	
120-12-7	Anthracene	ND	16	3.0	ug/kg	
56-55-3	Benzo(a)anthracene	ND	16	2.6	ug/kg	
50-32-8	Benzo(a)pyrene	ND	16	8.5	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	16	8.5	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	16	16	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	16	10	ug/kg	
218-01-9	Chrysene	4.8	16	3.9	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	16	15	ug/kg	
206-44-0	Fluoranthene	ND	16	3.5	ug/kg	
86-73-7	Fluorene	26.5	16	5.6	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	16	12	ug/kg	
90-12-0	1-Methylnaphthalene	19.2	16	3.0	ug/kg	
91-57-6	2-Methylnaphthalene	28.2	16	2.8	ug/kg	
91-20-3	Naphthalene	5.0	16	2.4	ug/kg	J
85-01-8	Phenanthrene	16.6	16	2.2	ug/kg	
129-00-0	Pyrene	ND	16	5.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	15% ^c	57% ^c	10-127%
321-60-8	2-Fluorobiphenyl	82% ^c	145% ^d	11-133%
1718-51-0	Terphenyl-d14	99% ^c	101% ^c	15-187%

(a) Internal standards are not within the advisory limits due to matrix interference. Confirmed by reanalysis.

(b) Internal standards are not within the advisory limits due to matrix interference.

(c) Recovery was adjusted for 10x spiking.

(d) Outside control limits due to dilution. Recovery was adjusted for 10x spiking.

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:	ENCANA_CUTTINGS_092309			Date Sampled:	09/23/09					
Lab Sample ID:	T38250-3			Date Received:	09/24/09					
Matrix:	SO - Soil			Percent Solids:	83.0					
Method:	SW846 8015									
Project:	EnCana Oil & Gas (USA) Inc.									

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE048214.D	1	10/05/09	FI	n/a	n/a	GEE2446
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.26 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	3.81	6.8	0.41	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		46-127%
98-08-8	aaa-Trifluorotoluene	109%		44-120%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	ENCANA_CUTTINGS_092309	
Lab Sample ID:	T38250-3	Date Sampled: 09/23/09
Matrix:	SO - Soil	Date Received: 09/24/09
Method:	SW846 8015 M SW846 3550B	Percent Solids: 83.0
Project:	EnCana Oil & Gas (USA) Inc.	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC215431.D	1	10/02/09	SS	10/01/09	OP13152	GCC966
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	66.6	10	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	34%		33-115%

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: ENCANA_CUTTINGS_092309**Lab Sample ID:** T38250-3**Date Sampled:** 09/23/09**Matrix:** SO - Soil**Date Received:** 09/24/09**Percent Solids:** 83.0**Project:** EnCana Oil & Gas (USA) Inc.

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.7	0.65	0.13	mg/kg	1	10/07/09	10/10/09 NS	SW846 6010B ²	SW846 3050B ³
Cadmium	0.53	0.32	0.065	mg/kg	1	10/07/09	10/10/09 NS	SW846 6010B ²	SW846 3050B ³
Chromium	15.9	0.65	0.045	mg/kg	1	10/07/09	10/10/09 NS	SW846 6010B ²	SW846 3050B ³
Copper	20.6	1.6	0.084	mg/kg	1	10/07/09	10/10/09 NS	SW846 6010B ²	SW846 3050B ³
Lead	16.0	0.65	0.26	mg/kg	1	10/07/09	10/10/09 NS	SW846 6010B ²	SW846 3050B ³
Mercury	0.055	0.020	0.00078	mg/kg	1	10/08/09	10/08/09 NS	SW846 7471A ¹	SW846 7471A ⁴
Nickel	15.8	2.6	0.084	mg/kg	1	10/07/09	10/10/09 NS	SW846 6010B ²	SW846 3050B ³
Selenium	0.54 B	0.65	0.16	mg/kg	1	10/07/09	10/10/09 NS	SW846 6010B ²	SW846 3050B ³
Silver	0.19 B	0.65	0.052	mg/kg	1	10/07/09	10/10/09 NS	SW846 6010B ²	SW846 3050B ³
Zinc	60.4	1.3	0.26	mg/kg	1	10/07/09	10/10/09 NS	SW846 6010B ²	SW846 3050B ³

(1) Instrument QC Batch: MA4325

(2) Instrument QC Batch: MA4329

(3) Prep QC Batch: MP10412

(4) Prep QC Batch: MP10415

RL = Reporting Limit

MDL = Method Detection Limit

U = Indicates a result < MDL

B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	ENCANA_CUTTINGS_092309		
Lab Sample ID:	T38250-3	Date Sampled:	09/23/09
Matrix:	SO - Soil	Date Received:	09/24/09
		Percent Solids:	83.0
Project:	EnCana Oil & Gas (USA) Inc.		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent	1.2 B	2.0	mg/kg	1	10/07/09 12:00	KD	SW846 3060/7196A
Chromium, Trivalent ^a	14.7	2.7	mg/kg	1	10/10/09 23:38	NS	SW846 6010/7196A M
Solids, Percent	83		%	1	10/05/09	MR	SM 2540 G
Specific Conductivity	2060	1.0	umhos/cm	1	10/07/09 15:00	KD	EPA 120.1
pH	10.6		su	1	09/26/09 16:00	EV	SW846 9045C

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	ENCANA_CUTTINGS_092309	Date Sampled:	09/23/09
Lab Sample ID:	T38250-3A	Date Received:	09/24/09
Matrix:	SO - Soil	Percent Solids:	83.0
Project:	EnCana Oil & Gas (USA) Inc.		

Hot Water Soluble Boron Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Boron	1.27	0.20	0.0042	mg/l	1	10/07/09	10/11/09 NS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA4329
(2) Prep QC Batch: MP10403

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	ENCANA_CUTTINGS_092309	Date Sampled:	09/23/09
Lab Sample ID:	T38250-3B	Date Received:	09/24/09
Matrix:	SO - Soil	Percent Solids:	83.0
Project:	EnCana Oil & Gas (USA) Inc.		

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method
Barium	12800	300	0.90	mg/kg	25	10/06/09	10/12/09 NS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA4330
(2) Prep QC Batch: MP10395

RL = Reporting Limit
MDL = Method Detection Limit
U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	ENCANA_CUTTINGS_092309			Date Sampled:	09/23/09
Lab Sample ID:	T38250-3C			Date Received:	09/24/09
Matrix:	SO - Soil			Percent Solids:	83.0
Project:	EnCana Oil & Gas (USA) Inc.				

SAR Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By		Method	Prep Method
Calcium	1670	25	0.18	mg/l	5	10/07/09	10/10/09	NS	SW846 6010B ¹	SW846 3050B ³
Magnesium	3.10 B	25	0.039	mg/l	5	10/07/09	10/10/09	NS	SW846 6010B ¹	SW846 3050B ³
Sodium	2030	130	3.4	mg/l	25	10/07/09	10/11/09	NS	SW846 6010B ²	SW846 3050B ³

- (1) Instrument QC Batch: MA4328
(2) Instrument QC Batch: MA4329
(3) Prep QC Batch: MP10393

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	ENCANA_CUTTINGS_092309	Date Sampled:	09/23/09
Lab Sample ID:	T38250-3C	Date Received:	09/24/09
Matrix:	SO - Soil	Percent Solids:	83.0
Project:	EnCana Oil & Gas (USA) Inc.		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio ^a	13.6		ratio	1	10/11/09 04:27	NS	LADNR29B

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (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

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

[illegible]

T38250: Chain of Custody

Page 1 of 3

SAMPLE INSPECTION FORM

Accutest Job Number: T38250 Client: Enlana Oil & Gas Date/Time Received: 09/24/09 0945
 # of Coolers Received: 1 Thermometer #: (R-) Temperature Adjustment Factor: +0.4
 Cooler Temps: #1: 1.0 #2: _____ #3: _____ #4: _____ #5: _____ #6: _____ #7: _____ #8: _____
 Method of Delivery: FEDEX UPS Accutest Courier Greyhound Delivery Other
 Airbill Numbers: _____

COOLER INFORMATION

- ☐ Custody seal missing or not intact
☐ Temperature criteria not met
☐ Wet ice received in cooler

CHAIN OF CUSTODY

- ☐ Chain of Custody not received
☐ Sample D/T unclear or missing
☐ Analyses unclear or missing
☐ COC not properly executed

SAMPLE INFORMATION

- ☐ Sample containers received broken
☐ VOC vials have headspace
☐ Sample labels missing or illegible
☐ ID on COC does not match label(s)
☐ D/T on COC does not match label(s)
☐ Sample/Bottles rec'd but no analysis on COC
☐ Sample listed on COC, but not received
☐ Bottles missing for requested analysis
☐ Insufficient volume for analysis
☐ Sample received improperly preserved

TRIP BLANK INFORMATION

- ☐ Trip Blank on COC but not received
☐ Trip Blank received but not on COC
☐ Trip Blank not intact
☐ Received Water Trip Blank
☐ Received Soil TB

Number of Encores? _____
 Number of 5035 kits? _____
 Number of lab-filtered metals? _____

Summary of Discrepancies: _____

TECHNICIAN SIGNATURE/DATE: _____
 INFORMATION AND SAMPLE LABELING VERIFIED BY: GC 9.24.09

CORRECTIVE ACTIONS

Client Representative Notified: _____ Date: _____
 By Accutest Representative: _____ Via: Phone Email
 Client Instructions: _____

\\mwalker\form\sample\inspection

T38250: Chain of Custody

Page 2 of 3

3.1

JOB #:

T38250

DATE/TIME RECEIVED:

09/24/07 0945

CLIENT:

En Cang 01/t G93

INITIALS:

FP

[illegible]

LOCATION: 1: Walk-In #1 (Waters) 2: Walk-In #2 (Soils) VR: Volatile Fridge M: Metals SUB: Subcontract EF: Encore Freezer

Rev 8/13/01 ewn

Page 3 of 3



GC/MS 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: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2619-MB	Z0052673.D	1	10/01/09	AH	n/a	n/a	VZ2619

The QC reported here applies to the following samples: Method: SW846 8260B

T38250-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.90	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	104% 70-121%
2037-26-5	Toluene-D8	125% 76-132%
460-00-4	4-Bromofluorobenzene	120% 73-165%
17060-07-0	1,2-Dichloroethane-D4	93% 57-122%

Method Blank Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2620-MB	Z0052694.D	1	10/02/09	JL	n/a	n/a	VZ2620

The QC reported here applies to the following samples: Method: SW846 8260B

T38250-1, T38250-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.90	ug/kg	
108-88-3	Toluene	ND	5.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 70-121%
2037-26-5	Toluene-D8	125% 76-132%
460-00-4	4-Bromofluorobenzene	117% 73-165%
17060-07-0	1,2-Dichloroethane-D4	86% 57-122%

Method Blank Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX307-MB	X0055945.D	1	10/05/09	JL	n/a	n/a	VX307

The QC reported here applies to the following samples: Method: SW846 8260B

T38250-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.90	ug/kg	
108-88-3	Toluene	ND	5.0	0.95	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	100% 70-121%
2037-26-5	Toluene-D8	91% 76-132%
460-00-4	4-Bromofluorobenzene	86% 73-165%
17060-07-0	1,2-Dichloroethane-D4	93% 57-122%

Blank Spike Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2619-BS	Z0052671.D	1	10/01/09	AH	n/a	n/a	VZ2619

The QC reported here applies to the following samples: Method: SW846 8260B

T38250-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	42.4	85	70-114
100-41-4	Ethylbenzene	50	45.3	91	60-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	70-121%
2037-26-5	Toluene-D8	120%	76-132%
460-00-4	4-Bromofluorobenzene	122%	73-165%
17060-07-0	1,2-Dichloroethane-D4	84%	57-122%

Blank Spike Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ2620-BS	Z0052692.D	1	10/02/09	JL	n/a	n/a	VZ2620

The QC reported here applies to the following samples: Method: SW846 8260B

T38250-1, T38250-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	39.5	79	70-114
100-41-4	Ethylbenzene	50	39.0	78	60-119
108-88-3	Toluene	50	37.8	76	68-115
1330-20-7	Xylene (total)	150	115	77	61-115

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	70-121%
2037-26-5	Toluene-D8	123%	76-132%
460-00-4	4-Bromofluorobenzene	122%	73-165%
17060-07-0	1,2-Dichloroethane-D4	79%	57-122%

Blank Spike Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX307-BS	X0055943.D	1	10/05/09	JL	n/a	n/a	VX307

The QC reported here applies to the following samples: Method: SW846 8260B

T38250-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	43.5	87	70-114
100-41-4	Ethylbenzene	50	42.9	86	60-119
108-88-3	Toluene	50	42.5	85	68-115
1330-20-7	Xylene (total)	150	134	89	61-115

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	70-121%
2037-26-5	Toluene-D8	96%	76-132%
460-00-4	4-Bromofluorobenzene	90%	73-165%
17060-07-0	1,2-Dichloroethane-D4	90%	57-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T38253-7MS	Z0052677.D	1	10/01/09	AH	n/a	n/a	VZ2619
T38253-7MSD	Z0052678.D	1	10/01/09	AH	n/a	n/a	VZ2619
T38253-7	Z0052676.D	1	10/01/09	AH	n/a	n/a	VZ2619

The QC reported here applies to the following samples:

Method: SW846 8260B

T38250-1

CAS No.	Compound	T38253-7 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	12	U	126	78.2	62*	80.3	57*	3	70-114/38
100-41-4	Ethylbenzene	12	U	126	79.8	63	84.8	61	6	60-119/40

CAS No.	Surrogate Recoveries	MS	MSD	T38253-7	Limits
1868-53-7	Dibromofluoromethane	3% * a	3% * a	7% * a	70-121%
2037-26-5	Toluene-D8	126%	127%	125%	76-132%
460-00-4	4-Bromofluorobenzene	129%	131%	126%	73-165%
17060-07-0	1,2-Dichloroethane-D4	76%	74%	84%	57-122%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T38251-2MS	Z0052703.D	1	10/02/09	JL	n/a	n/a	VZ2620
T38251-2MSD	Z0052704.D	1	10/02/09	JL	n/a	n/a	VZ2620
T38251-2	Z0052702.D	1	10/02/09	JL	n/a	n/a	VZ2620

The QC reported here applies to the following samples: Method: SW846 8260B

T38250-1, T38250-2

CAS No.	Compound	T38251-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		54.7	45.8	84	43.4	82	5	70-114/38
100-41-4	Ethylbenzene	ND		54.7	46.3	85	43.7	83	6	60-119/40
108-88-3	Toluene	ND		54.7	45.0	82	42.9	81	5	68-115/38
1330-20-7	Xylene (total)	ND		164	138	84	129	82	7	61-115/39

CAS No.	Surrogate Recoveries	MS	MSD	T38251-2	Limits
1868-53-7	Dibromofluoromethane	109%	106%	110%	70-121%
2037-26-5	Toluene-D8	123%	124%	127%	76-132%
460-00-4	4-Bromofluorobenzene	122%	123%	123%	73-165%
17060-07-0	1,2-Dichloroethane-D4	95%	95%	101%	57-122%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T39191-1MS	X0055955.D	1	10/05/09	JL	n/a	n/a	VX307
T39191-1MSD	X0055956.D	1	10/05/09	JL	n/a	n/a	VX307
T39191-1	X0055954.D	1	10/05/09	JL	n/a	n/a	VX307

The QC reported here applies to the following samples: Method: SW846 8260B

T38250-3

CAS No.	Compound	T39191-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		53.7	29.9	56*	28.1	54*	6	70-114/38
100-41-4	Ethylbenzene	8.9		53.7	30.2	40*	28.3	37*	6	60-119/40
108-88-3	Toluene	7.3		53.7	32.2	46*	30.7	45*	5	68-115/38
1330-20-7	Xylene (total)	56.2		161	126	43*	116	38*	8	61-115/39

CAS No.	Surrogate Recoveries	MS	MSD	T39191-1	Limits
1868-53-7	Dibromofluoromethane	96%	96%	96%	70-121%
2037-26-5	Toluene-D8	98%	98%	96%	76-132%
460-00-4	4-Bromofluorobenzene	102%	101%	97%	73-165%
17060-07-0	1,2-Dichloroethane-D4	89%	90%	89%	57-122%



GC/MS Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Page 1 of 1

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13178-MB	P06414.D	1	10/06/09	GJ	10/05/09	OP13178	EP313

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

T38250-3

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	6.7	1.1	ug/kg	
208-96-8	Acenaphthylene	ND	6.7	2.3	ug/kg	
120-12-7	Anthracene	ND	6.7	1.3	ug/kg	
56-55-3	Benzo(a)anthracene	ND	6.7	1.1	ug/kg	
50-32-8	Benzo(a)pyrene	ND	6.7	3.6	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	6.7	3.5	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	6.7	6.7	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	6.7	4.3	ug/kg	
218-01-9	Chrysene	ND	6.7	1.6	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	6.7	6.4	ug/kg	
206-44-0	Fluoranthene	ND	6.7	1.5	ug/kg	
86-73-7	Fluorene	ND	6.7	2.4	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	6.7	5.0	ug/kg	
90-12-0	1-Methylnaphthalene	ND	6.7	1.2	ug/kg	
91-57-6	2-Methylnaphthalene	ND	6.7	1.2	ug/kg	
91-20-3	Naphthalene	ND	6.7	1.0	ug/kg	
85-01-8	Phenanthrene	ND	6.7	0.93	ug/kg	
129-00-0	Pyrene	ND	6.7	2.3	ug/kg	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	43% 10-127%
321-60-8	2-Fluorobiphenyl	93% 11-133%
1718-51-0	Terphenyl-d14	89% 15-187%

Blank Spike Summary

Page 1 of 1

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13178-BS ^a	P06416.D	1	10/06/09	GJ	10/05/09	OP13178	EP313

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

T38250-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	167	67.1	40	18-118
208-96-8	Acenaphthylene	167	112	67	35-125
120-12-7	Anthracene	167	83.1	50	24-116
56-55-3	Benzo(a)anthracene	167	78.9	47	32-132
50-32-8	Benzo(a)pyrene	167	72.4	43	36-130
205-99-2	Benzo(b)fluoranthene	167	77.5	47	35-134
191-24-2	Benzo(g,h,i)perylene	167	87.6	53	18-149
207-08-9	Benzo(k)fluoranthene	167	75.0	45	30-131
218-01-9	Chrysene	167	80.9	49	37-124
53-70-3	Dibenzo(a,h)anthracene	167	86.9	52	23-150
206-44-0	Fluoranthene	167	93.1	56	28-118
86-73-7	Fluorene	167	99.6	60	32-106
193-39-5	Indeno(1,2,3-cd)pyrene	167	87.0	52	18-150
90-12-0	1-Methylnaphthalene	167	30.4	18	10-128
91-57-6	2-Methylnaphthalene	167	77.1	46	28-113
91-20-3	Naphthalene	167	51.3	31	31-106
85-01-8	Phenanthrene	167	81.9	49	37-112
129-00-0	Pyrene	167	82.1	49	24-132

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	36%	10-127%
321-60-8	2-Fluorobiphenyl	84%	11-133%
1718-51-0	Terphenyl-d14	52%	15-187%

(a) Recoveries were adjusted for double spiking.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13178-MS ^a	P06421.D	1	10/06/09	GJ	10/05/09	OP13178	EP313
OP13178-MSD ^a	P06422.D	1	10/06/09	GJ	10/05/09	OP13178	EP313
T38253-3R ^b	P06420.D	1	10/06/09	GJ	10/05/09	OP13178	EP313

The QC reported here applies to the following samples:

Method: SW846 8270C BY SIM

T38250-3

CAS No.	Compound	T38253-3R ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	8.0 U	194	86.6	45	57.2	29	41	10-153/80
208-96-8	Acenaphthylene	8.0 U	194	203	105	121	62	51	10-144/71
120-12-7	Anthracene	8.0 U	194	101	52	85.7	44	16	10-176/57
56-55-3	Benzo(a)anthracene	8.0 U	194	97.2	50	95.9	49	1	10-174/73
50-32-8	Benzo(a)pyrene	8.0 U	194	89.7	46	87.6	45	2	10-182/74
205-99-2	Benzo(b)fluoranthene	8.0 U	194	110	57	108	55	2	10-188/86
191-24-2	Benzo(g,h,i)perylene	8.0 U	194	105	54	101	52	4	10-150/62
207-08-9	Benzo(k)fluoranthene	8.0 U	194	94.0	49	88.5	45	6	10-170/94
218-01-9	Chrysene	8.0 U	194	98.7	51	96.8	50	2	10-165/73
53-70-3	Dibenzo(a,h)anthracene	8.0 U	194	106	55	102	52	4	10-192/74
206-44-0	Fluoranthene	8.0 U	194	118	61	107	55	10	10-141/73
86-73-7	Fluorene	8.0 U	194	167	86	110	56	41	10-164/72
193-39-5	Indeno(1,2,3-cd)pyrene	8.0 U	194	105	54	101	52	4	10-150/73
90-12-0	1-Methylnaphthalene	8.0 U	194	23.4	12	15.3	8*	42	10-154/82
91-57-6	2-Methylnaphthalene	8.0 U	194	65.1	34	43.2	22	40	10-171/75
91-20-3	Naphthalene	8.0 U	194	55.4	29	32.5	17	52	10-138/82
85-01-8	Phenanthrene	8.0 U	194	101	52	84.5	43	18	10-191/77
129-00-0	Pyrene	8.0 U	194	100	52	99.3	51	1	10-150/66

CAS No.	Surrogate Recoveries	MS	MSD	T38253-3R	Limits
118-79-6	2,4,6-Tribromophenol	36%	30%		18-129%
4165-60-0	Nitrobenzene-d5	34%	23%	21% ^c	10-127%
321-60-8	2-Fluorobiphenyl	118%	71%	98% ^c	11-133%
1718-51-0	Terphenyl-d14	53%	52%	49% ^c	15-187%

(a) Recoveries were adjusted for double spiking.

(b) Internal standards are not within the advisory limits due to matrix interference. Confirmed by associated ms/msd samples.

(c) Recovery was adjusted for double spiking.



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: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2439-MB	EE048075.D	1	10/01/09	FI	n/a	n/a	GEE2439

The QC reported here applies to the following samples: Method: SW846 8015

T38250-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	102%
98-08-8	aaa-Trifluorotoluene	109%

Method Blank Summary

Page 1 of 1

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2440-MB	EE048101.D	1	10/02/09	FI	n/a	n/a	GEE2440

The QC reported here applies to the following samples:

Method: SW846 8015

T38250-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	101%
98-08-8	aaa-Trifluorotoluene	107%

Method Blank Summary

Page 1 of 1

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2446-MB	EE048213.D	1	10/05/09	FI	n/a	n/a	GEE2446

The QC reported here applies to the following samples:

Method: SW846 8015

T38250-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.30	mg/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	101%
98-08-8	aaa-Trifluorotoluene	110%

Blank Spike Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2439-BS	EE048070.D	1	10/01/09	FI	n/a	n/a	GEE2439

The QC reported here applies to the following samples: Method: SW846 8015

T38250-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.372	93	78-115

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	104%	46-127%
98-08-8	aaa-Trifluorotoluene	113%	44-120%

Blank Spike/Blank Spike Duplicate Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2440-BS	EE048096.D	1	10/02/09	FI	n/a	n/a	GEE2440
GEE2440-BSD	EE048097.D	1	10/02/09	FI	n/a	n/a	GEE2440

The QC reported here applies to the following samples: Method: SW846 8015

T38250-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.4	0.381	95	0.377	94	1	78-115/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	101%	100%	46-127%
98-08-8	aaa-Trifluorotoluene	111%	110%	44-120%

Blank Spike/Blank Spike Duplicate Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE2446-BS	EE048207.D	1	10/05/09	FI	n/a	n/a	GEE2446
GEE2446-BSD	EE048208.D	1	10/05/09	FI	n/a	n/a	GEE2446

The QC reported here applies to the following samples: Method: SW846 8015

T38250-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.4	0.382	96	0.371	93	3	78-115/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	97%	101%	46-127%
98-08-8	aaa-Trifluorotoluene	115%	113%	44-120%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T38414-6MS	EE048082.D	1	10/02/09	FI	n/a	n/a	GEE2439
T38414-6MSD	EE048083.D	1	10/02/09	FI	n/a	n/a	GEE2439
T38414-6	EE048081.D	1	10/02/09	FI	n/a	n/a	GEE2439

The QC reported here applies to the following samples: Method: SW846 8015

T38250-1

CAS No.	Compound	T38414-6 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	1.77	J	25	21.8	80	21.4	79	2	78-115/14

CAS No.	Surrogate Recoveries	MS	MSD	T38414-6	Limits
460-00-4	4-Bromofluorobenzene	99%	101%	100%	46-127%
98-08-8	aaa-Trifluorotoluene	112%	110%	107%	44-120%



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: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13119-MB	CC215318.D 1		09/29/09	SS	09/29/09	OP13119	GCC966

The QC reported here applies to the following samples: Method: SW846 8015 M

T38250-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	52% 33-115%

7.1.1
7

Method Blank Summary

Page 1 of 1

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13152-MB	CC215418.D 1		10/01/09	SS	10/01/09	OP13152	GCC966

The QC reported here applies to the following samples:

Method: SW846 8015 M

T38250-2, T38250-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.3	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	52% 33-115%

7.1.2

7

Blank Spike Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13119-BS	CC215319.D 1		09/29/09	SS	09/29/09	OP13119	GCC966

The QC reported here applies to the following samples: Method: SW846 8015 M

T38250-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.1	28.4	86	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	57%	33-115%

Blank Spike Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13152-BS	CC215419.D 1		10/01/09	SS	10/01/09	OP13152	GCC966

The QC reported here applies to the following samples: Method: SW846 8015 M

T38250-2, T38250-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.1	27.9	84	45-107

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	55%	33-115%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13119-MS	CC215320.D	1	09/29/09	SS	09/29/09	OP13119	GCC966
OP13119-MSD	CC215321.D	1	09/29/09	SS	09/29/09	OP13119	GCC966
T38418-4	CC215331.D	1	09/29/09	SS	09/29/09	OP13119	GCC966

The QC reported here applies to the following samples: Method: SW846 8015 M

T38250-1

CAS No.	Compound	T38418-4 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	5.45	J	38.1	28.9	62	28.5	61	1	45-107/34

CAS No.	Surrogate Recoveries	MS	MSD	T38418-4	Limits
84-15-1	o-Terphenyl	57%	53%	64%	33-115%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T38250
Account: ENCACOP ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP13152-MS	CC215420.D	1	10/01/09	SS	10/01/09	OP13152	GCC966
OP13152-MSD	CC215421.D	1	10/01/09	SS	10/01/09	OP13152	GCC966
T38357-1	CC215443.D	25	10/02/09	SS	10/01/09	OP13152	GCC966

The QC reported here applies to the following samples:

Method: SW846 8015 M

T38250-2, T38250-3

CAS No.	Compound	T38357-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	6230		39.4	902	-13532* 747	-13926* 119			45-107/34

CAS No.	Surrogate Recoveries	MS	MSD	T38357-1	Limits
84-15-1	o-Terphenyl	55%	36%	0% * b	33-115%

- (a) Outside control limits due to high level in sample relative to spike amount.
(b) Outside control limits due to dilution.



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: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10360
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 09/30/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	0.20	.016	.017		
Antimony	0.20	.0023	.003		
Arsenic	0.50	.0018	.002	0.0085	<0.50
Barium	1.0	.00014	.0027	0.11	<1.0
Beryllium	0.0050	.00011	.0002		
Boron	0.10	.0011	.0021		
Cadmium	0.0050	.00025	.0003	0.00050	<0.0050
Calcium	5.0	.0054	.035		
Chromium	0.010	.0011	.0019	-0.00081	<0.010
Cobalt	0.050	.0005	.0008		
Copper	0.025	.00058	.0059		
Iron	0.10	.013	.013		
Lead	0.50	.0016	.0017	0.00053	<0.50
Magnesium	5.0	.0067	.0078		
Manganese	0.015	.0002	.0076		
Molybdenum	0.010	.00096	.0013		
Nickel	0.040	.00095	.0032		
Potassium	5.0	.053	.053		
Selenium	0.50	.0032	.0032	0.0097	<0.50
Silver	0.010	.00085	.0008	0.00019	<0.010
Sodium	5.0	.13	.13		
Strontium	0.020	.00017	.0004		
Thallium	0.20	.0032	.0026		
Tin	0.020	.0018	.0029		
Titanium	0.020	.0003	.0003		
Vanadium	0.050	.0006	.0006		
Zinc	0.10	.00049	.0041		

Associated samples MP10360: T38250-1, T38250-2

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

8.1.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10360
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date:

09/30/09

09/30/09

Metal	T38245-6A Original DUP		RPD	QC Limits	T38245-6A Original MS		Spikelot MPITCLP3	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.0077	0.0086	11.0	0-20	0.0077	1.8	2.0	89.6	80-120
Barium	0.57	0.58	1.7	0-20	0.57	5.5	5.0	98.6	80-120
Beryllium									
Boron									
Cadmium	0.0029	0.0030	3.4	0-20	0.0029	0.047	0.050	88.2	80-120
Calcium									
Chromium	0.0	0.0	NC	0-20	0.0	0.18	0.20	90.0	80-120
Cobalt									
Copper									
Iron									
Lead	0.022	0.023	4.4	0-20	0.022	1.8	2.0	88.9	80-120
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	0.014	0.013	7.4	0-20	0.014	1.8	2.0	89.3	80-120
Silver	0.0	0.0	NC	0-20	0.0	0.0012	0.050	2.4N	80-120
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP10360: T38250-1, T38250-2

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

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10360
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 09/30/09

Metal	T38245-6A Original	MSD	Spikelot MPITCLP3	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	0.0077	2.0	2.0	99.6	10.5	20
Barium	0.57	5.6	5.0	100.6	1.8	20
Beryllium						
Boron						
Cadmium	0.0029	0.051	0.050	96.2	8.2	20
Calcium						
Chromium	0.0	0.20	0.20	100.0	10.5	20
Cobalt						
Copper						
Iron						
Lead	0.022	1.9	2.0	93.9	5.4	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	0.014	2.0	2.0	99.3	10.5	20
Silver	0.0	0.0022	0.050	4.4N	58.8 (a)	20
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP10360: T38250-1, T38250-2

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) High RPD due to possible matrix interference.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10360
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 09/30/09

Metal	BSP Result	Spikelot MPITCLP3	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	2.0	2.0	100.0	80-120
Barium	5.2	5.0	104.0	80-120
Beryllium				
Boron				
Cadmium	0.049	0.050	98.0	80-120
Calcium				
Chromium	0.20	0.20	100.0	80-120
Cobalt				
Copper				
Iron				
Lead	1.9	2.0	95.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	2.0	2.0	100.0	80-120
Silver	0.049	0.050	98.0	80-120
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP10360: T38250-1, T38250-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

8.1.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10360
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: ug/l

Prep Date: 09/30/09

Metal	T38245-6A Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	7.68	0.00	100.0(a)	0-10
Barium	569	572	0.5	0-10
Beryllium				
Boron				
Cadmium	2.94	2.92	0.7	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron				
Lead	22.0	23.2	5.1	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	13.6	0.00	100.0(a)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP10360: T38250-1, T38250-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10393
Matrix Type: AQUEOUS

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

Prep Date: 10/07/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	16	17		
Antimony	5.0	2.3	3		
Arsenic	5.0	1.8	2		
Barium	200	.14	2.7		
Beryllium	5.0	.11	.2		
Boron	100	1.1	2.1		
Cadmium	4.0	.25	.3		
Calcium	5000	5.4	35	1050	<5000
Chromium	10	1.1	1.9		
Cobalt	50	.5	.8		
Copper	25	.58	5.9		
Iron	100	13	13		
Lead	3.0	1.6	1.7		
Magnesium	5000	6.7	7.8	261	<5000
Manganese	15	.2	7.6		
Molybdenum	10	.96	1.3		
Nickel	40	.95	3.2		
Potassium	5000	53	53		
Selenium	5.0	3.2	3.2		
Silver	10	.85	.8		
Sodium	5000	130	130	427	<5000
Strontium	20	.17	.4		
Thallium	10	3.2	2.6		
Tin	20	1.8	2.9		
Titanium	20	.3	.3		
Vanadium	50	.6	.6		
Zinc	20	.49	4.1		

Associated samples MP10393: T38250-3C

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: T38250
 Account: ENCACOP - ENCANA
 Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10393
 Matrix Type: AQUEOUS

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

Prep Date: 10/07/09

Metal	T37909-1C Original DUP		RPD	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	458000	498000	8.4	0-20
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium	24100	20700	15.2	0-20
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium	2040000	2010000	7.2	0-20
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP10393: T38250-3C

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

8.2.2
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10395
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 10/06/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.82	2.2		
Antimony	0.50	.11	.14		
Arsenic	0.50	.089	.1		
Barium	10	.007	.03	0.78	<10
Beryllium	0.25	.0055	.01		
Boron	5.0	.054	.11		
Cadmium	0.25	.013	.05		
Calcium	250	.27	.86		
Chromium	0.50	.055	.035		
Cobalt	2.5	.025	.09		
Copper	1.3	.029	.065		
Iron	5.0	.65	1.1		
Lead	0.50	.079	.2		
Magnesium	250	.34	.58		
Manganese	0.75	.01	.035		
Molybdenum	0.50	.048	.075		
Nickel	2.0	.048	.065		
Potassium	250	2.7	16		
Selenium	0.50	.16	.12		
Silver	0.50	.043	.04		
Sodium	250	6.5	13		
Strontium	1.0	.0085	.025		
Thallium	0.50	.16	.25		
Tin	1.0	.09	.12		
Titanium	1.0	.015	.045		
Vanadium	2.5	.03	.06		
Zinc	1.0	.025	.2		

Associated samples MP10395: T38250-3B

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: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10395
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 10/06/09

10/06/09

Metal	T37909-1B Original	DUP	RPD	QC Limits	T37909-1B Original	MS	Spikelot MPTW4	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic									
Barium	20900	20300	2.9	0-20	20900	21500	2.4	25020.0a	80-120
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

Associated samples MP10395: T38250-3B

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 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: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10395
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 10/06/09

Metal	T37909-1B Original MSD	Spikelot MPTW4	% Rec	MSD RPD	QC Limit
Aluminum					
Antimony					
Arsenic					
Barium	20900	21700	0.48	166800.0a0.9	20
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP10395: T38250-3B

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 amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Prep Date: 10/06/09

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10395
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/06/09

Metal	T37909-1B		QC	
	Original	SDL 25:125%DIF	Limits	

Aluminum				
Antimony				
Arsenic				
Barium	349000	371000	6.5	0-10
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP10395: T38250-3B

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: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10403
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/07/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	400	33	34		
Antimony	10	4.5	6		
Arsenic	10	3.5	4		
Barium	400	.28	5.4		
Beryllium	10	.22	.4		
Boron	200	2.2	4.2	14.5	<200
Cadmium	8.0	.5	.6		
Calcium	10000	11	70		
Chromium	20	2.2	3.8		
Cobalt	100	1	1.6		
Copper	50	1.2	12		
Iron	200	26	26		
Lead	6.0	3.2	3.4		
Magnesium	10000	13	16		
Manganese	30	.4	15		
Molybdenum	20	1.9	2.6		
Nickel	80	1.9	6.4		
Potassium	10000	110	110		
Selenium	10	6.5	6.4		
Silver	20	1.7	1.6		
Sodium	10000	260	270		
Strontium	40	.34	.8		
Thallium	20	6.5	5.2		
Tin	40	3.6	5.8		
Titanium	40	.6	.6		
Vanadium	100	1.2	1.2		
Zinc	40	.98	8.2		

Associated samples MP10403: T38250-3A

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: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10403
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

10/07/09

10/07/09

Metal	T37909-1A Original	DUP	RPD	QC Limits	T37909-1A Original MS	Spikelot MPTW4	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Boron	1290	930	32.4*(a)	0-20	1290	2570	1000	64.0N 80-120
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Strontium								
Thallium								
Tin								
Titanium								
Vanadium								
Zinc								

Associated samples MP10403: T38250-3A

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) High RPD due to possible matrix interference.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T38250
 Account: ENCACOP - ENCANA
 Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10403
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 10/07/09

Metal	T37909-1A Original	MSD	Spikelot MPTW4	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron	1290	2470	1000	59.2N	4.0	20
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP10403: T38250-3A

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

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Prep Date: 10/07/09

Metal	LCS Result	Spikelot MPTW4	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron	2400	1000	120.0	80-120
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10403
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/07/09

Metal	T37909-1A Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron	643	615	4.3	0-10
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP10403: T38250-3A

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

8.4.4
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10404
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 10/07/09

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.0020	.00049	.0013	-0.00033	<0.0020

Associated samples MP10404: T38250-1, T38250-2

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

8.5.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T38250
 Account: ENCACOP - ENCANA
 Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10404
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 10/07/09 10/07/09

Metal	T38250-1			QC	T38250-1			Spikelot	QC
	Original	DUP	RPD	Limits	Original	MS	HGTXAQ40	% Rec	Limits
Mercury	0.0	0.0	NC	0-20	0.0	0.032	0.030	106.7	75-125

Associated samples MP10404: T38250-1, T38250-2

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

8.5.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T38250
 Account: ENCACOP - ENCANA
 Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10404
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 10/07/09

Metal	T38250-1 Original	MSD	Spikelot HGTXAQ40	% Rec	MSD RPD	QC Limit
-------	----------------------	-----	----------------------	-------	------------	-------------

Mercury	0.0	0.031	0.030	103.3	3.2	
---------	-----	-------	-------	-------	-----	--

Associated samples MP10404: T38250-1, T38250-2

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

8.5.2

8

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Methods: SW846 7470A
Units: mg/l

Metal	BSP Result	Spikelot HGTXAQ40 % Rec	QC Limits
Mercury	0.030	0.030	100.0 80-120

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: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10412
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 10/07/09

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	.82	2.2		
Antimony	0.50	.11	.14		
Arsenic	0.50	.089	.1	0.0040	<0.50
Barium	10	.007	.03		
Beryllium	0.25	.0055	.01		
Boron	5.0	.054	.11		
Cadmium	0.25	.013	.05	-0.0015	<0.25
Calcium	250	.27	.86		
Chromium	0.50	.055	.035	0.0085	<0.50
Cobalt	2.5	.025	.09		
Copper	1.3	.029	.065	0.017	<1.3
Iron	5.0	.65	1.1		
Lead	0.50	.079	.2	0.016	<0.50
Magnesium	250	.34	.58		
Manganese	0.75	.01	.035		
Molybdenum	0.50	.048	.075		
Nickel	2.0	.048	.065	-0.0090	<2.0
Potassium	250	2.7	16		
Selenium	0.50	.16	.12	-0.014	<0.50
Silver	0.50	.043	.04	-0.0075	<0.50
Sodium	250	6.5	13		
Strontium	1.0	.0085	.025		
Thallium	0.50	.16	.25		
Tin	1.0	.09	.12		
Titanium	1.0	.015	.045		
Vanadium	2.5	.03	.06		
Zinc	1.0	.025	.2	0.021	<1.0

Associated samples MP10412: T38250-3

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: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10412
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date:

10/07/09

10/07/09

Metal	T38128-1 Original	DUP	RPD	QC Limits	T38128-1 Original	MS	Spikelot MPTW4	% Rec	QC Limits
Aluminum	anr								
Antimony	anr								
Arsenic	7.0	7.1	1.4	0-20	7.0	28.9	24.9	87.8	80-120
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	0.19	0.23	19.0	0-20	0.19	19.8	24.9	78.6N	80-120
Calcium	anr								
Chromium	18.4	18.9	2.7	0-20	18.4	38.0	24.9	78.6N	80-120
Cobalt	anr								
Copper	14.6	14.6	0.0	0-20	14.6	37.0	24.9	89.8	80-120
Iron	anr								
Lead	11.1	11.4	2.7	0-20	11.1	31.5	24.9	81.8	80-120
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	18.3	17.5	4.5	0-20	18.3	37.9	24.9	78.6N	80-120
Potassium	anr								
Selenium	0.25	0.0	200.0(a)	0-20	0.25	20.0	24.9	79.2N	80-120
Silver	0.089	0.11	21.1 (a)	0-20	0.089	11.4	24.9	45.4N	80-120
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	39.9	40.4	1.2	0-20	39.9	60.7	24.9	83.4	80-120

Associated samples MP10412: T38250-3

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) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10412
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 10/07/09

Metal	T38128-1 Original	MSD	Spikelot MPTW4	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	7.0	27.3	23.9	85.0	5.7	20
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	0.19	19.4	23.9	80.4	2.0	20
Calcium	anr					
Chromium	18.4	38.6	23.9	84.5	1.6	20
Cobalt	anr					
Copper	14.6	37.1	23.9	94.2	0.3	20
Iron	anr					
Lead	11.1	31.8	23.9	86.6	0.9	20
Magnesium	anr					
Manganese	anr					
Molybdenum	anr					
Nickel	18.3	38.7	23.9	85.4	2.1	20
Potassium	anr					
Selenium	0.25	19.7	23.9	81.4	1.5	20
Silver	0.089	11.7	23.9	48.6N	2.6	20
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	39.9	62.4	23.9	94.2	2.8	20

Associated samples MP10412: T38250-3

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

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10412
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 10/07/09

Metal	LCS Result	Spikelot MPLCD054	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	146	158	92.4	82-118
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	171	187	91.4	82-118
Calcium	anr			
Chromium	84.0	89.5	93.9	79-121
Cobalt	anr			
Copper	125	129	96.9	84-117
Iron	anr			
Lead	159	172	92.4	79-120
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	95.0	99	96.0	81-119
Potassium	anr			
Selenium	133	148	89.9	78-121
Silver	61.3	66	92.9	66-134
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	357	394	90.6	80-119

Associated samples MP10412: T38250-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10412
Matrix Type: SOLID

Methods: SW846 6010B
Units: ug/l

Prep Date: 10/07/09

Metal	T38128-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	120	134	12.0*(a)	0-10
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	3.17	1.53	51.7 (b)	0-10
Calcium	anr			
Chromium	314	367	17.0*(a)	0-10
Cobalt	anr			
Copper	249	271	9.0	0-10
Iron	anr			
Lead	190	224	17.7*(a)	0-10
Magnesium	anr			
Manganese	anr			
Molybdenum	anr			
Nickel	312	373	19.3*(a)	0-10
Potassium	anr			
Selenium	4.30	0.00	100.0(b)	0-10
Silver	1.52	0.00	100.0(b)	0-10
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	680	798	17.3*(a)	0-10

Associated samples MP10412: T38250-3

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(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: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10415
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 10/08/09

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.017	.0041	.00066	-0.0014	<0.017

Associated samples MP10415: T38250-3

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

8.7.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T38250
 Account: ENCACOP - ENCANA
 Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10415
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 10/08/09 10/08/09

Metal	T38233-1		QC	T38233-1		Spikelot	% Rec	QC
	Original	DUP	RPD	Original	MS	HGTXWS1		Limits
Mercury	0.032	0.041	24.7 (a)	0-20	0.032 0.35	0.29	109.6	75-125

Associated samples MP10415: T38250-3

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) RPD acceptable due to low duplicate and sample concentrations.

8.7.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: T38250
 Account: ENCACOP - ENCANA
 Project: EnCana Oil & Gas (USA) Inc.

QC Batch ID: MP10415
 Matrix Type: SOLID

Methods: SW846 7471A
 Units: mg/kg

Prep Date: 10/08/09

Metal	T38233-1 Original	MSD	Spikelot HGTXWS1	% Rec	MSD RPD	QC Limit
-------	----------------------	-----	---------------------	-------	------------	-------------

Mercury	0.032	0.36	0.295	111.3	2.8	
---------	-------	------	-------	-------	-----	--

Associated samples MP10415: T38250-3

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

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Methods: SW846 7471A
Units: mg/kg

Metal	LCS Result	Spikelot HGLCD054 % Rec	QC Limits
-------	---------------	----------------------------	--------------

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(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: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GN18199	2.0	<2.0	mg/kg	40	39.4	98.6	80-120%
Specific Conductivity	GN18243	1.0	<1.0	umhos/cm				

Associated Samples:
Batch GN18199: T38250-3
Batch GN18243: T38250-3
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GN18199	T38127-1	mg/kg	1.5 B	<2.0	1.8	0-20%
Corrosivity as pH	GN18161	T38250-2		8.2	8.2		0-%
Ignitability (Flashpoint)	GN18260	T38117-1	Deg. F	>210	>210	0.0	0-20%
Solids, Percent	GN18197	T38358-7	%	87.6	88	0.5	0-5%
Solids, Percent	GN18207	T38395-1	%	20.1	19.8	1.5	0-5%
Specific Conductivity	GN18243	T38127-1	umhos/cm	1620	1620	0.0	0-20%
pH	GN18120	T38378-1	su	10	10	0.0	0-20%

Associated Samples:

Batch GN18120: T38250-3
Batch GN18161: T38250-1, T38250-2
Batch GN18197: T38250-1, T38250-2
Batch GN18199: T38250-3
Batch GN18207: T38250-3
Batch GN18243: T38250-3
Batch GN18260: T38250-1, T38250-2
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: T38250
Account: ENCACOP - ENCANA
Project: EnCana Oil & Gas (USA) Inc.

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GN18199	T38127-1	mg/kg	1.5 B	40	38.6	92.8	75-125%

Associated Samples:
Batch GN18199: T38250-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits