Received 8/2/2012 Rifle COGCC

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

Tax I.D. 62-0814289

Est. 1970

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

Report Summary

Friday February 10, 2012

Report Number: L559140
Samples Received: 02/07/12
Client Project:

Description: F12E Bio-Film

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

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REPORT OF ANALYSIS

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

February 10, 2012

ESC Sample # : L559140-01

Date Received : February 07, 2012
Description : F12E Bio-Film

Site ID :

Sample ID : WDC-BF-020612

Project # :

Collected By : Waltsak
Collection Date : 02/06/12 13:45

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	02/10/12	1
Toluene	BDL	0.0050	mg/l	8021B	02/10/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	02/10/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	02/10/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	95.1		% Rec.	8021B	02/10/12	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
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Reported: 02/10/12 16:38 Printed: 02/10/12 16:38

Received 8/2/2012 Rifle COGCC

Summary of Remarks For Samples Printed
02/10/12 at 16:38:56

TSR Signing Reports: 358
R5 - Desired TAT

Be sure sub lab uses CLIENT SAMPLE ID on thier reports, not ESC sample ID. Try not to report benzene BDL above a 250x dilution. ONLY log water samples under this account. Soils under ENCANACO.

Sample: L559140-01 Account: ENCRCO Received: 02/07/12 09:00 Due Date: 02/14/12 00:00 RPT Date: 02/10/12 16:38

Received 8/2/2012 Rifle COGCC

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Brett Middleton
2717 Co. Rd. 215

Parachute, CO 81635

Quality Assurance Report
Level II

L559140

February 10, 2012

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG577788	02/09/12 21:43
Ethylbenzene	< .0005	mg/l			WG577788	02/09/12 21:43
Toluene	< .005	mg/l			WG577788	02/09/12 21:43
Total Xylene	< .0015	mg/l			WG577788	02/09/12 21:43
a,a,a-Trifluorotoluene(PID)		% Rec.	94.99	55-122	WG577788	02/09/12 21:43

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0466	93.2	79-114	WG577788
Ethylbenzene	mg/l	.05	0.0492	98.5	80-116	WG577788
Toluene	mg/l	.05	0.0465	93.0	79-112	WG577788
Total Xylene	mg/l	.15	0.152	101.	84-118	WG577788
a,a,a-Trifluorotoluene(PID)				96.01	55-122	WG577788

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0487	0.0466	97.0	79-114	4.44	20	WG577788
Ethylbenzene	mg/l	0.0525	0.0492	105.	80-116	6.49	20	WG577788
Toluene	mg/l	0.0493	0.0465	98.0	79-112	5.88	20	WG577788
Total Xylene	mg/l	0.162	0.152	108.	84-118	6.40	20	WG577788
a,a,a-Trifluorotoluene(PID)				99.14	55-122			WG577788

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0498	0	.05	99.6	35-147	L559132-18	WG577788
Ethylbenzene	mg/l	0.0527	0	.05	105.	39-141	L559132-18	WG577788
Toluene	mg/l	0.0496	0	.05	99.1	35-148	L559132-18	WG577788
Total Xylene	mg/l	0.161	0	.15	107.	33-151	L559132-18	WG577788
a,a,a-Trifluorotoluene(PID)					95.59	55-122		WG577788

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0497	0.0498	99.4	35-147	0.190	20	L559132-18	WG577788
Ethylbenzene	mg/l	0.0525	0.0527	105.	39-141	0.370	20	L559132-18	WG577788
Toluene	mg/l	0.0498	0.0496	99.6	35-148	0.440	20	L559132-18	WG577788
Total Xylene	mg/l	0.161	0.161	107.	33-151	0.150	20	L559132-18	WG577788
a,a,a-Trifluorotoluene(PID)				95.90	55-122				WG577788

Batch number /Run number / Sample number cross reference

WG577788: R2031832: L559140-01

* * 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.'

Received 8/2/2012 Rifle COGCC

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Encana
Brett Middleton
2717 Co. Rd. 215

Parachute, CO 81635

Quality Assurance Report
Level II

L559140

February 10, 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.

Received 8/2/2012 Rifle COGCC

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Fax (615) 758-5859

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Est. 1970

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

Report Summary

Thursday June 21, 2012

Report Number: L581085
Samples Received: 06/19/12
Client Project: F12 CREEK WALKS

Description: F12E Bio Film

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: Alan Harvill

T. Alan Harvill , 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

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REPORT OF ANALYSIS

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

June 21, 2012

Date Received : June 19, 2012
Description : F12E Bio Film

Sample ID : F12E-WDC-MOI-061812

Collected By : SJ
Collection Date : 06/18/12 13:00

COGCC Note:
Biofilm-
Langegger
Property

ESC Sample # : L581085-01

Site ID : F12E

Project # : F12 CREEK WALKS

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Benzene	BDL	0.00050	mg/l	8021B	06/20/12	1
Toluene	BDL	0.0050	mg/l	8021B	06/20/12	1
Ethylbenzene	BDL	0.00050	mg/l	8021B	06/20/12	1
Total Xylene	BDL	0.0015	mg/l	8021B	06/20/12	1
Surrogate Recovery(%)						
a,a,a-Trifluorotoluene(PID)	104.		% Rec.	8021B	06/20/12	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
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Reported: 06/21/12 11:45 Printed: 06/21/12 11:45

Received 8/2/2012 Rifle COGCC

Summary of Remarks For Samples Printed
06/21/12 at 11:45:52

TSR Signing Reports: 358
R4 - Rush: Three Day

Be sure sub lab uses CLIENT SAMPLE ID & not ESC sample ID. Try not to report benzene BDL above 250x dilution. Water samples ONLY under this account. Soils under ENCANACO. Log PAHs as PAHSIM.

Sample: L581085-01 Account: ENCRCO Received: 06/19/12 09:00 Due Date: 06/22/12 00:00 RPT Date: 06/21/12 11:45

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Brett Middleton
2717 Co. Rd. 215

Parachute, CO 81635

Quality Assurance Report
Level II

L581085

June 21, 2012

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Benzene	< .0005	mg/l			WG598828	06/20/12 16:09
Ethylbenzene	< .0005	mg/l			WG598828	06/20/12 16:09
Toluene	< .005	mg/l			WG598828	06/20/12 16:09
Total Xylene	< .0015	mg/l			WG598828	06/20/12 16:09
a,a,a-Trifluorotoluene(PID)		% Rec.	103.2	55-122	WG598828	06/20/12 16:09

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Benzene	mg/l	.05	0.0454	90.7	79-114	WG598828
Ethylbenzene	mg/l	.05	0.0477	95.5	80-116	WG598828
Toluene	mg/l	.05	0.0463	92.7	79-112	WG598828
Total Xylene	mg/l	.15	0.139	92.5	84-118	WG598828
a,a,a-Trifluorotoluene(PID)				102.1	55-122	WG598828

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Benzene	mg/l	0.0472	0.0454	94.0	79-114	4.03	20	WG598828
Ethylbenzene	mg/l	0.0491	0.0477	98.0	80-116	2.74	20	WG598828
Toluene	mg/l	0.0475	0.0463	95.0	79-112	2.56	20	WG598828
Total Xylene	mg/l	0.143	0.139	95.0	84-118	2.70	20	WG598828
a,a,a-Trifluorotoluene(PID)				102.3	55-122			WG598828

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0447	0	.05	89.3	35-147	L581090-04	WG598828
Ethylbenzene	mg/l	0.0484	0	.05	96.7	39-141	L581090-04	WG598828
Toluene	mg/l	0.0470	0	.05	93.9	35-148	L581090-04	WG598828
Total Xylene	mg/l	0.142	0	.15	94.8	33-151	L581090-04	WG598828
a,a,a-Trifluorotoluene(PID)					102.4	55-122		WG598828

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0447	0.0447	89.4	35-147	0.0400	20	L581090-04	WG598828
Ethylbenzene	mg/l	0.0470	0.0484	93.9	39-141	2.91	20	L581090-04	WG598828
Toluene	mg/l	0.0455	0.0470	91.0	35-148	3.17	20	L581090-04	WG598828
Total Xylene	mg/l	0.137	0.142	91.3	33-151	3.75	20	L581090-04	WG598828
a,a,a-Trifluorotoluene(PID)				102.8	55-122				WG598828

Batch number /Run number / Sample number cross reference

WG598828: R2220533: L581085-01

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

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Quality Assurance Report
Level II

L581085

June 21, 2012

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