

WORK ORDER Summary

Evergreen Analytical, Inc.

09-2262

Rpt To: Bob Chesson

Email To: Robert.Chesson@state.co.us

Colorado Oil & Gas Conservation

Comm.

1120 Lincoln St #801

Denver, CO 80203

(303) 894-2100

4/16/2009 11:54:23 AM

Client Project ID:

QC Level: LEVEL I+

Comments: EDD COGCC format. Invoice in triplicate 6/30/08 to 6/30/09.

Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Test Code	Test Name	Hold	MS	Date Due	Hold Time
09-2262-01A	Cummings	Drinking Water	4/03/09 0000	4/03/09	ANIONS_W *	300.0: DW Anions by IC	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	4/05/09
09-2262-01B	Cummings	Drinking Water	4/03/09 0000	4/03/09	F_W	Fluoride	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	5/01/09
09-2262-01C	Cummings	Drinking Water	4/03/09 0000	4/03/09	200.7_T *	200.7: Total Metals	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	9/30/09
09-2262-01D	Cummings	Drinking Water	4/03/09 0000	4/03/09	200.7_D *	200.7: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	9/30/09
09-2262-01E	Cummings	Drinking Water	4/03/09 0000	4/03/09	CARB/BICARB_W *	Carbonate and Bicarbonate	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	4/17/09
09-2262-01F	Cummings	Drinking Water	4/03/09 0000	4/03/09	8021_W *	8021: BTEX, MtBE	<input type="checkbox"/>	<input type="checkbox"/>	4/08/09	4/17/09
09-2262-01G	Cummings	Drinking Water	4/03/09 0000	4/03/09	MEEP_W *	RSK175M: Methane	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	4/17/09
09-2262-01H	Cummings	Drinking Water	4/03/09 0000	4/03/09	TDS_W	Total Dissolved Solids (TDS)	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	4/10/09
09-2262-02A	Bergstrom	Drinking Water	4/03/09 0000	4/03/09	ANIONS_W *	300.0: DW Anions by IC	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	4/05/09
09-2262-02B	Bergstrom	Drinking Water	4/03/09 0000	4/03/09	F_W	Fluoride	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	5/01/09
09-2262-02C	Bergstrom	Drinking Water	4/03/09 0000	4/03/09	200.7_T *	200.7: Total Metals	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	9/30/09
09-2262-02D	Bergstrom	Drinking Water	4/03/09 0000	4/03/09	200.7_D *	200.7: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	9/30/09
09-2262-02E	Bergstrom	Drinking Water	4/03/09 0000	4/03/09	CARB/BICARB_W *	Carbonate and Bicarbonate	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	4/17/09
09-2262-02F	Bergstrom	Drinking Water	4/03/09 0000	4/03/09	8021_W *	8021: BTEX, MtBE	<input type="checkbox"/>	<input type="checkbox"/>	4/08/09	4/17/09
09-2262-02G	Bergstrom	Drinking Water	4/03/09 0000	4/03/09	MEEP_W *	RSK175M: Methane	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	4/17/09
09-2262-02H	Bergstrom	Drinking Water	4/03/09 0000	4/03/09	TDS_W	Total Dissolved Solids (TDS)	<input type="checkbox"/>	<input type="checkbox"/>	4/17/09	4/10/09

Definitions: * - Test Code has a Select List

CHAIN OF CUSTODY RECORD / ANALYTICAL SERVICES AGREEMENT **

Page 1 of 1

CLIENT INFORMATION

Mail Original Report to:

COGCC

Quality Data on Time®

Attn: Bob Chesson

Address: 1120 Lincoln Street, Suite 801

City: Denver State: CO Zip: 80203

Tel #: Fax #:

E-mail: Robert.Chesson@state.co.us


 4036 Youngfield St.
 Wheat Ridge, Colorado 80033
 (303) 425-6021
 FAX (303) 425-6854
 (877) 737-4521
 e-mail: info@evergreenanalytical.com
REPORT ALSO BY ☐ FAX ☐ PDF ☐ EDD FAXED CONFIRMATION OF SAMPLE RECEIPT REQUIRED? ☐ YESREPORT CHROMATOGRAMS ☐ YES

Mail Invoice to: Bob Chesson

Attn:

Address:

City: State: Zip:

Tel #: Fax #:

Project ID#:

P.O. Quote: 11351

Sampler: Chris Roy (Tearcon)

NOTE: Identify Known Hazards Below

 SAMPLE DATE
 IDENTIFICATION SAMPLED TIME

No. of Containers

 1) Drinking Water or 2) Discharge Water or 3) Ground Water (circle one)
 Soil / Solid / Air / Gas
 Oil / Sludge / Wipe

MATRIX

ANALYSES (check analysis)

 300.0 Amians by IC
 Flouride
 200.7 Total Metals
 200.7 Dissolved Metals
 Carbonate and Bicarbonate
 8021
 RSKSOP-175M
 TDS

 Cummings 4-03-09 11
 Bergstrom 4-03-09 11

 X X X X X X X X X X
 X X X X X X X X X X

 01
 02
 T Metals p/cd
Does this analysis involve property transfer? ☐ Yes or ☒ No

A B C D E F G H

Sample Fraction

Instructions:

** Important Note: See reverse side hereof for terms and conditions.

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

Date/Time

Chris Roy

4-03-09 2:30 pm

Robert Chesson

4/13/19 2:30 pm

 Report Results by: (Date)*
 Standard 2 working weeks
 UST Analyses per Fee Schedule
 * Rush: ☐ less than 24 hrs, 150% ☒ 1-2 work days, 100%
☐ 3-5 work days, 50% ☐ 6-9 work days, 25%
 * Subject to surcharge & exceptions noted in fee schedule.

For Laboratory Use Only

W.O. # 04-2262

B.O.F. #

C/S (O) - / -

C/S (I) - / 41D

Temp. °C 28 / ice

Seals Present Y / NA

Samples Pres Y / NA

Headspace Y / NA

By: MR

Evergreen Analytical, Inc.

Date: 17-Apr-09

Lab Order: 09-2262

Client Project ID

CASE NARRATIVE

SAMPLE RECEIVING

Sample(s) were hand delivered to the laboratory by the client.

Custody seals were not present.

The temperature of the sample(s) upon arrival was 2.8°C.

Sample(s) were received in good condition, in the proper container, and within holding times.

Sample(s) were preserved properly. VOC sample(s) were marked as preserved on the bottle labels.

VOC sample(s) were received with no headspace present. NJO

QUALITY ASSURANCE (QA)

Analyses performed on samples in this work order by EAL meet the requirements of the EAL Quality Assurance Program unless otherwise explained. Analyses of RCRA samples meet the requirements of NELAC and Utah Rule R444-14 unless otherwise explained. Analyses of discharge samples meet the requirements of 40 CFR Part 136 unless otherwise explained. JE

CLIENT SERVICES

There are no anomalies to report. PM

GAS CHROMATOGRAPHY

Method 8021_W: There are no anomalies to report. JCC

Method RSK-175: There are no anomalies to report. VM

GENERAL CHEMISTRY

Method E300.0: The Nitrate maximum contaminant level (MCL = 10.0 mg/L) for drinking waters was exceeded for sample Bergstrom (09-2262-02) with a value of 24.3 mg/L. The samples have high conductivity levels and high Chloride levels, which required dilution of the sample to avoid saturating the detector and to separate the Nitrite-N peak from the Chloride peak. This raised the reporting limit for Nitrite-N for both samples and raised the reporting limit for Nitrate-N for sample Bergstrom.

There are no other anomalies to report. JML/MM/JE

METALS ANALYSIS

Method E200.7: Barium was detected in the method blank (MB) at 0.0034 mg/L. This amount was not subtracted from the sample results. The sample results were greater than five times the MB concentration so no further action was needed. There are no other anomalies to report. WKH/JE

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: Cummings
Client Project ID:
Date Collected: 4/3/09 0000
Date Received: 4/3/09

Lab Work Order 09-2262
Lab Sample ID: 09-2262-01
Sample Matrix: Drinking Water

ANIONS BY IC

Method: E300.0

Prep Method:

Date Prepared: 4/3/09
Date Analyzed: 4/3/09 1622

Method Blank: MB 04/03/09

Dilution Factor: 2
Lab Fraction ID: 09-2262-01A

Analytes	CAS Number	Result	LQL	Units
Chloride	7647-14-5	46.3	1.0	mg/L
Nitrite-N		U	0.0080	mg/L
Nitrate-N		U	0.020	mg/L
Nitrite+Nitrate-N		U	0.020	mg/L
Sulfate	7778-80-2	59.6	1.0	mg/L


Analyst


Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
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J - Indicates an estimated value when the compound is detected, but is below the LQL
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U - Compound analyzed for but not detected
X - See case narrative
* - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 4/5/09

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: Bergstrom
Client Project ID:
Date Collected: 4/3/09 0000
Date Received: 4/3/09

Lab Work Order 09-2262
Lab Sample ID: 09-2262-02
Sample Matrix: Drinking Water

ANIONS BY IC

Method: E300.0

Prep Method:

Date Prepared: 4/3/09
Date Analyzed: 4/3/09 1750

Method Blank: MB 04/03/09

Dilution Factor: 10
Lab Fraction ID: 09-2262-02A

Analytes	CAS Number	Result	LQL	Units
Chloride	7647-14-5	227	5.0	mg/L
Nitrite-N		U	0.040	mg/L

Date Prepared: 4/3/09
Date Analyzed: 4/3/09 1803

Method Blank: MB 04/03/09

Dilution Factor: 25
Lab Fraction ID: 09-2262-02A

Analytes	CAS Number	Result	LQL	Units
Nitrate-N		24.3 *	0.25	mg/L
Nitrite+Nitrate-N		24.3 *	0.25	mg/L
Sulfate	7778-80-2	637	13	mg/L


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Print Date: 4/5/09

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID Cummings
Client Project ID
Date Collected: 4/3/09
Date Received: 4/3/09

Lab Work Order 09-2262
Lab Sample ID: 09-2262-01
Sample Matrix: Drinking Water

CARBONATE AND BICARBONATE

Method: SM2320 B

Prep Method:

Date Prepared: 4/6/09
Date Analyzed: 4/6/09

Lab File ID: 78
Method Blank: MBLK 04/06/09

Dilution Factor: 1
Lab Fraction ID: 09-2262-01E

Analytes	CAS Number	Result	LQL	Units
Bicarbonate		710	5.0	mg/L
Carbonate		U	5.0	mg/L

FLUORIDE

Method: SM 4500-F C

Prep Method:

Date Prepared: 4/7/09
Date Analyzed: 4/7/09

Lab File ID: 95
Method Blank: MBLK 4/7/09

Dilution Factor: 1
Lab Fraction ID: 09-2262-01B

Analytes	CAS Number	Result	LQL	Units
Fluoride	16984-48-8	3.2	0.20	mg/L

TOTAL DISSOLVED SOLIDS (TDS)

Method: SM 2540C

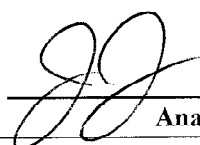
Prep Method:

Date Prepared: 4/6/09
Date Analyzed: 4/6/09

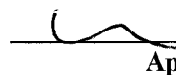
Lab File ID: 18
Method Blank: MBLK 4/6/09

Dilution Factor: 1
Lab Fraction ID: 09-2262-01H

Analytes	CAS Number	Result	LQL	Units
Total Dissolved Solids		831	10.0	mg/L



Analyst



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LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 4/9/2009

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID Bergstrom
Client Project ID
Date Collected: 4/3/09
Date Received: 4/3/09

Lab Work Order 09-2262
Lab Sample ID: 09-2262-02
Sample Matrix: Drinking Water

CARBONATE AND BICARBONATE

Method: SM2320 B

Prep Method:

Date Prepared: 4/6/09
Date Analyzed: 4/6/09

Lab File ID: 79
Method Blank: MBLK 04/06/09

Dilution Factor: 1
Lab Fraction ID: 09-2262-02E

Analytes	CAS Number	Result	LQL	Units
Bicarbonate		474	5.0	mg/L
Carbonate		U	5.0	mg/L

FLUORIDE

Method: SM 4500-F C

Prep Method:

Date Prepared: 4/7/09
Date Analyzed: 4/7/09

Lab File ID: 96
Method Blank: MBLK 4/7/09

Dilution Factor: 1
Lab Fraction ID: 09-2262-02B

Analytes	CAS Number	Result	LQL	Units
Fluoride	16984-48-8	1.3	0.20	mg/L

TOTAL DISSOLVED SOLIDS (TDS)

Method: SM 2540C

Prep Method:

Date Prepared: 4/6/09
Date Analyzed: 4/6/09

Lab File ID: 19
Method Blank: MBLK 4/6/09

Dilution Factor: 1
Lab Fraction ID: 09-2262-02H

Analytes	CAS Number	Result	LQL	Units
Total Dissolved Solids		1880	10.0	mg/L



Analyst



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Surr - Surrogate

Print Date: 4/9/2009

Evergreen Analytical, Inc.

4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
(303) 425-6021

Client Sample ID: Cummings
Client Project ID:
Date Collected: 4/3/09
Date Received: 4/3/09

Lab Work Order: 09-2262
Lab Sample ID: 09-2262-01
Sample Matrix: Drinking Water

DISSOLVED METALS

Method: E200.7, Rev. 4.4

Prep Method: E200.7/SW3010A

Date Prepared: 4/10/09
Date Analyzed: 4/11/09

Lab File ID: 041109AM
Method Blank: MB-18744

Dilution Factor: 1
Lab Fraction ID: 09-2262-01D

Analytes	CAS Number	Result	LQL	Units
Calcium	7440-70-2	12.7	0.387	mg/L
Magnesium	7439-95-4	4.05	0.150	mg/L
Potassium	7440-09-7	2.24	0.340	mg/L
Sodium	7440-23-5	313	0.400	mg/L

TOTAL METALS

Method: E200.7, Rev. 4.4

Prep Method: E200.7, Rev. 4.4


Date Prepared: 4/6/09
Date Analyzed: 4/7/09

Lab File ID: 040709AM
Method Blank: MB-18677

Dilution Factor: 1
Lab Fraction ID: 09-2262-01C

Analytes	CAS Number	Result	LQL	Units
Arsenic	7440-38-2	U	0.0500	mg/L
Barium	7440-39-3	0.126 B	0.00200	mg/L
Cadmium	7440-43-9	U	0.0100	mg/L
Chromium	7440-47-3	U	0.0100	mg/L
Iron	7439-89-6	1.80	0.0700	mg/L
Lead	7439-92-1	U	0.0730	mg/L
Manganese	7439-96-5	0.0155	0.00500	mg/L
Selenium	7782-49-2	U	0.100	mg/L


Analyst


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Definitions: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 4/14/2009

Evergreen Analytical, Inc.
 4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
 (303) 425-6021

Client Sample ID: Bergstrom
 Client Project ID:
 Date Collected: 4/3/09
 Date Received: 4/3/09

Lab Work Order: 09-2262
 Lab Sample ID: 09-2262-02
 Sample Matrix: Drinking Water

DISSOLVED METALS

Method: E200.7, Rev. 4.4

Prep Method: E200.7/SW3010A

Date Prepared: 4/10/09
 Date Analyzed: 4/11/09

Lab File ID: 041109AM
 Method Blank: MB-18744

Dilution Factor: 1
 Lab Fraction ID: 09-2262-02D

Analytes	CAS Number	Result	LQL	Units
Calcium	7440-70-2	173	0.387	mg/L
Magnesium	7439-95-4	67.7	0.150	mg/L
Potassium	7440-09-7	3.94	0.340	mg/L
Sodium	7440-23-5	312	0.400	mg/L

TOTAL METALS

Method: E200.7, Rev. 4.4

Prep Method: E200.7, Rev. 4.4


Date Prepared: 4/6/09
 Date Analyzed: 4/7/09

Lab File ID: 040709AM
 Method Blank: MB-18677

Dilution Factor: 1
 Lab Fraction ID: 09-2262-02C

Analytes	CAS Number	Result	LQL	Units
Arsenic	7440-38-2	U	0.0500	mg/L
Barium	7440-39-3	0.0180 B	0.00200	mg/L
Cadmium	7440-43-9	U	0.0100	mg/L
Chromium	7440-47-3	U	0.0100	mg/L
Iron	7439-89-6	U	0.0700	mg/L
Lead	7439-92-1	U	0.0730	mg/L
Manganese	7439-96-5	U	0.00500	mg/L
Selenium	7782-49-2	U	0.100	mg/L


 Analyst


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 Surrogate

Print Date: 4/14/2009

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 4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
 (303) 425-6021

Client Sample ID: Cummings
Client Project ID:
Date Collected: 4/3/2009
Date Received: 4/3/2009

Lab Work Order 09-2262
Lab Sample ID: 09-2262-01F
Sample Matrix: Drinking Water

AROMATIC VOLATILE ORGANICS

Method: SW8021B

Prep Method: SW5030B

Date Prepared: 4/6/2009


Lab File ID: TVB40406\005R

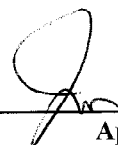
Dilution Factor: 1

Date Analyzed: 4/6/2009

Method Blank: MB4040609

Analytes	CAS Number	Result	LQL	Units
Methyl-t-butyl ether	1634-04-4	U	5.0	µg/L
Benzene	71-43-2	U	1.0	µg/L
Toluene	108-88-3	U	2.0	µg/L
Ethylbenzene	100-41-4	U	2.0	µg/L
m,p-Xylene	1330-20-7	U	2.0	µg/L
o-Xylene	95-47-6	U	2.0	µg/L
Surr: 1,2,4-Trichlorobenzene (S)	120-82-1	74	QC Limits: 60-140	%REC


 Analyst

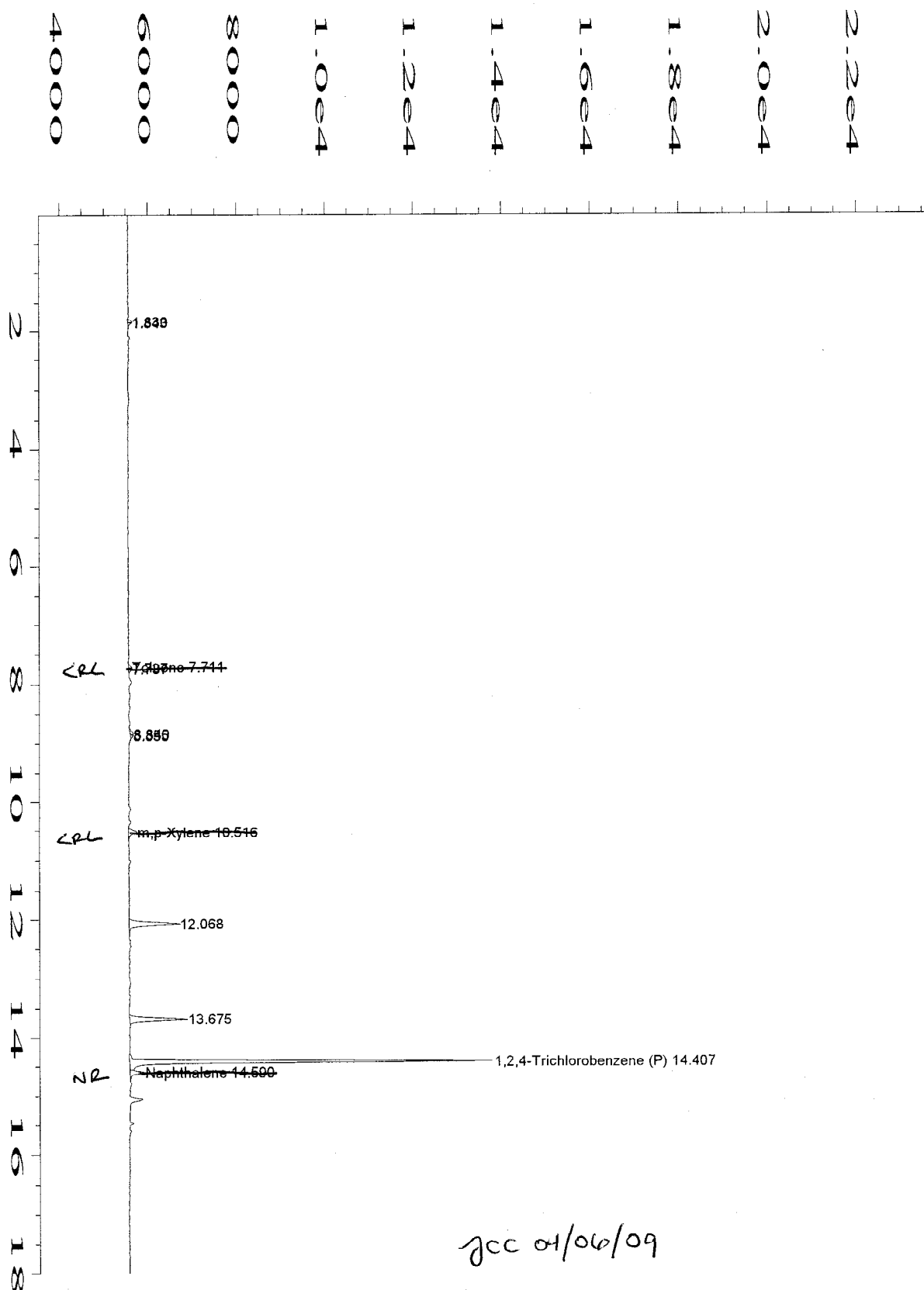

 Approved

Notes: Total Xylenes consist of three isomers, two of which co-elute. The Xylene RL is for a single peak. Confirmation analysis was not performed.

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Print Date: 4/7/2009



JCC 01/06/09

Data File Name	: C:\HPCHEM\1\DATA\TVB40406\005R0101.D	Page Number	: 1
Operator	: Jennifer Chapin	Vial Number	: 5
Instrument	: TVHBTEX4	Injection Number	: 1
Sample Name	: 09-2262-01F	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	TS40331.MTH
Acquired on	: 06 Apr 09 11:33 AM	Analysis Method	: BS40327.MTH
Report Created on:	06 Apr 09 11:51 AM	Sample Amount	: 0
Last Recalib on	: 30 MAR 09 10:23 AM	ISTD Amount	:
Multiplier	: 1		
Sample Info	: SAMP		
	DF=1		

Evergreen Analytical, Inc.
 4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
 (303) 425-6021

Client Sample ID: Bergstrom
Client Project ID:
Date Collected: 4/3/2009
Date Received: 4/3/2009

Lab Work Order 09-2262
Lab Sample ID: 09-2262-02F
Sample Matrix: Drinking Water

AROMATIC VOLATILE ORGANICS

Method: SW8021B

Prep Method: SW5030B

Date Prepared: 4/6/2009

Lab File ID: TVB40406\008R

Dilution Factor: 1

Date Analyzed: 4/6/2009

Method Blank: MB4040609

Analytes	CAS Number	Result	LQL	Units
Methyl-t-butyl ether	1634-04-4	U	5.0	µg/L
Benzene	71-43-2	U	1.0	µg/L
Toluene	108-88-3	U	2.0	µg/L
Ethylbenzene	100-41-4	U	2.0	µg/L
m,p-Xylene	1330-20-7	U	2.0	µg/L
o-Xylene	95-47-6	U	2.0	µg/L
Surr: 1,2,4-Trichlorobenzene (S)	120-82-1	73	QC Limits: 60-140	%REC

JCC

Analyst

[Signature]

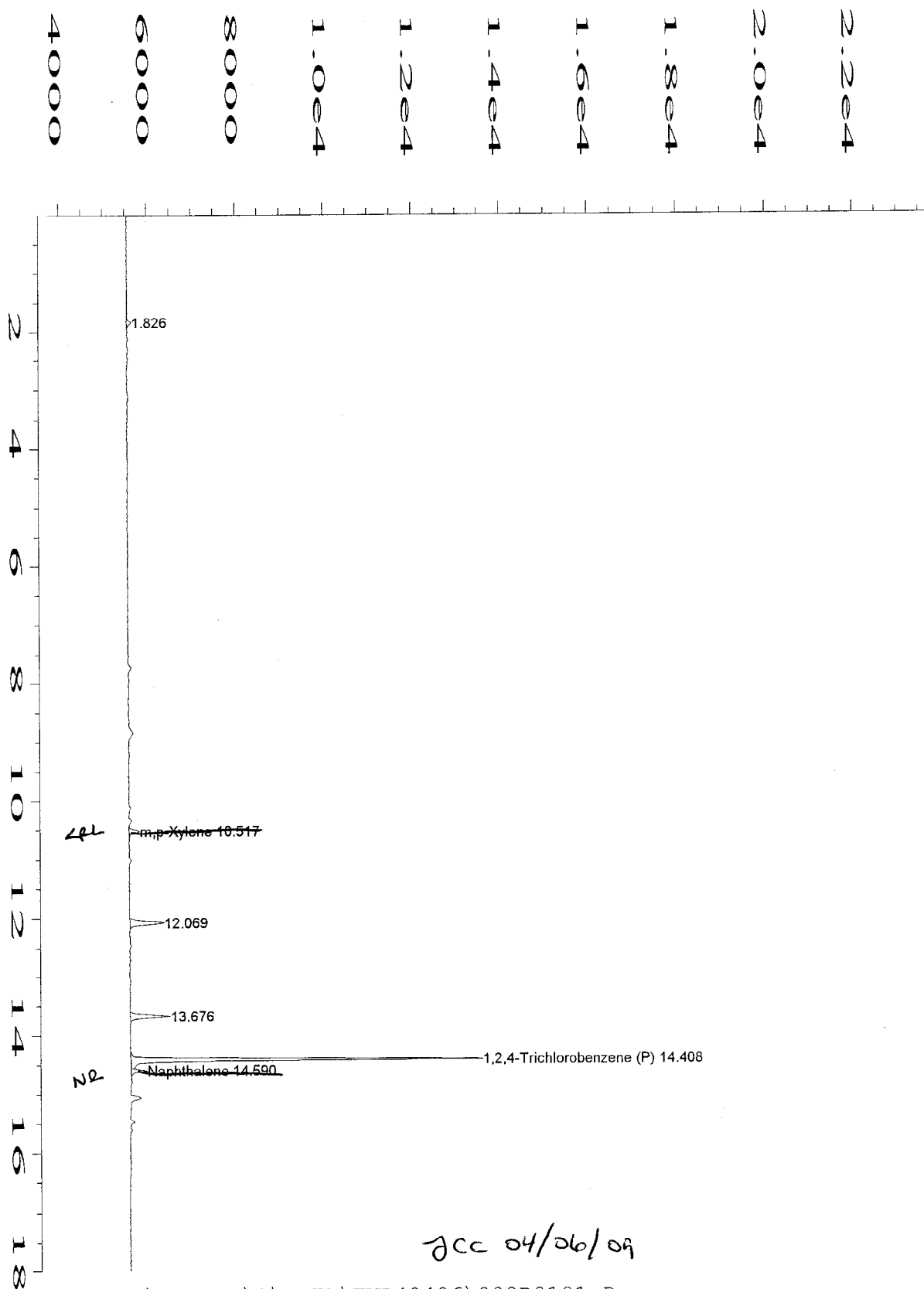
Approved

Notes: Total Xylenes consist of three isomers, two of which co-elute. The Xylene RL is for a single peak. Confirmation analysis was not performed.

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 S - Spike Recovery outside accepted limits
 U - Compound analyzed for but not detected
 X - See case narrative
 * - Value exceeded the Maximum Contamination Level (MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Definitions: LQL - Lower Quantitation Limit
 Surr - Surrogate

Print Date: 4/7/2009



Data File Name	: C:\HPCHEM\1\DATA\TVB40406\008R0101.D	Page Number	: 1
Operator	: Jennifer Chapin	Vial Number	: 8
Instrument	: TVHBTEX4	Injection Number	: 1
Sample Name	: 09-2262-02F	Sequence Line	: 1
Run Time Bar Code:		Instrument Method:	TS40331.MTH
Acquired on	: 06 Apr 09 01:17 PM	Analysis Method	: BS40327.MTH
Report Created on:	06 Apr 09 01:35 PM	Sample Amount	: 0
Last Recalib on	: 30 MAR 09 10:23 AM	ISTD Amount	:
Multiplier	: 1		
Sample Info	: SAMP		
	DF=1		

Evergreen Analytical, Inc.
 4036 Youngfield Street, Wheat Ridge, Colorado 80033-3862
 (303) 425-6021

Client Project ID

 Lab Order: 09-2262
 Units: mg/L

RSKSOP-175M Headspace

Method: RSKSOP175M

Methane

Prep Method: RSKSOP175M

Lab ID	Client ID	Matrix	Date Received	Collection Date	Date Prepared	Date Analyzed	Results	LQL	DF
09-2262-01G	Cummings	Drinking Water	4/3/09	4/3/09	4/7/09	4/7/09	14	0.040	50
09-2262-02G	Bergstrom	Drinking Water	4/3/09	4/3/09	4/7/09	4/7/09	0.0016	0.00080	1

Comments:

 VM
 Analyst


 Approved

Qualifiers: J - Indicates an estimated value when the compound is detected, but is below the LQL

H - Sample analysis exceeded analytical holding time

U - Compound analyzed for but not detected

X - See case narrative

* Value exceeds Maximum Contamination Level(MCL), TCLP limit, or if compound is undetected, LQL exceeds MCL.

Definitions: DF - Dilution Factor

LQL - Lower Quantitation Limit

Print Date: 4/7/2009

QUALITY ASSURANCE REPORTS

METHOD BLANKS (MB)

LABORATORY CONTROL SPIKES (LCS)

MATRIX SPIKES (MS/MSD)*

DUPLICATES (DUP)*

- **For Metals or Wet Chemistry analyses: only included if requested.**

Evergreen Analytical, Inc.

Date: 05-Apr-09

Work Order: 09-2262
Client Project ID:

ANALYTICAL QC SUMMARY REPORT

TestNo: E300.0

Sample ID: MB 04/03/09	Sample Type: MBLK	Test Code: ANIONS_Non	Run ID: IC-DX120_090403A	Prep Date: 4/3/09	Units: mg/L						
Batch ID: R46300	Test No: E300.0	File ID:	Analysis Date: 4/3/09	Seq No: 821909							
Analyte	Result	LQ L	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Chloride	0.35	0.50									J
Nitrite-N	0	0.061									
Nitrate-N	0	0.045									
Nitrite+Nitrate-N	0	0.061									
Sulfate	0	0.50									

Sample ID: LCS ALLT218076	Sample Type: LCS	Test Code: ANIONS_Non	Run ID: IC-DX120_090403A	Prep Date: 4/3/09	Units: mg/L						
Batch ID: R46300	Test No: E300.0	File ID:	Analysis Date: 4/3/09	Seq No: 821908							
Analyte	Result	LQ L	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Chloride	18.66	2.5	20	0.35	93.3	90	110	0	0		
Nitrite-N	6.026	0.31	6.09	0	98.9	90	110	0	0		
Nitrate-N	4.428	0.23	4.518	0	98	90	110	0	0		
Nitrite+Nitrate-N	10.45	0.31	10.61	0	98.5	90	110	0	0		
Sulfate	29.31	2.5	30	0	97.7	90	110	0	0		

Qualifiers:

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S - Spike Recovery outside acceptance limits
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R - RPD outside acceptance limits
B - Analyte detected in the associated Method Blank
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X - See case narrative

Evergreen Analytical, Inc.

Date: 09-Apr-09

Work Order: 09-2262
Client Project ID

ANALYTICAL QC SUMMARY REPORT

TestCode: CARB/BICARB_W

Sample ID: MBLK 04/06/09	Sample Type: MBLK	TestCode: CARB/BICAR	Run ID: ALK_090406A	Prep Date: 4/6/2009	Units: mg/L
Batch ID: R46305	TestNo: SM2320 B	FileID: 74	Analysis Date: 4/6/2009	SeqNo: 822008	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Bicarbonate	U	5.0			
Sample ID: LCS	Sample Type: LCS	TestCode: CARB/BICAR	Run ID: ALK_090406A	Prep Date: 4/6/2009	Units: mg/L
Batch ID: R46305	TestNo: SM2320 B	FileID: 75	Analysis Date: 4/6/2009	SeqNo: 822009	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Bicarbonate	101.6	5.0	100	2.098	102 90 110 0 0

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 H - Prep or analytical holding time exceeded
 X - See case narrative

Work Order: 09-2262
Client Project ID

ANALYTICAL QC SUMMARY REPORT

TestCode: F_W

Sample ID: MBLK 4/7/09	SampleType: MBLK	TestCode: F_W	Run ID: F_090407A	Prep Date: 4/7/2009	Units: mg/L
Batch ID: R46337	TestNo: SM 4500-F C	FileID: 47	Analysis Date: 4/7/2009	SeqNo: 822607	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Fluoride	U	0.20			
Sample ID: MBLK 4/7/09	SampleType: MBLK	TestCode: F_W	Run ID: F_090407A	Prep Date: 4/7/2009	Units: mg/L
Batch ID: R46337	TestNo: SM 4500-F C	FileID: 74	Analysis Date: 4/7/2009	SeqNo: 822630	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Fluoride	U	0.20			
Sample ID: LCS	SampleType: LCS	TestCode: F_W	Run ID: F_090407A	Prep Date: 4/7/2009	Units: mg/L
Batch ID: R46337	TestNo: SM 4500-F C	FileID: 48	Analysis Date: 4/7/2009	SeqNo: 822608	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Fluoride	9.814	0.20	10	0	98.1 95 105 0 0
Sample ID: LCS	SampleType: LCS	TestCode: F_W	Run ID: F_090407A	Prep Date: 4/7/2009	Units: mg/L
Batch ID: R46337	TestNo: SM 4500-F C	FileID: 75	Analysis Date: 4/7/2009	SeqNo: 822631	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Fluoride	10.42	0.20	10	0	104 95 105 0 0

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B - Analyte detected in the associated Method Blank
H - Prep or analytical holding time exceeded
X - See case narrative

Work Order: 09-2262
Client Project ID

ANALYTICAL QC SUMMARY REPORT

TestCode: TDS_W

Sample ID: MBLK 4/6/09	SamptType: MBLK	TestCode: TDS_W	Run ID: ANALYTICAL BALANCE_090406B	Prep Date: 4/6/2009	Units: mg/L
Batch ID: R46336	TestNo: SM 2540C	FieldID: 47	Analysis Date: 4/6/2009	SeqNo: 822583	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Dissolved Solids

U 10.0

Sample ID: LCS	SamptType: LCS	TestCode: TDS_W	Run ID: ANALYTICAL BALANCE_090406B	Prep Date: 4/6/2009	Units: mg/L
Batch ID: R46336	TestNo: SM 2540C	FieldID: 48	Analysis Date: 4/6/2009	SeqNo: 822584	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Dissolved Solids

398 10.0 400 0 99.5 90 110 0 0

Qualifiers:

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B - Analyte detected in the associated Method Blank
H - Prep or analytical holding time exceeded
X - See case narrative

Work Order: 09-2262
Client Project ID:

ANALYTICAL QC SUMMARY REPORT

BatchID: 18744

Sample ID: MB-18744	Sample Type: MBLK	TestCode: 200.7_D	Run ID: ICP-OPTIMA 5300 DV_090411A	Prep Date: 4/10/2009	Units: mg/L
	Batch ID: 18744	TestNo: E200.7, Rev.	FileID: 041109AM	Analysis Date: 4/11/2009	SeqNo: 824736
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Calcium	U	0.387			
Magnesium	U	0.150			
Potassium	U	0.340			
Sodium	U	0.400			
Sample ID: LCS-18744	Sample Type: LCS	TestCode: 200.7_D	Run ID: ICP-OPTIMA 5300 DV_090411A	Prep Date: 4/10/2009	Units: mg/L
	Batch ID: 18744	TestNo: E200.7, Rev.	FileID: 041109AM	Analysis Date: 4/11/2009	SeqNo: 824737
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Calcium	9.766	0.387	10	0	97.7 85 115 0 0
Magnesium	9.797	0.150	10	0	98 85 115 0 0
Potassium	9.973	0.340	10	0	99.7 85 115 0 0
Sodium	9.98	0.400	10	0	99.8 85 115 0 0

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X - See case narrative

Evergreen Analytical, Inc.

Date: 14-Apr-09

Work Order: 09-2262

Client Project ID:

ANALYTICAL QC SUMMARY REPORT

BatchID: 18677

Sample ID: MB-18677	Sample Type: MBLK	TestCode: 200.7_T	Run ID: ICP-OPTIMA 5300 DV_090407A	Prep Date: 4/6/2009	Units: mg/L						
Batch ID: 18677	TestNo: E200.7, Rev.	Field: 040709AM	Analysis Date: 4/7/2009	SeqNo: 822505							
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	Lowlimit	Hightlimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	U	0.0500									
Barium	0.003357	0.00200									
Cadmium	U	0.0100									
Chromium	U	0.0100									
Iron	U	0.0700									
Lead	U	0.0730									
Manganese	U	0.00500									
Selenium	U	0.100									

Sample ID: LCS-18677	Sample Type: LCS	Test Code: 200.7_T	Run ID: ICP-OPTIMA 5300 DV_090407A	Prep Date: 4/6/2009	Units: mg/L						
Batch ID: 18677	Test No: E200.7, Rev.	File ID: 040709AM	Analysis Date: 4/7/2009	SeqNo: 822506							
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	1.959	0.0500	2	0	97.9	85	115	0	0		
Barium	5.158	0.00200	5	0.003357	103	85	115	0	0		B
Cadmium	0.1985	0.0100	0.2	0	99.3	85	115	0	0		
Chromium	1.963	0.0100	2	0	98.1	85	115	0	0		
Iron	5.147	0.0700	5	0	103	85	115	0	0		
Lead	2.103	0.0730	2	0.009401	105	85	115	0	0		
Manganese	1.891	0.00500	2	0	94.5	85	115	0	0		
Selenium	2.03	0.100	2	0	101	85	115	0	0		

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 B - Analyte detected in the associated Method Blank
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 X - See case narrative

Work Order: 09-2262
Client Project ID:

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_W

Sample ID: MB4040609	Sample Type: MBLK	TestCode: 8021_W	Run ID: TVHBTEX4_090406A	Prep Date: 4/6/2009	Units: µg/L
	Batch ID: R46315	TestNo: SW8021B	FileID: TVB404061003R	Analysis Date: 4/6/2009	SeqNo: 822130
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual
Methyl-t-butyl ether	U	5.0			
Benzene	U	1.0			
Toluene	U	2.0			
Ethylbenzene	U	2.0			
m,p-Xylene	U	2.0			
o-Xylene	U	2.0			
Surr: 1,2,4-Trichlorobenzene (S)	71.22	0	100	0	71.2 60 140 0 0

Sample ID: LCS4040609	Sample Type: LCS	TestCode: 8021_W	Run ID: TVHBTEX4_090406A	Prep Date: 4/6/2009	Units: µg/L
	Batch ID: R46315	TestNo: SW8021B	FileID: TVB404061004R	Analysis Date: 4/6/2009	SeqNo: 822131
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual
Methyl-t-butyl ether	34.4	5.0	31.2	0	110 70 130 0 0
Benzene	24.24	1.0	25.5	0	95.1 70 130 0 0
Toluene	174.3	2.0	183.6	0	95 70 130 0 0
Ethylbenzene	36.18	2.0	36.8	0	98.3 70 130 0 0
m,p-Xylene	149.5	2.0	136.3	0	110 70 130 0 0
o-Xylene	57.86	2.0	57.2	0	101 70 130 0 0
Surr: 1,2,4-Trichlorobenzene (S)	81.01	0	100	0	81 60 140 0 0

Sample ID: 09-2262-01FMS	Sample Type: MS	TestCode: 8021_W	Run ID: TVHBTEX4_090406A	Prep Date: 4/6/2009	Units: µg/L
Client ID: Cummings	Batch ID: R46315	TestNo: SW8021B	FileID: TVB404061006R	Analysis Date: 4/6/2009	SeqNo: 822133
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC Lowlimit Highlimit RPD Ref Val %RPD RPDlimit Qual
Methyl-t-butyl ether	32.35	5.0	31.2	0	104 65 132 0 0
Benzene	22.9	1.0	25.5	0	89.8 70 130 0 0
Toluene	164.2	2.0	183.6	0	89.4 70 130 0 0
Ethylbenzene	33.69	2.0	36.8	0	91.5 62 130 0 0
m,p-Xylene	139.5	2.0	136.3	0	102 70 134 0 0

Qualifiers: U - Not detected at or above the Reporting Limit
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S - Spike Recovery outside acceptance limits
E - Extrapolated value, value exceeds calibration range.

R - RPD outside acceptance limits
B - Analyte detected in the associated Method Blank
H - Prep or analytical holding time exceeded
X - See case narrative

Work Order: 09-2262
Client Project ID:

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021_W

Sample ID: 09-2262-01FMS	Sample Type: MS	TestCode: 8021_W	Run ID: TVHBTEx4_090406A	Prep Date: 4/6/2009	Units: µg/L
Client ID: Cummings	Batch ID: R46315	TestNo: SW8021B	FileID: TVB404061006R	Analysis Date: 4/6/2009	SeqNo: 822133
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
o-Xylene	53.6	2.0	57.2	0	93.7 63 130 0 0
Surr: 1,2,4-Trichlorobenzene (S)	85.84	0	100	0	85.8 60 140 0 0

Sample ID: 09-2262-01FMSD	Sample Type: MSD	TestCode: 8021_W	Run ID: TVHBTEx4_090406A	Prep Date: 4/6/2009	Units: µg/L
Client ID: Cummings	Batch ID: R46315	TestNo: SW8021B	FileID: TVB404061007R	Analysis Date: 4/6/2009	SeqNo: 822148
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Methyl-t-butyl ether	32.25	5.0	31.2	0	103 65 132 32.35 0.325 30
Benzene	22.91	1.0	25.5	0	89.9 70 130 22.9 0.0699 30
Toluene	164.9	2.0	183.6	0	89.8 70 130 164.2 0.422 30
Ethylbenzene	34.38	2.0	36.8	0	93.4 62 130 33.69 2.01 30
m,p-Xylene	139.6	2.0	136.3	0	102 70 134 139.5 0.0903 30
o-Xylene	54.82	2.0	57.2	0	95.8 63 130 53.6 2.25 30
Surr: 1,2,4-Trichlorobenzene (S)	87.94	0	100	0	87.9 60 140 0 0

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X - See case narrative

Evergreen Analytical, Inc.

Date: 07-Apr-09

Work Order: 09-2262
 Client Project ID:

ANALYTICAL QC SUMMARY REPORT

TestCode: MEEP_W

Sample ID: GB040709	SampleType: MBLK	TestCode: MEEP_W	Run ID: FID4_090407A	Prep Date: 4/7/2009	Units: mg/L
Batch ID: GAS040709	TestNo: RSKSOP175	FileID: FB004	Analysis Date: 4/7/2009	SeqNo: 822566	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Methane U 0.00080

Sample ID: LCS040709	SampleType: LCS	TestCode: MEEP_W	Run ID: FID4_090407A	Prep Date: 4/7/2009	Units: mg/L
Batch ID: GAS040709	TestNo: RSKSOP175	FileID: FB005	Analysis Date: 4/7/2009	SeqNo: 822567	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Methane 0.6245 0.0080 0.5094 0 123 70 130 0 0

Sample ID: 09-2262-02GMS	SampleType: MS	TestCode: MEEP_W	Run ID: FID4_090407A	Prep Date: 4/7/2009	Units: mg/L
Client ID: Bergstrom	Batch ID: GAS040709	TestNo: RSKSOP175	FileID: FB021	Analysis Date: 4/7/2009	SeqNo: 822554
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Methane 0.5842 0.0080 0.5094 0.001575 115 70 130 0 0

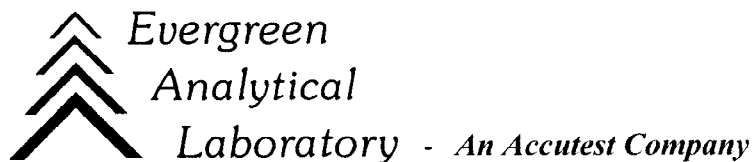
Sample ID: 09-2262-02GMSD	SampleType: MSD	TestCode: MEEP_W	Run ID: FID4_090407A	Prep Date: 4/7/2009	Units: mg/L
Client ID: Bergstrom	Batch ID: GAS040709	TestNo: RSKSOP175	FileID: FB022	Analysis Date: 4/7/2009	SeqNo: 822555
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Methane 0.5936 0.0080 0.5094 0.001575 117 70 130 0.5842 1.58 30

Qualifiers:

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April 16, 2009

Bob Chesson
Colorado Oil & Gas Conservation Comm.
1120 Lincoln St #801
Denver, CO 80203

Lab Work Order: 09-2262
Client Project ID:

Dear Bob Chesson:

Enclosed are the analytical results for the samples shown in the Laboratory Work Order Summary. The invoice is included with this report or has been mailed to another party as indicated on the chain of custody.

The enclosed data for testing performed at Evergreen Analytical Laboratory (EAL) have been reviewed for quality assurance. A case narrative is included to describe any anomalies associated with the samples or data.

EAL will dispose of all samples 44 days from the sample receipt date. If you want samples returned, please advise us by mail or fax as soon as possible.

A copy of this project report and supporting data will be retained for a period of five years unless we are otherwise advised by you. A document retrieval charge will apply.

Thank you for using the services of Evergreen Analytical. If you have any questions concerning the analytical data, please contact me. Please direct other questions to Client Services.

Sincerely,



Joseph J Egry IV/ Carl Smits
Quality Assurance