

July 10, 2009

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

Lab Work Order: 09-4546
Client Project ID: Complaint 200213187

Dear Peter Gintautas:

Enclosed are the analytical results for the samples shown in the Laboratory Work Order Summary.

THE INVOICE WILL BE MAILED FROM OUR NEW JERSEY OFFICE UNDER SEPARATE COVER.

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

Accutest 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 Accutest Laboratories. If you have any questions concerning the analytical data, please contact me. Please direct other questions to Client Services.

Sincerely,



Joseph J Egry IV/ Tiffany Pham
Quality Assurance

WORK ORDER Summary**Evergreen Analytical, Inc.****09-4546****Rpt To:** Peter Gintautas**Email To:** peter.gintautas@state.co.us

7/10/2009 1:10:57 PM

Colorado Oil & Gas Conservation
Comm.

1120 Lincoln St #801

Denver, CO 80203

(719) 846-3091

Client Project ID: Complaint 200213187**QC Level:** Level 1**Comments**

Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Test Code	Test Name	Hold	MS	Date Due	Hold Time
09-4546-01A	SFPD WW	Water	6/22/09 1033	6/23/09	8260_W *	8260B: VOA HSL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7/08/09	7/06/09
09-4546-01B	SFPD WW	Water	6/22/09 1033	6/23/09	MEEP_W *	RSK175M: MEE	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	7/06/09
09-4546-01C	SFPD WW	Water	6/22/09 1033	6/23/09	200.7_D *	200.7: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	12/19/09
09-4546-01C	SFPD WW	Water	6/22/09 1033	6/23/09	200.8_D *	200.8: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	12/19/09
09-4546-01D	SFPD WW	Water	6/22/09 1033	6/23/09	ANIONS_NonDW *	300.0: Anions by IC	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	6/24/09
09-4546-01D	SFPD WW	Water	6/22/09 1033	6/23/09	C/A_BAL	Cation / Anion Balance calculation	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	
09-4546-01E	SFPD WW	Water	6/22/09 1033	6/23/09	ALK_WGRP *	Alkalinity	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	7/06/09
09-4546-01E	SFPD WW	Water	6/22/09 1033	6/23/09	COND_W	Specific Conductance @ 25°C	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	7/20/09
09-4546-01E	SFPD WW	Water	6/22/09 1033	6/23/09	F_W	Fluoride	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	7/20/09
09-4546-01E	SFPD WW	Water	6/22/09 1033	6/23/09	PH_DW	E150.1 pH	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	6/23/09
09-4546-01E	SFPD WW	Water	6/22/09 1033	6/23/09	TDS_W	Total Dissolved Solids (TDS)	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	6/29/09
09-4546-01F	SFPD WW	Water	6/22/09 1033	6/23/09	6010_D *	6010: Dissolved Metals	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	12/19/09
09-4546-01F	SFPD WW	Water	6/22/09 1033	6/23/09	SAR_W	Sodium Adsorption Ratio for Water	<input type="checkbox"/>	<input type="checkbox"/>	7/08/09	12/19/09
09-4546-02A	Trip Blank	Trip Blank	6/22/09 0000	6/23/09	8260_W *	8260B: VOA HSL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7/08/09	7/06/09



225 Commerce Drive Fort Collins, CO 80524
800-443-1511 or (970) 490-1511 (970) 490-1522 Fax

Accession Number (LAB ID)

Chain-of-Custody

Date 7/21/09 Page 1 of 1

Originator: Retain pink copy!

Project Name/No.: _____ Sampler(s): Granta 25 Turnaround (circle one) Standard or Rush (Due _____) Dispose: Date 3/20/06 or Return to Client _____

Report To: Peter Gintautas
Phone:
Fax: 714 846-3091
E-mail: peter.gintautas
Company:
Address: Colo. Oil & Gas Cons. Comm.

complaint 2002-13187

Circle method (right); provide additional information as needed (comments).

[illegible]

WO# 09-4546 BOF# NA
C/S (O) NA C/S (I) C 1 UPR
Seals present X/N/NA Intact X/N
Pres. X/N/NA Hd Sp X/N/NA Loc _____
Temp (C) 2.5 Container _____ By _____

* Time Zone: EST CST (MST) PST Matrix Key: O = oil, S = soil, NS = non-soil solid, W = water, L = liquid, E = extract, F = filter

Comments:

Amians = Br, Cl, F, NO₂, NO₃, SO₄
200.7 = Ba, Be, B, Ca, Cr, Co, Cu, Fe, Li, Mg, Mn, Ni, K, Na, Sr, Zn
200.8 = Sb, As, Cd, Pb, Mo, Se, Ag, Te, U

Relinquished By: _____ (1) Signature <u>[Signature]</u> Printed Name <u>Peter Giattanas</u> Date <u>22 Jun 09</u> Time <u>16:50</u> Company <u>10611</u>	Relinquished By: _____ (2) Signature _____ Printed Name _____ Date _____ Time _____ Company _____
Received By: _____ (1) Signature _____ Printed Name _____ Date _____ Time _____ Company _____	Received By: _____ (2) Signature <u>[Signature]</u> Printed Name <u>J Decht</u> Date <u>6/23/09</u> Time <u>11:00</u> Company _____

Evergreen Analytical, Inc.

Date: 10-Jul-09

Lab Order: 09-4546

Client Project ID Complaint 200213187

CASE NARRATIVE

SAMPLE RECEIVING

Custody seals were present and intact.

The temperature of the sample(s) upon arrival was 2.5°C.

Sample(s) were received in good condition and in the proper container.

The pH samples were received outside of holding time.

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

VOC sample(s) were received with no headspace present. JD/JE

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. EKH Due to equipment failures and holding times 8260 samples were sent to Accutest New Jersey for analysis on June 30th. SG

GENERAL CHEMISTRY

Method E300.0: The sample has a high conductivity level and a high Chloride level, 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 Bromide and Nitrite-N. There are no other anomalies to report. BNP/MM/JE

Method E150..1: The pH analysis was done outside of holding time for RCRA samples (H). There are no other anomalies to report. JE

METALS ANALYSIS

Method 200.7_D: The matrix spike and matrix spike duplicate (MS/MSD; on another clients sample) recoveries of several analytes are outside the QC limits. All recoveries of these analytes for the laboratory control spike (LCS) are within QC limits, proving the analysis is in control. There are no other anomalies to report. JT/JE

GAS CHROMATOGRAPHY

Evergreen Analytical, Inc.**Date:** 10-Jul-09**Lab Order:** 09-4546**Client Project ID** Complaint 200213187**CASE NARRATIVE**

Method RSK-175: The laboratory control spike and laboratory control spike duplicate (LCS/LCSD) and matrix spike (MS; on another client's sample) recoveries for Ethene are above the QC limits. Since the bias for Ethene is high and the sample is non-detect this analyte, no further action is required. There are no other anomalies to report. VM/JE

Sample Summary

Accutest Mountain States

Job No: D4546

COGCCCCOD: COGCC Denver, CO
Project No: Complaint 200213187

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
D4546-1	06/22/09	10:33	06/23/09	AQ Water	SFPD WW
D4546-1F	06/22/09	10:33	06/23/09	AQ Water Filtered	SFPD WW
D4546-2	06/22/09	00:00	06/23/09	AQ Trip Blank Water	TRIP BLANK

Report of Analysis

Page 1 of 2

Client Sample ID:	SFPD WW	Date Sampled:	06/22/09
Lab Sample ID:	D4546-1	Date Received:	06/23/09
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	COGCCCCOD: COGCC Denver, CO		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1A78436.D	1	07/06/09	TGE	n/a	n/a	V1A3342
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA HSL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	3.1	1.0	0.22	ug/l	
75-25-2	Bromoform	19.5	4.0	0.23	ug/l	
74-83-9	Bromomethane	0.42	2.0	0.30	ug/l	J
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	1.4	ug/l	
67-66-3	Chloroform	1.7	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	7.9	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	

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

Page 2 of 2

Client Sample ID:	SFPD WW	Date Sampled:	06/22/09
Lab Sample ID:	D4546-1	Date Received:	06/23/09
Matrix:	AQ - Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	COGCCCCOD: COGCC Denver, CO		

VOA HSL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
108-05-4	Vinyl Acetate	ND	10	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		76-120%
17060-07-0	1,2-Dichloroethane-D4	90%		64-135%
2037-26-5	Toluene-D8	102%		76-117%
460-00-4	4-Bromofluorobenzene	92%		72-122%

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

Page 1 of 2

Client Sample ID:	TRIP BLANK	Date Sampled:	06/22/09
Lab Sample ID:	D4546-2	Date Received:	06/23/09
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	COGCCCCOD: COGCC Denver, CO		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3A65931.D	1	07/02/09	KPP	n/a	n/a	V3A2823
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA HSL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	2.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.22	ug/l	
75-25-2	Bromoform	ND	4.0	0.23	ug/l	
74-83-9	Bromomethane	ND	2.0	0.30	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	1.6	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.26	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.39	ug/l	
75-00-3	Chloroethane	ND	1.0	0.37	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	1.4	ug/l	
67-66-3	Chloroform	ND	1.0	0.23	ug/l	
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.22	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.26	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.25	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.28	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.29	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.33	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.40	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.22	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.25	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.27	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.27	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.4	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	0.86	ug/l	
75-09-2	Methylene chloride	ND	2.0	0.30	ug/l	
100-42-5	Styrene	ND	5.0	0.58	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.27	ug/l	

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

Page 2 of 2

Client Sample ID:	TRIP BLANK	Date Sampled:	06/22/09
Lab Sample ID:	D4546-2	Date Received:	06/23/09
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	COGCCCOD: COGCC Denver, CO		

VOA HSL List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-88-3	Toluene	ND	1.0	0.30	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.26	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.23	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
108-05-4	Vinyl Acetate	ND	10	1.3	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.44	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		76-120%
17060-07-0	1,2-Dichloroethane-D4	92%		64-135%
2037-26-5	Toluene-D8	94%		76-117%
460-00-4	4-Bromofluorobenzene	86%		72-122%

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

nw wtb

Job Number: D4546 Client project: Complaint 200213187
 Account: COGCCOD Colorado Oil & Gas, Denver
 Project: COGCCOD1025 COGCC Denver, CO
 Report to: Peter Gintautas MC Date: 08-JUL-09 Deliv: CONGEN StateCode: CO

Client
 Project
 Deliverables
 Mailing
 Test
 Metals DWS46

JAZZ-188

Sample Number	Client ID	Sample Name	Sample Class	Lab Date	Lab Time	Lab Result
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D4546-1	→ SYPD NW	NW	23-JUN-09	22-JUN-09	10:33	14	08-JUL-09	BRO, CHL, ENERGY, P, METDIG, MISC, NO2NO2, NO2NO3, PH, SAR, SCOM, SHIPPING, SO4, TDS, V801SDGMS, V826KSL, XCARBICALK
D4546-1F	SYPD NW	NW	23-JUN-09	22-JUN-09	10:33	14	08-JUL-09	ACMS, ARMS, B, BA, BE, CA, COMS, CO, CR, CU, FE, FILTERMET, K, LI, METDIG, MO, MM, MONS, MA, MI, PMS, SEMS, SEMS, SR, TMS, UMS, ZN
D4546-2	→ TRIP BLANK	WB	23-JUN-09	22-JUN-09	00:00	14	08-JUL-09	V826KSL

Comments: D4546-1
 Misc- Cation/ Anion balance calculation
 Package AQ XCARBICALK - ALK, BIC, CAR

EMAIL Address:
 Peter Gintautas
 Colorado Oil & Gas, Denver
 1120 Lincoln Street #801
 Denver, CO 80203 (303)846-3091
 peter.gintautas@state.co.us

REPORTING Address:
 Peter Gintautas
 Colorado Oil & Gas, Denver
 213 Corundum Road
 Trinidad, CO 81082 (719)846-3091

INVOICE/UD Address:
 Margaret Ash
 Colorado Oil & Gas, Denver
 1120 Lincoln Street #801
 Denver, CO 80203 (303)894-2100

2 VIALS

2282

reling by: Fedex rec'd by: PR. 7/1/09 @ 10:30
 3.2°C

Login:	_____	Date:	_____
Login Review:	_____	Date:	_____
CS Review:	_____	Date:	_____
ID Review:	_____	Date:	_____



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D4546 Client: _____ Immediate Client Services Action Required: No
Date / Time Received: 7/1/2009 Delivery Method: _____ Client Service Action Required at Login: No
Project: _____ No. Coolers: 1 Airbill #'s: _____

Cooler Security Y or N Y or N
1. Custody Seals Present: ☒ ☐ 3. COC Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐ 4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature Y or N
1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: Infrared gun
3. Cooler media: Ice (bag)

Quality Control Preservation Y or N N/A
1. Trip Blank present / cooler: ☒ ☐
2. Trip Blank listed on COC: ☒ ☐
3. Samples preserved properly: ☒ ☐
4. VOCs headspace free: ☐ ☐ ☒

Sample Integrity - Documentation Y or N
1. Sample labels present on bottles: ☒ ☐
2. Container labeling complete: ☒ ☐
3. Sample container label / COC agree: ☒ ☐

Sample Integrity - Condition Y or N
1. Sample recvd within HT: ☒ ☐
2. All containers accounted for: ☒ ☐
3. Condition of sample: Intact

Sample Integrity - Instructions Y or N N/A
1. Analysis requested is clear: ☒ ☐
2. Bottles received for unspecified tests: ☐ ☒
3. Sufficient volume recvd for analysis: ☒ ☐
4. Compositing instructions clear: ☐ ☐ ☒
5. Filtering instructions clear: ☐ ☐ ☒

Comments

Accutest Laboratories
V: 732.329.0200

2235 US Highway 130
F: 732.329.3499

Dayton, New Jersey
www.accutest.com

D4546: Chain of Custody

Page 2 of 2

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

Client Sample ID: SFPD WW
Client Project ID: Complaint 200213187
Date Collected: 6/22/09
Date Received: 6/23/09

Lab Work Order: 09-4546
Lab Sample ID: 09-4546-01
Sample Matrix: Water

RSKSOP-175M HEADSPACE

Method: RSKSOP175M

Prep Method: RSKSOP175M

Date Prepared: 6/29/09
Date Analyzed: 6/29/09

Lab File ID: FB235
Method Blank: GB062909

Dilution Factor: 1
Lab Fraction ID: 09-4546-01B

Analytes	CAS Number	Result	LQL	Units
Ethane	74-84-0	0.0021	0.0016	mg/L
Ethene	74-85-1	U	0.0024	mg/L

Date Prepared: 6/29/09
Date Analyzed: 6/29/09

Lab File ID: FB239
Method Blank: GB062909

Dilution Factor: 10
Lab Fraction ID: 09-4546-01B

Analytes	CAS Number	Result	LQL	Units
Methane	74-82-8	3.1	0.0080	mg/L

VM

Analyst



Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
 E - Extrapolated value. Value exceeds calibration range
 H - Sample analysis exceeded analytical holding time
 J - Indicates an estimated value when the compound is detected, but is below the LQL
 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: NA - Not Applicable
 LQL - Lower Quantitation Limit
 Surr - Surrogate

Print Date: 06/29/09

EVERGREEN ANALYTICAL, INC.
 4036 Youngfield St., Wheat Ridge, CO 80033
 (303)425-6021

Anion-Cation (Ion) Balance - Method 1030, Standard Methods, 20th Ed.

EAL Sample ID	09-4546-01D		09-		09-		09-		09-	
Client Sample ID	SFPD WW									
Sample Result	mg/L	Meq/L	mg/L	Meq/L	mg/L	Meq/L	mg/L	Meq/L	mg/L	Meq/L
<i>Anions</i>										
Cl	52.3	1.475		0.000		0.000		0.000		0.000
SO ₄	39.2	0.816		0.000		0.000		0.000		0.000
HCO ₃ as CaCO ₃	292	5.835		0.000		0.000		0.000		0.000
CO ₃ as CaCO ₃		0.000		0.000		0.000		0.000		0.000
NO ₃	3.62	0.058		0.000		0.000		0.000		0.000
NO ₃ as N		0.000		0.000		0.000		0.000		0.000
Other		0.000		0.000		0.000		0.000		0.000
Anions Total		8.184		0.000		0.000		0.000		0.000
<i>Cations</i>										
Ca	60.0	2.994		0.000		0.000		0.000		0.000
Mg	5.57	0.458		0.000		0.000		0.000		0.000
K	1.43	0.037		0.000		0.000		0.000		0.000
Na	97	4.224		0.000		0.000		0.000		0.000
Other		0.000		0.000		0.000		0.000		0.000
Cations Total		7.713		0.000		0.000		0.000		0.000
Ion Balance										
% Difference	2.97									

$$\% \text{ difference} = 100 \times \frac{(\text{sum cations} - \text{sum anions})}{(\text{sum cations} + \text{sum anions})}$$


 Approved

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

114

Client Sample ID: SFPD WW
Client Project ID: Complaint 200213187
Date Collected: 6/22/09
Date Received: 6/23/09

Lab Work Order: 09-4546
Lab Sample ID: 09-4546-01
Sample Matrix: Water

DISSOLVED METALS

Method: E200.7, Rev. 4.4

Prep Method: E200.7/SW3010A

Date Prepared: 6/29/09
Date Analyzed: 6/30/09

Lab File ID: 062909AM
Method Blank: MB-19704

Dilution Factor: 1
Lab Fraction ID: 09-4546-01C

Analytes	CAS Number	Result	LQL	Units
Barium	7440-39-3	0.272	0.00200	mg/L
Beryllium	7440-41-7	U	0.000450	mg/L
Boron	7440-42-8	0.0227	0.0200	mg/L
Calcium	7440-70-2	60.0	0.387	mg/L
Chromium	7440-47-3	U	0.0100	mg/L
Cobalt	7440-48-4	U	0.00500	mg/L
Copper	7440-50-8	U	0.00500	mg/L
Iron	7439-89-6	U	0.0700	mg/L
Magnesium	7439-95-4	5.57	0.150	mg/L
Manganese	7439-96-5	U	0.00500	mg/L
Nickel	7440-02-0	U	0.0300	mg/L
Potassium	7440-09-7	1.43	0.340	mg/L
Sodium	7440-23-5	97.1	0.400	mg/L
Zinc	7440-66-6	U	0.0300	mg/L

Date Prepared: 6/29/09
Date Analyzed: 7/7/09

Lab File ID: 062709AM
Method Blank: MB-19704

Dilution Factor: 1
Lab Fraction ID: 09-4546-01C

Analytes	CAS Number	Result	LQL	Units
Lithium	7439-93-2	0.0141	0.00200	mg/L
Strontium	7440-24-6	1.23	0.000500	mg/L



Analyst



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Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value. Value exceeds calibration range
H - Sample analysis exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
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: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 07/09/09

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

015

Client Sample ID: SFPD WW
Client Project ID: Complaint 200213187
Date Collected: 6/22/09
Date Received: 6/23/09

Lab Work Order: 09-4546
Lab Sample ID: 09-4546-01
Sample Matrix: Water

DISSOLVED METALS

Method: E200.8

Prep Method: E200.8

Date Prepared: 6/25/09
Date Analyzed: 7/4/09

Lab File ID: 090704A.B\114SMPL.D
Method Blank: MB-19662

Dilution Factor: 1
Lab Fraction ID: 09-4546-01C

Analytes	CAS Number	Result	LQL	Units
Antimony	7440-36-0	U	0.00200	mg/L
Arsenic	7440-38-2	U	0.00200	mg/L
Cadmium	7440-43-9	U	0.000500	mg/L
Lead	7439-92-1	U	0.00100	mg/L
Molybdenum	7439-98-7	U	0.00500	mg/L
Selenium	7782-49-2	U	0.00200	mg/L
Silver	7440-22-4	U	0.000200	mg/L
Thallium	7440-28-0	U	0.00100	mg/L
Uranium	7440-61-1	0.00114	0.00100	mg/L

DISSOLVED METALS

Method: SW6010B

Prep Method: E200.7/SW3010A

Date Prepared: 6/29/09
Date Analyzed: 6/30/09

Lab File ID: 062909PM
Method Blank: MB-19692

Dilution Factor: 1
Lab Fraction ID: 09-4546-01F

Analytes	CAS Number	Result	LQL	Units
Calcium	7440-70-2	59	0.39	mg/L
Magnesium	7439-95-4	5.6	0.15	mg/L
Sodium	7440-23-5	100	0.40	mg/L

SODIUM ADSORPTION RATIO

Method: USDA

Prep Method:

Date Prepared: 6/29/09
Date Analyzed: 7/7/09

Dilution Factor: 1
Lab Fraction ID: 09-4546-01F

Analytes	CAS Number	Result	LQL	Units
Sodium-Adsorption-Ratio		3.3	0.10	ratio


Analyst


Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value. Value exceeds calibration range
H - Sample analysis exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
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: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 07/09/09

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

816

Client Sample ID: SFPD WW
Client Project ID: Complaint 200213187
Date Collected: 6/22/09 1033
Date Received: 6/23/09

Lab Work Order: 09-4546
Lab Sample ID: 09-4546-01
Sample Matrix: Water

ANIONS BY IC

Method: E300.0

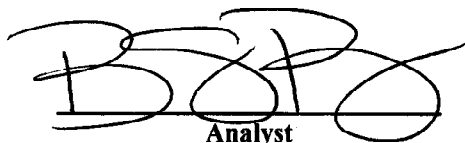
Prep Method:

Date Prepared: 6/24/09
Date Analyzed: 6/24/09 0934

Lab File ID: 09
Method Blank: MB 06/24/09

Dilution Factor: 2
Lab Fraction ID: 09-4546-01D

Analytes	CAS Number	Result	LQL	Units
Chloride	7647-14-5	52.3	1.0	mg/L
Nitrite		U	0.40	mg/L
Bromide	7647-15-6	U	0.40	mg/L
Nitrate		3.62	0.40	mg/L
Sulfate	7778-80-2	39.2	1.0	mg/L


Analyst


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Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value. Value exceeds calibration range
H - Sample analysis exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
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: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 6/25/2009

917

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

Client Sample ID: SFPD WW
Client Project ID: Complaint 200213187
Date Collected: 6/22/09 1033
Date Received: 6/23/09

Lab Work Order: 09-4546
Lab Sample ID: 09-4546-01
Sample Matrix: Water

ALKALINITY

Method: SM2320B

Prep Method:

Date Prepared: 6/25/09

Lab File ID: 7

Dilution Factor: 1

Date Analyzed: 6/25/09

Method Blank: MBLK 062509

Lab Fraction ID: 09-4546-01E

Analytes	CAS Number	Result	LQL	Units
Total Alkalinity		292	5.0	mg/L CaCO ₃
Bicarbonate		292	5.0	mg/L CaCO ₃
Carbonate		U	5.0	mg/L CaCO ₃

SPECIFIC CONDUCTANCE @ 25°C

Method: SM2510 B

Prep Method:

Date Prepared: 6/25/09

Lab File ID: 4

Dilution Factor: 1

Date Analyzed: 6/25/09

Lab Fraction ID: 09-4546-01E

Analytes	CAS Number	Result	LQL	Units
Specific Conductance		716	1.00	µmhos/cm

FLUORIDE

Method: SM 4500-F C

Prep Method:

Date Prepared: 6/29/09

Lab File ID: 14

Dilution Factor: 1

Date Analyzed: 6/29/09

Method Blank: MBLK 06/29/09

Lab Fraction ID: 09-4546-01E

Analytes	CAS Number	Result	LQL	Units
Fluoride	16984-48-8	2.0	0.20	mg/L

E150.1 PH

Method: E150.1

Prep Method:

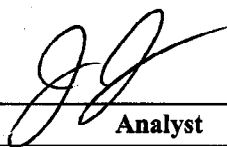
Date Prepared: 6/23/09

Dilution Factor: 1

Date Analyzed: 6/23/09 1525

Lab Fraction ID: 09-4546-01E

Analytes	CAS Number	Result	LQL	Units
pH		7.45 H	1.00	pH Units



Analyst



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Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
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H - Sample analysis exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
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: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 7/2/2009

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

818

Client Sample ID: SFPD WW
Client Project ID: Complaint 200213187
Date Collected: 6/22/09 1033
Date Received: 6/23/09

Lab Work Order: 09-4546
Lab Sample ID: 09-4546-01
Sample Matrix: Water

TOTAL DISSOLVED SOLIDS (TDS)

Method: SM 2540C

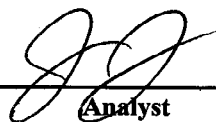
Prep Method:

Date Prepared: 6/24/09
Date Analyzed: 6/24/09

Lab File ID: 68
Method Blank: MBLK 2062409

Dilution Factor: 1
Lab Fraction ID: 09-4546-01E

Analytes	CAS Number	Result	LQL	Units
Total Dissolved Solids		496	10.0	mg/L



Analyst



Approved

Qualifiers: B - Analyte detected in the associated Method Blank, value not subtracted from result
E - Extrapolated value. Value exceeds calibration range
H - Sample analysis exceeded analytical holding time
J - Indicates an estimated value when the compound is detected, but is below the LQL
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: NA - Not Applicable
LQL - Lower Quantitation Limit
Surr - Surrogate

Print Date: 7/2/2009

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 or if performed on this client's samples.

Evergreen Analytical, Inc.

Date: 29-Jun-09

Work Order: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: MEEP_W

Sample ID: GB062909	SampType: MBLK	TestCode: MEEP_W	Run ID: FID4_090629A	Prep Date: 06/29/09	Units: mg/L						
	Batch ID: GAS062909	TestNo: RSKSOP175	FileID: FB228	Analysis Date: 06/29/09	SeqNo: 864508						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Ethane	U	0.0016									
Ethene	U	0.0024									
Methane	U	0.00080									

Sample ID: LCS062909	SampType: LCS	TestCode: MEEP_W	Run ID: FID4_090629A	Prep Date: 06/29/09	Units: mg/L						
	Batch ID: GAS062909	TestNo: RSKSOP175	FileID: FB229	Analysis Date: 06/29/09	SeqNo: 864509						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Ethane	1.203	0.016	0.9548	0	126	70	130	0	0		
Ethene	1.323	0.024	0.8913	0	148	70	140	0	0		S
Methane	0.6085	0.0080	0.5094	0	119	70	130	0	0		

Sample ID: LCS062909	SampType: LCSD	TestCode: MEEP_W	Run ID: FID4_090629A	Prep Date: 06/29/09	Units: mg/L						
	Batch ID: GAS062909	TestNo: RSKSOP175	FileID: FB230	Analysis Date: 06/29/09	SeqNo: 864510						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Ethane	1.192	0.016	0.9548	0	125	70	130	1.203	0.916	30	
Ethene	1.308	0.024	0.8913	0	147	70	140	1.323	1.15	30	S
Methane	0.6029	0.0080	0.5094	0	118	70	130	0.6085	0.928	30	

Sample ID: 09-4538-01GMS	SampType: MS	TestCode: MEEP_W	Run ID: FID4_090629A	Prep Date: 06/29/09	Units: mg/L						
	Batch ID: GAS062909	TestNo: RSKSOP175	FileID: FB243	Analysis Date: 06/29/09	SeqNo: 864499						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Ethane	1.127	0.016	0.9548	0	118	70	130	0	0		
Ethene	1.267	0.024	0.8913	0	142	70	140	0	0		S
Methane	0.577	0.0080	0.5094	0.001101	113	70	130	0	0		

Qualifiers:

- U - Not detected at or above the Reporting Limit
- J - Analyte detected below quantitation limits
- 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: 09-4546
Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT**TestCode: MEEP_W**

Sample ID: 09-4538-01GMSD	SampType: MSD	TestCode: MEEP_W	Run ID: FID4_090629A	Prep Date: 06/29/09	Units: mg/L						
	Batch ID: GAS062909	TestNo: RSKSOP175	FileID: FB244	Analysis Date: 06/29/09	SeqNo: 864500						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethane	1.082	0.016	0.9548	0	113	70	130	1.127	4.06	30	
Ethene	1.192	0.024	0.8913	0	134	70	140	1.267	6.10	30	
Methane	0.5583	0.0080	0.5094	0.001101	110	70	130	0.577	3.29	30	

Qualifiers:

U - Not detected at or above the Reporting Limit
J - Analyte detected below quantitation limits
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: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_D

Sample ID: MB-19704	SampType: MBLK	TestCode: 200.7_D	Run ID: ICP-OPTIMA 5300 DV_090629B	Prep Date: 06/29/09	Units: mg/L						
	Batch ID: 19704	TestNo: E200.7, Rev.	FileID: 062909AM	Analysis Date: 06/29/09	SeqNo: 864817						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Barium	U	0.00200									
Beryllium	U	0.000450									
Boron	U	0.0200									
Calcium	U	0.387									
Chromium	U	0.0100									
Cobalt	U	0.00500									
Copper	U	0.00500									
Iron	U	0.0700									
Magnesium	U	0.150									
Manganese	U	0.00500									
Nickel	U	0.0300									
Potassium	U	0.340									
Sodium	U	0.400									
Zinc	U	0.0300									

Sample ID: MB-19704		SampType: MBLK	TestCode: 200.7_D		Run ID: ICP-OPTIMA 5300 DV_090706B			Prep Date: 06/29/09		Units: mg/L	
		Batch ID: 19704	TestNo: E200.7, Rev.		FileID: 062709AM			Analysis Date: 07/06/09		SeqNo: 868999	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lithium	U	0.00200									
Strontium	U	0.000500									

Sample ID: LCS-19704	SampType: LCS	TestCode: 200.7_D	Run ID: ICP-OPTIMA 5300 DV_090629B	Prep Date: 06/29/09	Units: mg/L						
	Batch ID: 19704	TestNo: E200.7, Rev.	FileID: 062909AM	Analysis Date: 06/29/09	SeqNo: 864818						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Barium	4.948	0.00200	5	0	99	85	115	0	0		
Beryllium	0.04682	0.000450	0.05	0	93.6	85	115	0	0		
Boron	1.916	0.0200	2	0	95.8	85	115	0	0		

Qualifiers:

- U - Not detected at or above the Reporting Limit
- J - Analyte detected below quantitation limits
- 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: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7_D

Sample ID: LCS-19704		SampType: LCS		TestCode: 200.7_D		Run ID: ICP-OPTIMA 5300 DV_090629B		Prep Date: 06/29/09		Units: mg/L	
		Batch ID: 19704		TestNo: E200.7, Rev.		FileID: 062909AM		Analysis Date: 06/29/09		SeqNo: 864818	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	9.901	0.387	10	0	99	85	115	0	0		
Chromium	1.897	0.0100	2	0	94.8	85	115	0	0		
Cobalt	1.895	0.00500	2	0	94.7	85	115	0	0		
Copper	1.793	0.00500	2	0	89.7	85	115	0	0		
Iron	4.933	0.0700	5	0	98.7	85	115	0	0		
Magnesium	9.759	0.150	10	0	97.6	85	115	0	0		
Manganese	1.849	0.00500	2	0	92.5	85	115	0	0		
Nickel	1.881	0.0300	2	0	94	85	115	0	0		
Potassium	9.761	0.340	10	0.03444	97.6	85	115	0	0		
Sodium	9.792	0.400	10	0	97.9	85	115	0	0		
Zinc	1.833	0.0300	2	0	91.7	85	115	0	0		

Sample ID: LCS-19704		SampType: LCS		TestCode: 200.7_D		Run ID: ICP-OPTIMA 5300 DV_090706B		Prep Date: 06/29/09		Units: mg/L	
		Batch ID: 19704		TestNo: E200.7, Rev.		FileID: 062709AM		Analysis Date: 07/06/09		SeqNo: 869000	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lithium	1.813	0.00200	2	0	90.6	85	115	0	0		
Strontium	0.4772	0.000500	0.5	0	95.4	85	115	0	0		

Qualifiers:

U - Not detected at or above the Reporting Limit
 J - Analyte detected below quantitation limits
 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: 09-4546
 Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_D

Sample ID: MB-19662	SampType: MBLK	TestCode: 200.8_D	Run ID: ICPMS_090704A	Prep Date: 06/25/09	Units: mg/L						
	Batch ID: 19662	TestNo: E200.8	FileID: 090704A.B1086SMPL.D	Analysis Date: 07/04/09	SeqNo: 867621						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	U	0.00200									
Arsenic	U	0.00200									
Cadmium	U	0.000500									
Lead	U	0.00100									
Molybdenum	U	0.00500									
Selenium	U	0.00200									
Silver	U	0.000200									
Thallium	U	0.00100									
Uranium	U	0.00100									

Sample ID: LCS-19662	SampType: LCS	TestCode: 200.8_D	Run ID: ICPMS_090704A	Prep Date: 06/25/09	Units: mg/L						
	Batch ID: 19662	TestNo: E200.8	FileID: 090704A.B1087SMPL.D	Analysis Date: 07/04/09	SeqNo: 867622						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	0.02688	0.00200	0.025	0	108	85	115	0	0		
Arsenic	0.2436	0.00200	0.25	0	97.4	85	115	0	0		
Cadmium	0.02376	0.000500	0.025	0	95	85	115	0	0		
Lead	0.0105	0.00100	0.01	0	105	85	115	0	0		
Molybdenum	0.2508	0.00500	0.25	0	100	85	115	0	0		
Selenium	0.0519	0.00200	0.05	0	104	85	115	0	0		
Silver	0.02814	0.000200	0.025	0	113	85	115	0	0		
Thallium	0.01056	0.00100	0.01	0	106	85	115	0	0		
Uranium	0.01075	0.00100	0.01	0	107	85	115	0	0		

Sample ID: 09-4500-18DMS	SampType: MS	TestCode: 200.8_D	Run ID: ICPMS_090704A	Prep Date: 06/25/09	Units: mg/L						
	Batch ID: 19662	TestNo: E200.8	FileID: 090704A.B\090SMPL.D	Analysis Date: 07/04/09	SeqNo: 867624						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Selenium	0.0544	0.00200	0.05	0.002957	103	70	130	0	0		
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R - RPD outside acceptance limits
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 H - Prep or analytical holding time exceeded
 X - See case narrative

Work Order: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_D

Sample ID: 09-4500-18DMSD	SampType: MSD	TestCode: 200.8_D	Run ID: ICPMS_090704A	Prep Date: 06/25/09	Units: mg/L						
	Batch ID: 19662	TestNo: E200.8	FileID: 090704A.B\091SMPL.D	Analysis Date: 07/04/09	SeqNo: 867625						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.0549	0.00200	0.05	0.002957	104	70	130	0.0544	0.915	20	

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Work Order: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_D

Sample ID: 09-4500-12BMS		SampType: MS	TestCode: 6010_D		Run ID: ICP-OPTIMA 5300 DV_090629B			Prep Date: 06/29/09		Units: mg/L	
		Batch ID: 19704	TestNo: SW6010B		FileID: 062909AM			Analysis Date: 06/29/09		SeqNo: 864820	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	4.944	0.0013	6.25	0.05015	78.3	75	125	0	0		
Beryllium	0.04986	0.00056	0.0625	0.0007387	78.6	75	125	0	0		
Boron	2.198	0.025	2.5	0.07197	85	75	125	0	0		
Calcium	376	0.48	12.5	373.7	18.9	75	125	0	0		S
Chromium	2.147	0.013	2.5	0.04708	84	75	125	0	0		
Cobalt	2.154	0.0063	2.5	0.05196	84.1	75	125	0	0		
Copper	1.953	0.0063	2.5	0	78.1	75	125	0	0		
Iron	10.13	0.088	6.25	4.692	87	75	125	0	0		
Magnesium	31.09	0.19	12.5	20.31	86.2	75	125	0	0		
Manganese	341.1	0.0063	2.5	333.3	314	75	125	0	0		S
Nickel	2.094	0.038	2.5	0.037	83.7	75	125	0	0		
Potassium	202	0.43	12.5	188.9	105	75	125	0	0		
Sodium	455.3	0.50	12.5	436.4	151	75	125	0	0		S
Zinc	7.94	0.038	2.5	5.996	77.8	75	125	0	0		

Sample ID: 09-4500-12BMS		SampType: MS	TestCode: 6010_D		Run ID: ICP-OPTIMA 5300 DV_090706B			Prep Date: 06/29/09		Units: mg/L	
		Batch ID: 19704	TestNo: SW6010B		FileID: 062709AM			Analysis Date: 07/07/09		SeqNo: 869002	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lithium	3.933	0.013	2.5	0.09357	154	75	125	0	0		S
Strontium	2.329	0.0031	0.625	0.2935	326	75	125	0	0		S

Sample ID: 09-4500-12BMSD		SampType: MSD	TestCode: 6010_D		Run ID: ICP-OPTIMA 5300 DV_090629B			Prep Date: 06/29/09		Units: mg/L	
		Batch ID: 19704	TestNo: SW6010B		FileID: 062909AM			Analysis Date: 06/29/09		SeqNo: 864821	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	4.768	0.0013	6.25	0.05015	75.5	75	125	4.944	3.63	20	
Beryllium	0.04995	0.00056	0.0625	0.0007387	78.7	75	125	0.04986	0.187	20	
Boron	2.199	0.025	2.5	0.07197	85.1	75	125	2.198	0.0496	20	
Calcium	373.7	0.48	12.5	373.7	0.0543	75	125	376	0.628	20	S

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Work Order: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010_D

Sample ID: 09-4500-12BMSD		SampType: MSD		TestCode: 6010_D		Run ID: ICP-OPTIMA 5300 DV_090629B		Prep Date: 06/29/09		Units: mg/L	
		Batch ID: 19704		TestNo: SW6010B		FileID: 062909AM		Analysis Date: 06/29/09		SeqNo: 864821	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2.138	0.013	2.5	0.04708	83.7	75	125	2.147	0.419	20	
Cobalt	2.133	0.0063	2.5	0.05196	83.2	75	125	2.154	0.984	20	
Copper	1.962	0.0063	2.5	0	78.5	75	125	1.953	0.453	20	
Iron	10.04	0.088	6.25	4.692	85.6	75	125	10.13	0.842	20	
Magnesium	30.91	0.19	12.5	20.31	84.8	75	125	31.09	0.576	20	
Manganese	338.2	0.0063	2.5	333.3	195	75	125	341.1	0.878	20	S
Nickel	2.074	0.038	2.5	0.037	83	75	125	2.094	0.941	20	
Potassium	196.5	0.43	12.5	188.9	61.2	75	125	202	2.75	20	S
Sodium	440.5	0.50	12.5	436.4	32.9	75	125	455.3	3.30	20	S
Zinc	7.75	0.038	2.5	5.996	70.2	75	125	7.94	2.43	20	S

Sample ID: 09-4500-12BMSD		SampType: MSD		TestCode: 6010_D		Run ID: ICP-OPTIMA 5300 DV_090706B		Prep Date: 06/29/09		Units: mg/L	
		Batch ID: 19704		TestNo: SW6010B		FileID: 062709AM		Analysis Date: 07/07/09		SeqNo: 869003	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lithium	4.102	0.013	2.5	0.09357	160	75	125	3.933	4.22	20	S
Strontium	2.397	0.0031	0.625	0.2935	337	75	125	2.329	2.86	20	S

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 X - See case narrative

Work Order: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: anions_nondw

Sample ID: MB 06/24/09		SampType: MBLK		TestCode: anions_nond		Run ID: IC-2000_090624A		Prep Date: 6/24/2009		Units: mg/L	
		Batch ID: R48117		TestNo: E300.0		FileID: 06		Analysis Date: 6/24/2009		SeqNo: 862351	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	U	0.50									
Nitrite	U	0.20									
Bromide	U	0.20									
Nitrate	U	0.20									
Sulfate	U	0.50									

Sample ID: LCS ALLT218076		SampType: LCS		TestCode: anions_nond		Run ID: IC-2000_090624A		Prep Date: 6/24/2009		Units: mg/L	
		Batch ID: R48117		TestNo: E300.0		FileID: 05		Analysis Date: 6/24/2009		SeqNo: 862350	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	18.38	2.5	20	0	91.9	90	110	0	0		
Nitrite	19.52	1.0	20	0	97.6	90	110	0	0		
Bromide	19.78	1.0	20	0	98.9	90	110	0	0		
Nitrate	19.69	1.0	20	0	98.5	90	110	0	0		
Sulfate	28.88	2.5	30	0	96.3	90	110	0	0		

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Work Order: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: ALK_WGRP

Sample ID: MBLK 062509	SampType: MBLK	TestCode: ALK_WGRP	Run ID: ALK_090625A	Prep Date: 6/25/2009	Units: mg/L CaCO3						
	Batch ID: R48126	TestNo: SM2320B	FileID: 47	Analysis Date: 6/25/2009	SeqNo: 862446						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Alkalinity

U

5.0

Bicarbonate

U

5.0

Carbonate

U

5.0

Sample ID: MBLK 062509	SampType: MBLK	TestCode: ALK_WGRP	Run ID: ALK_090625A	Prep Date: 6/25/2009	Units: mg/L CaCO3						
	Batch ID: R48126	TestNo: SM2320B	FileID: 47	Analysis Date: 6/25/2009	SeqNo: 862465						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Alkalinity

U

5.0

Bicarbonate

U

5.0

Carbonate

U

5.0

Sample ID: LCS	SampType: LCS	TestCode: ALK_WGRP	Run ID: ALK_090625A	Prep Date: 6/25/2009	Units: mg/L CaCO3						
	Batch ID: R48126	TestNo: SM2320B	FileID: 48	Analysis Date: 6/25/2009	SeqNo: 862447						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Alkalinity

98.53

5.0

100

0

98.5

90

110

0

0

Sample ID: LCS	SampType: LCS	TestCode: ALK_WGRP	Run ID: ALK_090625A	Prep Date: 6/25/2009	Units: mg/L CaCO3						
	Batch ID: R48126	TestNo: SM2320B	FileID: 48	Analysis Date: 6/25/2009	SeqNo: 862466						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Alkalinity

97.79

5.0

100

0

97.8

90

110

0

0

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X - See case narrative

838

Work Order: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: COND_W

Sample ID: LCS	SampType: LCS	TestCode: COND_W	Run ID: COND_090625A	Prep Date: 6/25/2009	Units: µmhos/cm						
	Batch ID: R48109	TestNo: SM2510 B	FileID: 1	Analysis Date: 6/25/2009	SeqNo: 862201						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Specific Conductance	93.5	1.00	99.7	0	93.8	90	110	0	0		

Qualifiers:

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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: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: F_W

Sample ID: MBLK 06/29/09	SampType: MBLK	TestCode: F_W	Run ID: F_090629A	Prep Date: 6/29/2009	Units: mg/L						
	Batch ID: R48212	TestNo: SM 4500-F C	FileID: 1	Analysis Date: 6/29/2009	SeqNo: 864523						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Fluoride	U	0.20									
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Sample ID: MBLK 06/29/09	SampType: MBLK	TestCode: F_W	Run ID: F_090629A	Prep Date: 6/29/2009	Units: mg/L						
	Batch ID: R48212	TestNo: SM 4500-F C	FileID: 1	Analysis Date: 6/29/2009	SeqNo: 864548						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Fluoride	U	0.20									
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Sample ID: LCS	SampType: LCS	TestCode: F_W	Run ID: F_090629A	Prep Date: 6/29/2009	Units: mg/L						
	Batch ID: R48212	TestNo: SM 4500-F C	FileID: 2	Analysis Date: 6/29/2009	SeqNo: 864524						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Fluoride	9.664	0.20	10	0	96.6	95	105	0	0		
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Sample ID: LCS	SampType: LCS	TestCode: F_W	Run ID: F_090629A	Prep Date: 6/29/2009	Units: mg/L						
	Batch ID: R48212	TestNo: SM 4500-F C	FileID: 2	Analysis Date: 6/29/2009	SeqNo: 864549						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Fluoride	10.29	0.20	10	0	103	95	105	0	0		
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E - Extrapolated value, value exceeds calibration range.

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X - See case narrative

Work Order: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: PH_DW

Sample ID: LCS-R48058		SampType: LCS		TestCode: PH_DW		Run ID: PH_090623C		Prep Date: 6/23/2009		Units: pH Units	
		Batch ID: R48058		TestNo: E150.1		FileID:		Analysis Date: 6/23/2009		SeqNo: 860819	
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	7.98	1.00	8	0	99.8	99.3	100.7	0	0		

Qualifiers:

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 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: 09-4546

Client Project ID: Complaint 200213187

ANALYTICAL QC SUMMARY REPORT

TestCode: TDS_W

Sample ID: MBLK 2062409	SampType: MBLK	TestCode: TDS_W	Run ID: ANALYTICAL BALANCE_090624A	Prep Date: 6/24/2009	Units: mg/L						
	Batch ID: R48129	TestNo: SM 2540C	FileID: 47	Analysis Date: 6/24/2009	SeqNo: 862516						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Dissolved Solids	U	10.0
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Sample ID: LCS	SampType: LCS	TestCode: TDS_W	Run ID: ANALYTICAL BALANCE_090624A	Prep Date: 6/24/2009	Units: mg/L						
	Batch ID: R48129	TestNo: SM 2540C	FileID: 48	Analysis Date: 6/24/2009	SeqNo: 862517						
Analyte	Result	LQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Total Dissolved Solids	399	10.0	400	0	99.7	90	110	0	0
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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