



#1944530

formerly Evergreen Analytical, Inc.

July 23, 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:

ADDENDUM

Attached are the final Method 8260 results for the sample in this work order. The original report, mailed and e-mailed 7/10/09, contained preliminary results for this test. Those results are unchanged ; the final report just includes all the QC results and a description of any anomalies.

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

Thank you for using the services of this Laboratory. If you require further information, I can be reached at 303-425-6021.

Sincerely,


Joseph J Egry IV/ Carl Smits
Quality Assurance

WORK ORDER Summary

Evergreen Analytical, Inc.

09-4546

Rpt To: Peter Gintautas

Email To: peter.gintautas@state.co.us

Colorado Oil & Gas Conservation

Comm.

1120 Lincoln St #801

Denver, CO 80203

(719) 846-3091

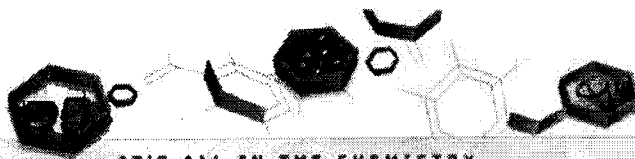
7/23/2009 6:18:41 PM

Client Project ID: Complaint 200213187

QC Level: Level I

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"/>	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"/>	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"/>	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"/>	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"/>	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"/>	7/08/09	
09-4546-01E	SFPD WW	Water	6/22/09 1033	6/23/09	ALK_WGRP *	Alkalinity	<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"/>	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"/>	7/08/09	7/20/09
09-4546-01E	SFPD WW	Water	6/22/09 1033	6/23/09	PH_DW	EI50.1 pH	<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"/>	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"/>	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"/>	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"/>	7/08/09	7/06/09



07/08/09

Technical Report for

Accutest Mountain States

COGCCCCOD: COGCC Denver, CO

Complaint 200213187

Accutest Job Number: D4546

Sampling Date: 06/22/09

Report to:

Accutest Mountain States
4036 Youngfield St.
Wheat Ridge, CO 80033-3862

Total number of pages in report: 30



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

David N. Speis
David N. Speis
VP Ops, Laboratory Director

Client Service contact: Tony Esposito 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, PA, RI, SC, TN, VA, WV

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

Table of Contents

Sections:

1
2
3
4
5

-1-

Section 1: Sample Summary	3
Section 2: Case Narrative/Conformance Summary	4
Section 3: Sample Results	5
3.1: D4546-1: SFPD WW	6
3.2: D4546-2: TRIP BLANK	8
Section 4: Misc. Forms	10
4.1: Chain of Custody	11
Section 5: GC/MS Volatiles - QC Data Summaries	13
5.1: Method Blank Summary	14
5.2: Blank Spike Summary	18
5.3: Matrix Spike/Matrix Spike Duplicate Summary	22
5.4: Instrument Performance Checks (BFB)	26
5.5: Surrogate Recovery Summaries	30

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

CASE NARRATIVE / CONFORMANCE SUMMARY**Client:** Accutest Mountain States**Job No** D4546**Site:** COGCCCCOD: COGCC Denver, CO**Report Date** 7/8/2009 9:36:57 AM

On 06/23/2009, 1 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 3.2 C. Samples were intact and properly preserved, unless noted below. An Accutest Job Number of D4546 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

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

Volatiles by GCMS By Method SW846 8260B**Matrix:** AQ**Batch ID:** V1A3342

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA22213-1MS, JA22213-1MSD were used as the QC samples indicated.

Matrix: AQ**Batch ID:** V3A2823

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JA21861-1MS, JA21861-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Outside control limits due to acid preservation.
- Matrix Spike Duplicate Recovery(s) for 2-Chloroethyl vinyl ether are outside control limits. Outside control limits due to acid preservation.

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

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

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



Sample Results

Report of Analysis

Report of Analysis

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

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:	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	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

Client Sample ID: TRIP BLANK

Lab Sample ID: D4546-2

Matrix: AQ - Trip Blank Water

Method: SW846 8260B

Project: COGCCCCOD: COGCC Denver, CO

Date Sampled: 06/22/09

Date Received: 06/23/09

Percent Solids: n/a

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

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	

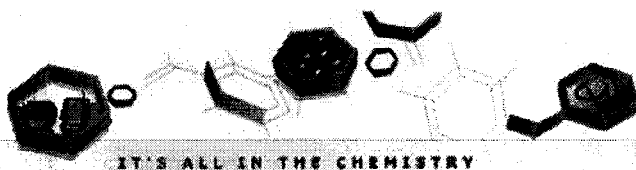
VOA HSL List

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



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ww wto

Job Number: D4546 Client project: Complaint 200213187

Account: COGCCCCO Colorado Oil & Gas, Denver

Project: COGCCCCO1025 COGCC Denver, CO ~~WWW PROJECT 14-JUN-09~~

Report to: Peter Gintautas NC Date: 08-JUL-09 Deliv: CONGEM StateCode: CO

Client
Project
Deliverables
Matrix
TAT
Tests
Metals 20046

JA22188

Sample Number	Client ID	Site	Sample Date	Test Date	Test Time	Test Result	Test Unit	Test Method	Test Description
---------------	-----------	------	-------------	-----------	-----------	-------------	-----------	-------------	------------------

D4546-1	→ SFPD NW	NW	23-JUN-09	22-JUN-09	10:33	14	08-JUL-09	BRO, CHL, ENERGY, F, METDIO, MISC, NO2NO2, NO3NO3, PH, SAR, SCOM, SHIPPING, SO4, TDS, V8015DGMK, V8260HSL, XCAUSICALK
D4546-1F	SFPD NW	NW	23-JUN-09	22-JUN-09	10:33	14	08-JUL-09	AGMS, ASMS, B, BA, BE, CA, COMS, CO, CR, CU, FE, FILTHMET, F, LI, METDIO, NG, NH, MONH, NA, NI, PEMS, SEHS, SEHS, SR, TMS, UHS, AN V8260HSL
D4546-2	→ TRIP BLANK	WTD	23-JUN-09	22-JUN-09	00:00	14	08-JUL-09	

Comments: D4546-1
Misc- Cation/ Anion balance calculation

Package AQ XCARBICALK = ALX, 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

INVOICE1UD 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: PP- 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

4.1
4

D4546: Chain of Custody

Page 2 of 2



GC/MS Volatiles



QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Page 1 of 2

Job Number: D4546

Account: ALMS Accutest Mountain States

Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A2823-MB	3A65916.D	1	07/02/09	KPP	n/a	n/a	V3A2823

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-2

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	
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	

Method Blank Summary

Page 2 of 2

Job Number: D4546

Account: ALMS Accutest Mountain States

Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A2823-MB	3A65916.D	1	07/02/09	KPP	n/a	n/a	V3A2823

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-2

CAS No.	Compound	Result	RL	MDL	Units	Q
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	Limits
1868-53-7	Dibromofluoromethane	91% 76-120%
17060-07-0	1,2-Dichloroethane-D4	91% 64-135%
2037-26-5	Toluene-D8	92% 76-117%
460-00-4	4-Bromofluorobenzene	87% 72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Page 1 of 2

Job Number: D4546
Account: ALMS Accutest Mountain States
Project: COGCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A3342-MB	1A78434.D	1	07/06/09	TGE	n/a	n/a	V1A3342

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-1

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	
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	

Method Blank Summary

Page 2 of 2

Job Number: D4546

Account: ALMS Accutest Mountain States

Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A3342-MB	1A78434.D	1	07/06/09	TGE	n/a	n/a	V1A3342

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-1

CAS No.	Compound	Result	RL	MDL	Units	Q
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	Limits
1868-53-7	Dibromofluoromethane	95% 76-120%
17060-07-0	1,2-Dichloroethane-D4	91% 64-135%
2037-26-5	Toluene-D8	100% 76-117%
460-00-4	4-Bromofluorobenzene	92% 72-122%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Page 1 of 2

Job Number: D4546
Account: ALMS Accutest Mountain States
Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A2823-BS	3A65917.D	1	07/02/09	KPP	n/a	n/a	V3A2823

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	50.5	101	51-151
71-43-2	Benzene	50	51.6	103	75-122
75-27-4	Bromodichloromethane	50	56.0	112	77-128
75-25-2	Bromoform	50	54.5	109	67-141
74-83-9	Bromomethane	50	55.8	112	53-152
78-93-3	2-Butanone (MEK)	50	52.6	105	64-130
75-15-0	Carbon disulfide	50	47.8	96	59-140
56-23-5	Carbon tetrachloride	50	54.8	110	75-148
108-90-7	Chlorobenzene	50	51.6	103	76-124
75-00-3	Chloroethane	50	55.7	111	54-147
110-75-8	2-Chloroethyl vinyl ether	250	265	106	66-131
67-66-3	Chloroform	50	52.3	105	77-124
74-87-3	Chloromethane	50	57.9	116	46-144
124-48-1	Dibromochloromethane	50	53.7	107	76-132
95-50-1	1,2-Dichlorobenzene	50	52.4	105	74-125
541-73-1	1,3-Dichlorobenzene	50	52.4	105	73-124
106-46-7	1,4-Dichlorobenzene	50	51.0	102	71-123
75-34-3	1,1-Dichloroethane	50	52.0	104	72-124
107-06-2	1,2-Dichloroethane	50	52.3	105	66-150
75-35-4	1,1-Dichloroethene	50	53.1	106	61-132
156-59-2	cis-1,2-Dichloroethene	50	52.7	105	71-119
156-60-5	trans-1,2-Dichloroethene	50	50.1	100	71-123
78-87-5	1,2-Dichloropropane	50	53.5	107	75-120
10061-01-5	cis-1,3-Dichloropropene	50	55.0	110	77-124
10061-02-6	trans-1,3-Dichloropropene	50	55.3	111	75-132
100-41-4	Ethylbenzene	50	51.2	102	77-124
591-78-6	2-Hexanone	50	52.7	105	58-136
108-10-1	4-Methyl-2-pentanone(MIBK)	50	50.7	101	63-135
75-09-2	Methylene chloride	50	47.6	95	69-122
100-42-5	Styrene	50	53.1	106	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	53.3	107	66-125
127-18-4	Tetrachloroethene	50	52.9	106	70-136
108-88-3	Toluene	50	52.3	105	76-126
71-55-6	1,1,1-Trichloroethane	50	54.4	109	77-136
79-00-5	1,1,2-Trichloroethane	50	54.5	109	75-123
79-01-6	Trichloroethene	50	52.7	105	79-126

Blank Spike Summary

Page 2 of 2

Job Number: D4546

Account: ALMS Accutest Mountain States

Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3A2823-BS	3A65917.D	1	07/02/09	KPP	n/a	n/a	V3A2823

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-05-4	Vinyl Acetate	50	46.8	94	60-128
75-01-4	Vinyl chloride	50	60.5	121	56-146
1330-20-7	Xylene (total)	150	159	106	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	93%	76-120%
17060-07-0	1,2-Dichloroethane-D4	92%	64-135%
2037-26-5	Toluene-D8	95%	76-117%
460-00-4	4-Bromofluorobenzene	88%	72-122%

5.2.1
5

Blank Spike Summary

Page 1 of 2

Job Number: D4546

Account: ALMS Accutest Mountain States

Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A3342-BS	1A78435.D	1	07/06/09	TGE	n/a	n/a	V1A3342

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	50	39.3	79	51-151
71-43-2	Benzene	50	50.4	101	75-122
75-27-4	Bromodichloromethane	50	58.0	116	77-128
75-25-2	Bromoform	50	55.4	111	67-141
74-83-9	Bromomethane	50	50.3	101	53-152
78-93-3	2-Butanone (MEK)	50	48.2	96	64-130
75-15-0	Carbon disulfide	50	50.3	101	59-140
56-23-5	Carbon tetrachloride	50	58.3	117	75-148
108-90-7	Chlorobenzene	50	54.7	109	76-124
75-00-3	Chloroethane	50	49.5	99	54-147
110-75-8	2-Chloroethyl vinyl ether	250	328	131	66-131
67-66-3	Chloroform	50	52.5	105	77-124
74-87-3	Chloromethane	50	40.9	82	46-144
124-48-1	Dibromochloromethane	50	53.7	107	76-132
95-50-1	1,2-Dichlorobenzene	50	56.5	113	74-125
541-73-1	1,3-Dichlorobenzene	50	55.7	111	73-124
106-46-7	1,4-Dichlorobenzene	50	55.4	111	71-123
75-34-3	1,1-Dichloroethane	50	51.0	102	72-124
107-06-2	1,2-Dichloroethane	50	50.2	100	66-150
75-35-4	1,1-Dichloroethene	50	54.6	109	61-132
156-59-2	cis-1,2-Dichloroethene	50	53.9	108	71-119
156-60-5	trans-1,2-Dichloroethene	50	51.5	103	71-123
78-87-5	1,2-Dichloropropane	50	51.4	103	75-120
10061-01-5	cis-1,3-Dichloropropene	50	56.7	113	77-124
10061-02-6	trans-1,3-Dichloropropene	50	54.2	108	75-132
100-41-4	Ethylbenzene	50	51.4	103	77-124
591-78-6	2-Hexanone	50	48.1	96	58-136
108-10-1	4-Methyl-2-pentanone(MIBK)	50	49.1	98	63-135
75-09-2	Methylene chloride	50	47.6	95	69-122
100-42-5	Styrene	50	51.3	103	78-126
79-34-5	1,1,2,2-Tetrachloroethane	50	51.6	103	66-125
127-18-4	Tetrachloroethene	50	50.8	102	70-136
108-88-3	Toluene	50	53.9	108	76-126
71-55-6	1,1,1-Trichloroethane	50	55.8	112	77-136
79-00-5	1,1,2-Trichloroethane	50	55.8	112	75-123
79-01-6	Trichloroethene	50	55.6	111	79-126

Blank Spike Summary

Page 2 of 2

Job Number: D4546
Account: ALMS Accutest Mountain States
Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1A3342-BS	1A78435.D	1	07/06/09	TGE	n/a	n/a	V1A3342

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-05-4	Vinyl Acetate	50	47.4	95	60-128
75-01-4	Vinyl chloride	50	47.4	95	56-146
1330-20-7	Xylene (total)	150	162	108	77-125

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	76-120%
17060-07-0	1,2-Dichloroethane-D4	95%	64-135%
2037-26-5	Toluene-D8	103%	76-117%
460-00-4	4-Bromofluorobenzene	93%	72-122%

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: D4546

Account: ALMS Accutest Mountain States

Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA21861-1MS	3A65923.D	1	07/02/09	KPP	n/a	n/a	V3A2823
JA21861-1MSD	3A65924.D	1	07/02/09	KPP	n/a	n/a	V3A2823
JA21861-1	3A65918.D	1	07/02/09	KPP	n/a	n/a	V3A2823

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-2

CAS No.	Compound	JA21861-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	45.2	90	45.9	92	2	44-157/20
71-43-2	Benzene	ND		50	42.5	85	39.5	79	7	38-139/13
75-27-4	Bromodichloromethane	ND		50	47.1	94	44.8	90	5	70-135/13
75-25-2	Bromoform	ND		50	46.7	93	46.6	93	0	53-139/13
74-83-9	Bromomethane	ND		50	42.6	85	38.4	77	10	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	48.2	96	48.6	97	1	58-140/14
75-15-0	Carbon disulfide	ND		50	29.9	60	26.6	53	12	34-136/21
56-23-5	Carbon tetrachloride	ND		50	39.1	78	34.3	69	13	50-161/18
108-90-7	Chlorobenzene	ND		50	44.6	89	42.4	85	5	65-128/12
75-00-3	Chloroethane	ND		50	39.0	78	34.3	69	13	41-151/18
110-75-8	2-Chloroethyl vinyl ether	ND		250	ND	0* a	ND	0* a	nc	1-150/38
67-66-3	Chloroform	ND		50	43.4	87	40.9	82	6	66-132/14
74-87-3	Chloromethane	ND		50	35.5	71	31.3	63	13	35-149/22
124-48-1	Dibromochloromethane	ND		50	48.8	98	48.6	97	0	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	46.9	94	46.0	92	2	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	45.3	91	44.0	88	3	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	45.0	90	43.5	87	3	63-126/13
75-34-3	1,1-Dichloroethane	ND		50	42.2	84	38.8	78	8	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	46.8	94	45.5	91	3	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	37.0	74	32.3	65	14	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	43.3	87	41.0	82	5	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	39.4	79	35.6	71	10	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	46.3	93	43.4	87	6	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	45.4	91	44.1	88	3	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	46.7	93	45.9	92	2	68-134/13
100-41-4	Ethylbenzene	ND		50	42.8	86	39.4	79	8	37-143/13
591-78-6	2-Hexanone	ND		50	49.4	99	48.4	97	2	53-145/17
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	50.2	100	48.9	98	3	57-141/14
75-09-2	Methylene chloride	ND		50	41.7	83	40.0	80	4	59-129/12
100-42-5	Styrene	ND		50	47.4	95	45.6	91	4	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	50.6	101	50.7	101	0	62-126/13
127-18-4	Tetrachloroethene	ND		50	43.7	87	39.0	78	11	48-145/15
108-88-3	Toluene	ND		50	43.8	88	40.2	80	9	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		50	39.9	80	35.2	70	13	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	49.1	98	48.3	97	2	70-127/12
79-01-6	Trichloroethene	ND		50	41.8	84	37.9	76	10	53-141/15

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: D4546
Account: ALMS Accutest Mountain States
Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA21861-1MS	3A65923.D	1	07/02/09	KPP	n/a	n/a	V3A2823
JA21861-1MSD	3A65924.D	1	07/02/09	KPP	n/a	n/a	V3A2823
JA21861-1	3A65918.D	1	07/02/09	KPP	n/a	n/a	V3A2823

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-2

CAS No.	Compound	JA21861-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-05-4	Vinyl Acetate	ND	50	36.2	72	35.6	71	2	38-142/16
75-01-4	Vinyl chloride	ND	50	35.3	71	30.5	61	15	34-151/20
1330-20-7	Xylene (total)	ND	150	131	87	123	82	6	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA21861-1	Limits
1868-53-7	Dibromofluoromethane	92%	91%	91%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	86%	90%	64-135%
2037-26-5	Toluene-D8	93%	92%	92%	76-117%
460-00-4	4-Bromofluorobenzene	85%	86%	87%	72-122%

(a) Outside control limits due to acid preservation.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 2

Job Number: D4546
Account: ALMS Accutest Mountain States
Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA22213-1MS	1A78440.D	1	07/06/09	TGE	n/a	n/a	V1A3342
JA22213-1MSD	1A78441.D	1	07/06/09	TGE	n/a	n/a	V1A3342
JA22213-1	1A78437.D	1	07/06/09	TGE	n/a	n/a	V1A3342

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-1

CAS No.	Compound	JA22213-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		50	34.0	68	30.9	62	10	44-157/20
71-43-2	Benzene	ND		50	38.2	76	37.0	74	3	38-139/13
75-27-4	Bromodichloromethane	ND		50	44.0	88	43.2	86	2	70-135/13
75-25-2	Bromoform	ND		50	39.5	79	43.6	87	10	53-139/13
74-83-9	Bromomethane	ND		50	38.3	77	37.0	74	3	44-150/18
78-93-3	2-Butanone (MEK)	ND		50	44.1	88	43.0	86	3	58-140/14
75-15-0	Carbon disulfide	ND		50	28.9	58	27.2	54	6	34-136/21
56-23-5	Carbon tetrachloride	ND		50	35.6	71	33.5	67	6	50-161/18
108-90-7	Chlorobenzene	ND		50	42.6	85	42.1	84	1	65-128/12
75-00-3	Chloroethane	ND		50	35.3	71	32.4	65	9	41-151/18
110-75-8	2-Chloroethyl vinyl ether	ND		250	1.9	1	1.8	1	5	1-150/38
67-66-3	Chloroform	2.8		50	40.6	76	39.2	73	4	66-132/14
74-87-3	Chloromethane	ND		50	30.1	60	28.4	57	6	35-149/22
124-48-1	Dibromochloromethane	ND		50	43.4	87	44.4	89	2	67-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	46.1	92	45.7	91	1	65-128/12
541-73-1	1,3-Dichlorobenzene	ND		50	43.6	87	43.2	86	1	63-128/13
106-46-7	1,4-Dichlorobenzene	ND		50	43.9	88	44.0	88	0	63-126/13
75-34-3	1,1-Dichloroethane	ND		50	36.6	73	35.1	70	4	59-132/15
107-06-2	1,2-Dichloroethane	ND		50	41.3	83	39.9	80	3	59-153/15
75-35-4	1,1-Dichloroethene	ND		50	34.5	69	32.7	65	5	41-144/17
156-59-2	cis-1,2-Dichloroethene	ND		50	41.3	83	40.1	80	3	57-131/13
156-60-5	trans-1,2-Dichloroethene	ND		50	36.1	72	35.1	70	3	55-131/15
78-87-5	1,2-Dichloropropane	ND		50	41.7	83	40.5	81	3	67-125/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	46.6	93	45.0	90	3	68-126/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	44.8	90	42.9	86	4	68-134/13
100-41-4	Ethylbenzene	ND		50	37.8	76	37.1	74	2	37-143/13
591-78-6	2-Hexanone	ND		50	43.3	87	42.0	84	3	53-145/17
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		50	46.8	94	45.7	91	2	57-141/14
75-09-2	Methylene chloride	ND		50	39.6	79	38.4	77	3	59-129/12
100-42-5	Styrene	ND		50	39.0	78	41.0	82	5	60-135/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	47.7	95	47.3	95	1	62-126/13
127-18-4	Tetrachloroethene	ND		50	35.6	71	34.8	70	2	48-145/15
108-88-3	Toluene	ND		50	40.2	80	38.8	78	4	44-141/14
71-55-6	1,1,1-Trichloroethane	ND		50	34.8	70	32.6	65	7	55-149/18
79-00-5	1,1,2-Trichloroethane	ND		50	48.4	97	47.1	94	3	70-127/12
79-01-6	Trichloroethene	ND		50	38.4	77	36.9	74	4	53-141/15

Matrix Spike/Matrix Spike Duplicate Summary

Page 2 of 2

Job Number: D4546

Account: ALMS Accutest Mountain States

Project: COGCCCCOD: COGCC Denver, CO

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JA22213-1MS	1A78440.D	1	07/06/09	TGE	n/a	n/a	V1A3342
JA22213-1MSD	1A78441.D	1	07/06/09	TGE	n/a	n/a	V1A3342
JA22213-1	1A78437.D	1	07/06/09	TGE	n/a	n/a	V1A3342

The QC reported here applies to the following samples:

Method: SW846 8260B

D4546-1

CAS No.	Compound	JA22213-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-05-4	Vinyl Acetate	ND	50	42.5	85	42.6	85	0	38-142/16
75-01-4	Vinyl chloride	ND	50	32.2	64	30.0	60	7	34-151/20
1330-20-7	Xylene (total)	ND	150	120	80	120	80	0	36-144/13

CAS No.	Surrogate Recoveries	MS	MSD	JA22213-1	Limits
1868-53-7	Dibromofluoromethane	95%	94%	96%	76-120%
17060-07-0	1,2-Dichloroethane-D4	87%	84%	95%	64-135%
2037-26-5	Toluene-D8	102%	101%	102%	76-117%
460-00-4	4-Bromofluorobenzene	94%	93%	93%	72-122%

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: D4546
Account: ALMS Accutest Mountain States
Project: COGCCCCOD: COGCC Denver, CO

Sample: V1A3325-BFB Injection Date: 06/24/09
Lab File ID: 1A78037.D Injection Time: 23:37
Instrument ID: GCMS1A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	14.99 - 40.0% of mass 95	13305	20.4	Pass
75	30.0 - 60.0% of mass 95	32573	49.9	Pass
95	Base peak, 100% relative abundance	65301	100.0	Pass
96	5.0 - 9.0% of mass 95	4348	6.7	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 120.0% of mass 95	58290	89.3	Pass
175	5.0 - 9.0% of mass 174	4351	6.7 (7.5) ^a	Pass
176	95.0 - 101.0% of mass 174	57042	87.4 (97.9) ^a	Pass
177	5.0 - 9.0% of mass 176	3883	5.9 (6.8) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A3325-IC3325	1A78038.D	06/25/09	00:06	00:29	Initial cal 0.5
V1A3325-IC3325	1A78039.D	06/25/09	00:35	00:58	Initial cal 1
V1A3325-IC3325	1A78040.D	06/25/09	01:04	01:27	Initial cal 2
V1A3325-IC3325	1A78041.D	06/25/09	01:33	01:56	Initial cal 5
V1A3325-IC3325	1A78042.D	06/25/09	02:05	02:28	Initial cal 20
V1A3325-ICC3325	1A78043.D	06/25/09	02:34	02:57	Initial cal 50
V1A3325-IC3325	1A78044.D	06/25/09	03:03	03:26	Initial cal 100
V1A3325-IC3325	1A78045.D	06/25/09	03:32	03:55	Initial cal 200
V1A3325-ICV3325	1A78047.D	06/25/09	04:30	04:53	Initial cal verification 50

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: D4546
Account: ALMS Accutest Mountain States
Project: COGCCCCOD: COGCC Denver, CO

Sample: V1A3342-BFB Injection Date: 07/06/09
Lab File ID: 1A78431.D Injection Time: 08:20
Instrument ID: GCMS1A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	56192	18.3	Pass
75	30.0 - 60.0% of mass 95	146880	47.8	Pass
95	Base peak, 100% relative abundance	307541	100.0	Pass
96	5.0 - 9.0% of mass 95	20597	6.7	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 120.0% of mass 95	274965	89.4	Pass
175	5.0 - 9.0% of mass 174	20186	6.6 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	269269	87.6 (97.9) ^a	Pass
177	5.0 - 9.0% of mass 176	18237	5.9 (6.8) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1A3342-CC3325	1A78432.D	07/06/09	08:49	00:29	Continuing cal 20
V1A3342-MB	1A78434.D	07/06/09	09:51	01:31	Method Blank
V1A3342-BS	1A78435.D	07/06/09	10:28	02:08	Blank Spike
D4546-1	1A78436.D	07/06/09	11:07	02:47	SFPD WW
JA22213-1	1A78437.D	07/06/09	11:36	03:16	(used for QC only; not part of job D4546)
ZZZZZZ	1A78438.D	07/06/09	12:05	03:45	(unrelated sample)
ZZZZZZ	1A78439.D	07/06/09	12:35	04:15	(unrelated sample)
JA22213-1MS	1A78440.D	07/06/09	13:04	04:44	Matrix Spike
JA22213-1MSD	1A78441.D	07/06/09	13:33	05:13	Matrix Spike Duplicate
ZZZZZZ	1A78443.D	07/06/09	14:31	06:11	(unrelated sample)
ZZZZZZ	1A78444.D	07/06/09	15:00	06:40	(unrelated sample)
ZZZZZZ	1A78445.D	07/06/09	15:29	07:09	(unrelated sample)
ZZZZZZ	1A78446.D	07/06/09	15:58	07:38	(unrelated sample)
ZZZZZZ	1A78447.D	07/06/09	16:28	08:08	(unrelated sample)
ZZZZZZ	1A78448.D	07/06/09	16:57	08:37	(unrelated sample)
ZZZZZZ	1A78449.D	07/06/09	17:26	09:06	(unrelated sample)
ZZZZZZ	1A78450.D	07/06/09	17:55	09:35	(unrelated sample)
ZZZZZZ	1A78451.D	07/06/09	18:24	10:04	(unrelated sample)
ZZZZZZ	1A78452.D	07/06/09	18:53	10:33	(unrelated sample)
ZZZZZZ	1A78453.D	07/06/09	19:22	11:02	(unrelated sample)
ZZZZZZ	1A78454.D	07/06/09	19:51	11:31	(unrelated sample)

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: D4546
Account: ALMS Accutest Mountain States
Project: COGCCCCOD: COGCC Denver, CO

Sample: V3A2821-BFB Injection Date: 07/01/09
Lab File ID: 3A65874.D Injection Time: 11:13
Instrument ID: GCMS3A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	17323	17.9	Pass
75	30.0 - 60.0% of mass 95	44565	46.1	Pass
95	Base peak, 100% relative abundance	96610	100.0	Pass
96	5.0 - 9.0% of mass 95	6409	6.6	Pass
173	Less than 2.0% of mass 174	488	0.51 (0.58) ^a	Pass
174	50.0 - 120.0% of mass 95	83661	86.6	Pass
175	5.0 - 9.0% of mass 174	6041	6.3 (7.2) ^a	Pass
176	95.0 - 101.0% of mass 174	81216	84.1 (97.1) ^a	Pass
177	5.0 - 9.0% of mass 176	5369	5.6 (6.6) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A2821-IC2821	3A65875.D	07/01/09	11:48	00:35	Initial cal 0.5
V3A2821-IC2821	3A65877.D	07/01/09	12:46	01:33	Initial cal 2
V3A2821-IC2821	3A65879.D	07/01/09	13:43	02:30	Initial cal 20
V3A2821-ICC2821	3A65880.D	07/01/09	14:12	02:59	Initial cal 50
V3A2821-IC2821	3A65881.D	07/01/09	14:41	03:28	Initial cal 100
V3A2821-IC2821	3A65882.D	07/01/09	15:10	03:57	Initial cal 200
V3A2821-ICV2821	3A65883.D	07/01/09	15:39	04:26	Initial cal verification 50
V3A2821-IC2821	3A65884.D	07/01/09	16:07	04:54	Initial cal 5
V3A2821-IC2821	3A65885.D	07/01/09	16:35	05:22	Initial cal 1

Instrument Performance Check (BFB)

Page 1 of 1

Job Number: D4546
Account: ALMS Accutest Mountain States
Project: COGCCCCOD: COGCC Denver, CO

Sample: V3A2823-BFB Injection Date: 07/02/09
Lab File ID: 3A65914.D Injection Time: 08:08
Instrument ID: GCMS3A

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	13746	16.1	Pass
75	30.0 - 60.0% of mass 95	36944	43.4	Pass
95	Base peak, 100% relative abundance	85197	100.0	Pass
96	5.0 - 9.0% of mass 95	5815	6.8	Pass
173	Less than 2.0% of mass 174	440	0.52 (0.56) ^a	Pass
174	50.0 - 120.0% of mass 95	78290	91.9	Pass
175	5.0 - 9.0% of mass 174	5582	6.6 (7.1) ^a	Pass
176	95.0 - 101.0% of mass 174	76325	89.6 (97.5) ^a	Pass
177	5.0 - 9.0% of mass 176	4961	5.8 (6.5) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3A2823-CC2821	3A65915.D	07/02/09	08:50	00:42	Continuing cal 20
V3A2823-MB	3A65916.D	07/02/09	09:30	01:22	Method Blank
V3A2823-BS	3A65917.D	07/02/09	10:09	02:01	Blank Spike
JA21861-1	3A65918.D	07/02/09	10:49	02:41	(used for QC only; not part of job D4546)
ZZZZZZ	3A65919.D	07/02/09	11:18	03:10	(unrelated sample)
ZZZZZZ	3A65920.D	07/02/09	11:47	03:39	(unrelated sample)
ZZZZZZ	3A65921.D	07/02/09	12:16	04:08	(unrelated sample)
ZZZZZZ	3A65922.D	07/02/09	12:44	04:36	(unrelated sample)
JA21861-1MS	3A65923.D	07/02/09	13:13	05:05	Matrix Spike
JA21861-1MSD	3A65924.D	07/02/09	13:42	05:34	Matrix Spike Duplicate
ZZZZZZ	3A65926.D	07/02/09	14:40	06:32	(unrelated sample)
ZZZZZZ	3A65927.D	07/02/09	15:08	07:00	(unrelated sample)
ZZZZZZ	3A65928.D	07/02/09	15:37	07:29	(unrelated sample)
ZZZZZZ	3A65929.D	07/02/09	16:06	07:58	(unrelated sample)
D4546-2	3A65931.D	07/02/09	17:26	09:18	TRIP BLANK
ZZZZZZ	3A65932.D	07/02/09	17:54	09:46	(unrelated sample)
ZZZZZZ	3A65933.D	07/02/09	18:23	10:15	(unrelated sample)
ZZZZZZ	3A65934.D	07/02/09	18:52	10:44	(unrelated sample)
ZZZZZZ	3A65935.D	07/02/09	19:21	11:13	(unrelated sample)
ZZZZZZ	3A65936.D	07/02/09	19:50	11:42	(unrelated sample)

Volatile Surrogate Recovery Summary

Page 1 of 1

Job Number: D4546

Account: ALMS Accutest Mountain States

Project: COGCCCCOD: COGCC Denver, CO

Method: SW846 8260B

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
D4546-1	1A78436.D	94.0	90.0	102.0	92.0
D4546-2	3A65931.D	94.0	92.0	94.0	86.0
JA21861-1MS	3A65923.D	92.0	87.0	93.0	85.0
JA21861-1MSD	3A65924.D	91.0	86.0	92.0	86.0
JA22213-1MS	1A78440.D	95.0	87.0	102.0	94.0
JA22213-1MSD	1A78441.D	94.0	84.0	101.0	93.0
V1A3342-BS	1A78435.D	98.0	95.0	103.0	93.0
V1A3342-MB	1A78434.D	95.0	91.0	100.0	92.0
V3A2823-BS	3A65917.D	93.0	92.0	95.0	88.0
V3A2823-MB	3A65916.D	91.0	91.0	92.0	87.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane	76-120%
S2 = 1,2-Dichloroethane-D4	64-135%
S3 = Toluene-D8	76-117%
S4 = 4-Bromofluorobenzene	72-122%

5.5.1

5