



received 07/31/2016  
Complaint 200439757

# Organic Carbon Case Narrative

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## COGCC

### Complaint 200439757

Work Order Number: 1607366

1. This report consists of 3 water samples.
2. The samples were received cool and intact by ALS on 07/20/16.
3. The samples had been correctly preserved for the requested analysis.
4. The samples were prepared for analysis based on Methods for the Chemical Analysis of Waters and Wastes (MCAWW), May 1994 procedures.
5. The samples were analyzed following MCAWW procedures for the current revision of the following SOP and method:

<u>Analyte</u>	<u>Method</u>	<u>SOP #</u>
TOC (Total Organic Carbon)	415.1	670

6. All standards and solutions were used within their recommended shelf life.
7. The samples were prepared and analyzed within the established hold time for TOC analysis.

All in house quality control procedures were followed, as described below.

8. General quality control procedures.
  - n A preparation (method) blank, laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were prepared and analyzed with the samples in this preparation batch.
  - n The method blank associated with this batch was below the reporting limit for the requested analyte.



- n All laboratory control sample criteria were met.
- n All initial and continuing calibration verifications were within the acceptance criteria for the requested analyte.

9. Matrix specific quality control procedures.

Sample 1607366-4 was designated as the quality control sample for this analysis.

Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.

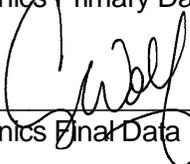
- n A matrix spike (MS) and matrix spike duplicate (MSD) were prepared and analyzed with this batch. All guidance criteria for precision and accuracy were met.

10. Sample dilutions were not required for the requested analysis.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

  
\_\_\_\_\_  
Megan Johnstone  
Organics Primary Data Reviewer

7/27/16  
Date

  
\_\_\_\_\_  
Organics Final Data Reviewer

7/30/16  
Date



### **Data Reporting Qualifiers**

The following qualifiers are used by the laboratory when reporting results of inorganic analyses.

- Concentration qualifier -- A “J” is entered if the reported value was obtained from a reading that was less than the Reporting Limit but greater than or equal to ALS’s Method Detection Limit. If the analyte was analyzed for but not detected a “U” is entered.
- QC qualifier -- Specified entries and their meanings are as follows:
  - N - Spiked sample recovery not within control limits.
  - \* - Duplicate analysis (relative percent difference) not within control limits.
  - Z - Calibration spike recovery not within control limits.

**ALS**  
**Data Qualifier Flags**  
**Organics**

- U or ND:** This flag indicates that the compound was analyzed for but not detected.
- J:** This flag indicates an estimated value. This flag is used as follows : (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the reporting limit (RL) but greater than the method detection limit (MDL); (3) when the retention time data indicate the presence of a compound that meets the GC identification criteria, and the result is less than the RL but greater than the MDL; and (4) the reported value is estimated.
- B:** This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.
- E:** This flag identifies compounds whose concentration exceeds the upper level of the calibration range.
- A:** This flag indicates that a tentatively identified compound is a suspected aldol-condensation product.
- X:** This flag indicates that the analyte was diluted below an accurate quantitation level.
- \*:** This flag indicates that a spike recovery is equal to or outside the control criteria used.
- +:** This flag indicates that the relative percent difference (RPD) equals or exceeds the control criteria.

# ALS -- Fort Collins

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 1607366

**Client Name:** COGCC

**Client Project Name:** Complaint 200439757

**Client Project Number:**

**Client PO Number:** CT 2016-141

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Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
754977 Platteville Lat.	1607366-1		WATER	20-Jul-16	8:08
754980 Platteville Lat.	1607366-2		WATER	20-Jul-16	8:30
753452 WW	1607366-3		WATER	20-Jul-16	9:45
754914 Sump	1607366-4		WATER	20-Jul-16	9:21



ALS Environmental

225 Commerce Drive, Fort Collins, Colorado 80524  
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Turnaround time for samples received after 2 p.m. will be calculated beginning from the next business day.  
Turnaround time for samples received Saturday will be calculated beginning from the next business day.

ALS WORKORDER #

1607366

PROJECT NAME	Complaint 200439757	TURNAROUND TIME	14 days	SAMPLER	PAC	PAGE	1	of	1	DISPOSAL	BY LAB	or	RETURN
PROJECT NO.		SITE ID		EDD FORMAT	COGEC	PARAMETER/METHOD REQUEST FOR ANALYSIS							
COMPANY NAME	Che. C. H. Gas Cong Comm	PURCHASE ORDER		BILL TO COMPANY		A							
SEND REPORT TO	Peter Grant Ault	INVOICE ATTN TO		ADDRESS		B							
ADDRESS	1120 Lincoln St # 801	CITY / STATE / ZIP		PHONE		C							
CITY / STATE / ZIP	Denver CO 80203	PHONE		FAX		D							
PHONE	719 679 1326	E-MAIL				E							
FAX						F							
E-MAIL	peter.g.grant@state.co.us					G							
						H							
						I							
						J							

LAB ID	FIELD ID	MATRIX	SAMPLE DATE	SAMPLE TIME	# OF BOTTLES	PRESERVATIVE	QC	A	B	C	D	E	F	G	H	I	J	SEE NOTES SECTION
①	754977 Platteville lat.	W	07/20/06	08:08	3	NO H <sub>2</sub> O <sub>2</sub>		X	X	X	X				X			
②	754980 Platteville lat.	W	07/20/06	08:30	3	NO H <sub>2</sub> O <sub>2</sub>		X	X	X	X				X			
③	753452 WW	W	07/20/06	09:45	3	H <sub>2</sub> O						X						
↓	753452 WW	W	07/20/06	09:45	2	—						X						
↓	753452 WW	W	07/20/06	09:45	3	—		X	X	X	X							
↓	753452 WW	W	07/20/06	09:45	1	H <sub>2</sub> O <sub>2</sub>									X			
④	754914 Sup	W	07/20	09:21	2	—		X	X	X	X							
↓	754914 Sup	W	07/20	09:21	1	H <sub>2</sub> O <sub>2</sub>									X			
↓	754914 Sup	W	07/20	09:21	1	—						X						

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY

REPORT LEVEL / QC REQUIRED	Summary (Standard OC)	LEVEL II (Standard OC)	LEVEL III (Std OC + forms)	LEVEL IV (Std OC + forms + raw)
	X			

PRINTED NAME	SIGNATURE	DATE	TIME
Peter Grant Ault	[Signature]	July 20, 2006	14:35
Rebecca Morala	[Signature]	7/20/06	14:35

6 of 11  
 dissolved metals = filter + preserve at lab  
 754914 may contain H<sub>2</sub>O<sub>2</sub> at 1005  
 2007 COGEC-11 Be 2007 COGEC

Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter  
PRESERVATION KEY 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NH4OH/ZnAcetate 6-NaHSO4 7-4°C 8-Other



ALS Environmental - Fort Collins  
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC

Workorder No: 1607366

Project Manager: ARW

Initials: SDM Date: 7-20-11

1. Does this project require any special handling in addition to standard ALS procedures?		YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	<input checked="" type="radio"/> NONE	YES	NO
3. Are Custody seals on sample containers intact?	<input checked="" type="radio"/> NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		YES	<input checked="" type="radio"/> NO
7. Were airbills / shipping documents present and/or removable?	<input checked="" type="radio"/> PROP OFF	YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	<input checked="" type="radio"/> YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	<input checked="" type="radio"/> YES	NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ___ < green pea ___ > green pea	N/A	YES	<input checked="" type="radio"/> NO
15. Do any water samples contain sediment? Amount Amount of sediment: ___ dusting ___ moderate ___ heavy	N/A	YES	<input checked="" type="radio"/> NO
16. Were the samples shipped on ice?		<input checked="" type="radio"/> YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 <input checked="" type="radio"/> #4		RAD ONLY	YES <input checked="" type="radio"/> NO
Cooler #: <u>1</u> <u>2</u>			
Temperature (°C): <u>5.0</u> <u>7.2</u>			
No. of custody seals on cooler: <u>2</u> <u>2</u>			
External µR/hr reading: <u>N/A</u> <u>N/A</u>			
Background µR/hr reading: <u>11</u>			
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? YES / NO <input checked="" type="radio"/> NA (If no, see Form 008.)			

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

\* Cooler 2 out of temp. Samples received same day as receipt.  
 \* Sample 4 bottles (through 4 have a <sup>right</sup> layer of oil off top of sample water.  
 b.) Sample 3 is missing the 200mL amber for TOC analysis. For Sample 3 the bottle for wet chem → The COC says 3 sample bottles only I received for the sample.

If applicable, was the client contacted? YES / NO / NA Contact: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Project Manager Signature / Date: \_\_\_\_\_

# Organic Carbon

Method EPA415.1

Method Blank

Lab Name: ALS -- Fort Collins

Work Order Number: 1607366

Client Name: COGCC

ClientProject ID: Complaint 200439757

Lab ID: MO160721-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 21-Jul-16

Date Analyzed: 21-Jul-16

Prep Batch: MO160721-1

QCBatchID: MO160721-1-1

Run ID: MO160721-1A1

Cleanup: NONE

Basis: N/A

File Name: 07211306

Sample Aliquot: 40 ml

Final Volume: 40 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ/LOD	MDL/DL	Result Qualifier	EPA Qualifier
10-35-5	TOTAL ORGANIC CARBON	1	1	1	0.3	U	

Data Package ID: MO1607366-1

Date Printed: Wednesday, July 27, 2016

ALS -- Fort Collins

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# TOTAL ORGANIC CARBON

## Method EPA415.1

### Sample Results

Lab Name: ALS -- Fort Collins  
Client Name: COGCC  
Client Project ID: Complaint 200439757  
Work Order Number: 1607366  
Reporting Basis: As Received  
Analyst: Steven D. White

Final Volume: 40 ml  
Matrix: WATER  
Result Units: MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	RptLimit/ LOQ/LOD	MDL/DL	Flag	Sample Aliquot
754977 Platteville Lat.	1607366-1	7/20/2016	7/21/2016	07/21/2016	N/A	1	6.2	1	0.3		40 ml
754980 Platteville Lat.	1607366-2	7/20/2016	7/21/2016	07/21/2016	N/A	1	6.2	1	0.3		40 ml
754914 Sump	1607366-4	7/20/2016	7/21/2016	07/21/2016	N/A	1	8.4	1	0.3		40 ml

#### Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *MO1607366-1*

Date Printed: Wednesday, July 27, 2016

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# Organic Carbon

## Method EPA415.1

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS -- Fort Collins

Work Order Number: 1607366

Client Name: COGCC

ClientProject ID: Complaint 200439757

Lab ID: MO160721-1LCS	Sample Matrix: WATER % Moisture: N/A Date Collected: N/A Date Extracted: 07/21/2016 Date Analyzed: 07/21/2016 Prep Method: NONE	Prep Batch: MO160721-1 QCBatchID: MO160721-1-1 Run ID: MO160721-1A1 Cleanup: NONE Basis: N/A File Name: 07211306	Sample Aliquot: 40 ml Final Volume: 40 ml Result Units: MG/L Clean DF: 1
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CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
10-35-5	TOTAL ORGANIC CARBON	15	15.5	1		103	85 - 115%

Lab ID: MO160721-1LCSD	Sample Matrix: WATER % Moisture: N/A Date Collected: N/A Date Extracted: 07/21/2016 Date Analyzed: 07/21/2016 Prep Method: NONE	Prep Batch: MO160721-1 QCBatchID: MO160721-1-1 Run ID: MO160721-1A1 Cleanup: NONE Basis: N/A File Name: 07211306	Sample Aliquot: 40 ml Final Volume: 40 ml Result Units: MG/L Clean DF: 1
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CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
10-35-5	TOTAL ORGANIC CARBON	15	15.6	1		104	20	1

Data Package ID: MO1607366-1

# Organic Carbon

Method EPA415.1

## Matrix Spike And Matrix Spike Duplicate

Lab Name: ALS -- Fort Collins

Work Order Number: 1607366

Client Name: COGCC

ClientProject ID: Complaint 200439757

Field ID: 754914 Sump

LabID: 1607366-4MS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 20-Jul-16

Date Extracted: 21-Jul-16

Date Analyzed: 21-Jul-16

Prep Method: NONE

Prep Batch: MO160721-1

QCBatchID: MO160721-1-1

Run ID: MO160721-1A1

Cleanup: NONE

Basis: As Received

Sample Aliquot: 40 ml

Final Volume: 40 ml

Result Units: MG/L

File Name: 07211306

CASNO	Target Analyte	Sample Result	Samp Qual	MS Result	MS Qual	Reporting Limit	Spike Added	MS % Rec.	Control Limits
10-35-5	TOTAL ORGANIC CARBON	8.4		19.4		1	10	110	80 - 120%

Field ID: 754914 Sump

LabID: 1607366-4MSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 20-Jul-16

Date Extracted: 21-Jul-16

Date Analyzed: 21-Jul-16

Prep Method: NONE

Prep Batch: MO160721-1

QCBatchID: MO160721-1-1

Run ID: MO160721-1A1

Cleanup: NONE

Basis: As Received

Sample Aliquot: 40 ml

Final Volume: 40 ml

Result Units: MG/L

File Name: 07211306

CASNO	Target Analyte	MSD Result	MSD Qual	Spike Added	MSD % Rec.	Reporting Limit	RPD Limit	RPD
10-35-5	TOTAL ORGANIC CARBON	19.7		10	113	1	20	2

Data Package ID: MO1607366-1

Date Printed: Wednesday, July 27, 2016

ALS -- Fort Collins

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