



Total Organic Carbon Case Narrative

Colorado Oil & Gas Conservation Commission Complaint 200272771

Work Order Number: 1010128

1. This report consists of 1 water sample.
2. The sample was received cool and intact by ALS on 10/08/10.
3. The sample had been correctly preserved for the requested analysis.
4. The sample was prepared for analysis based on Methods for the Chemical Analysis of Waters and Wastes (MCAWW), May 1994 procedures.
5. The sample were analyzed following MCAWW procedures for the following method:

<u>Analyte</u>	<u>Method</u>	<u>SOP #</u>
TOC (Total Organic Carbon)	415.1	670 Rev 13
6. All standards and solutions were used within their recommended shelf life.
7. The sample was 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. There were not more than 20 samples in this preparation batch.
 - n The method blank associated with this batch was below the reporting limit for the requested analyte. This indicates that no contaminants were introduced to the samples during preparation and analysis.
 - n The LCS and LCSD were within the acceptance limits for TOC analysis.



- All continuing calibration verifications (CCV) associated with this batch were within the acceptance criteria for the requested analyte. This indicates a valid calibration and stable instrument conditions.

9. Matrix specific quality control procedures.

Since a sample from this Order Number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

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.



Sharon L. Jobes
Organics Primary Data Reviewer

10-27-10
Date



Organics Final Data Reviewer

10/27/10
Date



Inorganic Data Reporting Qualifiers

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

- Concentration qualifier -- 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.
 - B - The method blank for the analysis contained the analyte of interest above the reporting limit.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 1010128

Client Name: Colorado Oil & Gas Conservation Commission

Client Project Name: Complaint 200272771

Client Project Number:

Client PO Number: OE PHA 11000000014

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Burge WW	1010128-1		WATER	06-Oct-10	11:25
Trip Blank	1010128-2		WATER	06-Oct-10	



ALS Laboratory Group

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

Chain-of-Custody

Form 202r8

WORKORDER # 1010128

PROJECT NAME	<u>Complaint 200272771</u>	SAMPLER		DATE		WORKORDER #	<u>1010128</u>
PROJECT No.		SITE ID		TURNAROUND	<u>14 day</u>	PAGE	<u>1</u> of <u>1</u>
COMPANY NAME	<u>Colo Oil & Gas Cons. Comm.</u>	EDD FORMAT				DISPOSAL	<u>By Lab</u> or Return to Client
SEND REPORT TO	<u>Peter Gintautas</u>	PURCHASE ORDER	<u>PHA #00611-14</u>				
ADDRESS	<u>PO Box 108</u>	BILL TO COMPANY					
CITY / STATE / ZIP	<u>Trinidad CO 81082</u>	INVOICE ATTN TO					
PHONE	<u>719 846-3091</u>	ADDRESS					
FAX		CITY / STATE / ZIP					
E-MAIL	<u>peter.gintautas@state.co.us</u>	PHONE					
		FAX					
		E-MAIL					

200.7 + 200.8 dissolved
 Dissolved Gases
 8260-25 + TICs
 8070 + TICs
 TEPH - DRO
 Anions
 pH, cond
 TDS + TSS
 Alk - Tot, HCO₃, CO₃
 SAR calc
 Cation Anion Balance
 TIC

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC													
①	Burge WW	W	10/6/10	11:25A	1	99		X	X	X	X	X	X	X	X	X	X	X	X	X
	Burge WW		↓	↓	1	H ₂ O														X
②	Trip Blanks	W	↓	↓	2	1				X										

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

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

For metals or anions, please detail analytes below.

Comments:
 Dissolved = Filter + preserve at lab.
 5 of 9

QC PACKAGE (check below)	
<input checked="" type="checkbox"/>	LEVEL II (Standard QC)
<input type="checkbox"/>	LEVEL III (Std QC + forms)
<input type="checkbox"/>	LEVEL IV (Std QC + forms + raw data)

SIGNATURE	PRINTED NAME	DATE	TIME
<i>[Signature]</i>	Angela Belloniani	10/7/10	9:00A
<i>[Signature]</i>	C Cochran	10/8/10	0945
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			

Preservative Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-NaHSO₄ 7-Other 8-4 degrees C 9-5035



CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC

Workorder No: 1010128

Project Manager: AW

Initials: AW Date: 10-8-10

1. Does this project require any special handling in addition to standard Paragon procedures?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
2. Are custody seals on shipping containers intact?	<input checked="" type="radio"/> NONE	<input checked="" type="radio"/> YES	<input type="radio"/> NO
3. Are Custody seals on sample containers intact?	<input checked="" type="radio"/> NONE	<input checked="" type="radio"/> YES	<input type="radio"/> NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		<input checked="" type="radio"/> YES	<input type="radio"/> NO
7. Were airbills / shipping documents present and/or removable?	<input type="radio"/> DROP OFF	<input checked="" type="radio"/> YES	<input type="radio"/> NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	<input type="radio"/> N/A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
9. Are all aqueous non-preserved samples pH 4-9?	<input type="radio"/> N/A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	<input type="radio"/> 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	<input type="radio"/> N/A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
15. Do perchlorate LCMS-MS samples have headspace? (at least 1/3 of container required)	<input checked="" type="radio"/> N/A	<input type="radio"/> YES	<input type="radio"/> NO
16. Were samples checked for and free from the presence of residual chlorine? (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	<input checked="" type="radio"/> N/A	<input type="radio"/> YES	<input type="radio"/> NO
17. Were the samples shipped on ice?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
18. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 <input checked="" type="radio"/> #4	<input type="radio"/> RAD ONLY	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Cooler #: <u>1</u>			
Temperature (°C): <u>4.5</u>			
No. of custody seals on cooler: <u>1</u>			
External µR/hr reading: <u>12</u>			
Background µR/hr reading: <u>11</u>			
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? YES / NO / NA (If no, see Form 008.)			

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

received out of hotel with only a few hours of hold time remaining.
AW 10/8/10

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

Project Manager Signature / Date: _____

*IR Gun #2: Oakton, SN 29922500201-0066

*IR Gun #4: Oakton, SN 2372220101-0002

Organic Carbon

Method EPA415.1

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1010128

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200272771

Field ID:	Burge WW
Lab ID:	1010128-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 06-Oct-10

Date Extracted: 14-Oct-10

Date Analyzed: 14-Oct-10

Prep Method: NONE

Prep Batch: MO101014-1

QCBatchID: MO101014-1-1

Run ID: MO101014-1A

Cleanup: NONE

Basis: As Received

File Name: 10140924

Sample Aliquot: 40 ml

Final Volume: 40 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
10-35-5	TOTAL ORGANIC CARBON	1	1.7	1		

Data Package ID: MO1010128-1

Organic Carbon

Method EPA415.1

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1010128

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200272771

Lab ID: MO101014-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 14-Oct-10

Date Analyzed: 14-Oct-10

Prep Method: NONE

Prep Batch: MO101014-1

QCBatchID: MO101014-1-1

Run ID: MO101014-1A

Cleanup: NONE

Basis: N/A

File Name: 10140924

Sample Aliquot: 40 ml

Final Volume: 40 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
10-35-5	TOTAL ORGANIC CARBON	1	1	1	U	

Data Package ID: MO1010128-1

Date Printed: Tuesday, October 26, 2010

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LIMS Version: 6.424A

Organic Carbon

Method EPA415.1

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1010128

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200272771

Lab ID: MO101014-1LCS	Sample Matrix: WATER % Moisture: N/A Date Collected: N/A Date Extracted: 10/14/2010 Date Analyzed: 10/14/2010 Prep Method: NONE	Prep Batch: MO101014-1 QCBatchID: MO101014-1-1 Run ID: MO101014-1A Cleanup: NONE Basis: N/A File Name: 10140924	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	15.7	1		104	85 - 115%

Lab ID: MO101014-1LCSD	Sample Matrix: WATER % Moisture: N/A Date Collected: N/A Date Extracted: 10/14/2010 Date Analyzed: 10/14/2010 Prep Method: NONE	Prep Batch: MO101014-1 QCBatchID: MO101014-1-1 Run ID: MO101014-1A Cleanup: NONE Basis: N/A File Name: 10140924	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	15.7	1		105	20	0

Data Package ID: MO1010128-1