



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.

sey
Sharon L. Jobes
Organics Primary Data Reviewer

10-27-10
Date

Boz Zh
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

PAGE

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DISPOSAL

By Lab or Return to Client

PROJECT NAME Complant 20027271

SAMPLER

SITE ID

DATE

TURNAROUND

14 day

PROJECT No.

EDD FORMAT

PURCHASE ORDER

PHA 100611-14

COMPANY NAME Colo Oil & Gas Cns. Lm.

BILL TO COMPANY

SEND REPORT TO Peter Gintantes

INVOICE ATTN TO

ADDRESS PO Box 108

ADDRESS

CITY / STATE / ZIP Trinidad CO 81082

CITY / STATE / ZIP

PHONE 719-846-3091

PHONE

FAX

FAX

E-MAIL peter.gintantes@stateco.us

E-MAIL

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

1 Burge WW
Burge WW

W

10/6/10 11:25A

29

X X X X X X X X X X

2 Trip Blanks

W

1 1

1

X

Anions = Br, Cl, F, NO₂, NO₃, SO₄
200.8 = Al, Sb, As, Cd, Pb, Mo, Se, Ag, Te, U
200.7 = Ba, Be, B, 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.

QC PACKAGE (check below)

☒ LEVEL II (Standard QC)
☐ LEVEL III (Std QC + forms)
☐ LEVEL IV (Std QC + forms + raw data)

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

SIGNATURE

PRINTED NAME

DATE

TIME

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

RELINQUISHED BY

RECEIVED BY

Angela Bellumani

C. Cochran

10/7/10 9:00A

10/8/10 0945



CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCCWorkorder No: 1010128Project Manager: AWInitials: CW Date: 10-8-10

1. Does this project require any special handling in addition to standard Paragon procedures?		<u>YES</u>	NO
2. Are custody seals on shipping containers intact?	NONE	<u>YES</u>	NO
3. Are Custody seals on sample containers intact?	NONE	<u>YES</u>	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<u>YES</u>	NO
5. Are the COC and bottle labels complete and legible?		<u>YES</u>	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		<u>YES</u>	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<u>YES</u>	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	<u>YES</u>	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	<u>YES</u>	NO
10. Is there sufficient sample for the requested analyses?		<u>YES</u>	NO
11. Were all samples placed in the proper containers for the requested analyses?		<u>YES</u>	NO
12. Are all samples within holding times for the requested analyses?		<u>YES</u>	NO
13. Were all sample containers received intact ? (not broken or leaking, etc.)		<u>YES</u>	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: <u> </u> < green pea <u> </u> > green pea	N/A	<u>YES</u>	NO
15. Do perchlorate LCMS-MS samples have headspace ? (at least 1/3 of container required)	N/A	<u>YES</u>	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.)	N/A	<u>YES</u>	NO
17. Were the samples shipped on ice ?		<u>YES</u>	NO
18. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: <u>#2</u> <u>#4</u> RAD ONLY		<u>YES</u>	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

Date Printed: Tuesday, October 26, 2010

ALS Environmental -- FC

LIMS Version: 6.424A

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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

ALS Environmental -- FC

LIMS Version: 6.424A

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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

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

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