



Total Organic Carbon Case Narrative

Colorado Oil & Gas Conservation Commission Complaint 200221017

Work Order Number: 0910287

1. This report consists of 1 water sample.
2. The sample was received cool and intact by ALS on 10/28/09.
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 samples 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.

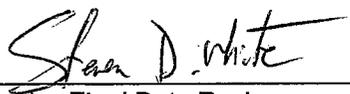
Since a sample from this Order Number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

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

11-4-09
Date



Organics Final Data Reviewer

11-4-09
Date



ALS Laboratory Group

225 Commerce Drive, Fort Collins, CO 80524

TF: 800-443-1511 PH: 970-490-1511 FX: 970-490-1522

Chain-of-Custody

0910287

Date 27 Oct 2009 Page 1 of 1

Lab ID

Project Name/No.		Sampler(s)	<u>Gintantars</u>										Turnaround	Standard	or Due	<u>File</u>	Disposal	By Lab	or Retu
REPORT TO:	<u>Peter Gintantars</u>																		
PHONE:	<u>719-846-3091</u>																		
FAX:	<u>719-846-3384</u>																		
E-MAIL:	<u>peter.gintantars@state.co</u>																		
COMPANY:	<u>Colo. Oil & Gas Comm.</u>																		
ADDRESS:	<u>PO Box 108 Trinidad CO 81082</u>																		

Provide additional information as needed in Comments below.				Circle Analytical Method Above															Circle Analytical Method Ab														
Sample ID	Date	Time	Lab ID	Matrix	Preservative (Type HCl, etc.)	No. of Containers	TPH Methane Ethane E	VOCs	BTEX + MIBE	SVOCs	OC Pesticides	PCBs TOL	Herbicides	Explosives	TCLP Organics SW1311	TCLP Metals SW1311	Total Metals (ICP) or Hg	Dissolved Metals (ICP) or Hg	Total Metals (ICP-MS)	Dissolved Metals (ICP-MS)	Hexavalent-Chromium	Inorganic Anions	Solids	pH	Perchlorate	Actinides	Gamma Isotopes	Gross Alpha / Beta	Total Alpha-Emitting Radium	Radium 226	Radium 228	Strontium 90 (Total RadioSr)	Tritium
<u>Complaint 200221017</u>	<u>27 Oct</u>	<u>09:36</u>	<u>1</u>	<u>W</u>	<u>None</u>	<u>1</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>Complaint 200221028</u>	<u>27 Oct</u>	<u>10:35</u>	<u>W</u>	<u>W</u>	<u>None</u>	<u>3</u>	<u>X</u>		<u>X</u>		<u>X</u>						<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>Complaint 200221032</u>	<u>27 Oct</u>	<u>11:14</u>	<u>W</u>	<u>W</u>	<u>None</u>	<u>5</u>	<u>X</u>										<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>Meadows WW</u>	<u>27 Oct</u>	<u>11:14</u>	<u>W</u>	<u>W</u>	<u>None</u>	<u>3</u>	<u>X</u>	<u>X</u>									<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>Complaint 200221031</u>	<u>27 Oct</u>	<u>12:06</u>	<u>W</u>	<u>W</u>	<u>None</u>	<u>5</u>	<u>X</u>										<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								
<u>Bieber WW</u>	<u>27 Oct</u>	<u>12:06</u>	<u>W</u>	<u>W</u>	<u>None</u>	<u>3</u>	<u>X</u>	<u>X</u>				<u>X</u>					<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>								

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

For metals or anions, please detail analyte list below.

Comments: (Trip blank + Complaint 200221032) = 8260-25 + tertbutanol / TDCs
Anions = Br, Cl, F, NO₂, NO₃, SO₄
Filter + Preserve metals upon receipt
200.7 = B, Ba, Be, Ca, Cr, Co, Cu, Fe, Li, Mg, Mn, Ni, K, Na, Sr, Zn, Si
200.8 = Sb, As, Cd, Pb, Mo, Se, Ag, Te, U

Relinquished By:	(1)	Relinquished By:	
Signature <u>Peter Gintantars</u>		Signature	
Printed Name <u>Peter Gintantars</u>		Printed Name	
Date <u>27 Oct 09</u> Time <u>16:20</u>		Date	Time
Company <u>COGCC</u>		Company	
Received By:	(1)	Received By:	
Signature <u>Jawara Schmitz</u>		Signature	
Printed Name <u>Jawara Schmitz</u>		Printed Name	
Date <u>10-28-09</u> Time <u>1015</u>		Date	Time
Company <u>ALS</u>		Company	

Originator: Retain pink page or a photocopy!

Form 2027 (5/19/09)



CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC

Workorder No: 0910287

Project Manager: AW

Initials: LAS Date: 10/28/2009

1. Does this project require any special handling in addition to standard Paragon procedures?		YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	NONE	<input checked="" type="radio"/> 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.)		<input checked="" type="radio"/> YES	<input checked="" type="radio"/> NO * ^{AS 10/28/09}
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<input checked="" type="radio"/> YES	NO ^{AS 10/29/09}
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	<input checked="" type="radio"/> YES	<input checked="" type="radio"/> 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	<input checked="" type="radio"/> YES	NO
15. Do perchlorate LCMS-MS samples have headspace? (at least 1/3 of container required)	<input checked="" type="radio"/> N/A	YES	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	YES	NO
17. Were the samples shipped on ice?		<input checked="" type="radio"/> YES	NO
18. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: <input checked="" type="radio"/> #2 <input type="radio"/> #4 RAD ONLY		<input checked="" type="radio"/> YES	NO
Cooler #: <u>1 2</u>			
Temperature (°C): <u>2.7° 3.8°</u>			
No. of custody seals on cooler: <u>1 1</u>			
DOT Survey/Acceptance Information	External µR/hr reading: <u>15 15</u>		
	Background µR/hr reading: <u>13</u>		
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES <input type="radio"/> NO / NA (If no, see Form 008.)			

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

* AS 10/28/09

* metals will be filtered and preserved by the lab (prior to analysis)

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

Project Manager Signature / Date: [Signature] 11/2/09

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

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



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 Laboratory Group -- FC

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0910287

Client Name: Colorado Oil & Gas Conservation Commission

Client Project Name: Complaint 200221017

Client Project Number:

Client PO Number: OE PHA 09000000004

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Stevens WW	0910287-1		WATER	27-Oct-09	9:36

Organic Carbon

Method EPA415.1

Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0910287

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200221017

Field ID:	Stevens WW
Lab ID:	0910287-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 27-Oct-09

Date Extracted: 29-Oct-09

Date Analyzed: 29-Oct-09

Prep Method: NONE

Prep Batch: MO091029-1

QCBatchID: MO091029-1-1

Run ID: MO091029-1A

Cleanup: NONE

Basis: As Received

File Name: 10291309

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	2.7	1		

Data Package ID: MO0910287-1

Organic Carbon

Method EPA415.1

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0910287

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200221017

Lab ID: MO091029-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 29-Oct-09

Date Analyzed: 29-Oct-09

Prep Method: NONE

Prep Batch: MO091029-1

QCBatchID: MO091029-1-1

Run ID: MO091029-1A

Cleanup: NONE

Basis: N/A

File Name: 10291309

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: MO0910287-1

Date Printed: Wednesday, November 04, 2009

ALS Laboratory Group -- FC

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LIMS Version: 6.307A

Organic Carbon

Method EPA415.1

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0910287

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200221017

Lab ID: MO091029-1LCS	Sample Matrix: WATER % Moisture: N/A Date Collected: N/A Date Extracted: 10/29/2009 Date Analyzed: 10/29/2009 Prep Method: NONE	Prep Batch: MO091029-1 QCBatchID: MO091029-1-1 Run ID: MO091029-1A Cleanup: NONE Basis: N/A File Name: 10291309	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	14.5	1		97	85 - 115%

Lab ID: MO091029-1LCSD	Sample Matrix: WATER % Moisture: N/A Date Collected: N/A Date Extracted: 10/29/2009 Date Analyzed: 10/29/2009 Prep Method: NONE	Prep Batch: MO091029-1 QCBatchID: MO091029-1-1 Run ID: MO091029-1A Cleanup: NONE Basis: N/A File Name: 10291309	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	14.7	1		98	20	1

Data Package ID: MO0910287-1