



# ALS Paragon



## Total Organic Carbon Case Narrative

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### Colorado Oil & Gas Conservation Commission

Complaint 200205808

Work Order Number: 0903060

1. This report consists of 1 water sample.
2. The sample was received cool and intact by ALS Paragon on 03/10/09.
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 sample was 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 12

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 Paragon certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

SLJ  
Sharon L. Jobes  
Organics Primary Data Reviewer

3-24-09  
Date

Eric Bayless  
Organics Final Data Reviewer

3/24/09  
Date

# ALS Paragon

## Sample Number(s) Cross-Reference Table

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**Paragon OrderNum:** 0903060

**Client Name:** Colorado Oil & Gas Conservation Commission

**Client Project Name:** Complaint 200205808

**Client Project Number:**

**Client PO Number:** OE PHA 09000000004

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Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Angely WW 1	0903060-1		WATER	09-Mar-09	9:56
Angely WW 2	0903060-2		WATER	09-Mar-09	10:30
Trip Blank	0903060-3		WATER	09-Mar-09	



225 Commerce Drive Fort Collins, CO 80524  
800-443-1511 or (970) 490-1511 (970) 490-1522 Fax

Accession Number (LAB ID) 0903000  
Chain-of-Custody Date 9 March 2005 Page 1 of 1

**Originator: Retain pink copy!**

Project Name/No.:	Turnaround	Standard or Rush (Due Date)	Dispose: Date	Return to Client
Report To: Peter Gintantus Phone: 714-946-3091 Fax: E-mail: peter.gintantus@state.co.us Company: Colo. Oil & Gas Cons. Comm. Address:	Complaint 2002-04738			
Sample ID	Date	Time *	Lab ID	Matrix
Angely Ww 1	9/10/09	09:56	W	nme
				HCL
				H <sub>2</sub> SO <sub>4</sub>
				HNO <sub>3</sub>
Angely Ww 2	9/10/09	10:30	W	nme
Trip Blank			(3)	
VOCs	SW8260B	25 Fullfills	X	
BTEX (only)	SW821B	Methano + Ethano	X	
SVOCs	SW8270C			
GC-Pesticides	SW8081A	HCS		
PCBs	SW8082	TCC		
Herbicides	SW8151A			
Explosives	SW8330			
TCLP Organics	SW8260B	8270C 8081A 8151A		
TCLP Metals	SW6010B	7470		
Total Metals by ICP Hg	SW6010B	7470 7471 E200.7		
Dissolved Metals by ICP Hg	SW6010B	7470 E200.7		
Total Metals by ICP/MS	SW6020A	E200.8		
Dissolved Metals by ICP/MS	SW6020A	E200.8		
Inorganic Anions	SW7196A	Kaliumline Digest / N		
Solids:	Total E160.3 TDS E160.1 TSS E160.2			
pH	SW9040B	SW9045C		
TPH	SW8015B	GRO DRU (circle one or both)		
Gross Alpha / Beta	SW9310	E900.0		
Actinides by Paragon SOP	Pu / U / Am / Th / Cm /			
Tritium	E906.0			
Total Alpha-Emitting Radium	SW9315	E903.0		
Radium 226	E903.1			
Radium 228	SW9320	E904.0		
Strontium 90 (Total RadioSr)	D5811-00			
Gamma Isotopes	E901.1			
Radon 222	SM7510Rn			
Relinquished By:	Signature _____	Printed Name _____	Date _____	Time _____
Relinquished By:	Signature _____	Printed Name _____	Date _____	Time _____
Received By:	Signature _____	Printed Name _____	Date _____	Time _____
Received By:	Signature _____	Printed Name _____	Date _____	Time _____

\* Time Zone: EST CST MST PST Matrix Key: O = oil, S = soil, NS = non-soil solid, W = water, L = liquid, E = extract, F = filter

Comments: Filter + preserve metals upon receipt  
Anims = Br, Cl, F, Na, Mg, SO<sub>4</sub>  
200.7 = Ba, Be, B, Ca, Cr, Cu, Fe, Li, Mg, Mn, Ni, K, Na, Zn, Sr  
+ 200.6 = Sb, As, Cd, Pb, Mo, Se, Ag, Te, U

## CONDITION OF SAMPLE UPON RECEIPT FORM

Paragon Analytics

Client: PCCGWorkorder No: 0903060Project Manager: AWInitials: Pro Date: 3-10-09

1. Does this project require any special handling in addition to standard Paragon procedures?		YES	<u>NO</u>
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>&lt; green pea</u> <u>✓</u> > green pea	N/A	YES	<u>NO</u>
15. Do perchlorate LCMS-MS samples have headspace? (at least 1/3 of container required)	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.)	N/A	YES	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>2.8</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.

3 vials for VL = Headspace <green pea #4 #5 #63 vials for methans - #7 #8 #9 #7 huge Bubble 809 small bubblesIf applicable, was the client contacted? YES / NO / NA Contact: Peter Gintantas Date/Time: 3/10/09Project Manager Signature / Date: [Signature] 3/10/09e-mail

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

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

PETER GINTAUTAS  
719-846-8091  
COLORADO OIL & GAS CONSERVATION  
801 ATCHISON AVENUE  
FORT COLLINS CO 81082

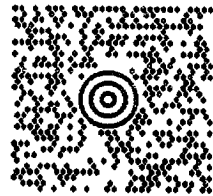
42 LBS

1 OF 1

SHIP TO:

AMY WOLF  
970-490-1511  
PARAGON ANALYTICS  
225 COMMERCE DRIVE  
FORT COLLINS CO 80524-2762

*Q101*  
*21*



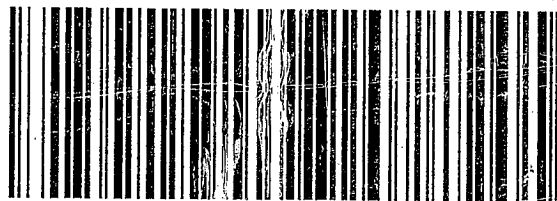
CO 805 0-01



UPS NEXT DAY AIR

TRACKING #: 1Z 014 8WR 01 9605 3313

**1**



BILLING: P/P

Reference#1: Compalint 200204738

UPS 11.1.05.

WXPIE70 87.0A 01/2009



TM

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### **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.

# Organic Carbon

## Method EPA415.1

### Sample Results

Lab Name: ALS Paragon

Work Order Number: 0903060

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200205808

Field ID:	Angely WW 1
Lab ID:	0903060-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 09-Mar-09

Date Extracted: 17-Mar-09

Date Analyzed: 17-Mar-09

Prep Method: NONE

Prep Batch: MO090317-1

QCBatchID: MO090317-1-1

Run ID: MO090317-1A

Cleanup: NONE

Basis: As Received

File Name: 03171310

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	1.6	1		

Data Package ID: MO0903060-1

Date Printed: Monday, March 23, 2009

ALS Paragon

LIMS Version: 6.252A

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# Organic Carbon

Method EPA415.1

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903060

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200205808

Lab ID: MO090317-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 17-Mar-09

Date Analyzed: 17-Mar-09

Prep Method: NONE

Prep Batch: MO090317-1

QCBatchID: MO090317-1-1

Run ID: MO090317-1A

Cleanup: NONE

Basis: N/A

File Name: 03171310

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: MO0903060-1

Date Printed: Monday, March 23, 2009

ALS Paragon

LIMS Version: 6.252A

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# Organic Carbon

## Method EPA415.1

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon

Work Order Number: 0903060

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200205808

Lab ID: MO090317-1LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 03/17/2009

Date Analyzed: 03/17/2009

Prep Method: NONE

Prep Batch: MO090317-1

QCBatchID: MO090317-1-1

Run ID: MO090317-1A

Cleanup: NONE

Basis: N/A

File Name: 03171310

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	15.1	1		101	85 - 115%

Lab ID: MO090317-1LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 03/17/2009

Date Analyzed: 03/17/2009

Prep Method: NONE

Prep Batch: MO090317-1

QCBatchID: MO090317-1-1

Run ID: MO090317-1A

Cleanup: NONE

Basis: N/A

File Name: 03171310

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	15.2	1		101	20	0

Data Package ID: MO0903060-1

Date Printed: Monday, March 23, 2009

ALS Paragon

LIMS Version: 6.252A

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