



ALS Paragon



Total Organic Carbon Case Narrative

Colorado Oil & Gas Conservation Commission

Complaint 200204503

Work Order Number: 0903158

1. This report consists of 1 water sample.
2. The sample was received cool and intact by ALS Paragon on 03/20/09.
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.

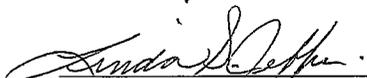
- Since a sample from this Order Number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

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.



Sharon L. Jobs
Organics Primary Data Reviewer

3-26-09
Date



Sandra L. Deffen
Organics Final Data Reviewer

03/26/09
Date

ALS Paragon

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0903158

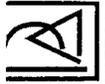
Client Name: Colorado Oil & Gas Conservation Commission

Client Project Name: Complaint 200204503

Client Project Number:

Client PO Number: OE PHA 09000000004

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
VanAlestyn 090319	0903158-1		WATER	19-Mar-09	12:40



Paragon Analyticals
A Division of DataChem Laboratories, Inc.

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

Accession Number (LAB ID) **0903158**
Chain-of-Custody Date **3/19/09** Page **1** of **1**
Originator: Retain pink copy!

Project Name/No.: **NER** Sampler(s): **C. Wainwright** Turnaround (circle one) **Standard** for Rush (Due **14**) (Dispose) Date **3/26/09** or Return to Client

Report To: **Peter Gintautas**
Phone: **719-846-3091**
Fax:
E-mail: **peter.gintautas@state.co.us**
Company: **Colo. Oil & Gas Caseratic Comm.**
Address:
Comments: **PLEASE REFER TO 200204502
VAUAGSTW W/ 200204503**

Circle method (right); provide additional information as needed (comments).

Sample ID	Date	Time *	Lab ID	Matrix	Preservative	No. of Containers	VOCs	BTEX (only)	SVOCs	OC Pesticides	PCBs	Herbicides	Explosives	TCLP Organics SW1311	TCLP Metals SW1311 Hg	Total Metals by ICP Hg	Dissolved Metals by ICP Hg	Total Metals by ICP/MS	Dissolved Metals by ICP/MS	Inorganic Anions	Solids:	pH	TPH Conductivity	Gross Alpha / Beta	Actinides by Paragon SOP	Tritium	Total Alpha-Emitting Radium	Radium 226	Radium 228	Strontium 90 (Total RadioSr)	Gamma Isotopes	Radon 222	Remarks			
GROSS 090319	3/19/09	10:05	W	W	None	10	X	X	X			X	X	SW8260B 8270C 8081A 8151A	SW6010B 7470	SW6010B 7470 7471 E200.7	SW6010B 7470	SW6020A E200.8	SW9056 E300.0	Total E160.3 TDS E160.1	SW9040B SW9045C	SW9015B GRO BRO (circle one or both)	SW9310 E900.0		E906.0	SW9315 E903.0	E903.1	SW9320 E904.0	D5811-00	E901.1	SM7510RN	SAR Calc. Balance				
PULSER 090319		11:05					X	X	X			X	X																							
VAUAGSTW 090319		12:40					X	X	X			X	X																							
KOSLYU 090319		13:45					X	X	X			X	X																							

Relinquished By: **Christina E. Whitmore** (1)
Signature: *[Signature]*
Printed Name: **Christina E. Whitmore**
Date: **3/19/09** Time: **16:30**
Company: **WHITMORE ASSOCIATES**

Relinquished By: **Christina E. Whitmore** (2)
Signature: *[Signature]*
Printed Name: **Christina E. Whitmore**
Date: **3/19/09** Time: **16:30**
Company: **WHITMORE ASSOCIATES**

Received By: **Lara J. Orban** (1)
Signature: *[Signature]*
Printed Name: **Lara J. Orban**
Date: **3/26/09** Time: **09:30 1008**
Company: **A.L.S. Paragon** WJ120109

Received By: **Lara J. Orban** (2)
Signature: *[Signature]*
Printed Name: **Lara J. Orban**
Date: **3/26/09** Time: **09:30 1008**
Company: **A.L.S. Paragon** WJ120109

* 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 via receipt
ANIMS = Bi, Cl, F, Ni, Nb, Mo, S, W
200.7 = Bi, Be, B, Ca, Cr, Cu, Fe, Li, Mn, Mg, Ni, K, Na, Sr, Zn
200.8 = Sb, As, Cd, Pb, Mo, Se, Ag, Te, U**

CONDITION OF SAMPLE UPON RECEIPT FORM

Paragon Analytics

Client: COGCC

Workorder No: 09 03 158

Project Manager: AW

Initials: LJO

Date: 3/20/09

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	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<input checked="" type="radio"/> YES	NO
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 #4 RAD ONLY		<input checked="" type="radio"/> YES	NO
Cooler #: <u>1</u>			
Temperature (°C): <u>2.2</u>			
No. of custody seals on cooler: <u>1</u>			
External µR/hr reading: <u>13</u>			
Background µR/hr reading: <u>11</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.

* 3 of ¹³ 40 ml vials for methane analysis listed no sample time on labels.
to 3/20/09

• The 500ml poly for metals analysis needs to be filtered and preserved in house.

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

Project Manager Signature / Date: Aw 3/23/09

*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.

TOTAL ORGANIC CARBON

Method EPA415.1

Sample Results

Lab Name: ALS Paragon
Client Name: Colorado Oil & Gas Conservation Commission
Client Project ID: Complaint 200204503
Work Order Number: 0903158 **Final Volume:** 40 ml
Reporting Basis: As Received **Matrix:** WATER
Prep Method: NONE **Result Units:** MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
VanAlestyn 090319	0903158-1	03/19/2009	03/24/2009	03/24/2009	N/A	1	1	1	U	40 ml

Comments:

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

Data Package ID: *MO0903158-1*

TOTAL ORGANIC CARBON

Method EPA415.1

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: MO090324-1MB

Sample Matrix: WATER

% Moisture: N/A

Prep Batch: MO090324-1

QCBatchID: MO090324-1-1

Run ID: MO090324-1A

Cleanup: NONE

Basis: N/A

Sample Aliquot: 40 ml

Final Volume: 40 ml

Result Units: MG/L

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
MO090324-1MB	3/24/2009	03/24/2009	N/A	1	1	1	U

Comments:

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

Data Package ID: MO0903158-1

Date Printed: Wednesday, March 25, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 1

Organic Carbon

Method EPA415.1

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: MO090324-1LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/24/2009
Date Analyzed: 03/24/2009
Prep Method: NONE

Prep Batch: MO090324-1
QCBatchID: MO090324-1-1
Run ID: MO090324-1A
Cleanup: NONE
Basis: N/A
File Name: 03241037

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	15.3	1		102	85 - 115%

Lab ID: MO090324-1LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/24/2009
Date Analyzed: 03/24/2009
Prep Method: NONE

Prep Batch: MO090324-1
QCBatchID: MO090324-1-1
Run ID: MO090324-1A
Cleanup: NONE
Basis: N/A
File Name: 03241037

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	15.4	1		102	20	0

Data Package ID: MO0903158-1