ALS Paragon

Total Organic Carbon
Case Narrative

Colorado Oil & Gas Conservation Commission
Complaint 200204501
Work Order Number: 0904037

1. This report consists of 1 water sample.

2. The sample was received cool and intact by ALS Paragon on 04/03/09.

3. The samples had been correctly preserved for the requested analysis.

4. The samples were 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:

Analyte	Method	SOP #
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.

    - 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.

    - 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.

    - 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.

_____   4-8-09
Sharon L. Jobes   Date
Organics Primary Data Reviewer

_____   4/8/05
Organics Final Data Reviewer   Date

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ALS Paragon

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0904037
Client Name: Colorado Oil & Gas Conservation Commission
Client Project Name: Complaint 200204501
Client Project Number:
Client PO Number: OE PHA 09000000004

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Dahl WW	0904037-1		WATER	02-Apr-09	12:18
Trip Blank	0904037-2		WATER	02-Apr-09	

Paragon Analytics
LIMS Version: 6.254A

Date Printed: Tuesday, April 07, 2009

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Paragon Analytics
A Division of DataChem Laboratories, Inc.

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

Chain-of-Custody

Accession Number (LAB ID): 0904037

Page 1 of 1

Date _____   (Dispose) or Return to Client

Originator: Retain pink copy!

Sampler(s): _Gintautas_

Project Name/No.: _____

Report To: Peter Gintautas
Phone: 719-846-2691
Fax: _____
E-mail: peter.gintautas@state.co.us
Company: Colo. Oil + Gas Cons. Comm
Address: _____

Turnaround (circle one) Standard or Rush (Due _____)

Dispose: Date _____

Sample ID	Date	Time*	Lab ID	Matrix	Preservative (indicate type... HCl, etc.)	No. of Containers	VOCs SW8260B	BTEX (only) SW8021B	SVOCs SW8270C	OC Pesticides SW8081A	...	Dissolved Metals by ICP Hg SW6010B 7470 E200.7	Dissolved Metals by ICP/MS SW6020A E200.8	Hexavalent Chromium SW7196A	Inorganic Anions SW9056 E300.0	Solids	pH SW9040B SW9045C	TPH SW8015B GRO DRO
Dahl WW	2 Apr 09	0915	1	W	none		X	X	X			X	X	X	X	X X X X	X	X
					HCl		X	X		X								
					H₂SO₄	1												
Trip Blank			2		HCl		X	X										

VOCS → SW8260B - 25 Full + TICs
BTEX (only) = methane, ethane, ethene
SVOCs = Full + TICs
OC Pesticides = TCL

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

Matrix Key: O = oil, S = soil, NS = non-soil solid, W = water, L = liquid, E = extract, F = filter

*Time Zone: EST CST (MST) PST

Comments:
Anions = Br, Cl, F, NO₂, NO₃, PO₄, SO₄
Dissolved = filter + preserve at Lab
E200.7 = Ba, Be, B, Ca, Cr, Co, Cu, Fe, Li, Mg, Mn, Ni, K, Na, Sr, Zn
E200.8 = Sb, As, Cd, Pb, Mo, Se, Ag, Tl, U

	(1)	(2)
Relinquished By: Signature	_Peter Gintautas_	
Printed Name	Peter Gintautas	
Date	2 Apr 09 Time 1640	Time
Company	COGCC	Company
Received By: Signature	_Sara Nilson_	
Printed Name	Lara J Orban	Printed Name
Date	4/3/09 Time 1008	Date Time
Company	ALS Paragon	Company

Form 2026.xls (6/16/06)

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Client: __COGCc__   Workorder No: __09 04 037__

Project Manager: __AW__   Initials: __LJo__   Date: __4/3/09__

1. Does this project require any **special handling** in addition to standard Paragon procedures?		YES	**NO**	
2. Are custody **seals** on **shipping containers** intact?	NONE	**YES**	NO	
3. Are Custody seals on **sample containers** intact?	ᴸᴼ4/3/09	NONE / **YES**	NO	
4. Is there a **COC (Chain-of-Custody) present** or other representative documents?		**YES**	NO	
5. Are the **COC and bottle labels complete and legible**?		**YES**	NO	
6. Is the **COC in agreement** with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		**YES**	NO	
7. Were **airbills / shipping documents** present and/or removable?	DROP OFF	**YES**	NO	
8. Are all aqueous **samples requiring preservation preserved correctly**? (excluding volatiles)	N/A	**YES**	**NO**	★
9. Are all aqueous **non-preserved samples pH 4-9**?	N/A	**YES**	NO	
10. Is there **sufficient sample** for the requested analyses?		**YES**	NO	
11. Were all samples placed in the **proper containers** for the requested analyses?		**YES**	NO	
12. Are all samples within **holding times** for the requested analyses?		**YES**	NO	
13. Were all sample containers received **intact**? (not broken or leaking, etc.)		**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	**YES**	NO	
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**?		**YES**	NO	
18. Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** **#2** #4	RAD ONLY	**YES**	NO	

Cooler #:	1							
Temperature (°C):	1.8							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information External µR/hr reading:	12							
Background µR/hr reading:	12							

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.

★ The 500 ml poly for metals analysis was received unpreserved. COC asks for it to be filtered and preserved upon receipt.

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

Project Manager Signature / Date: _____ 4/3/09

*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

Method Blank

Lab Name: ALS Paragon
Work Order Number: 0904037
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204501

Lab ID: MO090407-1MB

Sample Matrix: WATER
% Moisture: N/A

Prep Batch: MO090407-1
QCBatchID: MO090407-1-1
Run ID: MO090407-1A
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
MO090407-1MB	4/7/2009	04/07/2009	N/A	1	1	1	U

Comments:

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

Data Package ID: *MO0904037-1*

TOTAL ORGANIC CARBON

Method EPA415.1

Sample Results

Lab Name: ALS Paragon
Client Name: Colorado Oil & Gas Conservation Commission
Client Project ID: Complaint 200204501
Work Order Number: 0904037   **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
Dahl WW	0904037-1	04/02/2009	04/07/2009	04/07/2009	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: *MO0904037-1*

Organic Carbon

Method EPA415.1
Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0904037
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204501

Lab ID: MO090407-1LCS

Sample Matrix: WATER	**Prep Batch:** MO090407-1
% Moisture: N/A	**QCBatchID:** MO090407-1-1
Date Collected: N/A	**Run ID:** MO090407-1A
Date Extracted: 04/07/2009	**Cleanup:** NONE
Date Analyzed: 04/07/2009	**Basis:** N/A
Prep Method: NONE	**File Name:** 04071038

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	15.2	1		101	85 - 115%

Lab ID: MO090407-1LCSD

Sample Matrix: WATER	**Prep Batch:** MO090407-1
% Moisture: N/A	**QCBatchID:** MO090407-1-1
Date Collected: N/A	**Run ID:** MO090407-1A
Date Extracted: 04/07/2009	**Cleanup:** NONE
Date Analyzed: 04/07/2009	**Basis:** N/A
Prep Method: NONE	**File Name:** 04071038

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: *MO0904037-1*