



# ALS Paragon



## Dissolved Gasses Case Narrative

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### **Colorado Oil & Gas Conservation Commission**

Complaint 200204501

Work Order Number: 0904037

1. This report consists of 1 water sample. The sample was received cool and intact by ALS Paragon on 04/03/09. The sample was free of headspace prior to analysis. The sample had a pH < 2 at the time of analysis.
2. The sample was prepared and analyzed according to method RSK-175 procedures and SOP449R0.
3. The preparation batch included a method blank, laboratory control sample, and laboratory control sample duplicate. Per method requirements, matrix QC was performed for this analysis. 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.
4. All preparation QC results were within the acceptance criteria.
5. All samples are associated with one or more of the following analytical QC: initial calibrations, initial calibration verifications (ICV), and continuing calibration verifications (CCV).
6. All analytical QC were within the acceptance criteria.
7. Sample dilutions were not required for the requested analysis.
8. The sample was prepared and analyzed within the established holding times.
9. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in SOP 939 Revision 3.



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.

Emily Knodel  
Emily Knodel  
Organics Primary Data Reviewer

04-13-09  
Date

Dan Sherman  
Organics Final Data Reviewer

04-13-09  
Date

*ALS Paragon  
Data Qualifier Flags  
Chromatography and Mass Spectrometry*

- U or ND:** This flag indicates that the compound was analyzed for but not detected.
- J:** This flag indicates an estimated value. This flag is used as follows: (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the reporting limit (RL) but greater than the method detection limit (MDL); (3) when the retention time data indicate the presence of a compound that meets the GC identification criteria, and the result is less than the RL but greater than the MDL; and (4) the reported value is estimated.
- B:** This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.
- E:** This flag identifies compounds whose concentration exceeds the upper level of the calibration range.
- A:** This flag indicates that a tentatively identified compound is a suspected aldol-condensation product.
- X:** This flag indicates that the analyte was diluted below an accurate quantitation level.
- \*:** This flag indicates that a spike recovery is equal to or outside the control criteria used.
- +:** This flag indicates that the relative percent difference (RPD) equals or exceeds the control criteria.

# ALS Paragon

## Sample Number(s) Cross-Reference Table

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**Paragon OrderNum:** 0904037

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

**Client Project Name:** Complaint 200204501

**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
Dahl WW	0904037-1		WATER	02-Apr-09	12:18
Trip Blank	0904037-2		WATER	02-Apr-09	



**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)

Chain-of-Custody Date April 19 Page 1 of 1

Originator: Retain pink copy!

0904037

Project Name/No.: Contaminates Turnaround (circle one) Standard or Rush (Due 14 days) Dispose: Date 30 days or Return to Client

Report To: Peter Gintautas  
Phone: 719-846-3691  
Fax:  
E-mail: Peter.gintautas@state.co.us  
Company: Colo. C.I.T Gas Cons. Comm  
Address:

Complaint 700-04501

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

Sample ID	Date	Time*	Lab ID	Matrix	Preservative (indicate type: HCl, etc.)	No. of Containers
<u>Dahl WW</u>	<u>April 19</u>	<u>Pile</u>	<u>1</u>	<u>W</u>	<u>none</u>	
<u>↓</u>			<u>↓</u>		<u>HCl</u>	
<u>Trip Blank</u>			<u>2</u>		<u>H<sub>2</sub>O<sub>2</sub></u>	
					<u>HCl</u>	

Sample ID	Method	Result	Relinquished By: (1)	Relinquished By: (2)
SW8260B-25 Full + TICs	GC		Signature: <u>[Signature]</u> Printed Name: <u>Peter Gintautas</u> Date: <u>April 19</u> Time: <u>16:10</u> Company: <u>Colo. C.I.T.</u>	Signature: _____ Printed Name: _____ Date: _____ Time: _____ Company: _____
SW8260B-25 Full + TICs	GC		Signature: <u>[Signature]</u> Printed Name: <u>Lara J Orban</u> Date: <u>4/3/09</u> Time: <u>10:08</u> Company: <u>ALS Paragon</u>	Signature: _____ Printed Name: _____ Date: _____ Time: _____ Company: _____

\*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:  
 Arsenic = As, (1, F), Ni, Pb, Cu, Sn  
 Dissolved = Filter + preserve at Lab  
 200.7 = Br, B, Ca, Cr, Co, Cu, Fe, Li, Mg, Mn, Ni, Pb, Sr, Zn  
 200.8 = Sb, As, Cd, Pb, Mo, Se, Ag, Te, U

CONDITION OF SAMPLE UPON RECEIPT FORM

Paragon Analytics

Client: LOGCC

Workorder No: 0904037

Project Manager: AW

Initials: LJO

Date: 4/3/09

1. Does this project require any <b>special handling</b> in addition to standard Paragon procedures?		YES	<input checked="" type="radio"/> NO
2. Are custody <b>seals</b> on <b>shipping containers</b> intact?		NONE	<input checked="" type="radio"/> YES <input type="radio"/> NO
3. Are Custody seals on <b>sample containers</b> intact?	<u>04/3/09</u>	<input checked="" type="radio"/> NONE	<input checked="" type="radio"/> YES <input type="radio"/> NO
4. Is there a <b>COC (Chain-of-Custody)</b> present or other representative documents?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
5. Are the <b>COC and bottle labels complete and legible</b> ?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
6. Is the <b>COC in agreement</b> with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		<input checked="" type="radio"/> YES	<input type="radio"/> NO
7. Were <b>airbills / shipping documents</b> present and/or removable?		DROP OFF: <input checked="" type="radio"/> YES	<input type="radio"/> NO
8. Are all aqueous <b>samples requiring preservation preserved correctly</b> ? (excluding volatiles)		N/A	<input checked="" type="radio"/> YES <input checked="" type="radio"/> NO *
9. Are all aqueous <b>non-preserved samples pH 4-9</b> ?		N/A	<input checked="" type="radio"/> YES <input type="radio"/> NO
10. Is there <b>sufficient sample</b> for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
11. Were all samples placed in the <b>proper containers</b> for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
12. Are all samples within <b>holding times</b> for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
13. Were all sample containers received <b>intact</b> ? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	<input type="radio"/> NO
14. Are all samples requiring <b>no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon)</b> headspace free? <b>Size of bubble:</b> <u>    </u> < green pea <u>    </u> > green pea		N/A	<input checked="" type="radio"/> YES <input type="radio"/> NO
15. Do perchlorate LCMS-MS samples <b>have</b> headspace? (at least 1/3 of container required)		<input checked="" type="radio"/> N/A	<input type="radio"/> YES <input type="radio"/> NO
16. Were samples checked for and free from the presence of <b>residual chlorine</b> ? (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	<input type="radio"/> YES <input type="radio"/> NO
17. Were the samples <b>shipped on ice</b> ?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
18. Were cooler temperatures measured at 0.1-6.0°C? <b>IR gun used*:</b> <input checked="" type="radio"/> #2 <input type="radio"/> #4 <input type="radio"/> RAD ONLY		<input checked="" type="radio"/> YES	<input type="radio"/> NO
Cooler #: <u>1</u>			
Temperature (°C): <u>1.8</u>			
No. of custody seals on cooler: <u>1</u>			
DOT Survey/Acceptance Information	External µR/hr reading: <u>12</u>		
	Background µR/hr reading: <u>12</u>		
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> NA (If no. see Form 008.)			

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

\* The 500ml 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: AW 4/3/09

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

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

# Dissolved Gasses

Method RSK175

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0904037

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204501

Lab ID: HC090409-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 09-Apr-09

Date Analyzed: 09-Apr-09

Prep Method: METHOD

Prep Batch: HC090409-1

QCBatchID: HC090409-1-1

Run ID: HC090409-1A

Cleanup: NONE

Basis: N/A

File Name: 01049.dat

Sample Aliquot: 38.5 ml

Final Volume: 38.5 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
74-82-8	METHANE	1	1	1	U	
74-85-1	ETHENE	1	1	1	U	
74-84-0	ETHANE	1	2	2	U	

Data Package ID: HC0904037-1

Date Printed: Monday, April 13, 2009

ALS Paragon

LIMS Version: 6.255A

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# Dissolved Gasses

## Method RSK175

### Sample Results

Lab Name: ALS Paragon

Work Order Number: 0904037

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204501

Field ID:	Dahl WW
Lab ID:	0904037-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 02-Apr-09

Date Extracted: 09-Apr-09

Date Analyzed: 09-Apr-09

Prep Method: METHOD

Prep Batch: HC090409-1

QCBatchID: HC090409-1-1

Run ID: HC090409-1A

Cleanup: NONE

Basis: As Received

File Name: 01056.dat

Sample Aliquot: 38.5 ml

Final Volume: 38.5 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
74-82-8	METHANE	1	1	1	U	
74-85-1	ETHENE	1	1	1	U	
74-84-0	ETHANE	1	2	2	U	

Data Package ID: *HC0904037-1*

# Dissolved Gasses

## Method RSK175

### 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: HC090409-1LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 04/09/2009

Date Analyzed: 04/09/2009

Prep Method: METHOD

Prep Batch: HC090409-1

QCBatchID: HC090409-1-1

Run ID: HC090409-1A

Cleanup: NONE

Basis: N/A

File Name: 01048.dat

Sample Aliquot: 38.5 ml

Final Volume: 38.5 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
74-82-8	METHANE	142	137	1		97	80 - 120%
74-85-1	ETHENE	249	239	1		96	80 - 120%
74-84-0	ETHANE	267	259	2		97	80 - 120%

Lab ID: HC090409-1LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 04/09/2009

Date Analyzed: 04/09/2009

Prep Method: METHOD

Prep Batch: HC090409-1

QCBatchID: HC090409-1-1

Run ID: HC090409-1A

Cleanup: NONE

Basis: N/A

File Name: 01058.dat

Sample Aliquot: 38.5 ml

Final Volume: 38.5 ml

Result Units: UG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
74-82-8	METHANE	142	156	1		110	25	13
74-85-1	ETHENE	249	268	1		108	25	11
74-84-0	ETHANE	267	295	2		111	25	13

Data Package ID: HC0904037-1