

# Dissolved Gasses

## Case Narrative

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### Colorado Oil & Gas Conservation Commission

#### Complaint 200339399

Work Order Number: 1202195

1. This report consists of 1 water sample. The sample was received cool and intact by ALS on 02/16/2012.

The sample was free of headspace prior to analysis.

The sample had a pH > 2 at the time of analysis.

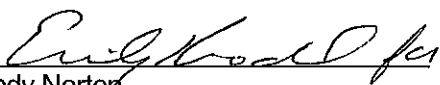
2. The sample was prepared and analyzed according to method RSK-175 procedures and SOP449R1.
3. The preparation batch included a method blank, laboratory control sample, laboratory control sample duplicate, sample duplicate, and matrix spike. Per method requirements, matrix QC was performed for this 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.

All preparation QC were within the acceptance criteria.

4. The sample was associated with one or more of the following analytical QC: initial calibrations, initial calibration verifications (ICV), and continuing calibration verifications (CCV).
5. All analytical QC were within the acceptance criteria.
6. Sample dilutions were not required for the requested analysis.
7. The sample was prepared and analyzed within the established holding time.
8. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in SOP 939 Revision 4.



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.

  
Mindy Norton  
Organics Primary Data Reviewer

02-29-12  
Date

  
Sandra S. Peltz  
Organics Final Data Reviewer

2-29-12  
Date



**ALS**  
**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 data indicate the presence of a compound that meets the 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 outside the control criteria.
- +:** This flag indicates that the relative percent difference (RPD) exceeds the control criteria.

# ALS Environmental -- FC

## Sample Number(s) Cross-Reference Table

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**OrderNum:** 1202195

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

**Client Project Name:** Complaint 200339399

**Client Project Number:**

**Client PO Number:** PHA 12-10

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Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
705325 Nosaka WW	1202195-1		WATER	14-Feb-12	14:17



# ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524  
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

## Chain-of-Custody

Form 20278

PROJECT NAME		PROJECT No.		COMPANY NAME		SEND REPORT TO		ADDRESS		CITY / STATE / ZIP		PHONE		FAX		E-MAIL		Lab ID		Field ID		Matrix		Sample Date		Sample Time		Bottles		Pres		QC	
Complaints 200339399		200339402		Peter Gintantus		60 Box 108		Trinidad CO 81062		719-846-3091						peter.gintantus@state.co.us		Complaint 200339402		707183 Steiner WW		W		14Feb		14:47		3		1		X	
																		Trip Blank		W		14Feb		06:30		2		1		X			
																		707183 Steiner WW		W		14Feb		14:47		1		3		X			
																		707183 Steiner WW		W		14Feb		14:47		6		8					
																		Complaint 200339399		W		14Feb		14:17		3		1		Y			
																		705325 Nosaka WW		W		14Feb		14:17		1		3		X			
																		705325 Nosaka WW		W		14Feb		14:17		6		8					
																		705325 Nosaka WW		W		14Feb		14:17		6		8					

Time 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 analytes below.

Comments:	Disolved metals = Filter + pressure upn Recip.
ANALYSIS =	Br, Cl, F, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>
200.7-6000-11,	Fe, 200.7-6000-11,
200.7-6000-16	N <sub>4</sub> 200.7, Th-200.7

Reserve Key: 1-HCl 2-HNO<sub>3</sub> 3-H<sub>2</sub>SO<sub>4</sub> 4-NaOH 5-NaHSO<sub>4</sub> 7-Other 8-4 degrees C 9-5035

RELINQUISHED BY	SIGNATURE	PRINTED NAME	DATE	TIME
RECEIVED BY	Peter Gintantus	Peter Gintantus	15 Feb 2012	12:15
RELINQUISHED BY		Lauren Schmitz	2/16/12	0925
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				



## CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC  
Project Manager: ARW

Workorder No: 1202195  
Initials: LAS Date: 2/16/12

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 seals on <b>shipping containers</b> intact?	NONE	<input checked="" type="radio"/> YES	NO
3. Are Custody seals on <b>sample containers</b> intact?	<input checked="" type="radio"/> NONE	YES	NO
4. Is there a <b>COC (Chain-of-Custody)</b> present or other representative documents?		<input checked="" type="radio"/> YES	NO
5. Are the <b>COC and bottle labels complete and legible</b> ?		<input checked="" type="radio"/> YES	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	NO
7. Were <b>airbills / shipping documents</b> present and/or removable?	DROP OFF	<input checked="" type="radio"/> YES	NO
8. Are all <b>aqueous samples requiring preservation preserved correctly? (excluding volatiles)</b>	N/A	<input checked="" type="radio"/> YES	NO
9. Are all aqueous <b>non-preserved samples pH 4-9</b> ?	N/A	<input checked="" type="radio"/> YES	NO
10. Is there <b>sufficient sample</b> for the requested analyses?		<input checked="" type="radio"/> YES	NO
11. Were all samples placed in the <b>proper containers</b> for the requested analyses?		<input checked="" type="radio"/> YES	NO
12. Are all samples within <b>holding times</b> for the requested analyses?		<input checked="" type="radio"/> YES	NO
13. Were all sample containers received <b>intact</b> ? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	NO
14. Are all samples requiring <b>no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon)</b> headspace free? Size of bubble: <u>X</u> < green pea <u>    </u> > green pea	N/A	YES	<input checked="" type="radio"/> NO *
15. Do perchlorate LCMS-MS samples <b>have headspace</b> ? (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 <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	YES	NO
17. Were the samples <b>shipped on ice</b> ?		<input checked="" type="radio"/> YES	NO
18. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: <u>#2</u> #4		<input checked="" type="radio"/> YES	NO
Cooler #: <u>1</u>			
Temperature (°C): <u>1.6</u>			
No. of custody seals on cooler: <u>1</u>			
External µR/hr reading: <u>14</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 / <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.

\*14 1202195-1-6(705325 Ndsqka) for DISS. Gases arrived with headspace ≤ pea-size.

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

Project Manager Signature / Date: [Signature] 2/16/12

1202195

From: (719) 846-3091  
Peter Gintautas  
Colo. Oil & Gas Cons. Comm.  
213 Conundrum RD  
Trinidad, CO 81082

Origin ID: PUBA

**FedEx**  
Express



J1210112190225

SHIP TO: (970) 490-1511

**Amy Wolf**  
**ALS Laboratory Group**  
**225 COMMERCE DR**

**FORT COLLINS, CO 80524**

**BILL SENDER**

Ship Date: 15FEB12  
ActWgt: 34.0 LB  
CAD: 4076443/NET3250

Delivery Address Bar Code



Ref # Complaint 200339399  
Invoice #  
PO #  
Dept #

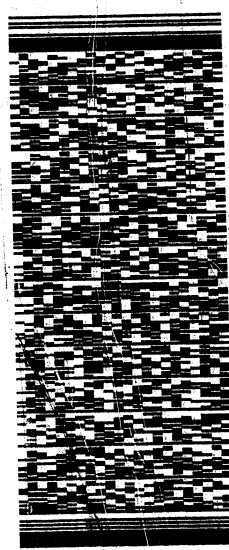
14

THU - 16 FEB A2  
PRIORITY OVERNIGHT

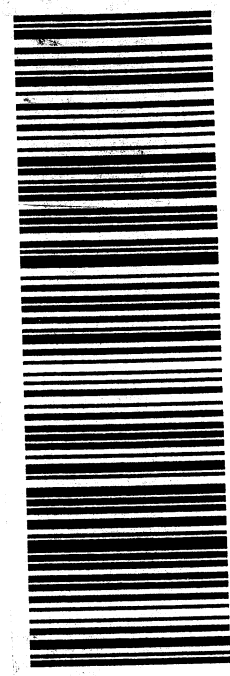
TRK# 7932 3213 0507  
0201

80524  
CO-US  
DEN

72 FTCA



1.9



512G18F58A278

# Dissolved Gasses

Method RSK175

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1202195

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200339399

Lab ID: HC120222-9MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 22-Feb-12

Date Analyzed: 22-Feb-12

Prep Method: METHOD

Prep Batch: HC120222-9

QCBatchID: HC120222-9-2

Run ID: HC120222-9A

Cleanup: NONE

Basis: N/A

File Name: 04226.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	
74-84-0	ETHANE	1	2	2	U	
74-98-6	PROPANE	1	1	1	U	

Data Package ID: MEE1202195-1

Date Printed: Tuesday, February 28, 2012

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# Dissolved Gasses

Method RSK175

## Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1202195

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200339399

Field ID: 705325 Nosaka WW

Lab ID: 1202195-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 14-Feb-12

Date Extracted: 22-Feb-12

Date Analyzed: 22-Feb-12

Prep Method: METHOD

Prep Batch: HC120222-9

QCBatchID: HC120222-9-2

Run ID: HC120222-9A

Cleanup: NONE

Basis: As Received

File Name: 04233.dat

Analyst: Dan Sheneman

Sample Aliquot: 38.5ML

Final Volume: 38.5ML

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	
74-84-0	ETHANE	1	2	2	U	
74-98-6	PROPANE	1	1	1	U	

Data Package ID: MEE1202195-1

Date Printed: Tuesday, February 28, 2012

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# Dissolved Gasses

## Method RSK175

### Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1202195

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200339399

Lab ID: HC120222-9LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 02/22/2012

Date Analyzed: 02/22/2012

Prep Method: METHOD

Prep Batch: HC120222-9

QCBatchID: HC120222-9-2

Run ID: HC120222-9A

Cleanup: NONE

Basis: N/A

File Name: 04225.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	159	1		112	80 - 120%
74-84-0	ETHANE	267	271	2		102	80 - 120%
74-98-6	PROPANE	392	425	1		108	80 - 120%

Lab ID: HC120222-9LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 02/22/2012

Date Analyzed: 02/22/2012

Prep Method: METHOD

Prep Batch: HC120222-9

QCBatchID: HC120222-9-2

Run ID: HC120222-9A

Cleanup: NONE

Basis: N/A

File Name: 04237.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	142	1		100	25	11
74-84-0	ETHANE	267	242	2		91	25	11
74-98-6	PROPANE	392	379	1		97	25	12

Data Package ID: MEE1202195-1

Date Printed: Tuesday, February 28, 2012

ALS Environmental -- FC

LIMS Version: 6.568

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