



Dissolved Gasses

Case Narrative

Colorado Oil & Gas Conservation Commission

Complaint 200272771

Work Order Number: 1010128

1. This report consists of 1 water sample. The sample was received cool and intact by ALS on 10/08/2010.

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, 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 3.



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
Mindy Norton
Organics Primary Data Reviewer

10-27-10
Date

Dan Sherman
Organics Final Data Reviewer

10-28-10
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

Paragon OrderNum: 1010128

Client Name: Colorado Oil & Gas Conservation Commission

Client Project Name: Complaint 200272771

Client Project Number:

Client PO Number: OE PHA 11000000014

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Burge WW	1010128-1		WATER	06-Oct-10	11:25
Trip Blank	1010128-2		WATER	06-Oct-10	



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 202r8

WORKORDER #

1010128

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME Complaint 200272771

SAMPLER

DATE

TURNAROUND

14 day

PROJECT No.

SITE ID

EDD FORMAT

PURCHASE ORDER

PHA #00611-14

COMPANY NAME

Colo Oil & Gas Cons. Comm.

BILL TO COMPANY

SEND REPORT TO

Peter Gintautas

INVOICE ATTN TO

ADDRESS

PO Box 108

ADDRESS

CITY / STATE / ZIP

Trinidad CO 81082

CITY / STATE / ZIP

PHONE

719 846-3091

PHONE

FAX

FAX

E-MAIL

peter.gintautas@state.co.us

E-MAIL

200.7 + 200.8 dissolved
Dissolved Gases
8260-25 + TICs
8070 + TICs
TEPH - DRO
ANIONS
pH, cond
TPS + TSS
Alk - Tot, HCO₃, CO₃
SAR calc
Cation Anion Balance
TUC

Lab ID Field ID Matrix Sample Date Sample Time # Bottles Pres. QC

1	Burge WW	W	10/6/10	11:25A	1	99	X	X	X	X	X	X	X	X	X	X	X	X	X
	Burge WW		↓	↓	1	100%													X
2	Trip Blanks	W	↓	↓	2	1													

Anions = Br, Cl, F, NO₂, NO₃, SO₄
200.8 = Al, Sb, As, Cd, Pb, Mo, Se, Ag, Te, U
200.7 = Ba, B, Bi, Br, Ca, Cr, Co, Cu, Fe, Li, Mg, Mn, Ni, K, Si, Na, Sr, Zn

Time Zone (Circle): EST CST 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: Dissolved = Filter + preserve at lab.

QC PACKAGE (check below)
<input checked="" type="checkbox"/> LEVEL II (Standard QC)
<input type="checkbox"/> LEVEL III (Std QC + forms)
<input type="checkbox"/> LEVEL IV (Std QC + forms + raw data)

SIGNATURE	PRINTED NAME	DATE	TIME
<i>[Signature]</i>	Angela Belloniani	10/7/10	9:00A
<i>[Signature]</i>	C. Cochran	10/8/10	0945
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			
RELINQUISHED BY			
RECEIVED BY			

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

5 of 9



CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC

Workorder No: 1010128

Project Manager: AW

Initials: CW Date: 10-8-10

1. Does this project require any special handling in addition to standard Paragon procedures?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
2. Are custody seals on shipping containers intact?	<input checked="" type="radio"/> NONE	<input checked="" type="radio"/> YES	<input type="radio"/> NO
3. Are Custody seals on sample containers intact?	<input checked="" type="radio"/> NONE	<input checked="" type="radio"/> YES	<input type="radio"/> NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	<input type="radio"/> 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	<input type="radio"/> NO
7. Were airbills / shipping documents present and/or removable?	<input type="radio"/> DROP OFF	<input checked="" type="radio"/> YES	<input type="radio"/> NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	<input type="radio"/> N/A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
9. Are all aqueous non-preserved samples pH 4-9?	<input type="radio"/> N/A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	<input type="radio"/> 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	<input type="radio"/> N/A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
15. Do perchlorate LCMS-MS samples have 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 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	<input type="radio"/> YES	<input type="radio"/> NO
17. Were the samples shipped on ice?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
18. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 <input checked="" type="radio"/> #4	<input type="radio"/> RAD ONLY	<input checked="" type="radio"/> YES	<input type="radio"/> NO
Cooler #: <u>1</u>			
Temperature (°C): <u>4.5</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

received out of hotel with only a few hours of hold time remaining.
AW 10/8/10

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

Project Manager Signature / Date: _____

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

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

Dissolved Gasses

Method RSK175

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1010128

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200272771

Lab ID: HC101019-9MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 19-Oct-10

Date Analyzed: 19-Oct-10

Prep Method: METHOD

Prep Batch: HC101019-9

QCBatchID: HC101019-9-1

Run ID: HC101019-9

Cleanup: NONE

Basis: N/A

File Name: 03077.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: MEE1010128-1

Dissolved Gasses

Method RSK175

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1010128

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200272771

Field ID:	Burge WW
Lab ID:	1010128-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 06-Oct-10

Date Extracted: 19-Oct-10

Date Analyzed: 19-Oct-10

Prep Method: METHOD

Prep Batch: HC101019-9

QCBatchID: HC101019-9-1

Run ID: HC101019-9

Cleanup: NONE

Basis: As Received

File Name: 03083.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	1000	1		
74-85-1	ETHENE	1	1	1	U	
74-84-0	ETHANE	1	2	2	U	

Data Package ID: MEE1010128-1

Dissolved Gasses

Method RSK175

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Environmental -- FC

Work Order Number: 1010128

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200272771

Lab ID: HC101019-9LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 10/19/2010

Date Analyzed: 10/19/2010

Prep Method: METHOD

Prep Batch: HC101019-9

QCBatchID: HC101019-9-1

Run ID: HC101019-9

Cleanup: NONE

Basis: N/A

File Name: 03076.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	158	1		111	80 - 120%
74-85-1	ETHENE	249	267	1		107	80 - 120%
74-84-0	ETHANE	267	296	2		111	80 - 120%

Lab ID: HC101019-9LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 10/19/2010

Date Analyzed: 10/19/2010

Prep Method: METHOD

Prep Batch: HC101019-9

QCBatchID: HC101019-9-1

Run ID: HC101019-9

Cleanup: NONE

Basis: N/A

File Name: 03093.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	161	1		113	25	2
74-85-1	ETHENE	249	272	1		109	25	2
74-84-0	ETHANE	267	302	2		113	25	2

Data Package ID: MEE1010128-1

Date Printed: Wednesday, October 27, 2010

ALS Environmental -- FC

Page 1 of 1

LIMS Version: 6.425A