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www.alsglobal.com

LABORATORY REPORT

March 29, 2017

Jake Janicek
Caerus Oil and Gas LLC
120 North Railroad Ave.
Parachute, CO 81635

RE: Parachute Creek 10

Dear Jake:

Enclosed are the results of the samples submitted to our laboratory on March 15, 2017. For your reference, these analyses have been assigned our service request number P1701237.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Kelly Horiuchi at 1:46 pm, Mar 29, 2017

Kelly Horiuchi
Laboratory Director



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Client: Caerus Oil and Gas LLC
Project: Parachute Creek 10

Service Request No: P1701237

CASE NARRATIVE

The samples were received intact under chain of custody on March 15, 2017 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hydrogen Sulfide Analysis

The samples were analyzed for hydrogen sulfide per ASTM D 5504-12 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). Method ASTM D 5504-12 is included on the laboratory's NELAP scope of accreditation, however it is not part of the DoD-ELAP accreditation.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



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CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2016036
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1177034
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-004
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-16-7
Utah DOH (NELAP)	http://health.utah.gov/lab/environmental-lab-certification/	CA01627201 6-6
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

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DETAIL SUMMARY REPORT

Client: Caerus Oil and Gas LLC
Project ID: Parachute Creek 10

Service Request: P1701237

Date Received: 3/15/2017
Time Received: 09:15

ASTM D 5504-12 - H2S Bag

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	
Chevron 8D-5D	P1701237-001	Air	3/14/2017	15:00	X
Chevron 8E-5D	P1701237-002	Air	3/14/2017	15:30	X

Chain-of-Custody

Form 202r8

[illegible]

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-sol solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	Q.C. PACKAGE (check below)	Preservative Key:						
		1-HCl	2-HNO3	3-H2SO4	4-NaOH	5-NaHSO4	7-Other	8-4 degrees C
	LEVEL I (Standard QC) LEVEL II (Standard QC) LEVEL III (Std QC + forms) LEVEL IV (Std QC + forms + raw data)							

RELINQUISHED BY	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Sake Sanicek	3-14-17	1615
RECEIVED BY		W.R.	3-14-17	1645
RELINQUISHED BY		W.R.	3-14-17	1500
RECEIVED BY		W.R.	3-15-17	0915
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental Sample Acceptance Check Form

Client: Caerus Oil and Gas LLC Work order: P1701237
 Project: Parachute Creek 10
 Sample(s) received on: 3/15/17 Date opened: 3/15/17 by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- | | | Yes | No | N/A |
|----|---|-------------------------------------|--------------------------|-------------------------------------|
| 1 | Were sample containers properly marked with client sample ID? | ☒ | ☐ | ☐ |
| 2 | Did sample containers arrive in good condition? | ☒ | ☐ | ☐ |
| 3 | Were chain-of-custody papers used and filled out? | ☒ | ☐ | ☐ |
| 4 | Did sample container labels and/or tags agree with custody papers? | ☒ | ☐ | ☐ |
| 5 | Was sample volume received adequate for analysis? | ☒ | ☐ | ☐ |
| 6 | Are samples within specified holding times? | ☒ | ☐ | ☐ |
| 7 | Was proper temperature (thermal preservation) of cooler at receipt adhered to? | ☐ | ☐ | ☒ |
| 8 | Were custody seals on outside of cooler/Box/Container? | ☒ | ☐ | ☐ |
| | Location of seal(s)? <u>sealing box</u> Sealing Lid? | ☒ | ☐ | ☐ |
| | Were signature and date included? | ☒ | ☐ | ☐ |
| | Were seals intact? | ☒ | ☐ | ☐ |
| 9 | Do containers have appropriate preservation , according to method/SOP or Client specified information? | ☐ | ☐ | ☒ |
| | Is there a client indication that the submitted samples are pH preserved? | ☐ | ☐ | ☒ |
| | Were VOA vials checked for presence/absence of air bubbles? | ☐ | ☐ | ☒ |
| | Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it? | ☐ | ☐ | ☒ |
| 10 | Tubes: Are the tubes capped and intact? | ☐ | ☐ | ☒ |
| 11 | Badges: Are the badges properly capped and intact? | ☐ | ☐ | ☒ |
| | Are dual bed badges separated and individually capped and intact? | ☐ | ☐ | ☒ |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1701237-001.01	1 L Zefon Bag					
P1701237-002.01	1 L Zefon Bag					

Explain any discrepancies: (include lab sample ID numbers): _____

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RESULTS OF ANALYSIS

Page 1 of 1

Client: Caerus Oil and Gas LLC

Client Project ID: Parachute Creek 10

ALS Project ID: P1701237

Hydrogen Sulfide

Test Code: ASTM D 5504-12

Instrument ID: Agilent 7890A/GC22/SCD

Analyst: Mike Conejo

Sample Type: 1 L Zefon Bag(s)

Test Notes:

Date(s) Collected: 3/14/17

Date Received: 3/15/17

Date Analyzed: 3/15/17

Client Sample ID	ALS Sample ID	Injection	Time Analyzed	Result µg/m ³	MRL µg/m ³	Result ppbV	MRL ppbV	Data Qualifier
		Volume ml(s)						
Chevron 8D-5D	P1701237-001	1.0	11:35	6,700	7.0	4,800	5.0	
Chevron 8E-5D	P1701237-002	1.0	11:48	34,000	7.0	24,000	5.0	
Method Blank	P170315-MB	1.0	08:14	ND	7.0	ND	5.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

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LABORATORY CONTROL SAMPLE SUMMARY

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Client: Caerus Oil and Gas LLC
Client Sample ID: Lab Control Sample
Client Project ID: Parachute Creek 10

ALS Project ID: P1701237
ALS Sample ID: P170315-LCS

Test Code: ASTM D 5504-12
Instrument ID: Agilent 7890A/GC22/SCD
Analyst: Mike Conejo
Sample Type: 1 L Zefon Bag
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 3/15/17
Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount ppbV	Result ppbV	% Recovery	ALS Acceptance Limits	Data Qualifier
7783-06-4	Hydrogen Sulfide	1,000	1,230	123	75-148	