Starkey 1 (Location ID 335383)
Condensate Dumpline Release
Spill/Release Point ID 448078
Form 19 (Notice of Completion)
Narrative Attachment

This Form 19 (Notice of Completion) was prepared for the purpose of describing completed work associated with the assessment of soil beneath a condensate dumpline that failed an annual integrity test at the Starkey 1 (Location ID 335383) pad location in the Caerus Piceance, LLC (Caerus) area of operations.

On November 9, 2016, additional soil was removed from the area represented by sample E-Wall@12'. Following removal of this additional soil, a sample (E-Wall#2@12') was collected and submitted for laboratory analysis of benzene. Analytical results indicate that the soil sample was in compliance with the COGCC Table 910-1 Concentration Level for benzene.

On November 23, 2016, at our request, Stan Spencer of the COGCC visited the project site to review the safety concerns associated with continued excavation along the western wall of this excavation. He was in alignment with our decision to not continue excavating into the western wall. He directed us to collect a sample from the existing western wall and analyze it for total petroleum hydrocarbons (TPH). His assessment of the site can be reviewed on the attached COGCC inspection report.

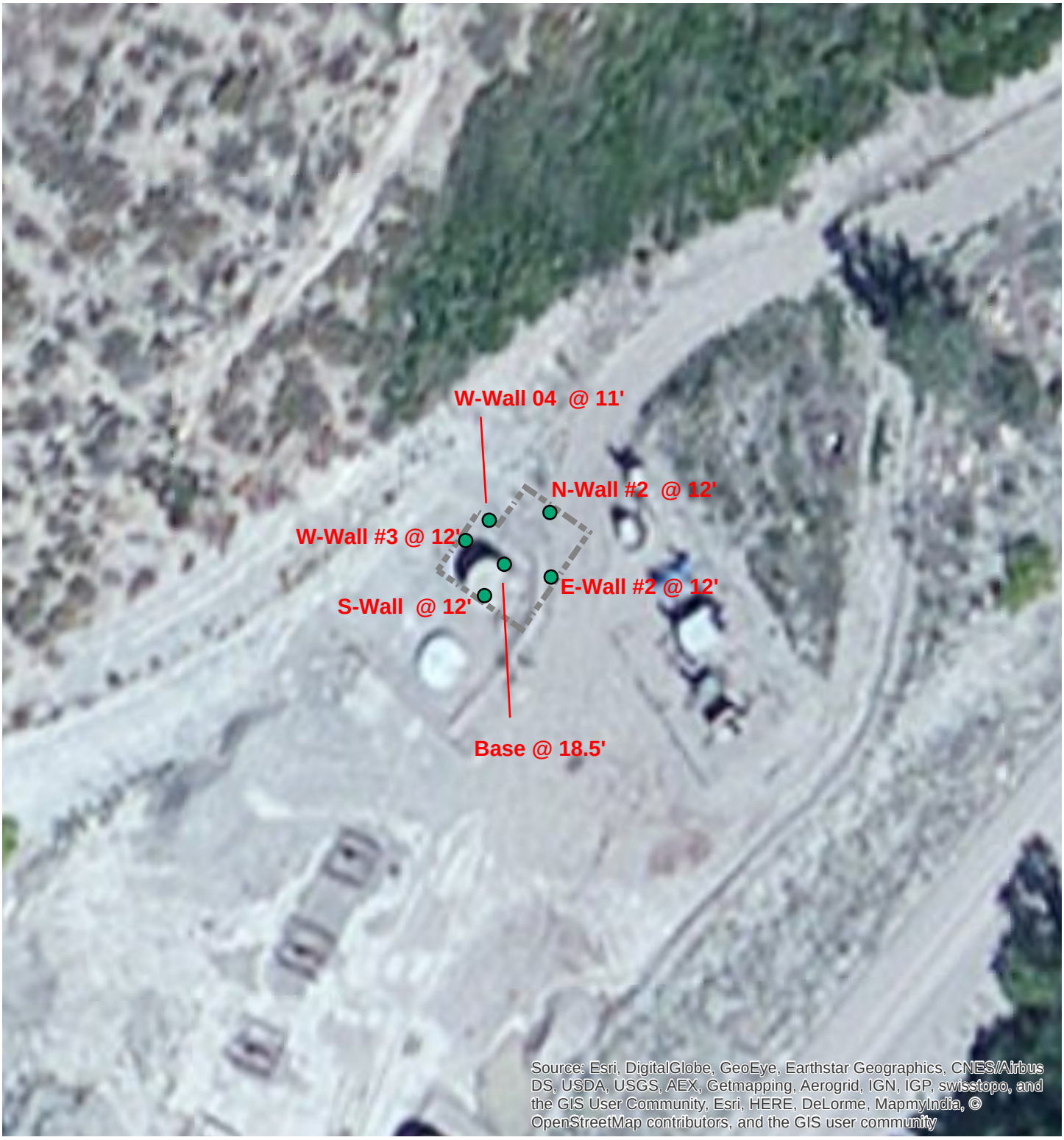
On December 2, 2016, a confirmation soil sample (W-Wall04@11') was collected from the western wall and submitted for laboratory analysis of TPH. Analytical results indicate that the soil sample was in compliance with the COGCC Table 910-1 Concentration Level for TPH.

All impacted soil removed during the excavation project was landfarmed on location. On November 9, 2016 a composite soil sample (Starkey 1 Landfarm) was collected from the onsite landfarm and submitted for laboratory analysis of all COGCC Table 910-1 analytes. Analytical results indicate that the soil sample was in compliance with COGCC Table 910-1 Concentration Levels for all analytes or were within background concentrations, except for the electrical conductivity (EC) measurement. However, the soil that this sample was collected from was buried within the excavation created during this remediation project at a depth greater than three feet below the ground surface and the COGCC does not apply the Concentration Level for EC to soils deeper than three feet below the ground surface.

Background samples were collected from an undisturbed area near the Chevron 41-8D pad (COGCC Location ID 324198). Sample locations are depicted on the attached Site Map and laboratory analytical results are summarized in the attached analytical table. Laboratory analytical reports are included as an attachment.

Based on soil analytical results, Caerus requests an NFA designation for this project.

FIGURE



Legend

- Sample Points
- Excavation Extent

0 30 60 120

Feet

N

FIGURE 1
SITE MAP
STARKEY 1 Dumpline Release
Garfield County, Colorado

CAERUS OIL AND GAS LLC

TABLE

TABLE 1
STARKEY 1 DUMPLINE RELEASE
SOIL ANALYTICAL RESULTS
CAERUS OIL AND GAS
PICEANCE BASIN, COLORADO

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	Base @ 18.5'	N-Wall #2 @12'	E-Wall @ 12'	E-Wall #2@12'	S-Wall @ 12'	W-Wall #3 @ 12'	W-Wall04@11'	Starkey 1 Landfarm	BKGD 1*
Sample Date			10/17/2016	10/17/2016	10/17/2016	11/9/2016	10/17/2016	10/17/2016	12/2/2016	11/9/2016	7/22/2013
Sample Type			Confirmation	Confirmation	Confirmation	Confirmation	Confirmation	Confirmation	Confirmation	Landfarm	Background
Arsenic	0.39	mg/kg	7.7	12	17	NA	5.1	24	NA	8.2	39
Barium	15,000	mg/kg	220	110	300	NA	53	98	NA	190	NA
Cadmium	70	mg/kg	ND	ND	0.93	NA	ND	ND	NA	ND	NA
Chromium (III)	120,000	mg/kg	9.3	14	10	NA	6.1	7.9	NA	9.0	NA
Chromium (VI)	23	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Copper	3,100	mg/kg	17	24	28	NA	11	13	NA	17	NA
Lead	400	mg/kg	19	13	16	NA	8.3	13	NA	11	NA
Mercury	23	mg/kg	0.035	0.034	0.036	NA	0.022	0.11	NA	0.034	NA
Nickel	1,600	mg/kg	27	24	25	NA	14	17	NA	18	NA
Selenium	390	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Silver	390	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Zinc	23,000	mg/kg	89	81	97	NA	41	68	NA	66	NA
EC	4 or 2x background	mmhos/cm	1.8	33	3.3	NA	6.6	8.5	NA	7.7	NA
pH	6-9	SU	8.6	8.1	8.2	NA	7.7	7.8	NA	7.7	NA
SAR	12	unitless	3.2	33	4.0	NA	1.7	2.9	NA	2.0	NA
TPH-DRO			32	38	120	NA	29	710	220	320	NA
TPH-GRO			ND	ND	57	NA	28	550	100	170	NA
TPH	500	mg/kg	32	38	177	NA	57	1,260	320	490	NA
Benzene	0.17	mg/kg	ND	ND	0.76	ND	ND	0.068	NA	ND	NA
Toluene	85	mg/kg	0.12	ND	0.37	NA	ND	ND	NA	0.042	NA
Ethylbenzene	100	mg/kg	ND	ND	0.044	NA	0.032	0.052	NA	0.15	NA
Total Xylenes	175	mg/kg	0.64	0.088	0.44	NA	0.18	0.19	NA	2.3	NA
Acenaphthene	1,000	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Anthracene	1,000	mg/kg	ND	ND	ND	NA	ND	0.029	NA	ND	NA
Benz(a)anthracene	0.22	mg/kg	ND	ND	ND	NA	ND	0.010	NA	ND	NA
Benzo(b)fluoranthene	0.22	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Benzo(k)fluoranthene	2.2	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Benzo(a)pyrene	0.022	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Chrysene	22	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Dibenzo(a,h)anthracene	0.022	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Fluoranthene	1,000	mg/kg	ND	ND	ND	NA	ND	0.013	NA	ND	NA
Fluorene	1,000	mg/kg	ND	ND	ND	NA	ND	0.12	NA	ND	NA
Indeno(1,2,3,c,d)pyrene	0.22	mg/kg	ND	ND	ND	NA	ND	ND	NA	ND	NA
Naphthalene	23	mg/kg	ND	ND	ND	NA	ND	0.11	NA	ND	NA
Pyrene	1,000	mg/kg	ND	ND	ND	NA	ND	0.034	NA	ND	NA

Notes:
* This background sample was collected near another pad location, Chevron 41-8D (COGCC Location ID 324198)
< - less than the stated reporting limit
Highlight - indicates result exceeds the COGCC concentration level
COGCC - Colorado Oil and Gas Conservation Commission
EC - electrical conductivity
mg/kg - milligrams per kilogram
mmhos/cm - millimhos per centimeter
NA - not analyzed
SAR - sodium adsorption ratio
SU - standard unit
TPH-GRO - total petroleum hydrocarbons-gasoline range organics
TPH-DRO - total petroleum hydrocarbons-diesel range organics
TPH - combination of TPH-GRO and TPH-DRO

ANALYTICAL REPORTS

17-Nov-2016

Jake Janicek
Caerus Oil and Gas LLC
120 N. Railroad Ave. Suite D
Parachute, CO 81635

Re: **Starkey 1 Flowline Release** Work Order: **1611730**

Dear Jake,

ALS Environmental received 1 sample on 10-Nov-2016 09:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 9.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 998501

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185
ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

ALS Group, USA

Date: 17-Nov-16

Client: Caerus Oil and Gas LLC
Project: Starkey 1 Flowline Release
Work Order: **1611730**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1611730-01	E-Wall #2 @ 12'	Soil		11/9/2016 09:49	11/10/2016 09:30	☐

ALS Group, USA

Date: 17-Nov-16

Client: Caerus Oil and Gas LLC
Project: Starkey 1 Flowline Release
WorkOrder: **1611730**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group, USA

Date: *17-Nov-16*

Client: Caerus Oil and Gas LLC
Project: Starkey 1 Flowline Release
Work Order: 1611730
Sample ID: E-Wall #2 @ 12'
Lab ID: 1611730-01
Collection Date: 11/9/2016 09:49 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			**SW8260B**		Prep: SW5035 / 11/13/16	Analyst: **LSY**
Benzene	ND		0.041	mg/Kg-dry	1	11/16/2016 01:20 AM
Surr: 1,2-Dichloroethane-d4	*95.1*		*70-130*	*%REC*	1	11/16/2016 01:20 AM
Surr: 4-Bromofluorobenzene	*95.2*		*70-130*	*%REC*	1	11/16/2016 01:20 AM
Surr: Dibromofluoromethane	*73.6*		*70-130*	*%REC*	1	11/16/2016 01:20 AM
Surr: Toluene-d8	*87.0*		*70-130*	*%REC*	1	11/16/2016 01:20 AM
MOISTURE			**SW3550C**			Analyst: **EDL**
Moisture	**16**		**0.050**	**% of sample**	1	11/11/2016 01:52 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 17-Nov-16

Client: Caerus Oil and Gas LLC

QC BATCH REPORT

Work Order: 1611730

Project: Starkey 1 Flowline Release

Batch ID: **94464** Instrument ID **VMS7** Method: **SW8260B**

MBLK Sample ID: **MBLK-94464-94464** Units: **µg/Kg-dry** Analysis Date: **11/13/2016 11:15 A**

Client ID: Run ID: **VMS7_161113A** SeqNo: **4150461** Prep Date: **11/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Surr: 1,2-Dichloroethane-d4	*980*	0	*1000*	0	*98*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*963*	0	*1000*	0	*96.3*	*70-130*	0			
Surr: Dibromofluoromethane	*922*	0	*1000*	0	*92.2*	*70-130*	0			
Surr: Toluene-d8	*1008*	0	*1000*	0	*101*	*70-130*	0			

LCS Sample ID: **LCS-94464-94464** Units: **µg/Kg-dry** Analysis Date: **11/13/2016 10:12 A**

Client ID: Run ID: **VMS7_161113A** SeqNo: **4150460** Prep Date: **11/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1070	30	1000	0	107	75-125	0			
Surr: 1,2-Dichloroethane-d4	*979*	0	*1000*	0	*97.9*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1006*	0	*1000*	0	*101*	*70-130*	0			
Surr: Dibromofluoromethane	*991*	0	*1000*	0	*99.1*	*70-130*	0			
Surr: Toluene-d8	*988*	0	*1000*	0	*98.8*	*70-130*	0			

MS Sample ID: **1611395-02A MS** Units: **µg/Kg-dry** Analysis Date: **11/13/2016 07:48 PM**

Client ID: Run ID: **VMS9_161113A** SeqNo: **4149968** Prep Date: **11/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1441	41	1381	0	104	75-125	0			
Surr: 1,2-Dichloroethane-d4	*1445*	0	*1381*	0	*105*	*70-130*	0			
Surr: 4-Bromofluorobenzene	*1414*	0	*1381*	0	*102*	*70-130*	0			
Surr: Dibromofluoromethane	*1284*	0	*1381*	0	*93*	*70-130*	0			
Surr: Toluene-d8	*1366*	0	*1381*	0	*98.9*	*70-130*	0			

MSD Sample ID: **1611395-02A MSD** Units: **µg/Kg-dry** Analysis Date: **11/13/2016 08:12 PM**

Client ID: Run ID: **VMS9_161113A** SeqNo: **4149969** Prep Date: **11/13/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1473	41	1381	0	107	75-125	1441	2.18	30	
Surr: 1,2-Dichloroethane-d4	*1481*	0	*1381*	0	*107*	*70-130*	1445	*2.45*	*30*	
Surr: 4-Bromofluorobenzene	*1456*	0	*1381*	0	*105*	*70-130*	1414	*2.93*	*30*	
Surr: Dibromofluoromethane	*1351*	0	*1381*	0	*97.8*	*70-130*	1284	*5.14*	*30*	
Surr: Toluene-d8	*1380*	0	*1381*	0	*99.9*	*70-130*	1366	*1.01*	*30*	

The following samples were analyzed in this batch: 1611730-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
Work Order: 1611730
Project: Starkey 1 Flowline Release

QC BATCH REPORT

Batch ID: **R200508** Instrument ID **MOIST** Method: **SW3550C**

MBLK Sample ID: **WBLKS-R200508** Units: **% of sample** Analysis Date: **11/11/2016 01:52 PM**
Client ID: Run ID: **MOIST_161111A** SeqNo: **4150168** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.03	0.050								J

LCS Sample ID: **LCS-R200508** Units: **% of sample** Analysis Date: **11/11/2016 01:52 PM**
Client ID: Run ID: **MOIST_161111A** SeqNo: **4150167** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP Sample ID: **1611399-05A DUP** Units: **% of sample** Analysis Date: **11/11/2016 01:52 PM**
Client ID: Run ID: **MOIST_161111A** SeqNo: **4150138** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	20.29	0.050	0	0	0		19.63	3.31	20	

DUP Sample ID: **1611649-19B DUP** Units: **% of sample** Analysis Date: **11/11/2016 01:52 PM**
Client ID: Run ID: **MOIST_161111A** SeqNo: **4150144** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	18.51	0.050	0	0	0		18.63	0.646	20	

The following samples were analyzed in this batch: 1611730-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Laboratory Group

ALS Holland 3352 128th Ave, Holland MI
855-372-1944 616-399-6070

Chain-of-Custody

Form 292r8

WORKORDER # 1611730

PAGE 1 of 1

DISPOSAL (By Lab) or Return to C

PROJECT NAME	Starkey 1 Flowline Release	SAMPLER	Tyler Rust
PROJECT No.		SITE ID	
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	Caerus Piceance, LLC	BILL TO COMPANY	Caerus Piceance, LLC
SEND REPORT TO	Jake Janicek	INVOICE ATTN TO	Jake Janicek
ADDRESS	120 N. Railroad, suite D	ADDRESS	120 N. Railroad, suite D
CITY / STATE / ZIP	Parachute Co, 81635	CITY / STATE / ZIP	Parachute Co, 81635
PHONE	970-285-9608	PHONE	970-285-9608
FAX		FAX	
E-MAIL	jjanicek@caerusoilandgas.com	E-MAIL	invoices@caerusoilandgas.com
DATE	11/9/2016		
TURNAROUND	STD 5 Day		

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	TPH/GRO/DRO	BTEX	Table 910 PAHs	EC	PH	SAR	Benzene	Table 910 Metals
1	E-Wall #2 @12'	So:1	11/9/16	949	2	—	—							X	-

*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: 4.0°C

QC PACKAGE (check below)	
X	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

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

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Tyler Rust	11/9/16	2:30
RECEIVED BY			11/9/16	2:30
RELINQUISHED BY			11/9/16	2:30
RECEIVED BY		Diane F. Sh	11/10/16	0930
RELINQUISHED BY				
RECEIVED BY				

ORIGIN ID:RILA (616) 298-1033
NICK MARTINEZ
ALS ENVIRONMENTAL PARACHUTE
ALS ENVIRONMENTAL PARACHUTE SERVICE CENTER
127 EAST 1ST. ST
PARACHUTE, CO 81635
UNITED STATES US

SHIP DATE: 09NOV16
ACTWGT: 3.00 LB
CAD: 2264840/INET3790
DIMS: 13x20x14 IN

BILL SENDER

TO SAMPLE RECEIVING
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

HOLLAND MI 49424
(616) 399-6070
REF: 110916-1
INV
PO: PARACHUTE
DEPT:

544J3/C9B1/14EB

FedEx Express

REL# 3765346

TRK# 0201 7776 7899 6120

XX HLMA

49424
GRR
MI-US

THU - 10 NOV 10:30A
PRIORITY OVERNIGHT

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 6070
Fax. +1 616 399 6185

CUSTODY SEAL
Date
Name
Company

Seal Broken By:
Date:

ALS Group, USA

Sample Receipt Checklist

Client Name: **CAERUS** Date/Time Received: **10-Nov-16 09:30**

Work Order: **1611730** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 10-Nov-16 (Date) Reviewed by: Chad Whelton (eSignature) 11-Nov-16 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.0/4.0 c	SR2	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	11/10/2016 2:02:57 PM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

06-Dec-2016

Jake Janicek
Caerus Oil and Gas LLC
120 N. Railroad Ave. Suite D
Parachute, CO 81635

Re: **Starkey 1 Dumpline Release** Work Order: **1612204**

Dear Jake,

ALS Environmental received 1 sample on 03-Dec-2016 09:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 9.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Certificate No: MN 998501

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185
ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

ALS Group, USA

Date: 06-Dec-16

Client: Caerus Oil and Gas LLC
Project: Starkey 1 Dumpline Release
Work Order: **1612204**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1612204-01	W-Wall04@11'	Soil		12/2/2016 09:50	12/3/2016 09:00	☐

ALS Group, USA

Date: 06-Dec-16

Client: Caerus Oil and Gas LLC
Project: Starkey 1 Dumpline Release
WorkOrder: **1612204**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group, USA

Date: *06-Dec-16*

Client: Caerus Oil and Gas LLC
Project: Starkey 1 Dumpline Release
Work Order: 1612204
Sample ID: W-Wall04@11'
Lab ID: 1612204-01
Collection Date: 12/2/2016 09:50 AM
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID			**SW8015M**		Prep: SW3546 / 12/5/16	Analyst: **IT**
DRO (C10-C28)	**220**		**5.5**	**mg/Kg-dry**	1	12/5/2016 07:28 PM
Surr: 4-Terphenyl-d14	*52.4*		*39-133*	*%REC*	1	12/5/2016 07:28 PM
GASOLINE RANGE ORGANICS BY GC-FID			**SW8015D**		Prep: SW5035 / 12/5/16	Analyst: **IT**
GRO (C6-C10)	**100**		**3.3**	**mg/Kg-dry**	1	12/5/2016 05:41 PM
Surr: Toluene-d8	*95.2*		*50-150*	*%REC*	1	12/5/2016 05:41 PM
MOISTURE			**SW3550C**			Analyst: **EDL**
Moisture	**14**		**0.050**	**% of sample**	1	12/5/2016 01:11 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 06-Dec-16

Client: Caerus Oil and Gas LLC

Work Order: 1612204

Project: Starkey 1 Dumpline Release

QC BATCH REPORT

Batch ID: **95388** Instrument ID **GC8** Method: **SW8015M**

MBLK Sample ID: **DBLKS1-95388-95388** Units: **mg/Kg** Analysis Date: **12/5/2016 05:30 PM**

Client ID: Run ID: **GC8_161205A** SeqNo: **4187873** Prep Date: **12/5/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	ND	5.0								
Surr: 4-Terphenyl-d14	*1.937*	0	*3.33*	0	*58.2*	*39-133*	0			

LCS Sample ID: **DLCSS1-95388-95388** Units: **mg/Kg** Analysis Date: **12/5/2016 06:00 PM**

Client ID: Run ID: **GC8_161205A** SeqNo: **4187874** Prep Date: **12/5/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	288.8	5.0	333	0	86.7	61-109	0			
Surr: 4-Terphenyl-d14	*1.775*	0	*3.33*	0	*53.3*	*39-133*	0			

MS Sample ID: **1612204-01A MS** Units: **mg/Kg** Analysis Date: **12/5/2016 06:29 PM**

Client ID: **W-Wall04@11'** Run ID: **GC8_161205A** SeqNo: **4187875** Prep Date: **12/5/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	479.4	4.9	327.9	185.7	89.6	48-110	0			
Surr: 4-Terphenyl-d14	*1.948*	0	*3.279*	0	*59.4*	*39-133*	0			

MSD Sample ID: **1612204-01A MSD** Units: **mg/Kg** Analysis Date: **12/5/2016 06:59 PM**

Client ID: **W-Wall04@11'** Run ID: **GC8_161205A** SeqNo: **4187876** Prep Date: **12/5/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	479.6	4.7	313.1	185.7	93.9	48-110	479.4	0.0371	30	
Surr: 4-Terphenyl-d14	*1.938*	0	*3.131*	0	*61.9*	*39-133*	1.948	*0.518*	*30*	

The following samples were analyzed in this batch: 1612204-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
Work Order: 1612204
Project: Starkey 1 Dumpline Release

QC BATCH REPORT

Batch ID: **95404** Instrument ID **GC9** Method: **PUBL-SW-140**

MBLK Sample ID: **MBLK-95404-95404** Units: **µg/Kg-dry** Analysis Date: **12/5/2016 12:17 PM**
Client ID: Run ID: **GC9_161205A** SeqNo: **4185191** Prep Date: **12/5/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500								

MBLK Sample ID: **MBLK-95404-95404** Units: **µg/Kg-dry** Analysis Date: **12/5/2016 04:51 PM**
Client ID: Run ID: **GC9_161205B** SeqNo: **4186199** Prep Date: **12/5/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	ND	2,500	0	0	0		0			
Surr: Toluene-d8	*4614*	0	*5000*	0	*92.3*	*50-150*	0			

LCS Sample ID: **LCS-95404-95404** Units: **µg/Kg-dry** Analysis Date: **12/5/2016 11:51 AM**
Client ID: Run ID: **GC9_161205A** SeqNo: **4185190** Prep Date: **12/5/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	10120	2,500	10000	0	101	80-120	0			

LCS Sample ID: **LCS-95404-95404** Units: **µg/Kg-dry** Analysis Date: **12/5/2016 02:53 PM**
Client ID: Run ID: **GC9_161205B** SeqNo: **4186198** Prep Date: **12/5/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	486600	2,500	500000	0	97.3	70-130	0			
Surr: Toluene-d8	*5740*	0	*5000*	0	*115*	*50-150*	0			

LCSD Sample ID: **LCSD-95404-95404** Units: **µg/Kg-dry** Analysis Date: **12/5/2016 01:10 PM**
Client ID: Run ID: **GC9_161205A** SeqNo: **4185193** Prep Date: **12/5/2016** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	9759	2,500	10000	0	97.6	80-120	10120	3.6	20	

The following samples were analyzed in this batch: 1612204-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
Work Order: 1612204
Project: Starkey 1 Dumpline Release

QC BATCH REPORT

Batch ID: **R201920** Instrument ID **MOIST** Method: **SW3550C**

MBLK	Sample ID: **WBLKS-R201920**				Units: **% of sample**		Analysis Date: **12/5/2016 01:11 PM**			
Client ID:		Run ID: **MOIST_161205A**			SeqNo: **4187269**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.050								

LCS	Sample ID: **LCS-R201920**				Units: **% of sample**		Analysis Date: **12/5/2016 01:11 PM**			
Client ID:		Run ID: **MOIST_161205A**			SeqNo: **4187266**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP	Sample ID: **1612186-02B DUP**				Units: **% of sample**		Analysis Date: **12/5/2016 01:11 PM**			
Client ID:		Run ID: **MOIST_161205A**			SeqNo: **4187244**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	14.34	0.050	0	0	0		14.24	0.7	20	

DUP	Sample ID: **1612186-06B DUP**				Units: **% of sample**		Analysis Date: **12/5/2016 01:11 PM**			
Client ID:		Run ID: **MOIST_161205A**			SeqNo: **4187249**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	16.7	0.050	0	0	0		17.1	2.37	20	

The following samples were analyzed in this batch: 1612204-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Laboratory Group

ALS Holland 3352 128th Ave, Holland MI
855-572-1944 616-399-6070

Chain-of-Custody

Form 282r8

WORKORDER # 1612204

PAGE 1 of 1

DISPOSAL (By Lab) or Return to C

PROJECT NAME	Starkey 1 Dumpline Release	SAMPLER	Jake Janicek
PROJECT No.		SITE ID	
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	Caerus Piceance, LLC	BILL TO COMPANY	Caerus Piceance, LLC
SEND REPORT TO	Jake Janicek	INVOICE ATTN TO	Jake Janicek
ADDRESS	120 N. Railroad,suite D	ADDRESS	120 N. Railroad,suite D
CITY / STATE / ZIP	Parachute Co, 81635	CITY / STATE / ZIP	Parachute Co, 81635
PHONE	970-285-9608	PHONE	970-285-9608
FAX		FAX	
E-MAIL	jlanicek@caerusoilandgas.com	E-MAIL	invoices@caerusoilandgas.com

DATE 12-2-16

TURNAROUND Same Day TAT

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	TPH/GRO/DRO	BTEX	Table 910 PAH;s	EC	PH	SAR	Benzene	Table 910 Metals
	W-Wall@4 @11'	Soil	12-2-16	0950	1	-		X							

*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:

QC PACKAGE (check below)	
X	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

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

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Jake Janicek	12-2-16	1445
RECEIVED BY			12-2-16	1445
RELINQUISHED BY			12-2-16	1730
RECEIVED BY			12/3/16	0950
RELINQUISHED BY				
RECEIVED BY				

ALS Group, USA

Sample Receipt Checklist

Client Name: **CAERUS** Date/Time Received: **03-Dec-16 09:00**

Work Order: **1612204** Received by: **WJC**

Checklist completed by Bill Carey (eSignature) 03-Dec-16 (Date) Reviewed by: Chad Whilton (eSignature) 05-Dec-16 (Date)

Matrices: Soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.0 C		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	12/3/2016 11:46:28 AM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

COGCC INSPECTION REPORT

COGCC DOCUMENT NUMBER 674300795

FORM INSP Rev X/15

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

FIELD INSPECTION FORM

Inspection Date: 11/23/2016
Submitted Date: 11/29/2016
Document Number: 674300795

Loc ID	Inspector Name:	On-Site Inspection
335383	Spencer, Stan	2A Doc Num:

Operator Information:

OGCC Operator Number: 10456
Name of Operator: CAERUS PICEANCE LLC
Address: 1001 17TH STREET #1600
City: DENVER State: CO Zip: 80202

Status Summary:

- ☐ THIS IS A FOLLOW UP INSPECTION
- ☐ FOLLOW UP INSPECTION REQUIRED
- ☐ NO FOLLOW UP INSPECTION REQUIRED

Findings:

1 Number of Comments
1 Number of Corrective Actions
☒ Corrective Action Response Requested

Contact Information:

Contact Name	Phone	Email	Comment
Janicek, Jake		JJanicek@caerusoilandgas.com	
Lujan, Carlos		carlos.lujan@state.co.us	
Fischer, Alex		alex.fischer@state.co.us	

General Comment:

Environmental

Spills/Releases:

Type of Spill: CONDENSATE Estimated Spill Volume:

Comment: Site visit to assess Spill#448077 with Jake Janecek of Caerus. Condensate dumpline failed pressure test. Contaminated soil excavated to base of unstable cliff at north wall comprised of friable shale. ND for benzene and ~1000 ppm TPH in sample from cliff base but too dangerous for further excavation.

Corrective Action: Resample to assess natural attenuation. If TPH still exceeds Table 910-1 standard, consult with COGCC concerning other remedial options. Date: 12/30/2016

Reportable: GPS: Lat Long

Proximity to Surface Water: Depth to Ground Water:

Water Well:

DWR Receipt Num: Owner Name: GPS : Lat Long

Field Parameters:

Sample Location: Comment:

Attached Documents

You can go to COGCC Images (https://cogcc.state.co.us/weblink/) and search by document number:

Document Num	Description	URL
674300796	Inspection photos	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=4014774