

12N

Form 19 (Notice of Completion)

Spill/Release Point ID 445431

Narrative Attachment

This Form 19 (Notice of Completion) was prepared for the purpose of describing completed work associated with assessing the soil beneath a tank that was leaking on the 12N pad location. A Site Location Map is included as an attachment (Figure 1).

Upon removing the tank from the ground, visual observations and field screening of soil around and below the tank indicated that impacted soil was present. Excavation of the impacted soil was conducted and field screen readings were utilized to determine the extent of the impacts.

On April 25, 2016, a confirmation soil sample was collected from beneath the removed tank (Base@4.5'). The soil sample was submitted for laboratory analysis of all COGCC Table 910-1 analytes. Analytical results indicate the soil sample was in compliance with COGCC Table 910-1 Concentration Levels for all analytes or were within background concentrations. Background samples were collected from an undisturbed area near the 35-O pad (COGCC Location ID 334355). Sample locations are depicted on the attached Site Location Map and laboratory analytical results are summarized in the attached analytical table. Laboratory analytical reports are included as an attachment. Due to the minor amount of impacted soil (approximately five cubic yards) removed, only one confirmation soil sample was collected from beneath the impacted soil.

All impacted soil removed during excavation activities was remediated onsite to below COGCC Table 910-1 Concentration Levels by utilizing ex-situ remediation. On April 25, 2016, a confirmation soil sample was collected from the removed soil (12N Landfarm). This soil sample was submitted for laboratory analysis of all COGCC Table 910-1 analytes. Analytical results indicate all soil samples were in compliance with COGCC Table 910-1 Concentration Levels for all analytes or were within background concentrations except for the total petroleum hydrocarbons (TPH) and sodium adsorption ratio (SAR) measurements. However, this soil will be used to backfill the excavation associated with this remediation project with the purpose of setting a new tank on this backfilled area. Therefore, the COGCC Table 910-1 Concentration Level for SAR should not apply to this soil since it will not be used for the purpose of supporting vegetation. Background samples were collected from an undisturbed area near the 35-O pad (COGCC Location ID 334355). In order to address the TPH exceedances observed in the removed soil, the removed soil was stirred and agitated in order to promote volatilization. On May 11 and June 10, 2016, confirmation soil samples were collected from the removed soil (12N Landfarm). The soil samples were submitted for laboratory analysis of TPH. Analytical results indicate the soil was remediated to within COGCC Table 910-1 Concentration Levels for TPH. Laboratory analytical results are summarized in the attached analytical table and laboratory analytical reports are included as an attachment.

Based on removal of the failed tank and soil analytical results, Caerus requests an NFA designation for this project.



TABLE 1
12N
SOIL ANALYTICAL RESULTS
CAERUS OIL AND GAS
PICEANCE BASIN, COLORADO

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	Base@ 4.5'	12N Landfarm	12N Landfarm	12N Landfarm
Sample Date			4/25/2016	4/25/2016	5/11/2016	6/10/2016
Sample Type			Confirmation	Confirmation	Confirmation	Confirmation
Arsenic	0.39	mg/kg	8.7	7.6	NA	NA
Barium	15,000	mg/kg	190	320	NA	NA
Cadmium	70	mg/kg	ND	ND	NA	NA
Chromium (III)	120,000	mg/kg	14	13	NA	NA
Chromium (VI)	23	mg/kg	ND	ND	NA	NA
Copper	3,100	mg/kg	16	11	NA	NA
Lead	400	mg/kg	10	7.0	NA	NA
Mercury	23	mg/kg	ND	0.024	NA	NA
Nickel	1,600	mg/kg	16	14	NA	NA
Selenium	390	mg/kg	1.1	ND	NA	NA
Silver	390	mg/kg	ND	ND	NA	NA
Zinc	23,000	mg/kg	50	35	NA	NA
EC	4 or 2x background	mmhos/cm	2.6	1.4	NA	NA
pH	6-9	SU	7.4	8.1	NA	NA
SAR	12	unitless	2.2	27	NA	NA
TPH-DRO			23	490	310	32
TPH-GRO			ND	2,100	370	ND
TPH	500	mg/kg	23	2,590	680	32
Benzene	0.17	mg/kg	ND	ND	NA	NA
Toluene	85	mg/kg	ND	0.11	NA	NA
Ethylbenzene	100	mg/kg	ND	ND	NA	NA
Total Xylenes	175	mg/kg	0.47	81	NA	NA
Acenaphthene	1,000	mg/kg	ND	ND	NA	NA
Anthracene	1,000	mg/kg	ND	ND	NA	NA
Benz(a)anthracene	0.22	mg/kg	ND	ND	NA	NA
Benzo(b)fluoranthene	0.22	mg/kg	ND	ND	NA	NA
Benzo(k)fluoranthene	2.2	mg/kg	ND	ND	NA	NA
Benzo(a)pyrene	0.022	mg/kg	ND	ND	NA	NA
Chrysene	22	mg/kg	ND	ND	NA	NA
Dibenzo(a,h)anthracene	0.022	mg/kg	ND	ND	NA	NA
Fluoranthene	1,000	mg/kg	ND	ND	NA	NA
Fluorene	1,000	mg/kg	ND	ND	NA	NA
Indeno(1,2,3,c,d)pyrene	0.22	mg/kg	ND	ND	NA	NA
Naphthalene	23	mg/kg	ND	2.0	NA	NA
Pyrene	1,000	mg/kg	ND	ND	NA	NA

Notes:

< - less than the stated reporting limit

Background samples were collected at the 35-O Pad Location (COGCC Location ID 334355)

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

TABLE 1
12N
SOIL ANALYTICAL RESULTS
CAERUS OIL AND GAS
PICEANCE BASIN, COLORADO

PARAMETER	COGCC CONCENTRATION LEVELS	UNITS	B2	B3	B4
Sample Date			7/16/2012	7/16/2012	7/16/2012
Sample Type			Background	Background	Background
Arsenic	0.39	mg/kg	8.07	6.57	18.9
Barium	15,000	mg/kg	NA	NA	NA
Cadmium	70	mg/kg	NA	NA	NA
Chromium (III)	120,000	mg/kg	NA	NA	NA
Chromium (VI)	23	mg/kg	NA	NA	NA
Copper	3,100	mg/kg	NA	NA	NA
Lead	400	mg/kg	NA	NA	NA
Mercury	23	mg/kg	NA	NA	NA
Nickel	1,600	mg/kg	NA	NA	NA
Selenium	390	mg/kg	NA	NA	NA
Silver	390	mg/kg	NA	NA	NA
Zinc	23,000	mg/kg	NA	NA	NA
EC	4 or 2x background	mmhos/cm	NA	NA	NA
pH	6-9	SU	NA	NA	NA
SAR	12	unitless	NA	NA	NA
TPH-DRO			NA	NA	NA
TPH-GRO			NA	NA	NA
TPH	500	mg/kg	NA	NA	NA
Benzene	0.17	mg/kg	NA	NA	NA
Toluene	85	mg/kg	NA	NA	NA
Ethylbenzene	100	mg/kg	NA	NA	NA
Total Xylenes	175	mg/kg	NA	NA	NA
Acenaphthene	1,000	mg/kg	NA	NA	NA
Anthracene	1,000	mg/kg	NA	NA	NA
Benz(a)anthracene	0.22	mg/kg	NA	NA	NA
Benzo(b)fluoranthene	0.22	mg/kg	NA	NA	NA
Benzo(k)fluoranthene	2.2	mg/kg	NA	NA	NA
Benzo(a)pyrene	0.022	mg/kg	NA	NA	NA
Chrysene	22	mg/kg	NA	NA	NA
Dibenzo(a,h)anthracene	0.022	mg/kg	NA	NA	NA
Fluoranthene	1,000	mg/kg	NA	NA	NA
Fluorene	1,000	mg/kg	NA	NA	NA
Indeno(1,2,3,c,d)pyrene	0.22	mg/kg	NA	NA	NA
Naphthalene	23	mg/kg	NA	NA	NA
Pyrene	1,000	mg/kg	NA	NA	NA

Notes:

< - less than the stated reporting limit

Background samples were collected at the 35-O Pad Location (COGCC Location ID 3).

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



03-May-2016

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

Re: **12N**

Work Order: **16041439**

Dear Jake,

ALS Environmental received 2 samples on 26-Apr-2016 04:00 PM 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 NELAP standard requirements and QC 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 26.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton", is written over a light blue horizontal line.

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager



Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Caerus Oil and Gas LLC
Project: 12N
Work Order: 16041439

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
16041439-01	Base @ 4.5'	Soil		4/25/2016 11:00	4/26/2016 16:00	<input type="checkbox"/>
16041439-02	12N Landfarm	Soil		4/25/2016 11:15	4/26/2016 16:00	<input type="checkbox"/>

Client: Caerus Oil and Gas LLC**Project:** 12N**Work Order:** 16041439**Case Narrative**

Batch 85278, Method VOC_8260_S, Sample 16041439-02A: VOC surrogate recovery high due to matrix interference.

Batch 85328, Method DRO_8015_S, Sample 16041439-02A: The concentration in the Method Blank was greater than the quantitation limit. The sample result was greater than 5x the concentration in the Method Blank; therefore, no qualification is required.

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
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
n	Not offered for accreditation
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 PQL, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
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

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight
mg/L	Milligrams per Liter
mmhos/cm @25°C	Millimhos-Centimeter at 25 Degrees Celcius
none	
s.u.	Standard Units

ALS Group USA, Corp

Date: 03-May-16

Client: Caerus Oil and Gas LLC
Project: 12N
Sample ID: Base @ 4.5'
Collection Date: 4/25/2016 11:00 AM

Work Order: 16041439
Lab ID: 16041439-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 5/2/16	Analyst: IT
DRO (C10-C28)	23		5.3	mg/Kg-dry	1	5/2/2016 11:15 PM
Surr: 4-Terphenyl-d14	80.2		39-133	%REC	1	5/2/2016 11:15 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/27/16	Analyst: IT
GRO (C6-C10)	ND		3.8	mg/Kg-dry	1	4/27/2016 06:20 PM
Surr: Toluene-d8	108		50-150	%REC	1	4/27/2016 06:20 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 5/2/16	Analyst: LR
Mercury	ND		0.018	mg/Kg-dry	1	5/2/2016 06:22 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 4/27/16	Analyst: JEC
Arsenic	8.7		0.41	mg/Kg-dry	1	4/28/2016 04:30 PM
Barium	190		0.41	mg/Kg-dry	1	4/27/2016 08:48 PM
Cadmium	ND		0.82	mg/Kg-dry	1	4/27/2016 08:48 PM
Chromium	14		0.41	mg/Kg-dry	1	4/27/2016 08:48 PM
Copper	16		0.82	mg/Kg-dry	1	4/27/2016 08:48 PM
Lead	10		0.41	mg/Kg-dry	1	4/27/2016 08:48 PM
Nickel	16		0.41	mg/Kg-dry	1	4/27/2016 08:48 PM
Selenium	1.1		0.82	mg/Kg-dry	1	4/28/2016 04:30 PM
Silver	ND		0.41	mg/Kg-dry	1	4/27/2016 08:48 PM
Zinc	50		0.82	mg/Kg-dry	1	4/28/2016 04:30 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/29/16	Analyst: JEC
Calcium	220		5.0	mg/L	10	4/29/2016 12:42 PM
Magnesium	64		2.0	mg/L	10	4/29/2016 12:42 PM
Sodium	140		2.0	mg/L	10	4/29/2016 12:42 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/29/16	Analyst: JEC
Sodium Adsorption Ratio	2.2		0.010	none	1	4/29/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/27/16	Analyst: JF
Acenaphthene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Anthracene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Benzo(a)anthracene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Benzo(a)pyrene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Benzo(b)fluoranthene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Benzo(k)fluoranthene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Chrysene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Dibenzo(a,h)anthracene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Fluoranthene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM

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

ALS Group USA, Corp

Date: 03-May-16

Client: Caerus Oil and Gas LLC
Project: 12N
Sample ID: Base @ 4.5'
Collection Date: 4/25/2016 11:00 AM

Work Order: 16041439
Lab ID: 16041439-01
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Indeno(1,2,3-cd)pyrene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Naphthalene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Pyrene	ND		0.010	mg/Kg-dry	1	4/28/2016 01:11 AM
Surr: 2-Fluorobiphenyl	74.9		12-100	%REC	1	4/28/2016 01:11 AM
Surr: 4-Terphenyl-d14	101		25-137	%REC	1	4/28/2016 01:11 AM
Surr: Nitrobenzene-d5	69.7		37-107	%REC	1	4/28/2016 01:11 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/27/16	Analyst: LSY	
Benzene	ND		0.046	mg/Kg-dry	1	5/1/2016 04:36 PM
Ethylbenzene	ND		0.046	mg/Kg-dry	1	5/1/2016 04:36 PM
m,p-Xylene	0.37		0.092	mg/Kg-dry	1	5/1/2016 04:36 PM
o-Xylene	0.10		0.046	mg/Kg-dry	1	5/1/2016 04:36 PM
Toluene	ND		0.046	mg/Kg-dry	1	5/1/2016 04:36 PM
Xylenes, Total	0.47		0.14	mg/Kg-dry	1	5/1/2016 04:36 PM
Surr: 1,2-Dichloroethane-d4	98.7		70-130	%REC	1	5/1/2016 04:36 PM
Surr: 4-Bromofluorobenzene	105		70-130	%REC	1	5/1/2016 04:36 PM
Surr: Dibromofluoromethane	89.6		70-130	%REC	1	5/1/2016 04:36 PM
Surr: Toluene-d8	98.1		70-130	%REC	1	5/1/2016 04:36 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/29/16	Analyst: JB	
Electrical Conductivity @ Saturation	2.6		0.12	mmhos/cm @2	25	4/29/2016 04:00 PM
CHROMIUM, TRIVALENT			CALCULATION	Analyst: JB		
Chromium, Trivalent	14		0.64	mg/Kg-dry	1	5/2/2016 08:00 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/27/16	Analyst: MB	
Chromium, Hexavalent	ND		1.3	mg/Kg-dry	1	4/29/2016 03:00 PM
MOISTURE			SW3550C	Analyst: ED		
Moisture	21		0.050	% of sample	1	4/26/2016 08:53 PM
PH			SW9045D	Prep: EXTRACT / 4/27/16	Analyst: STP	
pH	7.4			s.u.	1	4/27/2016 05:30 PM

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

ALS Group USA, Corp

Date: 03-May-16

Client: Caerus Oil and Gas LLC
Project: 12N
Sample ID: 12N Landfarm
Collection Date: 4/25/2016 11:15 AM

Work Order: 16041439
Lab ID: 16041439-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015M		Prep: SW3541 / 4/28/16	Analyst: IT
DRO (C10-C28)	490		5.2	mg/Kg-dry	1	4/29/2016 01:09 AM
Surr: 4-Terphenyl-d14	57.7		39-133	%REC	1	4/29/2016 01:09 AM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW5035 / 4/27/16	Analyst: IT
GRO (C6-C10)	2,100		3.7	mg/Kg-dry	1	4/27/2016 06:44 PM
Surr: Toluene-d8	96.9		50-150	%REC	1	4/27/2016 06:44 PM
MERCURY BY CVAA						
			SW7471B		Prep: SW7471 / 5/2/16	Analyst: LR
Mercury	0.024		0.015	mg/Kg-dry	1	5/2/2016 06:24 PM
METALS ANALYSIS BY ICP						
			SW846 6010C		Prep: SW3050B / 4/27/16	Analyst: JEC
Arsenic	7.6		0.48	mg/Kg-dry	1	4/28/2016 04:35 PM
Barium	320		0.48	mg/Kg-dry	1	4/27/2016 08:54 PM
Cadmium	ND		0.95	mg/Kg-dry	1	4/27/2016 08:54 PM
Chromium	13		0.48	mg/Kg-dry	1	4/27/2016 08:54 PM
Copper	11		0.95	mg/Kg-dry	1	4/27/2016 08:54 PM
Lead	7.0		0.48	mg/Kg-dry	1	4/27/2016 08:54 PM
Nickel	14		0.48	mg/Kg-dry	1	4/27/2016 08:54 PM
Selenium	ND		0.95	mg/Kg-dry	1	4/27/2016 08:54 PM
Silver	ND		0.48	mg/Kg-dry	1	4/27/2016 08:54 PM
Zinc	35		0.95	mg/Kg-dry	1	4/28/2016 04:35 PM
SOLUBLE CATIONS FOR SAR						
			SW846 6010C		Prep: USDA Method 20B / 4/29/16	Analyst: JEC
Calcium	240		5.0	mg/L	10	4/29/2016 12:25 PM
Magnesium	83		2.0	mg/L	10	4/29/2016 12:25 PM
Sodium	1,900		2.0	mg/L	10	4/29/2016 12:25 PM
SODIUM ADSORPTION RATIO						
			USDA H60 METHO		Prep: USDA Method 20B / 4/29/16	Analyst: JEC
Sodium Adsorption Ratio	27		0.010	none	1	4/29/2016
SEMI-VOLATILE ORGANIC COMPOUNDS						
			SW846 8270D		Prep: SW3541 / 4/27/16	Analyst: JF
Acenaphthene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Anthracene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Benzo(a)anthracene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Benzo(a)pyrene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Benzo(b)fluoranthene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Benzo(k)fluoranthene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Chrysene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Dibenzo(a,h)anthracene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Fluoranthene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM

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

ALS Group USA, Corp

Date: 03-May-16

Client: Caerus Oil and Gas LLC
Project: 12N
Sample ID: 12N Landfarm
Collection Date: 4/25/2016 11:15 AM

Work Order: 16041439
Lab ID: 16041439-02
Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Indeno(1,2,3-cd)pyrene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Naphthalene	2.0		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Pyrene	ND		0.0083	mg/Kg-dry	1	4/28/2016 01:34 AM
Surr: 2-Fluorobiphenyl	73.5		12-100	%REC	1	4/28/2016 01:34 AM
Surr: 4-Terphenyl-d14	87.8		25-137	%REC	1	4/28/2016 01:34 AM
Surr: Nitrobenzene-d5	38.5		37-107	%REC	1	4/28/2016 01:34 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B	Prep: SW5035 / 4/27/16		Analyst: LSY
Benzene	ND		0.044	mg/Kg-dry	1	5/1/2016 05:00 PM
Ethylbenzene	ND		0.044	mg/Kg-dry	1	5/1/2016 05:00 PM
m,p-Xylene	65		3.5	mg/Kg-dry	40	5/2/2016 04:26 PM
o-Xylene	15		1.8	mg/Kg-dry	40	5/2/2016 04:26 PM
Toluene	0.11		0.044	mg/Kg-dry	1	5/1/2016 05:00 PM
Xylenes, Total	81		5.3	mg/Kg-dry	40	5/2/2016 04:26 PM
Surr: 1,2-Dichloroethane-d4	111		70-130	%REC	40	5/2/2016 04:26 PM
Surr: 1,2-Dichloroethane-d4	97.5		70-130	%REC	1	5/1/2016 05:00 PM
Surr: 4-Bromofluorobenzene	120		70-130	%REC	1	5/1/2016 05:00 PM
Surr: 4-Bromofluorobenzene	94.4		70-130	%REC	40	5/2/2016 04:26 PM
Surr: Dibromofluoromethane	103		70-130	%REC	40	5/2/2016 04:26 PM
Surr: Dibromofluoromethane	88.4		70-130	%REC	1	5/1/2016 05:00 PM
Surr: Toluene-d8	134	S	70-130	%REC	1	5/1/2016 05:00 PM
Surr: Toluene-d8	106		70-130	%REC	40	5/2/2016 04:26 PM
ELECTRICAL CONDUCTIVITY (SAR)			USDA H60 METHO	Prep: USDA Method 20B / 4/29/16		Analyst: JB
Electrical Conductivity @ Saturation	1.4		0.050	mmhos/cm @2	10	4/29/2016 04:00 PM
CHROMIUM, TRIVALENT			CALCULATION			Analyst: JB
Chromium, Trivalent	13		0.62	mg/Kg-dry	1	5/2/2016 08:00 AM
CHROMIUM, HEXAVALENT			SW7196A	Prep: SW3060A / 4/27/16		Analyst: MB
Chromium, Hexavalent	ND		1.2	mg/Kg-dry	1	4/29/2016 03:00 PM
MOISTURE			SW3550C			Analyst: ED
Moisture	19		0.050	% of sample	1	4/27/2016 05:34 PM
PH			SW9045D	Prep: EXTRACT / 4/27/16		Analyst: STP
pH	8.1			s.u.	1	4/27/2016 05:30 PM

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

ALS Group USA, Corp

Date: 03-May-16

Client: Caerus Oil and Gas LLC
Work Order: 16041439
Project: 12N

QC BATCH REPORT

Batch ID: **85328** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-85328-85328				Units: mg/Kg		Analysis Date: 4/28/2016 05:09 PM		
Client ID:		Run ID: GC8_160428B				SeqNo: 3804317		Prep Date: 4/28/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	10.36	5.0								
Surr: 4-Terphenyl-d14	1.324	0	2	0	66.2	39-133		0		

LCS		Sample ID: DLCSS1-85328-85328				Units: mg/Kg		Analysis Date: 4/28/2016 05:39 PM		
Client ID:		Run ID: GC8_160428B				SeqNo: 3804333		Prep Date: 4/28/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	159	5.0	200	0	79.5	61-109		0		B
Surr: 4-Terphenyl-d14	1.36	0	2	0	68	39-133		0		

MS		Sample ID: 16041443-01A MS				Units: mg/Kg		Analysis Date: 4/28/2016 06:09 PM		
Client ID:		Run ID: GC8_160428B				SeqNo: 3804334		Prep Date: 4/28/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	123.4	4.2	166.6	9.737	68.2	48-110		0		B
Surr: 4-Terphenyl-d14	1.184	0	1.666	0	71.1	39-133		0		

MSD		Sample ID: 16041443-01A MSD				Units: mg/Kg		Analysis Date: 4/28/2016 06:39 PM		
Client ID:		Run ID: GC8_160428B				SeqNo: 3804335		Prep Date: 4/28/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	133.4	4.1	165.3	9.737	74.8	48-110	123.4	7.78	30	B
Surr: 4-Terphenyl-d14	1.245	0	1.653	0	75.4	39-133	1.184	5.03	30	

The following samples were analyzed in this batch:

16041439-01A	16041439-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
 Work Order: 16041439
 Project: 12N

QC BATCH REPORT

Batch ID: **85471** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-85471-85471				Units: mg/Kg		Analysis Date: 5/2/2016 05:45 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806100		Prep Date: 5/2/2016		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								
<i>Surr: 4-Terphenyl-d14</i>	1.566	0	2	0	78.3	39-133	0			

LCS		Sample ID: DLCSS1-85471-85471				Units: mg/Kg		Analysis Date: 5/2/2016 06:15 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806101		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	163.8	5.0	200	0	81.9	61-109	0			
<i>Surr: 4-Terphenyl-d14</i>	1.54	0	2	0	77	39-133	0			

MS		Sample ID: 16041442-01A MS				Units: mg/Kg		Analysis Date: 5/2/2016 06:45 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806102		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	144.7	4.1	165.6	8.485	82.3	48-110	0			
<i>Surr: 4-Terphenyl-d14</i>	1.679	0	1.656	0	101	39-133	0			

MSD		Sample ID: 16041442-01A MSD				Units: mg/Kg		Analysis Date: 5/2/2016 07:15 PM		
Client ID:		Run ID: GC8_160502A				SeqNo: 3806103		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
DRO (C10-C28)	144.4	4.1	163.4	8.485	83.2	48-110	144.7	0.167	30	
<i>Surr: 4-Terphenyl-d14</i>	1.518	0	1.634	0	92.9	39-133	1.679	10.1	30	

The following samples were analyzed in this batch:

16041439-01A

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

Client: Caerus Oil and Gas LLC
 Work Order: 16041439
 Project: 12N

QC BATCH REPORT

Batch ID: **85280** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-85280-85280				Units: µg/Kg-dry		Analysis Date: 4/27/2016 05:30 PM		
Client ID:		Run ID: GC9_160427A				SeqNo: 3798674		Prep Date: 4/27/2016		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	5170	0	5000	0	103	50-150	0			

LCS		Sample ID: LCS-85280-85280				Units: µg/Kg-dry		Analysis Date: 4/27/2016 05:05 PM		
Client ID:		Run ID: GC9_160427A				SeqNo: 3798673		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	561100	2,500	500000	0	112	70-130	0			
Surr: Toluene-d8	5058	0	5000	0	101	50-150	0			

MS		Sample ID: 16041443-01A MS				Units: µg/Kg-dry		Analysis Date: 4/27/2016 08:26 PM		
Client ID:		Run ID: GC9_160427A				SeqNo: 3798681		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	677000	3,100	611100	0	111	70-130	0			
Surr: Toluene-d8	6282	0	6111	0	103	50-150	0			

MSD		Sample ID: 16041443-01A MSD				Units: µg/Kg-dry		Analysis Date: 4/27/2016 08:51 PM		
Client ID:		Run ID: GC9_160427A				SeqNo: 3798682		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	662600	3,100	611100	0	108	70-130	677000	2.15	30	
Surr: Toluene-d8	6484	0	6111	0	106	50-150	6282	3.16	30	

The following samples were analyzed in this batch:

16041439-01A	16041439-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
Work Order: 16041439
Project: 12N

QC BATCH REPORT

Batch ID: **85477** Instrument ID **HG1** Method: **SW7471B**

MBLK		Sample ID: MBLK-85477-85477				Units: mg/Kg		Analysis Date: 5/2/2016 05:27 PM		
Client ID:		Run ID: HG1_160502A				SeqNo: 3805359		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury ND 0.020

LCS		Sample ID: LCS-85477-85477				Units: mg/Kg		Analysis Date: 5/2/2016 05:29 PM		
Client ID:		Run ID: HG1_160502A				SeqNo: 3805360		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1717 0.020 0.1665 0 103 80-120 0

MS		Sample ID: 16041584-02BMS				Units: mg/Kg		Analysis Date: 5/2/2016 05:42 PM		
Client ID:		Run ID: HG1_160502A				SeqNo: 3805366		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1273 0.014 0.113 0.01345 101 75-125 0

MSD		Sample ID: 16041584-02BMSD				Units: mg/Kg		Analysis Date: 5/2/2016 05:45 PM		
Client ID:		Run ID: HG1_160502A				SeqNo: 3805367		Prep Date: 5/2/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1272 0.014 0.116 0.01345 98 75-125 0.1273 0.0666 35

The following samples were analyzed in this batch:

16041439-01A	16041439-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
 Work Order: 16041439
 Project: 12N

QC BATCH REPORT

Batch ID: **85268** Instrument ID **ICP2** Method: **SW846 6010C**

MBLK		Sample ID: MBLK-85268-85268				Units: mg/Kg		Analysis Date: 4/27/2016 08:26 PM		
Client ID:		Run ID: ICP2_160427A				SeqNo: 3798345		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	ND	0.25								
Cadmium	0.02616	0.50								J
Chromium	ND	0.25								
Copper	ND	0.50								
Lead	ND	0.25								
Nickel	ND	0.25								
Selenium	ND	0.50								
Silver	ND	0.25								

MBLK		Sample ID: MBLK-85268-85268				Units: mg/Kg		Analysis Date: 4/28/2016 04:19 PM		
Client ID:		Run ID: ICP2_160428A				SeqNo: 3800590		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Zinc	0.04155	0.50								J

LCS		Sample ID: LCS-85268-85268				Units: mg/Kg		Analysis Date: 4/27/2016 08:31 PM		
Client ID:		Run ID: ICP2_160427A				SeqNo: 3798346		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	5.212	0.25	5	0	104	80-120	0			
Cadmium	4.886	0.50	5	0	97.7	80-120	0			
Chromium	5.553	0.25	5	0	111	80-120	0			
Copper	5.186	0.50	5	0	104	80-120	0			
Lead	5.047	0.25	5	0	101	80-120	0			
Nickel	4.897	0.25	5	0	97.9	80-120	0			
Selenium	5.128	0.50	5	0	103	80-120	0			
Silver	5.017	0.25	5	0	100	80-120	0			

LCS		Sample ID: LCS-85268-85268				Units: mg/Kg		Analysis Date: 4/28/2016 04:25 PM		
Client ID:		Run ID: ICP2_160428A				SeqNo: 3800591		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.606	0.25	5	0	92.1	80-120	0			
Zinc	4.755	0.50	5	0	95.1	80-120	0			

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

Client: Caerus Oil and Gas LLC
 Work Order: 16041439
 Project: 12N

QC BATCH REPORT

Batch ID: **85268** Instrument ID **ICP2** Method: **SW846 6010C**

MS				Sample ID: 16041441-03AMS			Units: mg/Kg		Analysis Date: 4/28/2016 02:28 PM		
Client ID:			Run ID: ICP2_160428A			SeqNo: 3800573		Prep Date: 4/27/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	17.32	0.37	7.44	8.813	114	75-125	0				
Barium	1260	0.37	7.44	669.9	7930	75-125	0			SO	
Cadmium	6.958	0.74	7.44	-0.03734	94	75-125	0				
Chromium	15.89	0.37	7.44	8.941	93.4	75-125	0				
Copper	35.32	0.74	7.44	20.54	199	75-125	0			S	
Lead	11.06	0.37	7.44	3.787	97.7	75-125	0				
Nickel	16.05	0.37	7.44	8.757	98.1	75-125	0				
Selenium	8.986	0.74	7.44	0.6669	112	75-125	0				
Silver	7.578	0.37	7.44	-0.08334	103	75-125	0				
Zinc	40.26	0.74	7.44	29.29	147	75-125	0			S	

MSD				Sample ID: 16041441-03AMSD			Units: mg/Kg		Analysis Date: 4/28/2016 03:26 PM		
Client ID:			Run ID: ICP2_160428A			SeqNo: 3800583		Prep Date: 4/27/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Arsenic	16.67	0.37	7.44	8.813	106	75-125	17.32	3.84	20		
Barium	592.2	0.37	7.44	669.9	-1040	75-125	1260	72.1	20	SRO	
Cadmium	6.822	0.74	7.44	-0.03734	92.2	75-125	6.958	1.98	20		
Chromium	14.28	0.37	7.44	8.941	71.7	75-125	15.89	10.7	20	S	
Copper	21.65	0.74	7.44	20.54	15	75-125	35.32	48	20	SR	
Lead	10.54	0.37	7.44	3.787	90.7	75-125	11.06	4.8	20		
Nickel	14.13	0.37	7.44	8.757	72.2	75-125	16.05	12.8	20	S	
Selenium	8.722	0.74	7.44	0.6669	108	75-125	8.986	2.98	20		
Silver	7.371	0.37	7.44	-0.08334	100	75-125	7.578	2.76	20		
Zinc	34.94	0.74	7.44	29.29	76	75-125	40.26	14.2	20		

The following samples were analyzed in this batch:

16041439-01A	16041439-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
Work Order: 16041439
Project: 12N

QC BATCH REPORT

Batch ID: **85336** Instrument ID **ICP2** Method: **SW846 6010C**

DUP		Sample ID: 16041441-03ADUP				Units: mg/L		Analysis Date: 4/29/2016 06:49 PM		
Client ID:		Run ID: ICP2_160429B				SeqNo: 3803863		Prep Date: 4/29/2016		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	80.87	5.0	0	0	0	0-0	80.3	0.699		
Magnesium	7.627	2.0	0	0	0	0-0	7.469	2.1		
Sodium	2098	2.0	0	0	0	0-0	2005	4.5		

DUP		Sample ID: 16041441-03ADUP				Units: none		Analysis Date: 4/29/2016		
Client ID:		Run ID: SAR_160429A				SeqNo: 3804812		Prep Date: 4/29/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium Adsorption Ratio	59.76	0.010	0	0	0		57.38	4.06	50	

The following samples were analyzed in this batch:

16041439-01A	16041439-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
 Work Order: 16041439
 Project: 12N

QC BATCH REPORT

Batch ID: **85265** Instrument ID **SVMS5** Method: **SW846 8270D**

MBLK				Sample ID: SBLKS1-85265-85265				Units: µg/Kg			Analysis Date: 4/27/2016 05:38 PM		
Client ID:			Run ID: SVMS5_160427A				SeqNo: 3799371		Prep Date: 4/27/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Acenaphthene	ND	6.7											
Anthracene	ND	6.7											
Benzo(a)anthracene	ND	6.7											
Benzo(a)pyrene	ND	6.7											
Benzo(b)fluoranthene	ND	6.7											
Benzo(k)fluoranthene	ND	6.7											
Chrysene	ND	6.7											
Dibenzo(a,h)anthracene	ND	6.7											
Fluoranthene	ND	6.7											
Fluorene	ND	6.7											
Indeno(1,2,3-cd)pyrene	ND	6.7											
Naphthalene	ND	6.7											
Pyrene	ND	6.7											
Surr: 2-Fluorobiphenyl	1206	0	1667	0	72.4	12-100		0					
Surr: 4-Terphenyl-d14	1819	0	1667	0	109	25-137		0					
Surr: Nitrobenzene-d5	1187	0	1667	0	71.2	37-107		0					

LCS				Sample ID: SLCSS1-85265-85265				Units: µg/Kg		Analysis Date: 4/27/2016 06:01 PM	
Client ID:			Run ID: SVMS5_160427A			SeqNo: 3799372		Prep Date: 4/27/2016		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Acenaphthene	516.7	6.7	666.7	0	77.5	45-110	0				
Anthracene	645.3	6.7	666.7	0	96.8	55-105	0				
Benzo(a)anthracene	652.3	6.7	666.7	0	97.8	50-110	0				
Benzo(a)pyrene	625	6.7	666.7	0	93.7	50-110	0				
Benzo(b)fluoranthene	701.3	6.7	666.7	0	105	45-115	0				
Benzo(k)fluoranthene	695	6.7	666.7	0	104	45-115	0				
Chrysene	637.7	6.7	666.7	0	95.6	55-110	0				
Dibenzo(a,h)anthracene	565.7	6.7	666.7	0	84.8	40-125	0				
Fluoranthene	687.7	6.7	666.7	0	103	55-115	0				
Fluorene	531.7	6.7	666.7	0	79.7	50-110	0				
Indeno(1,2,3-cd)pyrene	590	6.7	666.7	0	88.5	40-120	0				
Naphthalene	540	6.7	666.7	0	81	40-105	0				
Pyrene	718.3	6.7	666.7	0	108	45-125	0				
Surr: 2-Fluorobiphenyl	1343	0	1667	0	80.6	12-100	0				
Surr: 4-Terphenyl-d14	1764	0	1667	0	106	25-137	0				
Surr: Nitrobenzene-d5	1377	0	1667	0	82.6	37-107	0				

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

Client: Caerus Oil and Gas LLC
 Work Order: 16041439
 Project: 12N

QC BATCH REPORT

Batch ID: 85265 Instrument ID SVMS5 Method: SW846 8270D

MS				Sample ID: 16041352-02B MS			Units: µg/Kg		Analysis Date: 4/27/2016 06:25 PM	
Client ID:				Run ID: SVMS5_160427A			SeqNo: 3799373		Prep Date: 4/27/2016	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	447.9	6.5	653.4	0	68.5	45-110	0			
Anthracene	603.1	6.5	653.4	0	92.3	55-105	0			
Benzo(a)anthracene	609.3	6.5	653.4	0	93.2	50-110	0			
Benzo(a)pyrene	575.6	6.5	653.4	0	88.1	50-110	0			
Benzo(b)fluoranthene	637.4	6.5	653.4	0	97.5	45-115	0			
Benzo(k)fluoranthene	610.6	6.5	653.4	0	93.4	45-115	0			
Chrysene	591.7	6.5	653.4	0	90.5	55-110	0			
Dibenzo(a,h)anthracene	603.1	6.5	653.4	0	92.3	40-125	0			
Fluoranthene	651.8	6.5	653.4	0	99.7	55-115	0			
Fluorene	493	6.5	653.4	0	75.4	50-110	0			
Indeno(1,2,3-cd)pyrene	666.8	6.5	653.4	0	102	40-120	0			
Naphthalene	444.3	6.5	653.4	0	68	40-105	0			
Pyrene	664.8	6.5	653.4	2.94	101	45-125	0			
Surr: 2-Fluorobiphenyl	1155	0	1634	0	70.7	12-100	0			
Surr: 4-Terphenyl-d14	1620	0	1634	0	99.2	25-137	0			
Surr: Nitrobenzene-d5	1163	0	1634	0	71.2	37-107	0			

MSD				Sample ID: 16041352-02B MSD			Units: µg/Kg		Analysis Date: 4/27/2016 06:49 PM	
Client ID:				Run ID: SVMS5_160427A			SeqNo: 3799374		Prep Date: 4/27/2016	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acenaphthene	502.2	6.6	659.1	0	76.2	45-110	447.9	11.4	30	
Anthracene	620.5	6.6	659.1	0	94.1	55-105	603.1	2.85	30	
Benzo(a)anthracene	624.2	6.6	659.1	0	94.7	50-110	609.3	2.41	30	
Benzo(a)pyrene	593.5	6.6	659.1	0	90	50-110	575.6	3.06	30	
Benzo(b)fluoranthene	643.3	6.6	659.1	0	97.6	45-115	637.4	0.917	30	
Benzo(k)fluoranthene	634	6.6	659.1	0	96.2	45-115	610.6	3.77	30	
Chrysene	604.7	6.6	659.1	0	91.7	55-110	591.7	2.18	30	
Dibenzo(a,h)anthracene	623.8	6.6	659.1	0	94.6	40-125	603.1	3.38	30	
Fluoranthene	651.2	6.6	659.1	0	98.8	55-115	651.8	0.0907	30	
Fluorene	539.1	6.6	659.1	0	81.8	50-110	493	8.94	30	
Indeno(1,2,3-cd)pyrene	679.2	6.6	659.1	0	103	40-120	666.8	1.84	30	
Naphthalene	515.1	6.6	659.1	0	78.1	40-105	444.3	14.8	30	
Pyrene	682.2	6.6	659.1	2.94	103	45-125	664.8	2.57	30	
Surr: 2-Fluorobiphenyl	1321	0	1648	0	80.2	12-100	1155	13.4	40	
Surr: 4-Terphenyl-d14	1679	0	1648	0	102	25-137	1620	3.55	40	
Surr: Nitrobenzene-d5	1324	0	1648	0	80.4	37-107	1163	13	40	

The following samples were analyzed in this batch:

16041439-01A

16041439-02A

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

Client: Caerus Oil and Gas LLC
 Work Order: 16041439
 Project: 12N

QC BATCH REPORT

Batch ID: **85278** Instrument ID **VMS9** Method: **SW8260B**

MBLK		Sample ID: MBLK-85278-85278				Units: µg/Kg-dry		Analysis Date: 4/27/2016 03:23 PM		
Client ID:		Run ID: VMS9_160427A				SeqNo: 3799832		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	30								
Ethylbenzene	ND	30								
m,p-Xylene	ND	60								
o-Xylene	ND	30								
Toluene	ND	30								
Xylenes, Total	ND	90								
Surr: 1,2-Dichloroethane-d4	1066	0	1000	0	107	70-130	0			
Surr: 4-Bromofluorobenzene	898.5	0	1000	0	89.8	70-130	0			
Surr: Dibromofluoromethane	985	0	1000	0	98.5	70-130	0			
Surr: Toluene-d8	962.5	0	1000	0	96.2	70-130	0			

LCS		Sample ID: LCS-85278-85278				Units: µg/Kg-dry		Analysis Date: 4/27/2016 01:31 PM		
Client ID:		Run ID: VMS9_160427A				SeqNo: 3799831		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	1078	30	1000	0	108	75-125	0			
Ethylbenzene	1102	30	1000	0	110	75-125	0			
m,p-Xylene	2321	60	2000	0	116	80-125	0			
o-Xylene	1104	30	1000	0	110	75-125	0			
Toluene	1074	30	1000	0	107	70-125	0			
Xylenes, Total	3426	90	3000	0	114	75-125	0			
Surr: 1,2-Dichloroethane-d4	1018	0	1000	0	102	70-130	0			
Surr: 4-Bromofluorobenzene	1035	0	1000	0	104	70-130	0			
Surr: Dibromofluoromethane	1000	0	1000	0	100	70-130	0			
Surr: Toluene-d8	1014	0	1000	0	101	70-130	0			

The following samples were analyzed in this batch:

16041439-01A	16041439-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
Work Order: 16041439
Project: 12N

QC BATCH REPORT

Batch ID: **85296** Instrument ID **WETCHEM** Method: **SW9045D**

LCS		Sample ID: LCS-85296-85296				Units: s.u.		Analysis Date: 4/27/2016 05:30 PM		
Client ID:		Run ID: WETCHEM_160427U				SeqNo: 3798143		Prep Date: 4/27/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH	3.96	0	4	0	99	90-110	0			
----	------	---	---	---	----	--------	---	--	--	--

DUP		Sample ID: 16041487-01C DUP					Units: s.u.		Analysis Date: 4/27/2016 05:30 PM		
Client ID:		Run ID: WETCHEM_160427U			SeqNo: 3798150		Prep Date: 4/27/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

pH	8.32	0	0	0	0	0-0	8.37	0.599	20	
----	------	---	---	---	---	-----	------	-------	----	--

The following samples were analyzed in this batch:

16041439-01A	16041439-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
Work Order: 16041439
Project: 12N

QC BATCH REPORT

Batch ID: **85310** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MBLK-85310-85310				Units: mg/Kg		Analysis Date: 4/29/2016 03:00 PM		
Client ID:		Run ID: WETCHEM_160429P		SeqNo: 3802939		Prep Date: 4/27/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent ND 1.0

LCS		Sample ID: LCS-85310-85310				Units: mg/Kg		Analysis Date: 4/29/2016 03:00 PM		
Client ID:		Run ID: WETCHEM_160429P		SeqNo: 3802938		Prep Date: 4/27/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.64 1.0 5 0 92.8 80-120 0

MS		Sample ID: 16041439-02A MS				Units: mg/Kg		Analysis Date: 4/29/2016 03:00 PM		
Client ID: 12N Landfarm		Run ID: WETCHEM_160429P		SeqNo: 3802931		Prep Date: 4/27/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 4.03 1.0 5 0 80.6 75-125 0

MS		Sample ID: 16041439-02A MSI				Units: mg/Kg		Analysis Date: 4/29/2016 03:00 PM		
Client ID: 12N Landfarm		Run ID: WETCHEM_160429P		SeqNo: 3802933		Prep Date: 4/27/2016		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 2825 99 2549 0 111 75-125 0

MSD		Sample ID: 16041439-02A MSD				Units: mg/Kg		Analysis Date: 4/29/2016 03:00 PM		
Client ID: 12N Landfarm		Run ID: WETCHEM_160429P		SeqNo: 3802932		Prep Date: 4/27/2016		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 3.9 1.0 5 0 78 75-125 4.03 3.28 20

The following samples were analyzed in this batch:

16041439-01A	16041439-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
Work Order: 16041439
Project: 12N

QC BATCH REPORT

Batch ID: **85336** Instrument ID **WETCHEM** Method: **USDA H60 Metho**

DUP		Sample ID: 16041441-03A DUP				Units: mmhos/cm @25°		Analysis Date: 4/29/2016 04:00 PM		
Client ID:		Run ID: WETCHEM_160429N				SeqNo: 3802638		Prep Date: 4/29/2016		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Electrical Conductivity @ Saturation	11.65	0.050	0	0	0		11.81	1.36	50	

The following samples were analyzed in this batch:

16041439-01A	16041439-02A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Caerus Oil and Gas LLC
Work Order: 16041439
Project: 12N

QC BATCH REPORT

Batch ID: **R186215** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R186215				Units: % of sample		Analysis Date: 4/26/2016 08:53 PM		
Client ID:		Run ID: MOIST_160426D				SeqNo: 3797443		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-R186215				Units: % of sample		Analysis Date: 4/26/2016 08:53 PM		
Client ID:		Run ID: MOIST_160426D				SeqNo: 3797442		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: 16041379-01B DUP				Units: % of sample		Analysis Date: 4/26/2016 08:53 PM		
Client ID:		Run ID: MOIST_160426D				SeqNo: 3797426		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 6.88 0.050 0 0 0 7.21 4.68 20

DUP		Sample ID: 16041439-01A DUP				Units: % of sample		Analysis Date: 4/26/2016 08:53 PM		
Client ID: Base @ 4.5'		Run ID: MOIST_160426D				SeqNo: 3797441		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 21.63 0.050 0 0 0 21.47 0.742 20

The following samples were analyzed in this batch:

16041439-01A

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

Client: Caerus Oil and Gas LLC
Work Order: 16041439
Project: 12N

QC BATCH REPORT

Batch ID: **R186301** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R186301				Units: % of sample		Analysis Date: 4/27/2016 05:34 PM		
Client ID:		Run ID: MOIST_160427A				SeqNo: 3799227		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-R186301				Units: % of sample		Analysis Date: 4/27/2016 05:34 PM		
Client ID:		Run ID: MOIST_160427A			SeqNo: 3799226		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: 16041440-01A DUP				Units: % of sample		Analysis Date: 4/27/2016 05:34 PM		
Client ID:		Run ID: MOIST_160427A			SeqNo: 3799206		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 11.44 0.050 0 0 0 11.47 0.262 20

DUP		Sample ID: 16041445-01A DUP				Units: % of sample		Analysis Date: 4/27/2016 05:34 PM		
Client ID:		Run ID: MOIST_160427A		SeqNo: 3799213		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.53 0.050 0 0 0 14.63 0.686 20

The following samples were analyzed in this batch:

16041439-02A

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



ALS Laboratory Group

ALS Holland 3352 128th Ave., Holland MI
655-572-1944 616-399-6070

Chain-of-Custody

Form 202r5

WORKORDER #	16041439
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PROJECT NAME	12N	SAMPLER	Jake Janicek					DATE	4-25-16					PAGE	1 of 1				
PROJECT No.		SITE ID						TURNAROUND	STD 5-day					DISPOSAL	By Lab or Return to Client				
COMPANY NAME	Caerus Piceance, LLC	EDD FORMAT						TPH/GRODRO BTEX Table 910 PAH's EC PH SAR Benzene Table 910 Metals											
SEND REPORT TO	Jake Janicek	PURCHASE ORDER																	
ADDRESS	120 N. Railroad, suite D	BILL TO COMPANY	Caerus Piceance, LLC																
CITY / STATE / ZIP	Parachute Co, 81635	INVOICE ATTN TO	Jake Janicek																
PHONE	970-285-9608	ADDRESS	120 N. Railroad, suite D																
FAX		CITY / STATE / ZIP	Parachute Co, 81635																
E-MAIL	jjanicek@caerusoilandgas.com	PHONE	970-285-9608																
		FAX																	
		E-MAIL	invoices@caerusoilandgas.com																

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	TPH/GRODRO	BTEX	Table 910 PAH's	EC	PH	SAR	Benzene	Table 910 Metals
1	Base @ 4.5'	Soil	4-25-16	1100	2	-		X	X	X	X	X	X	X	X
2	12 N Land Farm	Soil	4-25-16	1115	2	-		X	X	X	X	X	X	X	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)
	<input type="checkbox"/> LEVEL II (Standard QC)
	<input type="checkbox"/> LEVEL III (Std QC + forms)
	<input type="checkbox"/> LEVEL IV (Std QC + forms + raw data)
	<input type="checkbox"/>

24°C

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	J Janicek	Jake Janicek	4-25-16	1330
RECEIVED BY	Mr	Mr	4-25-16	1330
RELINQUISHED BY	Mr	Mr	4-25-16	1400
RECEIVED BY	Mr Broadbert	Mr Broadbert	4/26/16	1600
RELINQUISHED BY				
RECEIVED BY				

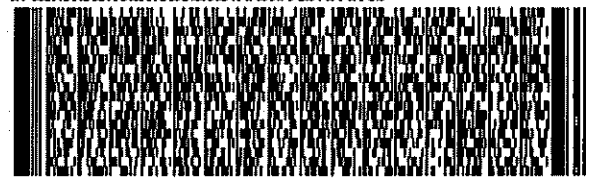
ORIGIN ID: RILA (816) 298-1033
NICK MARTINEZ
ALS ENVIRONMENTAL PARACHUTE
PARACHUTE SERVICE CENTER
127 EAST 1ST ST
PARACHUTE, CO 81635
UNITED STATES US

SHIP DATE: 25APR16
ACTWGT: 54.00 LB
CAD: 2284840/NET3730
DMS: 14x28x15 IN
BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

HOLLAND MI 49424

(816) 399-0070 REF: 042516-1
INV
PO: PARACHUTE DEPT:



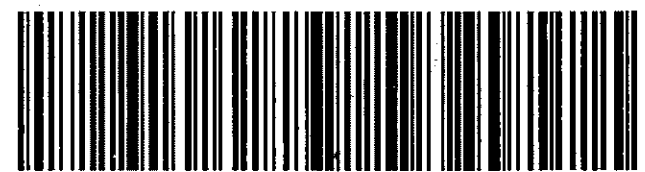
REL#
3785346

TRK#
0201 7761 8979 0454

TUE - 26 APR 10:30A
PRIORITY OVERNIGHT

XX HLMA

49424
MI-US GRR



540.H/0421727F

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.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number. 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 Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

24C

Sample Receipt Checklist

Client Name: **CAERUS**

Date/Time Received: **26-Apr-16 16:00**

Work Order: **16041439**

Received by: **MEB**

Checklist completed by Meghan Broadbent
eSignature

26-Apr-16
Date

Reviewed by: Chad Whelton
eSignature

27-Apr-16
Date

Matrices: **soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.4/2.4</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>4/26/2016 4:26:43 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



18-May-2016

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

Re: **12N**

Work Order: **1605720**

Dear Jake,

ALS Environmental received 1 sample on 12-May-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 NELAP standard requirements and QC 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 10.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager



Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Caerus Oil and Gas LLC
Project: 12N
Work Order: 1605720

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1605720-01	12N Landfarm	Soil		5/11/2016 12:16	5/12/2016 09:30	<input type="checkbox"/>

Client: Caerus Oil and Gas LLC
Project: 12N
WorkOrder: 1605720

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
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
n	Not offered for accreditation
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 PQL, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
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

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

ALS Group USA, Corp**Date:** 18-May-16**Client:** Caerus Oil and Gas LLC**Project:** 12N**Work Order:** 1605720**Sample ID:** 12N Landfarm**Lab ID:** 1605720-01**Collection Date:** 5/11/2016 12:16 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	310		SW8015M		Prep: SW3546 / 5/16/16	Analyst: IT
			10	mg/Kg-dry	1	5/17/2016 03:14 PM
<i>Surr: 4-Terphenyl-d14</i>	<i>46.7</i>		<i>39-133</i>	<i>%REC</i>	<i>1</i>	5/17/2016 03:14 PM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	370		SW8015D			Analyst: IT
			3.5	mg/Kg-dry	1	5/12/2016 07:22 PM
<i>Surr: Toluene-d8</i>	<i>114</i>		<i>50-150</i>	<i>%REC</i>	<i>1</i>	5/12/2016 07:22 PM
MOISTURE						
Moisture	17		SW3550C			Analyst: EDL
			0.050	% of sample	1	5/12/2016 05:48 PM

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

Client: Caerus Oil and Gas LLC
Work Order: 1605720
Project: 12N

QC BATCH REPORT

Batch ID: **86080** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-86080-86080				Units: mg/Kg		Analysis Date: 5/17/2016 01:13 PM		
Client ID:		Run ID: GC8_160517A				SeqNo: 3832394		Prep Date: 5/16/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	ND	8.3								
<i>Surr: 4-Terphenyl-d14</i>	2.432	0	3.333	0	73	39-133	0			

LCS		Sample ID: DLCSS1-86080-86080				Units: mg/Kg		Analysis Date: 5/17/2016 01:43 PM		
Client ID:		Run ID: GC8_160517A				SeqNo: 3832395		Prep Date: 5/16/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	273.3	8.3	333.3	0	82	61-109	0			
<i>Surr: 4-Terphenyl-d14</i>	1.888	0	3.333	0	56.6	39-133	0			

MS		Sample ID: 1605720-01B MS				Units: mg/Kg		Analysis Date: 5/17/2016 02:14 PM		
Client ID: 12N Landfarm		Run ID: GC8_160517A				SeqNo: 3832396		Prep Date: 5/16/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	473.4	8.0	320	260.7	66.5	48-110	0			
<i>Surr: 4-Terphenyl-d14</i>	1.54	0	3.2	0	48.1	39-133	0			

MSD		Sample ID: 1605720-01B MSD				Units: mg/Kg		Analysis Date: 5/17/2016 02:44 PM		
Client ID: 12N Landfarm		Run ID: GC8_160517A				SeqNo: 3832397		Prep Date: 5/16/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	558.9	8.2	328.2	260.7	90.9	48-110	473.4	16.6	30	
<i>Surr: 4-Terphenyl-d14</i>	1.68	0	3.282	0	51.2	39-133	1.54	8.66	30	

The following samples were analyzed in this batch: 1605720-01B

Client: Caerus Oil and Gas LLC
 Work Order: 1605720
 Project: 12N

QC BATCH REPORT

Batch ID: **85996A** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-85996-85996A				Units: µg/Kg-dry		Analysis Date: 5/12/2016 12:23 PM		
Client ID:		Run ID: GC9_160512A				SeqNo: 3825667		Prep Date: 5/12/2016		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	0			
Surr: Toluene-d8	4575	0	5000	0	91.5	50-150	0			

LCS		Sample ID: LCS-85996-85996A				Units: µg/Kg-dry		Analysis Date: 5/12/2016 11:59 AM		
Client ID:		Run ID: GC9_160512A				SeqNo: 3825665		Prep Date: 5/12/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	485200	2,500	500000	0	97	70-130	0			
Surr: Toluene-d8	4776	0	5000	0	95.5	50-150	0			

MS		Sample ID: 1605672-02B MS				Units: µg/Kg-dry		Analysis Date: 5/12/2016 06:07 PM		
Client ID:		Run ID: GC9_160512A				SeqNo: 3825675		Prep Date: 5/12/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	611300	3,400	676500	0	90.4	70-130	0			
Surr: Toluene-d8	6588	0	6765	0	97.4	50-150	0			

MSD		Sample ID: 1605672-02B MSD				Units: µg/Kg-dry		Analysis Date: 5/12/2016 06:32 PM		
Client ID:		Run ID: GC9_160512A				SeqNo: 3825676		Prep Date: 5/12/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
GRO (C6-C10)	680600	3,400	676500	0	101	70-130	611300	10.7	30	
Surr: Toluene-d8	6760	0	6765	0	99.9	50-150	6588	2.57	30	

The following samples were analyzed in this batch:

1605720-01A

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

Client: Caerus Oil and Gas LLC
Work Order: 1605720
Project: 12N

QC BATCH REPORT

Batch ID: **R187428** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R187428				Units: % of sample		Analysis Date: 5/12/2016 05:48 PM		
Client ID:		Run ID: MOIST_160512B		SeqNo: 3826337		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-R187428				Units: % of sample		Analysis Date: 5/12/2016 05:48 PM		
Client ID:		Run ID: MOIST_160512B		SeqNo: 3826336		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: 1605726-01A DUP				Units: % of sample		Analysis Date: 5/12/2016 05:48 PM		
Client ID:		Run ID: MOIST_160512B		SeqNo: 3826335		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.37 0.050 0 0 0 5.36 0.186 20

The following samples were analyzed in this batch:

1605720-01B

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 202r

WORKORDER #

1605720

PAGE

1 of 1

DISPOSAL

By Lab or Return to Client

PROJECT NAME

12N

SAMPLER

Tyler Rust

DATE

5-11-16

TURNAROUND

5 Day STD

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

970-285-9808

PHONE

970-285-9808

FAX

FAX

E-MAIL

jjanicek@caerusoilandgas.com

E-MAIL

invoices@caerusoilandgas.com

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

1

12N Landfarm

Soil

5-11-16

12:16

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:

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

Tyler Rust

5-11-16

3:30

RECEIVED BY

mm

mm

5-11-16

3:30

RELINQUISHED BY

mm

mm

5-11-16

4:30

RECEIVED BY

mm

mm

5-12-16

0930

RELINQUISHED BY

RECEIVED BY

ORIGIN ID: RLA (016) 208-1033
 NICK MARTINEZ
 ALS ENVIRONMENTAL PARACHUTE
 PARACHUTE SERVICE CENTER
 127 EAST 1ST ST
 PARACHUTE, CO 81635
 UNITED STATES US

SHIP DATE: 11MAY16
 ACTWGT: 58.00 LB
 CAD: 22644401NET3730
 DIMS: 24x15x15 IN

BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

540116323727F

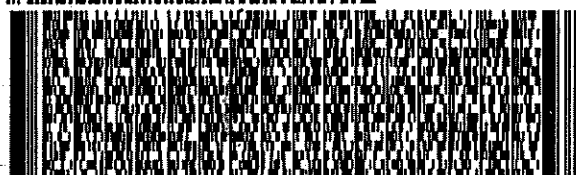
HOLLAND MI 49424

(016) 399-6070

REF: 051116-1

PO: PARACHUTE

DEPT:



FedEx Express



REL 3
 275346

THU - 12 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 7763 2142 9206
 0201

XX HLMA

49424
MI-US GRR



ALS Environmental
 3352 128th Ave
 Holland, Michigan 49424
 Tel: +1 616 399 6170
 Fax: +1 616 399 6185

CUSTODY SEAL

Seal Broken By:

Date: 5/11/16 Time: 12:02
 By: [Signature]
 Company: ALS

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 3. Place label in shipping container

Warning: Use only the
 result in additional be-
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 misinformation, unless
 found in the current
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 limited to the greater
 extraordinary value, or
 claims must be filed

Print your label to your laser or inkjet printer.

Place it to your shipment so that the barcode portion of the label can be read and scanned.

Label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in the cancellation of your FedEx account number. Use of this system or will not be responsible for any loss, damage, delay, non-delivery, misdelivery, or loss of value, pay an additional charge, document your actual loss and file a timely claim. Limitations apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the actual declared value. Recovery cannot exceed actual documented loss. Maximum for items of negotiable value, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within 90 days of the date of shipment. For more information, see current FedEx Service Guide.

4.0°C

Sample Receipt Checklist

Client Name: **CAERUS**

Date/Time Received: **12-May-16 09:30**

Work Order: **1605720**

Received by: **DS**

Checklist completed by Diane Shaw 12-May-16
eSignature Date

Reviewed by: Chad Whelton 12-May-16
eSignature Date

Matrices: **Soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.0/4.0 c</u> <u>SR2</u>		
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>5/12/2016 1:34:55 PM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



17-Jun-2016

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

Re: **12N**

Work Order: **1606704**

Dear Jake,

ALS Environmental received 1 sample on 11-Jun-2016 10:00 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 NELAP standard requirements and QC 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 11.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Chad Whelton".

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager



Certificate No: MN 998501

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Caerus Oil and Gas LLC
Project: 12N
Work Order: 1606704**Work Order Sample Summary**

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1606704-01	12N Landfarm	Soil		6/10/2016 14:00	6/11/2016 10:00	<input type="checkbox"/>

Client: Caerus Oil and Gas LLC
Project: 12N
WorkOrder: 1606704

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
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
n	Not offered for accreditation
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.

<u>Acronym</u>	<u>Description</u>
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

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

ALS Group USA, Corp**Date:** 17-Jun-16**Client:** Caerus Oil and Gas LLC**Project:** 12N**Work Order:** 1606704**Sample ID:** 12N Landfarm**Lab ID:** 1606704-01**Collection Date:** 6/10/2016 02:00 PM**Matrix:** SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
DRO (C10-C28)	32		SW8015M		Prep: SW3546 / 6/15/16	Analyst: IT
<i>Surr: 4-Terphenyl-d14</i>	<i>52.0</i>		14	mg/Kg-dry	1	6/16/2016 01:48 AM
			39-133	%REC	1	6/16/2016 01:48 AM
GASOLINE RANGE ORGANICS BY GC-FID						
GRO (C6-C10)	ND		SW8015D		Prep: SW5035 / 6/15/16	Analyst: IT
<i>Surr: Toluene-d8</i>	<i>109</i>		4.1	mg/Kg-dry	1	6/15/2016 01:20 PM
			50-150	%REC	1	6/15/2016 01:20 PM
MOISTURE						
Moisture	24		SW3550C			Analyst: EDL
			0.050	% of sample	1	6/13/2016 06:49 PM

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

Client: Caerus Oil and Gas LLC
Work Order: 1606704
Project: 12N

QC BATCH REPORT

Batch ID: **87273** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-87273-87273				Units: mg/Kg		Analysis Date: 6/14/2016 05:12 PM		
Client ID:		Run ID: GC8_160614A				SeqNo: 3875101		Prep Date: 6/14/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	13.25	5.0								
<i>Surr: 4-Terphenyl-d14</i>	1.218	0	2	0	60.9	39-133	0			

LCS		Sample ID: DLCSS1-87273-87273				Units: mg/Kg		Analysis Date: 6/14/2016 05:42 PM		
Client ID:		Run ID: GC8_160614A				SeqNo: 3875102		Prep Date: 6/14/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	208.7	5.0	200	0	104	61-109	0			B
<i>Surr: 4-Terphenyl-d14</i>	1.276	0	2	0	63.8	39-133	0			

MS		Sample ID: 1606630-01A MS				Units: mg/Kg		Analysis Date: 6/14/2016 06:12 PM		
Client ID:		Run ID: GC8_160614A				SeqNo: 3875103		Prep Date: 6/14/2016		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	186.9	21	166.5	30.56	93.9	48-110	0			B
<i>Surr: 4-Terphenyl-d14</i>	0.9807	0	1.665	0	58.9	39-133	0			

MSD		Sample ID: 1606630-01A MSD				Units: mg/Kg		Analysis Date: 6/14/2016 06:42 PM		
Client ID:		Run ID: GC8_160614A				SeqNo: 3875104		Prep Date: 6/14/2016		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	165.4	21	165.8	30.56	81.4	48-110	186.9	12.2	30	B
<i>Surr: 4-Terphenyl-d14</i>	0.9167	0	1.658	0	55.3	39-133	0.9807	6.75	30	

The following samples were analyzed in this batch: 1606704-01A

Client: Caerus Oil and Gas LLC
 Work Order: 1606704
 Project: 12N

QC BATCH REPORT

Batch ID: **87342** Instrument ID **GC8** Method: **SW8015M**

MBLK		Sample ID: DBLKS1-87342-87342				Units: mg/Kg		Analysis Date: 6/15/2016 06:47 PM		
Client ID:		Run ID: GC8_160615A				SeqNo: 3877574		Prep Date: 6/15/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	ND	8.3								
Surr: 4-Terphenyl-d14	2.311	0	3.333	0	69.3	39-133	0			

LCS		Sample ID: DLCSS1-87342-87342				Units: mg/Kg		Analysis Date: 6/15/2016 07:17 PM		
Client ID:		Run ID: GC8_160615A				SeqNo: 3877575		Prep Date: 6/15/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	329.6	8.3	333.3	0	98.9	61-109	0			
Surr: 4-Terphenyl-d14	1.91	0	3.333	0	57.3	39-133	0			

MS		Sample ID: 1606628-01A MS				Units: mg/Kg		Analysis Date: 6/15/2016 07:47 PM		
Client ID:		Run ID: GC8_160615A				SeqNo: 3877576		Prep Date: 6/15/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	290.4	8.1	324.8	31.76	79.6	48-110	0			
Surr: 4-Terphenyl-d14	1.531	0	3.248	0	47.1	39-133	0			

MSD		Sample ID: 1606628-01A MSD				Units: mg/Kg		Analysis Date: 6/15/2016 08:17 PM		
Client ID:		Run ID: GC8_160615A				SeqNo: 3877577		Prep Date: 6/15/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	301.2	8.1	324.1	31.76	83.1	48-110	290.4	3.63	30	
Surr: 4-Terphenyl-d14	1.608	0	3.241	0	49.6	39-133	1.531	4.94	30	

The following samples were analyzed in this batch: 1606704-01A

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

Client: Caerus Oil and Gas LLC
 Work Order: 1606704
 Project: 12N

QC BATCH REPORT

Batch ID: **87334** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: MBLK-87334-87334				Units: µg/Kg-dry		Analysis Date: 6/15/2016 12:30 PM		
Client ID:		Run ID: GC9_160615A				SeqNo: 3876735		Prep Date: 6/15/2016		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								
Surr: Toluene-d8	4764	0	5000	0	95.3	50-150	0			

LCS		Sample ID: LCS-87334-87334				Units: µg/Kg-dry		Analysis Date: 6/15/2016 12:05 PM		
Client ID:		Run ID: GC9_160615A				SeqNo: 3876734		Prep Date: 6/15/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	516900	2,500	500000	0	103	70-130	0			
Surr: Toluene-d8	5574	0	5000	0	111	50-150	0			

MS		Sample ID: 1606806-02A MS				Units: µg/Kg-dry		Analysis Date: 6/15/2016 05:53 PM		
Client ID:		Run ID: GC9_160615A				SeqNo: 3877519		Prep Date: 6/15/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	548800	2,800	554900	0	98.9	70-130	0			
Surr: Toluene-d8	6054	0	5549	0	109	50-150	0			

MSD		Sample ID: 1606806-02A MSD				Units: µg/Kg-dry		Analysis Date: 6/15/2016 06:18 PM		
Client ID:		Run ID: GC9_160615A				SeqNo: 3877520		Prep Date: 6/15/2016		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	616200	2,800	554900	0	111	70-130	548800	11.6	30	
Surr: Toluene-d8	6296	0	5549	0	113	50-150	6054	3.93	30	

The following samples were analyzed in this batch: 1606704-01A

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

Client: Caerus Oil and Gas LLC
Work Order: 1606704
Project: 12N

QC BATCH REPORT

Batch ID: **R189488** Instrument ID **MOIST** Method: **SW3550C**

MBLK		Sample ID: WBLKS-R189488				Units: % of sample		Analysis Date: 6/13/2016 06:49 PM		
Client ID:		Run ID: MOIST_160613C				SeqNo: 3873848		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-R189488				Units: % of sample		Analysis Date: 6/13/2016 06:49 PM		
Client ID:		Run ID: MOIST_160613C				SeqNo: 3873847		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: 1606736-04B DUP				Units: % of sample		Analysis Date: 6/13/2016 06:49 PM		
Client ID:		Run ID: MOIST_160613C				SeqNo: 3873838		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 17.4 0.050 0 0 0 18.2 4.49 20

DUP		Sample ID: 1606736-07B DUP				Units: % of sample		Analysis Date: 6/13/2016 06:49 PM		
Client ID:		Run ID: MOIST_160613C				SeqNo: 3873842		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 21.93 0.050 0 0 0 20.1 8.71 20

The following samples were analyzed in this batch:

1606704-01A

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



ALS Laboratory Group

ALS Holland 3352 128th Ave, Holland MI
616-572-1044 616-399-8070

Chain-of-Custody

Form 2026

WORKORDER #

16006704

PAGE

1 of 1

PROJECT NAME

12N

SAMPLER

Jake Janicek

DATE

6-10-16

TURNAROUND

STD 5-day

DISPOSAL

By Lab or Return to Client

PROJECT No.

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

Lab ID

Field ID

Matrix

Sample Date

Sample Time

Bottles

Pres.

QC

12N Landfarm

SOIL

6-10-16

1400

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

Jake Janicek

6-10-16

1430

RECEIVED BY

M

M

6-10-16

1420

RELINQUISHED BY

M

M

6-10-16

1430

RECEIVED BY

M

M

6/11/16

1000

RELINQUISHED BY

RECEIVED BY

ORIGIN ID:RILA (616) 298-1033
NICK MARTINEZ
ALS ENVIRONMENTAL PARACHUTE
PARACHUTE SERVICE CENTER
127 EAST 1ST. ST
PARACHUTE, CO 81835
UNITED STATES US

SHIP DATE: 10JUN16
ACTWGT: 25.00 LB
CAD: 2264840/NET3730
DIMS: 13x10x15 IN
BILL SENDER

TO **SAMPLE RECEIVING**
ALS ENVIRONMENTAL HOLLAND LAB
3352 128TH AVE

540.024080727F

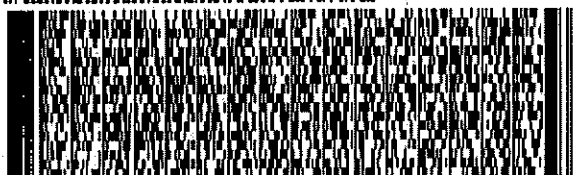
HOLLAND MI 49424

(616) 399-6070

REF: 061016-1

PO PARACHUTE

DEPT



FedEx
Express



THE UNIVERSITY OF CHICAGO

on this page to print your label to your laser or inkjet printer.
along the horizontal line.

ing pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in charges, along with the cancellation of your FedEx account number.

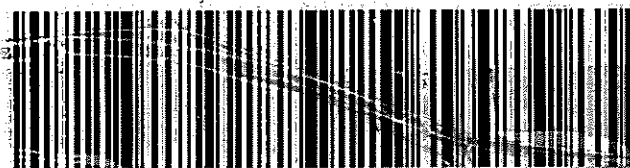
Notifies your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx is not responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or if you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations on recovery of actual loss apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the amount of the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of value over \$100 is jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written time limits, see current FedEx Service Guide.

TRK# 7764 9783 3891
0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO HLMA

49424
GRR



ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
Tel. +1 616 399 8070
Fax. +1 616 399 6185

CUSTODY SEAL

Date: 6-12-11

Time:

Name:

Company:

Seal Broken By:

Date:

After 11. Use 12. Find 13. Pl

War resul Use will n misin found of sal. Unlitter extrac claim

Sample Receipt Checklist

Client Name: **CAERUS**

Date/Time Received: **11-Jun-16 10:00**

Work Order: **1606704**

Received by: **MEB**

Checklist completed by Meghan Broadbent
eSignature

11-Jun-16
Date

Reviewed by: Chad Whelton
eSignature

13-Jun-16
Date

Matrices: **soil**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>2.4/2.4</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>6/11/2016 11:12:50 AM</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



27-Jul-2012

Asher Weinberg
Noble Energy
505 B East 8th Avenue
Yuma, Colorado 80759

Tel: (970) 625-1494
Fax: (970) 625-1654

Re: 350

Work Order: **1207704**

Dear Asher,

ALS Environmental received 3 samples on 17-Jul-2012 09:15 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. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 11.

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

Sincerely,

A handwritten signature in black ink that reads "Patricia L. Lynch".

Electronically approved by: Jumoke M. Lawal

Patricia L. Lynch
Project Manager



Certificate No: T104704231-09A-TX

ADDRESS 10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 | PHONE (281) 530-5656 | FAX (281) 530-5887

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Noble Energy
 Project: 350
 Work Order: 1207704

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1207704-01	B 2	Soil		7/16/2012 12:31	7/17/2012 09:15	<input type="checkbox"/>
1207704-02	B 3	Soil		7/16/2012 12:40	7/17/2012 09:15	<input type="checkbox"/>
1207704-03	B 4	Soil		7/16/2012 12:45	7/17/2012 09:15	<input type="checkbox"/>

ALS Environmental

Date: 29-Jul-12

Client: Noble Energy

Project: 350

Work Order: 1207704

Case Narrative

No Exceptions

ALS Environmental

Date: 29-Jul-12

Client: Noble Energy

Project: 350

Sample ID: B 2

Collection Date: 7/16/2012 12:31 PM

Work Order: 1207704

Lab ID: 1207704-01

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Prep	Date Analyzed
METALS			SW6020				Analyst: SKS
Arsenic	8.07		0.969	mg/Kg	2	7/19/2012	7/20/2012 03:10 PM

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

ALS Environmental

Date: 29-Jul-12

Client: Noble Energy

Project: 350

Sample ID: B 3

Collection Date: 7/16/2012 12:40 PM

Work Order: 1207704

Lab ID: 1207704-02

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Prep	Date Analyzed
METALS			SW6020				Analyst: SKS
Arsenic	6.57		0.925 mg/Kg		2	7/19/2012	7/20/2012 04:24 PM

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

ALS Environmental

Date: 29-Jul-12

Client: Noble Energy

Project: 350

Sample ID: B 4

Collection Date: 7/16/2012 12:45 PM

Work Order: 1207704

Lab ID: 1207704-03

Matrix: SOIL

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Prep	Date Analyzed
METALS			SW6020				Analyst: SKS
Arsenic	18.9		0.897 mg/Kg		2	7/19/2012	7/20/2012 03:13 PM

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

ALS Environmental

Date: 29-Jul-12

Client: Noble Energy
Work Order: 1207704
Project: 350

QC BATCH REPORT

Batch ID: **62775** Instrument ID **ICPMS05** Method: **SW6020**

MBLK	Sample ID: MBLKS2-071912-62775				Units: mg/Kg		Analysis Date: 7/23/2012 09:52 AM			
Client ID:	Run ID: ICPMS05_120723A				SeqNo: 2869001		Prep Date: 7/19/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.50								

LCS	Sample ID: MLCSS2-071912-62775				Units: mg/Kg		Analysis Date: 7/20/2012 03:08 PM			
Client ID:	Run ID: ICPMS05_120720A				SeqNo: 2868184		Prep Date: 7/19/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	9.396	0.50	10	0	94	80-120	0			

MS	Sample ID: 1207808-07AMS				Units: mg/Kg		Analysis Date: 7/23/2012 10:15 AM			
Client ID:	Run ID: ICPMS05_120723A				SeqNo: 2869021		Prep Date: 7/19/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	12.97	0.45	9.082	4.156	97	75-125	0			

MSD	Sample ID: 1207808-07AMSD				Units: mg/Kg		Analysis Date: 7/23/2012 12:02 PM			
Client ID:	Run ID: ICPMS05_120723A				SeqNo: 2869475		Prep Date: 7/19/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	13.4	0.45	8.99	4.156	103	75-125	12.97	3.3	25	

DUP	Sample ID: 1207808-07ADUP				Units: mg/Kg		Analysis Date: 7/23/2012 10:12 AM			
Client ID:	Run ID: ICPMS05_120723A				SeqNo: 2869019		Prep Date: 7/19/2012		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.223	0.46	0	0	0	0-0	4.156	1.61	25	

The following samples were analyzed in this batch:

1207704-01A	1207704-02A	1207704-03A
-------------	-------------	-------------

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

Client: Noble Energy
Project: 350
WorkOrder: 1207704

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
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 detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
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

<u>Acronym</u>	<u>Description</u>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram

Sample Receipt Checklist

Client Name: **NOBLE ENERGY**

Date/Time Received: **17-Jul-12 09:15**

Work Order: **1207704**

Received by: **RDN**

Checklist completed by Johannie B. Allen
eSignature

17-Jul-12
Date

Reviewed by: Patricia L. Lynch
eSignature

18-Jul-12
Date

Matrices: soil

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.1 C/uc</u> <u>003</u>		
Cooler(s)/Kit(s):	<u>Small Red/White</u>		
Date/Time sample(s) sent to storage:	<u>7/13/12 13:40</u>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
pH adjusted by:	<u>-</u>		
Login Notes:			

Client Contacted:

Date Contacted:

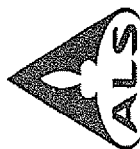
Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



Cincinnati, OH
+1 513 733 5336
Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511
Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 1

COC ID: 57548

1207704

NOBLE ENERGY: Noble Energy

Project: 350

Environmental



ALS Project Manager:

Customer Information

Purchase Order	Project Name	Project Number	Bill To Company	Invoice Attn	Address	City/State/Zip	Phone	Fax	e-Mail Address
Work Order									
Company Name	Noble Energy								
Send Report To	Asher Weinberg								
Address	800 Airport Road, Suite 3								
City/State/Zip	Rifle, Colorado 81650								
Phone	(970) 625-1494								
Fax									
e-Mail Address									

Project Information

Project Name	Project Number	Bill To Company	Invoice Attn	Address	City/State/Zip	Phone	Fax	e-Mail Address

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	B2	7/16/12	12:31	Soil	-	1	X										
2	B3	7/16/12	12:40	Soil	-	1	X										
3	B4	7/16/12	12:45	Soil	-	1	X										
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sample(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)		Results Due Date:	
Asher Weinberg, CO		Received by: Asher Weinberg, CO		5 Day TAT / Colorado Table 310 Parameters		5 Day TAT / Colorado Table 310 Parameters	
Relinquished by: Asher Weinberg, CO		Received by: Asher Weinberg, CO		5 Day TAT / Colorado Table 310 Parameters		5 Day TAT / Colorado Table 310 Parameters	
Logged by: Asher Weinberg, CO		Checked by: (Laboratory):		5 Day TAT / Colorado Table 310 Parameters		5 Day TAT / Colorado Table 310 Parameters	
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₃ 7-Other		Cooler ID		Cooler Temp.		QC Package: (Check One Box Below)	
						<input checked="" type="checkbox"/> Level II S&C OC <input type="checkbox"/> Level III S&C OC <input type="checkbox"/> Level IV S&C OC <input type="checkbox"/> Other / EDO	

Lab Hub LLC **CUSTODY SEAL**

Date: 7-16-12 Lab Hub, LLC

Signature: _____ Parachute, CO