



08-May-2020

Jake Janicek
Caerus Oil and Gas LLC
143 Diamond Ave.
Parachute, CO 81635

Re: **E34 Source Sample**

Work Order: **20050070**

Dear Jake,

ALS Environmental received 1 sample on 01-May-2020 10:00 AM for the analyses presented in the following report.

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

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

The total number of pages in this report is 24.

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

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

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

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

Report of Laboratory Analysis

Certificate No: MN 026-999-449

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

Environmental 

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Caerus Oil and Gas LLC
Project: E34 Source Sample
Work Order: 20050070

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>
20050070-01	20200430-E34-496-Source	Water		4/30/2020 13:15	5/1/2020 10:00	☐

Client: Caerus Oil and Gas LLC
Project: E34 Source Sample
Work Order: 20050070

Case Narrative

Batch 155508, Method ICP_6020_W, Sample 20050070-01D: The reporting limit for Selenium is elevated due to internal standard failure in the undiluted run.

Batch R287799, Method PH_9040_W, Sample LCS-R287799: Sample was processed outside of holding time for pH, as the analysis is a field test and holding time is defined as 15 minutes.

Batch R288050, Method GRO_8015_W, Sample 20050070-01A MS/MSD: The MS/MSD recovery was below the lower control limit for GRO. The corresponding result in the parent sample may be biased low.

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

<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>
°C	Degrees Celcius
µg/L	Micrograms per Liter
µmhos/cm	Micromhos per Centimeter
mg/L	Milligrams per Liter
s.u.	Standard Units

ALS Group, USA

Date: 08-May-20

Client: Caerus Oil and Gas LLC
 Project: E34 Source Sample
 Sample ID: 20200430-E34-496-Source
 Collection Date: 4/30/2020 01:15 PM

Work Order: 20050070
 Lab ID: 20050070-01
 Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
DIESEL RANGE ORGANICS BY GC-FID						
			SW8015D		Prep: SW3511 5/6/20 14:06	Analyst: JZB
DRO (C10-C28)	18		1.0	mg/L	10	5/7/2020 06:52 PM
Surr: 4-Terphenyl-d14	63.9		35-161	%REC	10	5/7/2020 06:52 PM
GASOLINE RANGE ORGANICS BY GC-FID						
			SW8015D			Analyst: JZB
GRO (C6-C10)	87,000		2,000	µg/L	10	5/6/2020 10:47 PM
Surr: Toluene-d8	93.8		79-130	%REC	10	5/6/2020 10:47 PM
METALS BY ICP-MS						
			SW6020B		Prep: SW3005A 5/6/20 12:36	Analyst: STP
Barium	31		0.50	mg/L	100	5/6/2020 05:54 PM
Boron	7.4		0.20	mg/L	10	5/6/2020 05:56 PM
Calcium	110		0.50	mg/L	1	5/6/2020 03:26 PM
Iron	7.1		0.80	mg/L	10	5/6/2020 05:56 PM
Magnesium	11		2.0	mg/L	10	5/6/2020 05:56 PM
Manganese	0.21		0.0050	mg/L	1	5/6/2020 03:26 PM
Potassium	56		2.0	mg/L	10	5/6/2020 05:56 PM
Selenium	U		0.050	mg/L	10	5/6/2020 05:56 PM
Sodium	4,200		20	mg/L	100	5/6/2020 05:54 PM
Strontium	19		0.50	mg/L	100	5/6/2020 05:54 PM
VOLATILE ORGANIC COMPOUNDS						
			SW8260C			Analyst: MF
Benzene	6,100		100	µg/L	100	5/4/2020 02:50 PM
Ethylbenzene	490		100	µg/L	100	5/4/2020 02:50 PM
m,p-Xylene	5,900		200	µg/L	100	5/4/2020 02:50 PM
o-Xylene	990		100	µg/L	100	5/4/2020 02:50 PM
Toluene	10,000		100	µg/L	100	5/4/2020 02:50 PM
Xylenes, Total	6,900		300	µg/L	100	5/4/2020 02:50 PM
Surr: 1,2-Dichloroethane-d4	98.6		75-120	%REC	100	5/4/2020 02:50 PM
Surr: 4-Bromofluorobenzene	97.0		80-110	%REC	100	5/4/2020 02:50 PM
Surr: Dibromofluoromethane	105		85-115	%REC	100	5/4/2020 02:50 PM
Surr: Toluene-d8	102		85-110	%REC	100	5/4/2020 02:50 PM
ALKALINITY						
			A2320 B-11			Analyst: QTN
Alkalinity, Bicarbonate (as CaCO3)	870		10	mg/L	1	5/4/2020 03:16 PM
Alkalinity, Carbonate (as CaCO3)	U		10	mg/L	1	5/4/2020 03:16 PM
Alkalinity, Total (as CaCO3)	870		10	mg/L	1	5/4/2020 03:16 PM
ANIONS BY ION CHROMATOGRAPHY						
			SW9056A			Analyst: JDR
Bromide	46		3.2	mg/L	16	5/6/2020 03:57 PM
Chloride	5,700		500	mg/L	500	5/6/2020 04:16 PM
Fluoride	41		1.6	mg/L	16	5/6/2020 03:57 PM
Sulfate	9.8	J	16	mg/L	16	5/6/2020 03:57 PM

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

ALS Group, USA

Date: 08-May-20

Client: Caerus Oil and Gas LLC
Project: E34 Source Sample
Sample ID: 20200430-E34-496-Source
Collection Date: 4/30/2020 01:15 PM

Work Order: 20050070
Lab ID: 20050070-01
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
NITROGEN, NITRITE			A4500-NO2 B-11			Analyst: JB
Nitrogen, Nitrite	U		0.020	mg/L	1	5/1/2020 05:30 PM
NITROGEN, NITRATE			E353.2 R2.0			Analyst: CAC
Nitrogen, Nitrate	0.015	J	0.020	mg/L	1	5/4/2020 11:21 AM
PHOSPHORUS, TOTAL			E365.1 R2.0		Prep: E365.1 R2.0 5/5/20 17:56	Analyst: CAC
Phosphorus, Total	0.060		0.050	mg/L	1	5/6/2020 12:34 PM
PH (LABORATORY)			SW9040C			Analyst: QTN
pH (laboratory)	6.84	H	0.100	s.u.	1	5/4/2020 03:16 PM
Temperature	20.2	H	0.100	°C	1	5/4/2020 03:16 PM
SPECIFIC CONDUCTANCE @ 25°C			A2510 B-11			Analyst: DVD
Specific Conductance	17,000		5.0	µmhos/cm	1	5/7/2020 10:30 AM
TOTAL DISSOLVED SOLIDS			A2540 C-11		Prep: FILTER 5/4/20 17:17	Analyst: ERW
Total Dissolved Solids	10,000		150	mg/L	1	5/6/2020 05:00 PM

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

Client: Caerus Oil and Gas LLC
Work Order: 20050070
Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **155522** Instrument ID **GC8** Method: **SW8015D**

MBLK		Sample ID: DBLKW1-155522-155522				Units: mg/L		Analysis Date: 5/7/2020 04:16 PM		
Client ID:		Run ID: GC8_200507B				SeqNo: 6400249		Prep Date: 5/6/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	U	0.10								
<i>Surr: 4-Terphenyl-d14</i>	<i>0.03917</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>93.9</i>	<i>35-161</i>	<i>0</i>			

LCS		Sample ID: DLC SW1-155522-155522				Units: mg/L		Analysis Date: 5/7/2020 05:34 PM		
Client ID:		Run ID: GC8_200507B				SeqNo: 6400254		Prep Date: 5/6/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	4.565	0.10	4.17	0	109	60-150	0			
<i>Surr: 4-Terphenyl-d14</i>	<i>0.041</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>98.3</i>	<i>35-161</i>	<i>0</i>			

LCSD		Sample ID: DLCSDW1-155522-155522				Units: mg/L		Analysis Date: 5/7/2020 06:13 PM		
Client ID:		Run ID: GC8_200507B				SeqNo: 6400256		Prep Date: 5/6/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

DRO (C10-C28)	4.506	0.10	4.17	0	108	60-150	4.565	1.3	30	
<i>Surr: 4-Terphenyl-d14</i>	<i>0.04333</i>	<i>0</i>	<i>0.0417</i>	<i>0</i>	<i>104</i>	<i>35-161</i>	<i>0.041</i>	<i>5.53</i>	<i>30</i>	

The following samples were analyzed in this batch:

20050070-01E

Client: Caerus Oil and Gas LLC
 Work Order: 20050070
 Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **R288050** Instrument ID **GC9** Method: **SW8015D**

MBLK		Sample ID: GBLKW1-200506-R288050				Units: µg/L		Analysis Date: 5/6/2020 10:03 PM		
Client ID:		Run ID: GC9_200506B				SeqNo: 6398170		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	U	200								
Surr: Toluene-d8	102.4	0	100	0	102	79-130	0			

LCS		Sample ID: GLCSW1-200506-R288050				Units: µg/L		Analysis Date: 5/6/2020 10:25 PM		
Client ID:		Run ID: GC9_200506B				SeqNo: 6398171		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	8999	200	10000	0	90	76-126	0			
Surr: Toluene-d8	98.2	0	100	0	98.2	79-130	0			

MS		Sample ID: 20050070-01A MS				Units: µg/L		Analysis Date: 5/6/2020 11:09 PM		
Client ID: 20200430-E34-496-Source		Run ID: GC9_200506B				SeqNo: 6398173		Prep Date:		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	126000	2,000	100000	86650	39.4	76-126	0			S
Surr: Toluene-d8	924.1	0	1000	0	92.4	79-130	0			

MSD		Sample ID: 20050070-01A MSD				Units: µg/L		Analysis Date: 5/6/2020 11:32 PM		
Client ID: 20200430-E34-496-Source		Run ID: GC9_200506B				SeqNo: 6398174		Prep Date:		DF: 10
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

GRO (C6-C10)	152300	2,000	100000	86650	65.6	76-126	126000	18.9	30	S
Surr: Toluene-d8	947.1	0	1000	0	94.7	79-130	924.1	2.46	30	

The following samples were analyzed in this batch:

20050070-01A

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

Client: Caerus Oil and Gas LLC
 Work Order: 20050070
 Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **155508** Instrument ID **ICPMS4** Method: **SW6020B**

MBLK		Sample ID: MBLK-155508-155508				Units: mg/L		Analysis Date: 5/6/2020 03:14 PM		
Client ID:		Run ID: ICPMS4_200506A				SeqNo: 6394527		Prep Date: 5/6/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	U	0.0050								
Calcium	U	0.50								
Iron	U	0.080								
Magnesium	U	0.20								
Manganese	U	0.0050								
Potassium	U	0.20								
Selenium	U	0.0050								
Strontium	U	0.0050								

MBLK		Sample ID: MBLK-155508-155508				Units: mg/L		Analysis Date: 5/6/2020 05:46 PM		
Client ID:		Run ID: ICPMS3_200506B				SeqNo: 6396589		Prep Date: 5/6/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	U	0.020								
Sodium	U	0.20								

LCS		Sample ID: LCS-155508-155508				Units: mg/L		Analysis Date: 5/6/2020 03:19 PM		
Client ID:		Run ID: ICPMS4_200506A				SeqNo: 6394992		Prep Date: 5/6/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.0999	0.0050	0.1	0	99.9	80-120	0			
Calcium	10.32	0.50	10	0	103	80-120	0			
Iron	10.2	0.080	10	0	102	80-120	0			
Magnesium	10.53	0.20	10	0	105	80-120	0			
Manganese	0.0985	0.0050	0.1	0	98.5	80-120	0			
Potassium	9.979	0.20	10	0	99.8	80-120	0			
Selenium	0.09848	0.0050	0.1	0	98.5	80-120	0			
Strontium	0.1024	0.0050	0.1	0	102	80-120	0			

LCS		Sample ID: LCS-155508-155508				Units: mg/L		Analysis Date: 5/6/2020 05:47 PM		
Client ID:		Run ID: ICPMS3_200506B				SeqNo: 6396590		Prep Date: 5/6/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	0.4717	0.020	0.5	0	94.3	80-120	0			
Sodium	9.827	0.20	10	0	98.3	80-120	0			

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

Client: Caerus Oil and Gas LLC
 Work Order: 20050070
 Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **155508** Instrument ID **ICPMS4** Method: **SW6020B**

MS					Sample ID: 20050093-01AMS		Units: mg/L		Analysis Date: 5/6/2020 03:29 PM		
Client ID:			Run ID: ICPMS4_200506A			SeqNo: 6394998		Prep Date: 5/6/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Barium	0.1543	0.0050	0.1	0.07932	75	75-125	0			S	
Calcium	74.47	0.50	10	65.6	88.7	75-125	0			O	
Iron	10.8	0.080	10	0.872	99.3	75-125	0				
Magnesium	30.63	0.20	10	20.72	99.1	75-125	0				
Manganese	0.1424	0.0050	0.1	0.04608	96.3	75-125	0				
Potassium	11.12	0.20	10	1.076	100	75-125	0				
Selenium	0.09955	0.0050	0.1	-0.00014	99.7	75-125	0				
Sodium	14.12	0.20	10	5.801	83.2	75-125	0				
Strontium	0.2076	0.0050	0.1	0.123	84.7	75-125	0				

MS				Sample ID: 20050093-01AMS				Units: mg/L		Analysis Date: 5/6/2020 05:57 PM	
Client ID:			Run ID: ICPMS3_200506B			SeqNo: 6396596		Prep Date: 5/6/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Boron	0.4854	0.020	0.5	0.08007	81.1	75-125	0				

MSD				Sample ID: 20050093-01AMSD			Units: mg/L		Analysis Date: 5/6/2020 03:31 PM		
Client ID:			Run ID: ICPMS4_200506A			SeqNo: 6394999		Prep Date: 5/6/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Barium	0.1528	0.0050	0.1	0.07932	73.5	75-125	0.1543	0.96	20	S	
Calcium	74.41	0.50	10	65.6	88.1	75-125	74.47	0.0759	20	O	
Iron	11.02	0.080	10	0.872	101	75-125	10.8	1.99	20		
Magnesium	30.43	0.20	10	20.72	97.1	75-125	30.63	0.638	20		
Manganese	0.1433	0.0050	0.1	0.04608	97.3	75-125	0.1424	0.664	20		
Potassium	11.13	0.20	10	1.076	101	75-125	11.12	0.12	20		
Selenium	0.09866	0.0050	0.1	-0.00014	98.8	75-125	0.09955	0.896	20		
Sodium	14.61	0.20	10	5.801	88.1	75-125	14.12	3.41	20		
Strontium	0.2068	0.0050	0.1	0.123	83.8	75-125	0.2076	0.396	20		

MSD				Sample ID: 20050093-01AMSD				Units: mg/L		Analysis Date: 5/6/2020 05:59 PM	
Client ID:			Run ID: ICPMS3_200506B			SeqNo: 6396597		Prep Date: 5/6/2020		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Boron	0.4944	0.020	0.5	0.08007	82.9	75-125	0.4854	1.83	20		

The following samples were analyzed in this batch:

20050070-01D

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

Client: Caerus Oil and Gas LLC
 Work Order: 20050070
 Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **R287782A** Instrument ID **VMS8** Method: **SW8260C**

MBLK		Sample ID: VLKWL1-200504-R287782A				Units: µg/L		Analysis Date: 5/4/2020 12:50 PM		
Client ID:		Run ID: VMS8_200504A				SeqNo: 6390694		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	U	1.0								
Ethylbenzene	U	1.0								
m,p-Xylene	U	2.0								
o-Xylene	U	1.0								
Toluene	U	1.0								
Xylenes, Total	U	3.0								
Surr: 1,2-Dichloroethane-d4	20.22	0	20	0	101	75-120	0			
Surr: 4-Bromofluorobenzene	19.94	0	20	0	99.7	80-110	0			
Surr: Dibromofluoromethane	20.39	0	20	0	102	85-115	0			
Surr: Toluene-d8	20.51	0	20	0	103	85-110	0			

LCS		Sample ID: VLCSW1-200504-R287782A				Units: µg/L		Analysis Date: 5/4/2020 12:01 PM		
Client ID:		Run ID: VMS8_200504A				SeqNo: 6390693		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.65	1.0	20	0	98.2	70-130	0			
Ethylbenzene	21.79	1.0	20	0	109	76-123	0			
m,p-Xylene	44.2	2.0	40	0	110	75-130	0			
o-Xylene	19.35	1.0	20	0	96.8	76-127	0			
Toluene	18.96	1.0	20	0	94.8	76-125	0			
Xylenes, Total	63.55	3.0	60	0	106	76-127	0			
Surr: 1,2-Dichloroethane-d4	19.41	0	20	0	97	75-120	0			
Surr: 4-Bromofluorobenzene	20.77	0	20	0	104	80-110	0			
Surr: Dibromofluoromethane	20.39	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.45	0	20	0	97.2	85-110	0			

MS		Sample ID: 20050099-03A MS				Units: µg/L		Analysis Date: 5/4/2020 06:38 PM		
Client ID:		Run ID: VMS8_200504A				SeqNo: 6390713		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.42	1.0	20	0	112	70-130	0			
Ethylbenzene	25.09	1.0	20	0	125	76-123	0			S
m,p-Xylene	51.29	2.0	40	0	128	75-130	0			
o-Xylene	22.65	1.0	20	0	113	76-127	0			
Toluene	22.07	1.0	20	0	110	76-125	0			
Xylenes, Total	73.94	3.0	60	0	123	76-127	0			
Surr: 1,2-Dichloroethane-d4	19.72	0	20	0	98.6	75-120	0			
Surr: 4-Bromofluorobenzene	19.69	0	20	0	98.4	80-110	0			
Surr: Dibromofluoromethane	20.32	0	20	0	102	85-115	0			
Surr: Toluene-d8	20.03	0	20	0	100	85-110	0			

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

Client: Caerus Oil and Gas LLC
 Work Order: 20050070
 Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **R287782A** Instrument ID **VMS8** Method: **SW8260C**

MSD				Sample ID: 20050099-03A MSD			Units: µg/L		Analysis Date: 5/4/2020 06:54 PM		
Client ID:			Run ID: VMS8_200504A		SeqNo: 6390714		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Benzene	21.27	1.0	20	0	106	70-130	22.42	5.26	30		
Ethylbenzene	23.6	1.0	20	0	118	76-123	25.09	6.12	30		
m,p-Xylene	48.38	2.0	40	0	121	75-130	51.29	5.84	30		
o-Xylene	21.03	1.0	20	0	105	76-127	22.65	7.42	30		
Toluene	21.11	1.0	20	0	106	76-125	22.07	4.45	30		
Xylenes, Total	69.41	3.0	60	0	116	76-127	73.94	6.32	30		
Surr: 1,2-Dichloroethane-d4	19.43	0	20	0	97.2	75-120	19.72	1.48	30		
Surr: 4-Bromofluorobenzene	19.77	0	20	0	98.8	80-110	19.69	0.405	30		
Surr: Dibromofluoromethane	20.14	0	20	0	101	85-115	20.32	0.89	30		
Surr: Toluene-d8	20.09	0	20	0	100	85-110	20.03	0.299	30		

The following samples were analyzed in this batch:

20050070-01A

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

Client: Caerus Oil and Gas LLC
Work Order: 20050070
Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **155424** Instrument ID **TDS** Method: **A2540 C-11**

MBLK		Sample ID: MBLK-155424-155424				Units: mg/L		Analysis Date: 5/6/2020 05:00 PM		
Client ID:		Run ID: TDS_200506A				SeqNo: 6395071		Prep Date: 5/4/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids U 30

LCS		Sample ID: LCS-155424-155424				Units: mg/L		Analysis Date: 5/6/2020 05:00 PM		
Client ID:		Run ID: TDS_200506A				SeqNo: 6395070		Prep Date: 5/4/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 460 30 495 0 92.9 85-109 0

DUP		Sample ID: 20050116-01A DUP				Units: mg/L		Analysis Date: 5/6/2020 05:00 PM		
Client ID:		Run ID: TDS_200506A				SeqNo: 6395068		Prep Date: 5/4/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Total Dissolved Solids 660 30 0 0 0 0-0 668 1.2 10

The following samples were analyzed in this batch:

20050070-01B

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

Client: Caerus Oil and Gas LLC
Work Order: 20050070
Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **155475** Instrument ID **LACHAT** Method: **E365.1 R2.0**

MBLK		Sample ID: MBLK-155475-155475				Units: mg/L		Analysis Date: 5/6/2020 12:03 PM		
Client ID:		Run ID: LACHAT_200506A				SeqNo: 6394870		Prep Date: 5/5/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Phosphorus, Total U 0.050

LCS		Sample ID: LCS-155475-155475				Units: mg/L		Analysis Date: 5/6/2020 12:04 PM		
Client ID:		Run ID: LACHAT_200506A				SeqNo: 6394871		Prep Date: 5/5/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Phosphorus, Total 1.056 0.050 1 0 106 90-110 0

MS		Sample ID: 20050093-01C MS				Units: mg/L		Analysis Date: 5/6/2020 12:07 PM		
Client ID:		Run ID: LACHAT_200506A				SeqNo: 6394874		Prep Date: 5/5/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Phosphorus, Total 1.058 0.050 1 0.05009 101 90-110 0

MS		Sample ID: 20050076-01C MS				Units: mg/L		Analysis Date: 5/6/2020 12:24 PM		
Client ID:		Run ID: LACHAT_200506A				SeqNo: 6394889		Prep Date: 5/5/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Phosphorus, Total 1.539 0.050 1 0.5212 102 90-110 0

MSD		Sample ID: 20050093-01C MSD				Units: mg/L		Analysis Date: 5/6/2020 12:09 PM		
Client ID:		Run ID: LACHAT_200506A				SeqNo: 6394875		Prep Date: 5/5/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Phosphorus, Total 1.066 0.050 1 0.05009 102 90-110 1.058 0.753 20

MSD		Sample ID: 20050076-01C MSD				Units: mg/L		Analysis Date: 5/6/2020 12:27 PM		
Client ID:		Run ID: LACHAT_200506A				SeqNo: 6394892		Prep Date: 5/5/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Phosphorus, Total 1.505 0.050 1 0.5212 98.4 90-110 1.539 2.23 20

LCS2		Sample ID: LCS2-155475-155475				Units: mg/L		Analysis Date: 5/6/2020 12:05 PM		
Client ID:		Run ID: LACHAT_200506A				SeqNo: 6394872		Prep Date: 5/5/2020		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Phosphorus, Total 0.9864 0.050 1 0 98.6 90-110 0

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

Client: Caerus Oil and Gas LLC
Work Order: 20050070
Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **155475** Instrument ID **LACHAT** Method: **E365.1 R2.0**

The following samples were analyzed in this batch:

20050070-01C

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

Client: Caerus Oil and Gas LLC
Work Order: 20050070
Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **R287704** Instrument ID **WETCHEM** Method: **A4500-NO2 B-11**

MBLK		Sample ID: MB-R287704-R287704				Units: mg/L		Analysis Date: 5/1/2020 05:30 PM		
Client ID:		Run ID: WETCHEM_2005011		SeqNo: 6386481		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrite U 0.020

LCS		Sample ID: LCS-R287704-R287704				Units: mg/L		Analysis Date: 5/1/2020 05:30 PM		
Client ID:		Run ID: WETCHEM_2005011		SeqNo: 6386482		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrite 0.2174 0.020 0.2 0 109 80-120 0

MS		Sample ID: 20050093-01D MS				Units: mg/L		Analysis Date: 5/1/2020 05:30 PM		
Client ID:		Run ID: WETCHEM_2005011		SeqNo: 6386486		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrite 0.1974 0.020 0.2 -0.0019 99.6 80-120 0

MSD		Sample ID: 20050093-01D MSD				Units: mg/L		Analysis Date: 5/1/2020 05:30 PM		
Client ID:		Run ID: WETCHEM_2005011		SeqNo: 6386487		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrite 0.2021 0.020 0.2 -0.0019 102 80-120 0.1974 2.35 10

The following samples were analyzed in this batch:

20050070-01B

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

Client: Caerus Oil and Gas LLC
 Work Order: 20050070
 Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **R287785B** Instrument ID **LACHAT2** Method: **E353.2 R2.0**

MBLK		Sample ID: MBLK2-R287785B				Units: mg/L		Analysis Date: 5/4/2020 11:13 AM		
Client ID:		Run ID: LACHAT2_200504A				SeqNo: 6388426		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate U 0.020

LCS		Sample ID: LCS2-R287785B				Units: mg/L		Analysis Date: 5/4/2020 11:14 AM		
Client ID:		Run ID: LACHAT2_200504A				SeqNo: 6388427		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate 2.641 0.020 2.5 0 106 90-110 0

MS		Sample ID: 20041912-01C MS				Units: mg/L		Analysis Date: 5/4/2020 11:16 AM		
Client ID:		Run ID: LACHAT2_200504A				SeqNo: 6388429		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate 3.579 0.020 2.5 1.031 102 90-110 0

MSD		Sample ID: 20041912-01C MSD				Units: mg/L		Analysis Date: 5/4/2020 11:20 AM		
Client ID:		Run ID: LACHAT2_200504A				SeqNo: 6388432		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate 3.574 0.020 2.5 1.031 102 90-110 3.579 0.14 5

The following samples were analyzed in this batch:

20050070-01C

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

Client: Caerus Oil and Gas LLC
Work Order: 20050070
Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **R287797** Instrument ID **Titrator 1** Method: **A2320 B-11**

MBLK		Sample ID: MB-R287797-R287797				Units: mg/L		Analysis Date: 5/4/2020 03:16 PM		
Client ID:		Run ID: TITRATOR 1_200504A				SeqNo: 6388666		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	U	10								
Alkalinity, Carbonate (as CaCO3)	U	10								
Alkalinity, Total (as CaCO3)	U	10								

MBLK		Sample ID: MB-R287797-R287797				Units: mg/L		Analysis Date: 5/4/2020 03:16 PM		
Client ID:		Run ID: TITRATOR 1_200504A				SeqNo: 6388679		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	U	10								

LCS		Sample ID: LCS-R287797-R287797				Units: mg/L		Analysis Date: 5/4/2020 03:16 PM		
Client ID:		Run ID: TITRATOR 1_200504A				SeqNo: 6388667		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (as CaCO3)	912.2	10	925	0	98.6	88-110	0			
Alkalinity, Total (as CaCO3)	989	10	1000	0	98.9	89-103	0			

LCS		Sample ID: LCS-R287797-R287797				Units: mg/L		Analysis Date: 5/4/2020 03:16 PM		
Client ID:		Run ID: TITRATOR 1_200504A				SeqNo: 6388680		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	989	10	1000	0	98.9	86-104	0			

DUP		Sample ID: 20041941-05B DUP				Units: mg/L		Analysis Date: 5/4/2020 03:16 PM		
Client ID:		Run ID: TITRATOR 1_200504A				SeqNo: 6388670		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	310.2	10	0	0	0	0-0	298.9	3.72	10	
Alkalinity, Carbonate (as CaCO3)	U	10	0	0	0	0-0	0	0	10	
Alkalinity, Total (as CaCO3)	310.2	10	0	0	0	0-0	298.9	3.72	10	

DUP		Sample ID: 20041899-01C DUP				Units: mg/L		Analysis Date: 5/4/2020 03:16 PM		
Client ID:		Run ID: TITRATOR 1_200504A				SeqNo: 6388682		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	435.7	10	0	0	0	0-0	428.4	1.69	20	

The following samples were analyzed in this batch:

20050070-01B

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

Client: Caerus Oil and Gas LLC
Work Order: 20050070
Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **R287799** Instrument ID **Titrator 1** Method: **A4500-H B-11**

LCS				Sample ID: LCS-R287799-R287799				Units: s.u.			Analysis Date: 5/4/2020 03:16 PM		
Client ID:			Run ID: TITRATOR 1_200504B				SeqNo: 6388693			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
pH (laboratory)	4	0.10	4	0	100	92-108	0						

LCS		Sample ID: LCS-R287799-R287799				Units: s.u.		Analysis Date: 5/4/2020 03:16 PM		
Client ID:		Run ID: TITRATOR 1_200504B				SeqNo: 6388698		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH (laboratory)	4	0.10	4	0	100	92-108	0			

DUP		Sample ID: 20041941-05B DUP					Units: s.u.		Analysis Date: 5/4/2020 03:16 PM		
Client ID:			Run ID: TITRATOR 1_200504B			SeqNo: 6388694		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH (laboratory)	8.05	0.10	0	0	0	0-0	8.08	0.372	5	H	
Temperature	19.48	0.10	0	0	0	0-0	19.6	0.614		H	

The following samples were analyzed in this batch:

20050070-01B

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

Client: Caerus Oil and Gas LLC
Work Order: 20050070
Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **R288010** Instrument ID **WETCHEM** Method: **A2510 B-11**

MBLK		Sample ID: MB-R288010-R288010				Units: µmhos/cm		Analysis Date: 5/7/2020 10:30 AM		
Client ID:		Run ID: WETCHEM_200507D		SeqNo: 6397161		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Specific Conductance U 5.0

DUP		Sample ID: 20050358-02C DUP				Units: µmhos/cm		Analysis Date: 5/7/2020 10:30 AM		
Client ID:		Run ID: WETCHEM_200507D		SeqNo: 6397166		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Specific Conductance 1402 5.0 0 0 0 0-0 1409 0.498 5

LCS1		Sample ID: LCS 1-R288010				Units: µmhos/cm		Analysis Date: 5/7/2020 10:30 AM		
Client ID:		Run ID: WETCHEM_200507D		SeqNo: 6397162		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Specific Conductance 15.24 5.0 14.9 0 102 92-110 0

LCS2		Sample ID: LCS 2-R288010				Units: µmhos/cm		Analysis Date: 5/7/2020 10:30 AM		
Client ID:		Run ID: WETCHEM_200507D		SeqNo: 6397174		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Specific Conductance 581 5.0 592 0 98.1 87-112 0

The following samples were analyzed in this batch:

20050070-01B

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

Client: Caerus Oil and Gas LLC
 Work Order: 20050070
 Project: E34 Source Sample

QC BATCH REPORT

Batch ID: **R288034** Instrument ID **IC3** Method: **SW9056A**

MBLK		Sample ID: CCB/MBLK-R288034				Units: mg/L		Analysis Date: 5/6/2020 02:21 PM		
Client ID:		Run ID: IC3_200506A				SeqNo: 6397912		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	U	0.20								
Chloride	U	1.0								
Fluoride	U	0.10								
Sulfate	U	1.0								

LCS		Sample ID: LCS-R288034				Units: mg/L		Analysis Date: 5/6/2020 02:40 PM		
Client ID:		Run ID: IC3_200506A				SeqNo: 6397913		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	1.957	0.20	2	0	97.9	90-110	0			
Chloride	9.425	1.0	10	0	94.2	88-110	0			
Fluoride	2.018	0.10	2	0	101	82-116	0			
Sulfate	9.743	1.0	10	0	97.4	90-110	0			

MS		Sample ID: 20041720-23A MS				Units: mg/L		Analysis Date: 5/6/2020 07:28 PM		
Client ID:		Run ID: IC3_200506A				SeqNo: 6397928		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	106.6	10	100	0	107	90-110	0			
Chloride	508.2	50	500	29.54	95.7	88-110	0			
Fluoride	106.2	5.0	100	0	106	82-116	0			
Sulfate	897	50	500	411.5	97.1	90-110	0			

MSD		Sample ID: 20041720-23A MSD				Units: mg/L		Analysis Date: 5/6/2020 07:47 PM		
Client ID:		Run ID: IC3_200506A				SeqNo: 6397929		Prep Date:		DF: 50
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bromide	105.3	10	100	0	105	90-110	106.6	1.23	20	
Chloride	508.2	50	500	29.54	95.7	88-110	508.2	0.00689	20	
Fluoride	104.7	5.0	100	0	105	82-116	106.2	1.38	20	
Sulfate	896.3	50	500	411.5	97	90-110	897	0.0742	20	

The following samples were analyzed in this batch:

20050070-01B

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



Form 202r8

*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.

QC PACKAGE (check below)

☒ 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

SR1 4.8-c pH20

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY		Jake Janice K	4-30-20	1545
RECEIVED BY			4-30-20	1545
RELINQUISHED BY			4-30-20	1800
RECEIVED BY		Diane F Shea	5/1/20	1000
RELINQUISHED BY				
RECEIVED BY				

Chad Whelton

From: Jake Janicek <JJanicek@caerusoilandgas.com>
Sent: Friday, May 1, 2020 8:30 AM
To: Chad Whelton
Cc: Brett Middleton; Jake Janicek
Subject: [EXTERNAL] - FW: COC
Attachments: IMG_0883.jpg; ATT00001.txt

CAUTION: This email originated from outside of ALS. Do not click links or open attachments unless you recognize the sender and are sure content is relevant to you.

Chad,

Yesterday, I couldn't remember which analytes I needed the sample associated with the attached COC analyzed for. I know now. Please analyze the sample for:

1. pH,
2. specific conductance,
3. total dissolved solids (TDS),
4. alkalinity (total bicarbonate and carbonate as CaCO₃),
5. major anions (bromide, chloride, fluoride, sulfate, nitrate and nitrite as N, phosphorus),
6. major cations (calcium, iron, magnesium, manganese, potassium, sodium),
7. barium, boron, selenium and strontium
8. total petroleum hydrocarbons (TPH) and
9. BTEX compounds

Please attach this email to the analytical report somehow. Let me know if you have any questions.

Jake

Jake Janicek
EHS Specialist
143 Diamond Ave. Parachute, CO 81635
Office: 970-285-2720 | Mobile: 970-778-2314 | jjanicek@caerusoilandgas.com

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-----Original Message-----

From: Jake Janicek <JJanicek@caerusoilandgas.com>
Sent: Friday, May 01, 2020 6:06 AM
To: Jake Janicek <JJanicek@caerusoilandgas.com>

Sample Receipt Checklist

Client Name: **CAERUS**

Date/Time Received: **01-May-20 10:00**

Work Order: **20050070**

Received by: **DS**

Checklist completed by **Diane Shaw**

01-May-20

Reviewed by: **Chad Whelton**

01-May-20

eSignature

Date

eSignature

Date

Matrices: **Water**

Carrier name: **FedEx**

Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐

Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒

Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒

Chain of custody present? Yes ☒ No ☐

Chain of custody signed when relinquished and received? Yes ☒ No ☐

Chain of custody agrees with sample labels? Yes ☒ No ☐

Samples in proper container/bottle? Yes ☒ No ☐

Sample containers intact? Yes ☒ No ☐

Sufficient sample volume for indicated test? Yes ☒ No ☐

All samples received within holding time? Yes ☒ No ☐

Container/Temp Blank temperature in compliance? Yes ☒ No ☐

Sample(s) received on ice? Yes ☒ No ☐

Temperature(s)/Thermometer(s): **4.8/4.8 c** **SR1**

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: **5/1/2020 1:49:39 PM**

Water - VOA vials have zero headspace? Yes ☒ No ☐ No VOA vials submitted ☐

Water - pH acceptable upon receipt? Yes ☒ No ☐ N/A ☐

pH adjusted? Yes ☐ No ☒ N/A ☐

pH adjusted by: **-**

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction: