



10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

January 31, 2023

Max Trehus
PDC Energy
4000 Burlington Ave.
Evans, CO 80620

Work Order: **HS23010681**

Laboratory Results for: **Bost Farm 9N-8C-L**

Dear Max Trehus ,

ALS Environmental received 2 sample(s) on Jan 14, 2023 for the analysis 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.

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

Sincerely,

Generated By: DAYNA.FISHER

Tyler Monroe

Client: PDC Energy
Project: Bost Farm 9N-8C-L
Work Order: HS23010681

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23010681-01	9N-8C-L A	Water		11-Jan-2023 10:55	14-Jan-2023 08:50	<input type="checkbox"/>
HS23010681-02	9N-8C-L B	Water		11-Jan-2023 10:55	14-Jan-2023 08:50	<input type="checkbox"/>

Client: PDC Energy
Project: Bost Farm 9N-8C-L
Work Order: HS23010681

CASE NARRATIVE

GC Semivolatiles by Method RSK-175

Batch ID: R425957

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GC Semivolatiles by Method SW8015M

Batch ID: 188473

Sample ID: 9N-8C-L A (HS23010681-01)

- The surrogate recoveries could not be determined due to dilution below the calibration range.

GC Volatiles by Method SW8015

Batch ID: R426151

Sample ID: 9N-8C-L A (HS23010681-01)

- Dilution required due to sample matrix. Surrogate failed outside control limits high. Sample is ND.

GCMS Volatiles by Method SW8260

Batch ID: R426172

Sample ID: 9N-8C-L A (HS23010681-01)

- Lowest practical dilution due to matrix.

Metals by Method E200.8

Batch ID: 188967

Sample ID: 9N-8C-L B (HS23010681-02)

- Sample ran at a 2X dilution due to high concentration of Sodium.

Sample ID: HS23010856-02MS, HS23010703-01MS

- MS and MSD are for an unrelated sample

Batch ID: 188949

Sample ID: HS23011293-03MS, HS23011295-03MS

- MS and MSD are for an unrelated sample

WetChemistry by Method E300

Batch ID: R426761

Sample ID: HS23010780-02MS, HS23010879-01MS

- MS and MSD are for an unrelated sample (Chloride,Sulfate)

WetChemistry by Method SM2320B

Batch ID: R426612

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: PDC Energy
Project: Bost Farm 9N-8C-L
Work Order: HS23010681

CASE NARRATIVE

WetChemistry by Method M2540C

Batch ID: R426112

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
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Client: PDC Energy
 Project: Bost Farm 9N-8C-L
 Sample ID: 9N-8C-L A
 Collection Date: 11-Jan-2023 10:55

ANALYTICAL REPORT
 WorkOrder:HS23010681
 Lab ID:HS23010681-01
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		Method:SW8260		Analyst: PC			
Benzene	U		100	500	ug/L	500	20-Jan-2023 07:39
Ethylbenzene	U		150	500	ug/L	500	20-Jan-2023 07:39
m,p-Xylene	430	J	250	1000	ug/L	500	20-Jan-2023 07:39
o-Xylene	U		150	500	ug/L	500	20-Jan-2023 07:39
Toluene	320	J	100	500	ug/L	500	20-Jan-2023 07:39
Xylenes, Total	430	J	150	500	ug/L	500	20-Jan-2023 07:39
Surr: 1,2-Dichloroethane-d4	98.3			70-126	%REC	500	20-Jan-2023 07:39
Surr: 4-Bromofluorobenzene	96.8			77-113	%REC	500	20-Jan-2023 07:39
Surr: Dibromofluoromethane	91.8			77-123	%REC	500	20-Jan-2023 07:39
Surr: Toluene-d8	107			82-127	%REC	500	20-Jan-2023 07:39
GASOLINE RANGE ORGANICS BY SW8015C		Method:SW8015		Analyst: FT			
Gasoline Range Organics	U		5.00	25.0	mg/L	500	19-Jan-2023 13:39
Surr: 4-Bromofluorobenzene	219	S		70-123	%REC	500	19-Jan-2023 13:39
DISSOLVED GASES BY RSK-175		Method:RSK-175		Analyst: PPM			
Ethane	290		28.8	200	ug/L	200	16-Jan-2023 13:57
Methane	840		21.4	100	ug/L	200	16-Jan-2023 13:57
Propane	333		200	200	ug/L	200	16-Jan-2023 13:57
TPH DRO/ORO BY SW8015C		Method:SW8015M		Prep:SW3511 / 16-Jan-2023		Analyst: PPM	
DRO (>C10 - C28)	1,200		19	49	mg/L	1000	17-Jan-2023 20:36
Surr: 2-Fluorobiphenyl	0	JS		60-135	%REC	1000	17-Jan-2023 20:36
TOTAL METALS BY E200.8, REV 5.4, 1994		Method:E200.8		Prep:E200.8 / 27-Jan-2023		Analyst: JC	
Calcium	1,300		1.80	50.0	mg/L	100	30-Jan-2023 19:41
Magnesium	1.87	J	0.0390	2.50	mg/L	5	30-Jan-2023 17:05
Potassium	913		3.30	50.0	mg/L	100	30-Jan-2023 19:41
Sodium	824		2.10	20.0	mg/L	100	30-Jan-2023 19:41
ANIONS BY E300.0, REV 2.1, 1993		Method:E300		Analyst: TH			
Chloride	3,190		10.0	25.0	mg/L	50	28-Jan-2023 10:44
Sulfate	163		10.0	25.0	mg/L	50	28-Jan-2023 10:44
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		Method:M2540C		Analyst: MZD			
Total Dissolved Solids (Residue, Filterable)	14,000		5.00	10.0	mg/L	1	18-Jan-2023 14:55
ALKALINITY BY SM 2320B-2011		Method:SM2320B		Analyst: JAC			
Alkalinity, Bicarbonate (As CaCO3)	53.3		50.0	50.0	mg/L	10	25-Jan-2023 16:02
Alkalinity, Carbonate (As CaCO3)	939		50.0	50.0	mg/L	10	25-Jan-2023 16:02
Alkalinity, Total (As CaCO3)	992		50.0	50.0	mg/L	10	25-Jan-2023 16:02

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

Client: PDC Energy
 Project: Bost Farm 9N-8C-L
 Sample ID: 9N-8C-L B
 Collection Date: 11-Jan-2023 10:55

ANALYTICAL REPORT

WorkOrder:HS23010681
 Lab ID:HS23010681-02
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
DISSOLVED METALS BY E200.8, REV 5.4, 1994	Method:E200.8 (dissolved)				Prep:E200.8 / 27-Jan-2023		Analyst: JC
Calcium	1,210		1.80	50.0	mg/L	100	30-Jan-2023 12:12
Magnesium	4.50	J	0.780	50.0	mg/L	100	30-Jan-2023 12:12
Potassium	896		3.30	50.0	mg/L	100	30-Jan-2023 12:12
Sodium	829		2.10	20.0	mg/L	100	30-Jan-2023 12:12

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

Weight / Prep Log

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

Batch ID: 188473	Start Date: 16 Jan 2023 14:00	End Date: 17 Jan 2023 13:45
Method: SW3511	Prep Code: 3511_DRO	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23010681-01		33.85 (mL)	2 (mL)	0.05908	40 mL Amber

Batch ID: 188665	Start Date: 20 Jan 2023 15:30	End Date: 20 Jan 2023 16:00
Method: SAMPLE FILTRATION - 0.45 MICRON FILTER	Prep Code: FILTRATION	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23010681-02		100 (mL)	100 (mL)	1	250 mL plastic, Neat

Batch ID: 188949	Start Date: 27 Jan 2023 09:00	End Date: 27 Jan 2023 13:00
Method: TOTAL METALS PREP BY E200.8, REV 5.4, 1994	Prep Code: 200.8PR	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23010681-01		10 (mL)	10 (mL)	1	250 mL plastic, HNO3 to pH <2

Batch ID: 188967	Start Date: 27 Jan 2023 08:30	End Date: 27 Jan 2023 12:30
Method: DISSOLVED METALS DIGESTION BY E200.8,REV 5.4,1994	Prep Code: 200.8_DISSPR	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23010681-02		10 (mL)	10 (mL)	1	250 mL plastic, Neat

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 188473 (0)		Test Name : TPH DRO/ORO BY SW8015C			Matrix: Water	
HS23010681-01	9N-8C-L A	11 Jan 2023 10:55		16 Jan 2023 09:00	17 Jan 2023 20:36	1000
Batch ID: 188949 (0)		Test Name : TOTAL METALS BY E200.8, REV 5.4, 1994			Matrix: Water	
HS23010681-01	9N-8C-L A	11 Jan 2023 10:55		27 Jan 2023 09:00	30 Jan 2023 19:41	100
HS23010681-01	9N-8C-L A	11 Jan 2023 10:55		27 Jan 2023 09:00	30 Jan 2023 17:05	5
Batch ID: 188967 (0)		Test Name : DISSOLVED METALS BY E200.8, REV 5.4, 1994			Matrix: Water	
HS23010681-02	9N-8C-L B	11 Jan 2023 10:55		27 Jan 2023 08:30	30 Jan 2023 12:14	2
HS23010681-02	9N-8C-L B	11 Jan 2023 10:55		27 Jan 2023 08:30	30 Jan 2023 12:12	100
HS23010681-02	9N-8C-L B	11 Jan 2023 10:55		27 Jan 2023 08:30	28 Jan 2023 16:33	10
Batch ID: R425957 (0)		Test Name : DISSOLVED GASES BY RSK-175			Matrix: Water	
HS23010681-01	9N-8C-L A	11 Jan 2023 10:55			16 Jan 2023 13:57	200
Batch ID: R426112 (0)		Test Name : TOTAL DISSOLVED SOLIDS BY SM2540C-2011			Matrix: Water	
HS23010681-01	9N-8C-L A	11 Jan 2023 10:55			18 Jan 2023 14:55	1
Batch ID: R426151 (0)		Test Name : GASOLINE RANGE ORGANICS BY SW8015C			Matrix: Water	
HS23010681-01	9N-8C-L A	11 Jan 2023 10:55			19 Jan 2023 13:39	500
Batch ID: R426172 (0)		Test Name : LOW LEVEL VOLATILES BY SW8260C			Matrix: Water	
HS23010681-01	9N-8C-L A	11 Jan 2023 10:55			20 Jan 2023 07:39	500
Batch ID: R426612 (0)		Test Name : ALKALINITY BY SM 2320B-2011			Matrix: Water	
HS23010681-01	9N-8C-L A	11 Jan 2023 10:55			25 Jan 2023 16:02	10
Batch ID: R426761 (0)		Test Name : ANIONS BY E300.0, REV 2.1, 1993			Matrix: Water	
HS23010681-01	9N-8C-L A	11 Jan 2023 10:55			28 Jan 2023 10:44	50

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: 188473 (0)	Instrument: FID-16	Method: TPH DRO/ORO BY SW8015C
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MBLK	Sample ID: MBLK-188473	Units: mg/L	Analysis Date: 17-Jan-2023 13:15							
Client ID:	Run ID: FID-16_426000	SeqNo: 7077245	PrepDate: 16-Jan-2023 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
DRO (>C10 - C28)	U	0.050								
<i>Surr: 2-Fluorobiphenyl</i>	<i>0.05645</i>	<i>0.0050</i>	<i>0.06</i>	<i>0</i>	<i>94.1</i>	<i>60 - 135</i>				

LCS	Sample ID: LCS-188473	Units: mg/L	Analysis Date: 17-Jan-2023 13:44							
Client ID:	Run ID: FID-16_426000	SeqNo: 7077246	PrepDate: 16-Jan-2023 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
DRO (>C10 - C28)	0.649	0.050	0.6	0	108	70 - 130				
<i>Surr: 2-Fluorobiphenyl</i>	<i>0.07431</i>	<i>0.0050</i>	<i>0.06</i>	<i>0</i>	<i>124</i>	<i>60 - 135</i>				

LCSD	Sample ID: LCSD-188473	Units: mg/L	Analysis Date: 17-Jan-2023 14:14							
Client ID:	Run ID: FID-16_426000	SeqNo: 7077247	PrepDate: 16-Jan-2023 DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
DRO (>C10 - C28)	0.6398	0.050	0.6	0	107	70 - 130	0.649	1.43	20	
<i>Surr: 2-Fluorobiphenyl</i>	<i>0.07334</i>	<i>0.0050</i>	<i>0.06</i>	<i>0</i>	<i>122</i>	<i>60 - 135</i>	<i>0.07431</i>	<i>1.32</i>	<i>20</i>	

The following samples were analyzed in this batch: HS23010681-01

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: R425957 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK		Sample ID: MBLK-230116		Units: ug/L		Analysis Date: 16-Jan-2023 09:06				
Client ID:		Run ID: FID-4_425957		SeqNo: 7076296		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	U	1.00								
Methane	U	0.500								
Propane	U	1.00								

LCS		Sample ID: LCS-230116		Units: ug/L		Analysis Date: 16-Jan-2023 09:21				
Client ID:		Run ID: FID-4_425957		SeqNo: 7076297		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	20.5	1.00	18.04	0	114	75 - 125				
Methane	10.2	0.500	9.647	0	106	75 - 125				
Propane	31.22	1.00	26.46	0	118	75 - 125				

LCSD		Sample ID: LCSD-230116		Units: ug/L		Analysis Date: 16-Jan-2023 09:37				
Client ID:		Run ID: FID-4_425957		SeqNo: 7076298		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	19.93	1.00	18.04	0	110	75 - 125	20.5	2.82	30	
Methane	8.996	0.500	9.647	0	93.3	75 - 125	10.2	12.6	30	
Propane	32.15	1.00	26.46	0	122	75 - 125	31.22	2.95	30	

The following samples were analyzed in this batch: HS23010681-01

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: R426151 (0)		Instrument: FID-20		Method: GASOLINE RANGE ORGANICS BY SW8015C						
MBLK	Sample ID: MBLK-230119	Units: mg/L			Analysis Date: 19-Jan-2023 12:58					
Client ID:	Run ID: FID-20_426151	SeqNo: 7080450		PrepDate:			DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	

Gasoline Range Organics	U	0.0500							
<i>Surr: 4-Bromofluorobenzene</i>	<i>0.08346</i>	<i>0.00500</i>	<i>0.1</i>	<i>0</i>	<i>83.5</i>	<i>70 - 121</i>			

LCS	Sample ID: LCS-230119	Units: mg/L			Analysis Date: 19-Jan-2023 12:04				
Client ID:	Run ID: FID-20_426151	SeqNo: 7080448		PrepDate:			DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Gasoline Range Organics	1.025	0.0500	1	0	103	76 - 124			
<i>Surr: 4-Bromofluorobenzene</i>	<i>0.08939</i>	<i>0.00500</i>	<i>0.1</i>	<i>0</i>	<i>89.4</i>	<i>52 - 138</i>			

LCSD	Sample ID: LCSD-230119	Units: mg/L			Analysis Date: 19-Jan-2023 12:17				
Client ID:	Run ID: FID-20_426151	SeqNo: 7080449		PrepDate:			DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Gasoline Range Organics	0.9622	0.0500	1	0	96.2	76 - 124	1.025	6.33	20
<i>Surr: 4-Bromofluorobenzene</i>	<i>0.09031</i>	<i>0.00500</i>	<i>0.1</i>	<i>0</i>	<i>90.3</i>	<i>52 - 138</i>	<i>0.08939</i>	<i>1.03</i>	<i>20</i>

The following samples were analyzed in this batch: HS23010681-01

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: 188949 (0)		Instrument: ICPMS07		Method: TOTAL METALS BY E200.8, REV 5.4, 1994						
MBLK	Sample ID: MBLK-188949	Units: ug/L			Analysis Date: 30-Jan-2023 14:04					
Client ID:	Run ID: ICPMS07_426817	SeqNo: 7096210		PrepDate: 27-Jan-2023		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Calcium	40.84	500							J	
Magnesium	12.7	500							J	
Potassium	U	500								
Sodium	U	200								
LCS	Sample ID: LCS-188949	Units: ug/L			Analysis Date: 30-Jan-2023 14:05					
Client ID:	Run ID: ICPMS07_426817	SeqNo: 7096211		PrepDate: 27-Jan-2023		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Calcium	5071	500	5000	0	101	85 - 115				
Magnesium	5415	500	5000	0	108	85 - 115				
Potassium	5270	500	5000	0	105	85 - 115				
Sodium	5278	200	5000	0	106	85 - 115				
MS	Sample ID: HS23011295-03MS	Units: ug/L			Analysis Date: 30-Jan-2023 14:15					
Client ID:	Run ID: ICPMS07_426817	SeqNo: 7096216		PrepDate: 27-Jan-2023		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Calcium	65690	500	5000	47790	358	70 - 130			SO	
Magnesium	25420	500	5000	15970	189	70 - 130			S	
Potassium	57220	500	5000	41360	317	70 - 130			SO	
Sodium	2423000	200	5000	1929000	9900	70 - 130			SEO	
MS	Sample ID: HS23011293-03MS	Units: ug/L			Analysis Date: 30-Jan-2023 15:49					
Client ID:	Run ID: ICPMS07_426817	SeqNo: 7096340		PrepDate: 27-Jan-2023		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Calcium	43390	500	5000	33200	204	70 - 130			SO	
Magnesium	7895	500	5000	2134	115	70 - 130				
Potassium	366000	500	5000	361100	97.5	70 - 130			EO	
Sodium	1310000	200	5000	1277000	675	70 - 130			SEO	

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: 188949 (0) **Instrument:** ICPMS07 **Method:** TOTAL METALS BY E200.8, REV 5.4, 1994

MSD		Sample ID: HS23011295-03MSD			Units: ug/L		Analysis Date: 30-Jan-2023 14:17			
Client ID:		Run ID: ICPMS07_426817			SeqNo: 7096217		PrepDate: 27-Jan-2023		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	59380	500	5000	47790	232	70 - 130	65690	10.1	20	SO
Magnesium	23390	500	5000	15970	148	70 - 130	25420	8.31	20	S
Potassium	51810	500	5000	41360	209	70 - 130	57220	9.92	20	SO
Sodium	2139000	200	5000	1929000	4200	70 - 130	2423000	12.5	20	SEO

MSD		Sample ID: HS23011293-03MSD			Units: ug/L		Analysis Date: 30-Jan-2023 14:11			
Client ID:		Run ID: ICPMS07_426817			SeqNo: 7096214		PrepDate: 27-Jan-2023		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	42360	500	5000	33200	183	70 - 130	43390	2.4	20	SO
Magnesium	7837	500	5000	2134	114	70 - 130	7895	0.741	20	
Potassium	365100	500	5000	361100	80.6	70 - 130	366000	0.232	20	EO
Sodium	1329000	200	5000	1277000	1040	70 - 130	1310000	1.38	20	SEO

The following samples were analyzed in this batch: HS23010681-01

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: 188967 (0) **Instrument:** ICPMS07 **Method:** DISSOLVED METALS BY E200.8, REV 5.4, 1994 (DISSOLVED)

MBLK		Sample ID: MBLKF1-188967		Units: ug/L		Analysis Date: 28-Jan-2023 15:16				
Client ID:		Run ID: ICPMS07_426743		SeqNo: 7093934		PrepDate: 27-Jan-2023		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	121.5	500								J
Magnesium	28.49	500								J
Potassium	U	500								
Sodium	U	200								

MBLK		Sample ID: MBLK-188967		Units: ug/L		Analysis Date: 28-Jan-2023 15:14				
Client ID:		Run ID: ICPMS07_426743		SeqNo: 7093933		PrepDate: 27-Jan-2023		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	22.24	500								J
Magnesium	U	500								
Potassium	U	500								
Sodium	U	200								

MBLK		Sample ID: MBLK-188967		Units: ug/L		Analysis Date: 30-Jan-2023 13:14				
Client ID:		Run ID: ICPMS07_426817		SeqNo: 7095986		PrepDate: 27-Jan-2023		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	U	500								
Magnesium	U	500								
Potassium	U	500								
Sodium	U	200								

LCS		Sample ID: LCS-188967		Units: ug/L		Analysis Date: 28-Jan-2023 15:18				
Client ID:		Run ID: ICPMS07_426743		SeqNo: 7093935		PrepDate: 27-Jan-2023		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	5307	500	5000	0	106	85 - 115				
Magnesium	5304	500	5000	0	106	85 - 115				
Potassium	5103	500	5000	0	102	85 - 115				
Sodium	5187	200	5000	0	104	85 - 115				

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: 188967 (0)		Instrument: ICPMS07		Method: DISSOLVED METALS BY E200.8, REV 5.4, 1994 (DISSOLVED)						
MS	Sample ID: HS23010856-02MS	Units: ug/L		Analysis Date: 28-Jan-2023 16:46						
Client ID:	Run ID: ICPMS07_426743	SeqNo: 7094065		PrepDate: 27-Jan-2023		DF: 10				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	1351000	5000	5000	1444000	-1860	85 - 115				SO
Magnesium	512200	5000	5000	532300	-403	85 - 115				SO
Potassium	41740	5000	5000	38360	67.5	85 - 115				SO
MS	Sample ID: HS23010703-01MS	Units: ug/L		Analysis Date: 28-Jan-2023 15:22						
Client ID:	Run ID: ICPMS07_426743	SeqNo: 7093937		PrepDate: 27-Jan-2023		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	84150	500	5000	76980	143	85 - 115				SO
Magnesium	16660	500	5000	11290	107	85 - 115				
Potassium	11670	500	5000	6499	103	85 - 115				
Sodium	120000	200	5000	114300	113	85 - 115				O
MS	Sample ID: HS23010856-02MS	Units: ug/L		Analysis Date: 28-Jan-2023 16:09						
Client ID:	Run ID: ICPMS07_426743	SeqNo: 7093949		PrepDate: 27-Jan-2023		DF: 10				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	12100000	2000	5000	11810000	5900	85 - 115				SEO
MSD	Sample ID: HS23010856-02MSD	Units: ug/L		Analysis Date: 28-Jan-2023 16:11						
Client ID:	Run ID: ICPMS07_426743	SeqNo: 7093950		PrepDate: 27-Jan-2023		DF: 10				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	1456000	5000	5000	1444000	241	85 - 115	1351000	7.49	20	SO
Magnesium	533600	5000	5000	532300	24.5	85 - 115	512200	4.09	20	SO
Potassium	43720	5000	5000	38360	107	85 - 115	41740	4.64	20	O
Sodium	11820000	2000	5000	11810000	234	85 - 115	11420000	3.46	20	SEO

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: 188967 (0)		Instrument: ICPMS07		Method: DISSOLVED METALS BY E200.8, REV 5.4, 1994 (DISSOLVED)						
MSD	Sample ID: HS23010703-01MSD				Units: ug/L	Analysis Date: 28-Jan-2023 15:24				
Client ID:		Run ID: ICPMS07_426743		SeqNo: 7093938	PrepDate: 27-Jan-2023	DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	80910	500	5000	76980	78.6	85 - 115	84150	3.92	20	SO
Magnesium	16240	500	5000	11290	99.0	85 - 115	16660	2.56	20	
Potassium	11290	500	5000	6499	95.9	85 - 115	11670	3.24	20	
Sodium	116900	200	5000	114300	52.0	85 - 115	120000	2.58	20	SO

The following samples were analyzed in this batch: HS23010681-02

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: R426172 (0) **Instrument:** VOA6 **Method:** LOW LEVEL VOLATILES BY SW8260C

MBLK		Sample ID: VBLKW-230119		Units: ug/L		Analysis Date: 19-Jan-2023 23:56			
Client ID:		Run ID: VOA6_426172		SeqNo: 7080810		PrepDate:		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	1.0							
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>48.37</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>96.7</i>	<i>70 - 123</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.06</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>98.1</i>	<i>77 - 113</i>			
<i>Surr: Dibromofluoromethane</i>	<i>45.58</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>91.2</i>	<i>73 - 126</i>			
<i>Surr: Toluene-d8</i>	<i>53.09</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>81 - 120</i>			

LCS		Sample ID: VLCSW-230119		Units: ug/L		Analysis Date: 19-Jan-2023 23:14			
Client ID:		Run ID: VOA6_426172		SeqNo: 7080809		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Benzene	20.15	1.0	20	0	101	74 - 120			
Ethylbenzene	21.03	1.0	20	0	105	77 - 117			
m,p-Xylene	41.05	2.0	40	0	103	77 - 122			
o-Xylene	20.24	1.0	20	0	101	75 - 119			
Toluene	20.07	1.0	20	0	100	77 - 118			
Xylenes, Total	61.29	1.0	60	0	102	75 - 122			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>54.13</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>108</i>	<i>70 - 123</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>48.82</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>97.6</i>	<i>77 - 113</i>			
<i>Surr: Dibromofluoromethane</i>	<i>49.87</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>99.7</i>	<i>73 - 126</i>			
<i>Surr: Toluene-d8</i>	<i>48.45</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>96.9</i>	<i>81 - 120</i>			

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: R426172 (0) **Instrument:** VOA6 **Method:** LOW LEVEL VOLATILES BY SW8260C

MS		Sample ID: HS23010875-01MS			Units: ug/L		Analysis Date: 20-Jan-2023 00:59			
Client ID:		Run ID: VOA6_426172			SeqNo: 7080813		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.1	1.0	20	0	95.5	70 - 127				
Ethylbenzene	20.78	1.0	20	0	104	70 - 124				
m,p-Xylene	40.79	2.0	40	0	102	70 - 130				
o-Xylene	20.03	1.0	20	0	100	70 - 124				
Toluene	20.15	1.0	20	0	101	70 - 123				
Xylenes, Total	60.82	1.0	60	0	101	70 - 130				
Surr: 1,2-Dichloroethane-d4	47.33	1.0	50	0	94.7	70 - 126				
Surr: 4-Bromofluorobenzene	50.17	1.0	50	0	100	77 - 113				
Surr: Dibromofluoromethane	44.71	1.0	50	0	89.4	77 - 123				
Surr: Toluene-d8	52.31	1.0	50	0	105	82 - 127				

MSD		Sample ID: HS23010875-01MSD			Units: ug/L		Analysis Date: 20-Jan-2023 01:20			
Client ID:		Run ID: VOA6_426172			SeqNo: 7080814		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.83	1.0	20	0	94.2	70 - 127	19.1	1.42	20	
Ethylbenzene	20.52	1.0	20	0	103	70 - 124	20.78	1.23	20	
m,p-Xylene	39.53	2.0	40	0	98.8	70 - 130	40.79	3.16	20	
o-Xylene	19.13	1.0	20	0	95.6	70 - 124	20.03	4.59	20	
Toluene	19.41	1.0	20	0	97.0	70 - 123	20.15	3.75	20	
Xylenes, Total	58.65	1.0	60	0	97.8	70 - 130	60.82	3.63	20	
Surr: 1,2-Dichloroethane-d4	47.77	1.0	50	0	95.5	70 - 126	47.33	0.92	20	
Surr: 4-Bromofluorobenzene	49.77	1.0	50	0	99.5	77 - 113	50.17	0.788	20	
Surr: Dibromofluoromethane	44.51	1.0	50	0	89.0	77 - 123	44.71	0.446	20	
Surr: Toluene-d8	52.06	1.0	50	0	104	82 - 127	52.31	0.48	20	

The following samples were analyzed in this batch: HS23010681-01

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: R426112 (0)		Instrument: Balance1		Method: TOTAL DISSOLVED SOLIDS BY SM2540C-2011					
MBLK	Sample ID: WBLK-01182023	Units: mg/L		Analysis Date: 18-Jan-2023 14:55					
Client ID:	Run ID: Balance1_426112	SeqNo: 7079597		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Total Dissolved Solids (Residue, Filterable) U 10.0

LCS	Sample ID: LCS-01182023	Units: mg/L		Analysis Date: 18-Jan-2023 14:55					
Client ID:	Run ID: Balance1_426112	SeqNo: 7079596		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Total Dissolved Solids (Residue, Filterable) 904 10.0 1000 0 90.4 85 - 115

DUP	Sample ID: HS23010792-01DUP	Units: mg/L		Analysis Date: 18-Jan-2023 14:55					
Client ID:	Run ID: Balance1_426112	SeqNo: 7079592		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Total Dissolved Solids (Residue, Filterable) 1244 10.0 1236 0.645 5

The following samples were analyzed in this batch: HS23010681-01

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: R426612 (0)	Instrument: ManTech01	Method: ALKALINITY BY SM 2320B-2011
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MBLK	Sample ID: WBLKW1-012523	Units: mg/L	Analysis Date: 25-Jan-2023 14:37							
Client ID:	Run ID: ManTech01_426612	SeqNo: 7090267	PrepDate: 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	5.00								
Alkalinity, Carbonate (As CaCO3)	U	5.00								
Alkalinity, Total (As CaCO3)	U	5.00								

LCS	Sample ID: LCS1-012523	Units: mg/L	Analysis Date: 25-Jan-2023 14:47							
Client ID:	Run ID: ManTech01_426612	SeqNo: 7090268	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (As CaCO3)	1084	5.00	1000	0	108	85 - 115				
Alkalinity, Total (As CaCO3)	1114	5.00	1000	0	111	85 - 115				

LCSD	Sample ID: LCSD1-012523	Units: mg/L	Analysis Date: 25-Jan-2023 14:56							
Client ID:	Run ID: ManTech01_426612	SeqNo: 7090269	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (As CaCO3)	1086	5.00	1000	0	109	85 - 115	1084	0.205	20	
Alkalinity, Total (As CaCO3)	1118	5.00	1000	0	112	85 - 115	1114	0.339	20	

DUP	Sample ID: HS23010566-10DUP	Units: mg/L	Analysis Date: 25-Jan-2023 15:10							
Client ID:	Run ID: ManTech01_426612	SeqNo: 7090271	PrepDate: DF: 1							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	134.7	5.00					115.5	15.3	20	
Alkalinity, Carbonate (As CaCO3)	U	5.00					0	0	20	
Alkalinity, Total (As CaCO3)	134.7	5.00					115.5	15.3	20	

The following samples were analyzed in this batch: HS23010681-01

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: R426761 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY E300.0, REV 2.1, 1993

MBLK		Sample ID: MBLK		Units: mg/L		Analysis Date: 28-Jan-2023 10:09			
Client ID:		Run ID: ICS-Integrion_426761		SeqNo: 7094163		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	U	0.500							
Sulfate	U	0.500							

LCS		Sample ID: LCS		Units: mg/L		Analysis Date: 28-Jan-2023 10:15			
Client ID:		Run ID: ICS-Integrion_426761		SeqNo: 7094164		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	21.04	0.500	20	0	105	90 - 110			
Sulfate	21.61	0.500	20	0	108	90 - 110			

MS		Sample ID: HS23010879-01MS		Units: mg/L		Analysis Date: 28-Jan-2023 11:41			
Client ID:		Run ID: ICS-Integrion_426761		SeqNo: 7094176		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	395.6	0.500	10	398.1	-24.7	80 - 120			SEO
Sulfate	15.05	0.500	10	4.217	108	80 - 120			

MS		Sample ID: HS23010780-03MS		Units: mg/L		Analysis Date: 28-Jan-2023 14:35			
Client ID:		Run ID: ICS-Integrion_426761		SeqNo: 7094200		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	10.15	0.500	10	0.065	101	80 - 120			
Sulfate	10.55	0.500	10	0.0241	105	80 - 120			

MS		Sample ID: HS23010780-02MS		Units: mg/L		Analysis Date: 28-Jan-2023 13:32			
Client ID:		Run ID: ICS-Integrion_426761		SeqNo: 7094192		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
Chloride	150.2	0.500	10	142.9	72.8	80 - 120			SEO
Sulfate	84.05	0.500	10	78.8	52.4	80 - 120			SO

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

QC BATCH REPORT

Batch ID: R426761 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY E300.0, REV 2.1, 1993

MSD		Sample ID: HS23010879-01MSD			Units: mg/L		Analysis Date: 28-Jan-2023 11:47			
Client ID:		Run ID: ICS-Integrion_426761			SeqNo: 7094177		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	373	0.500	10	398.1	-250	80 - 120	395.6	5.87	20	SEO
Sulfate	14.16	0.500	10	4.217	99.4	80 - 120	15.05	6.09	20	

MSD		Sample ID: HS23010780-03MSD			Units: mg/L		Analysis Date: 28-Jan-2023 14:41			
Client ID:		Run ID: ICS-Integrion_426761			SeqNo: 7094201		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.692	0.500	10	0.065	96.3	80 - 120	10.15	4.63	20	
Sulfate	10.04	0.500	10	0.0241	100	80 - 120	10.55	4.91	20	

MSD		Sample ID: HS23010780-02MSD			Units: mg/L		Analysis Date: 28-Jan-2023 13:37			
Client ID:		Run ID: ICS-Integrion_426761			SeqNo: 7094193		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	149.9	0.500	10	142.9	69.7	80 - 120	150.2	0.207	20	SEO
Sulfate	84.01	0.500	10	78.8	52.1	80 - 120	84.05	0.0386	20	SO

The following samples were analyzed in this batch: HS23010681-01

Client: PDC Energy
Project: Bost Farm 9N-8C-L
WorkOrder: HS23010681

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	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/SDL

Acronym	Description
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

Unit Reported	Description
Date	
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932022-13	31-Jul-2023

Sample Receipt Checklist

Work Order ID: HS23010681

Date/Time Received: 14-Jan-2023 08:50

Client Name: PDC Energy 80620

Received by: Corey Grandits

Completed By: /S/ Corey Grandits	16-Jan-2023 12:17	Reviewed by: /S/ Tyler Monroe	16-Jan-2023 14:51
eSignature	Date/Time	eSignature	Date/Time

Matrices: **W**

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
- VOA/TX1005/TX1006 Solids in hermetically sealed vials? Yes No Not Present
- Chain of custody present? Yes No 1 Page(s)
- Chain of custody signed when relinquished and received? Yes No
- Samplers name present on COC? 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

Temperature(s)/Thermometer(s):	1.8UC/1.3C	IR31
Cooler(s)/Kit(s):	49618	
Date/Time sample(s) sent to storage:	1/16/23	
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:



Chain of Custody Form

Page _____ of _____

HS23010681

PDC Energy
Bost Farm 9N-8C-L

ital
ice
:10
:99
:22



ALS Project Manager:

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order		Project Name	Bost Farm 9N-8C-L	A	Dissolved Gases (Methane, Ethane, Propane)											
Work Order		Project Number		B	BTEX 8260											
Company Name	PDC Energy	Bill To Company	PDC Energy	C	DRO 8015											
Send Report To	Max Trehus	Invoice Attn.	Max Trehus	D	GRO 8015											
Address	4000 Burlington Ave	Address	1775 Sherman St #3000	E	Anions (Cl,SO4), Alk (T, CO3, HCO3), TDS											
					F	Dissolved Ca, Mg, K, Na - need to lab filter										
City/State/Zip	Evans, CO 80620	City/State/Zip	Denver, CO 80203	G	Total Ca, Mg, K, Na											
Phone	720-762-3569	Phone	303-860-5800	H												
Fax		Fax		I												
e-Mail Address	max.trehus@pdce.com	e-Mail Address		J												
	jenifer.hakkannen@pdce.com															
	jessica.johannsen@pdce.com															

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	9N-8C-L A	1/11/23	10:55	W	8	3	X										
2	9N-8C-L A	↓	↓	W	1	3		X									
3	9N-8C-L A	↓	↓	W	1	3			X								
4	9N-8C-L A	↓	↓	W	1	3				X							
5	9N-8C-L A	↓	↓	W	8	1					X						
6	9N-8C-L B	↓	↓	W	8	1						X					
7	9N-8C-L A	↓	↓	W	2	1							X				
8																	
9																	
10																	

Sampler(s): Please Print & Sign Max Trehus		Shipment Method:		Required Turnaround Time: <input checked="" type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour				Results Due Date:	
Relinquished by:	Date:	Time:	Received by:	Notes: Facility ID: 478974					
	1/13/23	12:00		1R31 49898					
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler Temp.		QC Package: (Check Box Below)			
	1/13/23	15:30		1.0		<input checked="" type="checkbox"/> Level II: Standard QC <input type="checkbox"/> Level III: Std QC + Raw Data <input type="checkbox"/> Level IV: SW846 CLP-Like			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			<input type="checkbox"/> TRRP-Checklist <input type="checkbox"/> TRRP Level IV			
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035						Other:			

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.

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JAN 14 2023

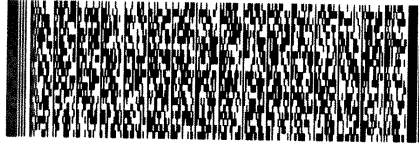
ORIGIN ID:GKVA (970) 305-1648
AMY KEPHART
ALS
965 E 11TH ST
LOVELAND, CO 80537
UNITED STATES US

SHIP DATE: 13JAN23
ACTWT: 43.95 LB
CAD: 0497862/CAFE3618
DIMS: 24x14x12 IN
BILL THIRD PARTY

TO **SAMPLE RECEIVING**
ALS
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099

u9618

REF: WSP & PDC



TRK# 6182 5243 5095
0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO SGRA

77099
TX-US IAH

Part # 16707-434.MTW EXP 0622 **

