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June 28, 2024

Jessica Johannsen
PDC Energy
1775 Sherman Street
Suite 3000
Denver, CO 80203

Work Order: **HS24060956**

Laboratory Results for: **Sylvester G 06-30D**

Dear Jessica Johannsen,

ALS Environmental received 1 sample(s) on Jun 15, 2024 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: Sylvester G 06-30D
Work Order: HS24060956

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS24060956-01	Sylvester G 06-30D	Water		14-Jun-2024 12:50	15-Jun-2024 09:00	☐

Client: PDC Energy **CASE NARRATIVE**
Project: Sylvester G 06-30D
Work Order: HS24060956

GC Semivolatiles by Method RSK-175

Batch ID: R470521

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

GC Semivolatiles by Method SW8015M

Batch ID: 213670

Sample ID: Sylvester G 06-30D (HS24060956-01)

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

GC Volatile Organics by Method SW8015

Batch ID: R470342

Sample ID: LCSD-240624

• The RPD between the LCS and LCSD was outside of the control limit.

GC Volatiles by Method SW8015

Batch ID: R470342

Sample ID: Sylvester G 06-30D (HS24060956-01)

• Lowest possible dilution due to sample matrix.

GCMS Volatiles by Method SW8260

Batch ID: R470314

Sample ID: Sylvester G 06-30D (HS24060956-01)

• Lowest possible dilution due to sample matrix.

Sample ID: VLCSW-240621

• Insufficient sample received to perform MS/MSD. An LCS/LCSD was performed as batch quality control.

Metals by Method E200.8

Batch ID: 213919

Sample ID: HS24061250-01MS

• MS and MSD are for an unrelated sample

Sample ID: HS24061270-02MS

• MS and MSD are for an unrelated sample

WetChemistry by Method SM2320B

Batch ID: R470778

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

Client: PDC Energy **CASE NARRATIVE**
Project: Sylvester G 06-30D
Work Order: HS24060956

WetChemistry by Method E300

Batch ID: R470551

Sample ID: HS24061564-02MS

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

Sample ID: HS24061564-04MS

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

WetChemistry by Method M2540C

Batch ID: R469874

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

Client: PDC Energy
Project: Sylvester G 06-30D
Sample ID: Sylvester G 06-30D
Collection Date: 14-Jun-2024 12:50

ANALYTICAL REPORT
WorkOrder:HS24060956
Lab ID:HS24060956-01
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES BY SW8260C		**Method:SW8260**				Analyst: TS
Benzene	**3,500**		**500**	**ug/L**	500	23-Jun-2024 21:34
Ethylbenzene	ND		500	ug/L	500	23-Jun-2024 21:34
m,p-Xylene	ND		1000	ug/L	500	23-Jun-2024 21:34
o-Xylene	ND		500	ug/L	500	23-Jun-2024 21:34
Toluene	ND		500	ug/L	500	23-Jun-2024 21:34
Xylenes, Total	ND		1500	ug/L	500	23-Jun-2024 21:34
Surr: 1,2-Dichloroethane-d4	*108*		*70-126*	*%REC*	*500*	*23-Jun-2024 21:34*
Surr: 4-Bromofluorobenzene	*98.4*		*77-113*	*%REC*	*500*	*23-Jun-2024 21:34*
Surr: Dibromofluoromethane	*110*		*77-123*	*%REC*	*500*	*23-Jun-2024 21:34*
Surr: Toluene-d8	*110*		*82-127*	*%REC*	*500*	*23-Jun-2024 21:34*
GASOLINE RANGE ORGANICS BY SW8015C		**Method:SW8015**				Analyst: TS
Gasoline Range Organics	ND		25.0	mg/L	500	24-Jun-2024 15:41
Surr: 4-Bromofluorobenzene	*99.4*		*70-123*	*%REC*	*500*	*24-Jun-2024 15:41*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**				Analyst: RG
Ethane	**1,870**		**200**	**ug/L**	200	26-Jun-2024 15:26
Methane	**3,770**		**100**	**ug/L**	200	26-Jun-2024 15:26
Propane	**1,000**		**200**	**ug/L**	200	26-Jun-2024 15:26
TPH DRO/ORO BY SW8015C		**Method:SW8015M**		Prep:SW3511 / 17-Jun-2024		Analyst: SAM
TPH (Diesel Range)	**61**		**0.55**	**mg/L**	10	17-Jun-2024 16:12
Surr: 2-Fluorobiphenyl	*0*	*JS*	*60-135*	*%REC*	*10*	*17-Jun-2024 16:12*
TOTAL METALS BY E200.8, REV 5.4, 1994		**Method:E200.8**		Prep:E200.8 / 24-Jun-2024		Analyst: JC
Calcium	**37.9**		**2.50**	**mg/L**	5	26-Jun-2024 23:07
Magnesium	**4.65**		**2.50**	**mg/L**	5	26-Jun-2024 23:07
Potassium	**6.46**		**2.50**	**mg/L**	5	26-Jun-2024 23:07
Sodium	**821**		**1.00**	**mg/L**	5	26-Jun-2024 23:07
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**				Analyst: TH
Chloride	**968**		**10.0**	**mg/L**	20	27-Jun-2024 02:06
Sulfate	**0.826**		**0.500**	**mg/L**	1	27-Jun-2024 02:00
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**				Analyst: MH
Total Dissolved Solids (Residue, Filterable)	**2,890**		**10.0**	**mg/L**	1	19-Jun-2024 09:30
ALKALINITY BY -2011		**Method:SM2320B**				Analyst: AR
Alkalinity, Bicarbonate (As CaCO3)	**648**		**100**	**mg/L**	20	28-Jun-2024 11:28
Alkalinity, Carbonate (As CaCO3)	ND		100	mg/L	20	28-Jun-2024 11:28
Alkalinity, Total (As CaCO3)	**648**		**100**	**mg/L**	20	28-Jun-2024 11:28

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

Weight / Prep Log

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

Batch ID: 213670 **Start Date:** 17 Jun 2024 08:00 **End Date:** 17 Jun 2024 08:00
Method: SW3511 **Prep Code:** 3511_DRO

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS24060956-01		30.09 (mL)	2 (mL)	0.06647	40 mL Amber

Batch ID: 213919 **Start Date:** 24 Jun 2024 10:00 **End Date:** 24 Jun 2024 10:00
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	
HS24060956-01		10 (mL)	10 (mL)	1	250 mL plastic, HNO3 to pH <2

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 213670 (0)	**Test Name :** TPH DRO/ORO BY SW8015C				**Matrix:** Water	
HS24060956-01	Sylvester G 06-30D	14 Jun 2024 12:50		17 Jun 2024 08:00	17 Jun 2024 16:12	10
Batch ID: 213919 (0)	**Test Name :** TOTAL METALS BY E200.8, REV 5.4, 1994				**Matrix:** Water	
HS24060956-01	Sylvester G 06-30D	14 Jun 2024 12:50		24 Jun 2024 10:00	26 Jun 2024 23:07	5
Batch ID: R469874 (0)	**Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011				**Matrix:** Water	
HS24060956-01	Sylvester G 06-30D	14 Jun 2024 12:50			19 Jun 2024 09:30	1
Batch ID: R470314 (0)	**Test Name :** LOW LEVEL VOLATILES BY SW8260C				**Matrix:** Water	
HS24060956-01	Sylvester G 06-30D	14 Jun 2024 12:50			23 Jun 2024 21:34	500
Batch ID: R470342 (0)	**Test Name :** GASOLINE RANGE ORGANICS BY SW8015C				**Matrix:** Water	
HS24060956-01	Sylvester G 06-30D	14 Jun 2024 12:50			24 Jun 2024 15:41	500
Batch ID: R470521 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Water	
HS24060956-01	Sylvester G 06-30D	14 Jun 2024 12:50			26 Jun 2024 15:26	200
Batch ID: R470551 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** Water	
HS24060956-01	Sylvester G 06-30D	14 Jun 2024 12:50			27 Jun 2024 02:06	20
HS24060956-01	Sylvester G 06-30D	14 Jun 2024 12:50			27 Jun 2024 02:00	1
Batch ID: R470778 (0)	**Test Name :** ALKALINITY BY -2011				**Matrix:** Water	
HS24060956-01	Sylvester G 06-30D	14 Jun 2024 12:50			28 Jun 2024 11:28	20

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: 213670 (0) **Instrument: FID-16** **Method: TPH DRO/ORO BY SW8015C**

MBLK Sample ID: **MBLK-213670** Units: **mg/L** Analysis Date: **17-Jun-2024 13:16**
Client ID: Run ID: **FID-16_469724** SeqNo: **8082770** PrepDate: **17-Jun-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	ND	0.050								
Surr: 2-Fluorobiphenyl	*0.05759*	*0.0050*	*0.06*	*0*	*96.0*	*60 - 135*				

LCS Sample ID: **LCS-213670** Units: **mg/L** Analysis Date: **17-Jun-2024 13:45**
Client ID: Run ID: **FID-16_469724** SeqNo: **8082771** PrepDate: **17-Jun-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	0.589	0.050	0.6	0	98.2	70 - 130				
Surr: 2-Fluorobiphenyl	*0.05269*	*0.0050*	*0.06*	*0*	*87.8*	*60 - 135*				

LCSD Sample ID: **LCSD-213670** Units: **mg/L** Analysis Date: **17-Jun-2024 14:15**
Client ID: Run ID: **FID-16_469724** SeqNo: **8082772** PrepDate: **17-Jun-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
TPH (Diesel Range)	0.5586	0.050	0.6	0	93.1	70 - 130	0.589	5.29	20	
Surr: 2-Fluorobiphenyl	*0.05127*	*0.0050*	*0.06*	*0*	*85.5*	*60 - 135*	*0.05269*	*2.72*	*20*	

The following samples were analyzed in this batch: HS24060956-01

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: R470521 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-240626** Units: **ug/L** Analysis Date: **26-Jun-2024 09:30**
Client ID: Run ID: **FID-4_470521** SeqNo: **8100766** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	ND	1.00								
Methane	ND	0.500								
Propane	ND	1.50								

LCS Sample ID: **LCS-240626** Units: **ug/L** Analysis Date: **26-Jun-2024 09:45**
Client ID: Run ID: **FID-4_470521** SeqNo: **8100767** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	16.81	1.00	18.04	0	93.2	75 - 125				
Methane	8.881	0.500	9.647	0	92.1	75 - 125				
Propane	21.92	1.50	26.46	0	82.8	75 - 125				

LCSD Sample ID: **LCSD-240626** Units: **ug/L** Analysis Date: **26-Jun-2024 10:00**
Client ID: Run ID: **FID-4_470521** SeqNo: **8100768** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	16.7	1.00	18.04	0	92.6	75 - 125	16.81	0.689	30	
Methane	8.79	0.500	9.647	0	91.1	75 - 125	8.881	1.04	30	
Propane	21.65	1.50	26.46	0	81.8	75 - 125	21.92	1.23	30	

The following samples were analyzed in this batch: HS24060956-01

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: R470342 (0) **Instrument:** FID-20 **Method:** GASOLINE RANGE ORGANICS BY SW8015C

MBLK Sample ID: **MBLK-240624** Units: **mg/L** Analysis Date: **24-Jun-2024 11:55**
Client ID: Run ID: **FID-20_470342** SeqNo: **8096325** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	ND	0.0500								
Surr: 4-Bromofluorobenzene	*0.09303*	*0.00500*	*0.1*	*0*	*93.0*	*70 - 121*				

LCS Sample ID: **LCS-240624** Units: **mg/L** Analysis Date: **24-Jun-2024 11:28**
Client ID: Run ID: **FID-20_470342** SeqNo: **8096323** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.8648	0.0500	1	0	86.5	76 - 124				
Surr: 4-Bromofluorobenzene	*0.1107*	*0.00500*	*0.1*	*0*	*111*	*52 - 138*				

LCSD Sample ID: **LCSD-240624** Units: **mg/L** Analysis Date: **24-Jun-2024 11:41**
Client ID: Run ID: **FID-20_470342** SeqNo: **8096324** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.8373	0.0500	1	0	83.7	76 - 124	0.8648	3.23	20	
Surr: 4-Bromofluorobenzene	*0.08803*	*0.00500*	*0.1*	*0*	*88.0*	*52 - 138*	*0.1107*	*22.8*	*20*	R

The following samples were analyzed in this batch: HS24060956-01

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: 213919 (0) **Instrument: ICPMS07** **Method: TOTAL METALS BY E200.8, REV 5.4, 1994**

MBLK Sample ID: **MBLK-213919** Units: **ug/L** Analysis Date: **27-Jun-2024 11:52**
Client ID: Run ID: **ICPMS07_470579** SeqNo: **8102627** PrepDate: **24-Jun-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	ND	500								
Magnesium	ND	500								
Potassium	ND	500								
Sodium	ND	200								

LCS Sample ID: **LCS-213919** Units: **ug/L** Analysis Date: **26-Jun-2024 22:30**
Client ID: Run ID: **ICPMS07_470483** SeqNo: **8101399** PrepDate: **24-Jun-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	4804	500	5000	0	96.1	85 - 115				
Magnesium	4802	500	5000	0	96.0	85 - 115				
Potassium	4788	500	5000	0	95.8	85 - 115				
Sodium	4979	200	5000	0	99.6	85 - 115				

MS Sample ID: **HS24061270-02MS** Units: **ug/L** Analysis Date: **26-Jun-2024 22:49**
Client ID: Run ID: **ICPMS07_470483** SeqNo: **8101407** PrepDate: **24-Jun-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	265400	500	5000	247600	355	70 - 130				SEO
Magnesium	45360	500	5000	38780	132	70 - 130				SO
Potassium	45020	500	5000	38340	134	70 - 130				SO
Sodium	441600	200	5000	414500	541	70 - 130				SEO

MS Sample ID: **HS24061250-01MS** Units: **ug/L** Analysis Date: **26-Jun-2024 22:35**
Client ID: Run ID: **ICPMS07_470483** SeqNo: **8101401** PrepDate: **24-Jun-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	55780	500	5000	45400	208	70 - 130				SO
Magnesium	8283	500	5000	3334	99.0	70 - 130				
Potassium	9823	500	5000	4717	102	70 - 130				
Sodium	60440	200	5000	49810	213	70 - 130				SO

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: 213919 (0) **Instrument: ICPMS07** **Method: TOTAL METALS BY E200.8, REV 5.4, 1994**

MSD Sample ID: **HS24061270-02MSD** Units: **ug/L** Analysis Date: **26-Jun-2024 22:52**
Client ID: Run ID: **ICPMS07_470483** SeqNo: **8101408** PrepDate: **24-Jun-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	265600	500	5000	247600	360	70 - 130	265400	0.0857	20	SEO
Magnesium	45900	500	5000	38780	142	70 - 130	45360	1.18	20	SO
Potassium	45460	500	5000	38340	142	70 - 130	45020	0.967	20	SO
Sodium	445700	200	5000	414500	624	70 - 130	441600	0.93	20	SEO

MSD Sample ID: **HS24061250-01MSD** Units: **ug/L** Analysis Date: **26-Jun-2024 22:37**
Client ID: Run ID: **ICPMS07_470483** SeqNo: **8101402** PrepDate: **24-Jun-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	55120	500	5000	45400	194	70 - 130	55780	1.2	20	SO
Magnesium	8193	500	5000	3334	97.2	70 - 130	8283	1.09	20	
Potassium	9693	500	5000	4717	99.5	70 - 130	9823	1.33	20	
Sodium	59350	200	5000	49810	191	70 - 130	60440	1.83	20	SO

The following samples were analyzed in this batch: HS24060956-01

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: R470314 (0) **Instrument: VOA9** **Method: LOW LEVEL VOLATILES BY SW8260C**

MBLK Sample ID: **VBLKW-240621** Units: **ug/L** Analysis Date: **23-Jun-2024 14:48**
Client ID: Run ID: **VOA9_470314** SeqNo: **8095404** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	*49.42*	*1.0*	*50*	*0*	*98.8*	*70 - 123*				
Surr: 4-Bromofluorobenzene	*50.65*	*1.0*	*50*	*0*	*101*	*77 - 113*				
Surr: Dibromofluoromethane	*52.74*	*1.0*	*50*	*0*	*105*	*73 - 126*				
Surr: Toluene-d8	*55.58*	*1.0*	*50*	*0*	*111*	*81 - 120*				

LCS Sample ID: **VLCSW-240621** Units: **ug/L** Analysis Date: **23-Jun-2024 13:44**
Client ID: Run ID: **VOA9_470314** SeqNo: **8095402** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.4	1.0	20	0	87.0	74 - 120				
Ethylbenzene	18.5	1.0	20	0	92.5	77 - 117				
m,p-Xylene	38.92	2.0	40	0	97.3	77 - 122				
o-Xylene	19.84	1.0	20	0	99.2	75 - 119				
Toluene	18.4	1.0	20	0	92.0	77 - 118				
Xylenes, Total	58.76	3.0	60	0	97.9	75 - 122				
Surr: 1,2-Dichloroethane-d4	*52.06*	*1.0*	*50*	*0*	*104*	*70 - 123*				
Surr: 4-Bromofluorobenzene	*53.66*	*1.0*	*50*	*0*	*107*	*77 - 113*				
Surr: Dibromofluoromethane	*54.21*	*1.0*	*50*	*0*	*108*	*73 - 126*				
Surr: Toluene-d8	*57.35*	*1.0*	*50*	*0*	*115*	*81 - 120*				

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: R470314 (0) **Instrument: VOA9** **Method: LOW LEVEL VOLATILES BY SW8260C**

LCSD Sample ID: **VLCSDW-240621** Units: **ug/L** Analysis Date: **23-Jun-2024 14:05**
Client ID: Run ID: **VOA9_470314** SeqNo: **8095403** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Benzene	17.27	1.0	20	0	86.4	74 - 120	17.4	0.732	20	
Ethylbenzene	18.3	1.0	20	0	91.5	77 - 117	18.5	1.08	20	
m,p-Xylene	37.89	2.0	40	0	94.7	77 - 122	38.92	2.69	20	
o-Xylene	19.5	1.0	20	0	97.5	75 - 119	19.84	1.71	20	
Toluene	18.24	1.0	20	0	91.2	77 - 118	18.4	0.881	20	
Xylenes, Total	57.39	3.0	60	0	95.7	75 - 122	58.76	2.36	20	
Surr: 1,2-Dichloroethane-d4	*52.43*	*1.0*	*50*	*0*	*105*	*70 - 123*	*52.06*	*0.708*	*20*	
Surr: 4-Bromofluorobenzene	*53.84*	*1.0*	*50*	*0*	*108*	*77 - 113*	*53.66*	*0.347*	*20*	
Surr: Dibromofluoromethane	*56.06*	*1.0*	*50*	*0*	*112*	*73 - 126*	*54.21*	*3.35*	*20*	
Surr: Toluene-d8	*58.36*	*1.0*	*50*	*0*	*117*	*81 - 120*	*57.35*	*1.76*	*20*	

The following samples were analyzed in this batch: HS24060956-01

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: R469874 (0) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

MBLK Sample ID: **WMBLK-06192024** Units: **mg/L** Analysis Date: **19-Jun-2024 09:30**
Client ID: Run ID: **Balance1_469874** SeqNo: **8086157** 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)	ND	10.0								

LCS Sample ID: **WLCS-06192024** Units: **mg/L** Analysis Date: **19-Jun-2024 09:30**
Client ID: Run ID: **Balance1_469874** SeqNo: **8086156** 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)	930	10.0	1000	0	93.0	85 - 115				

DUP Sample ID: **HS24061010-01 DUP** Units: **mg/L** Analysis Date: **19-Jun-2024 09:30**
Client ID: Run ID: **Balance1_469874** SeqNo: **8086148** 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)	420	10.0					422	0.475	20	

DUP Sample ID: **HS24060967-02 DUP** Units: **mg/L** Analysis Date: **19-Jun-2024 09:30**
Client ID: Run ID: **Balance1_469874** SeqNo: **8086146** 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)	12240	10.0					12260	0.163	20	

The following samples were analyzed in this batch: HS24060956-01

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: R470551 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **26-Jun-2024 21:28**
Client ID: Run ID: **ICS-Integrion_470551** SeqNo: **8101791** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.500								
Sulfate	ND	0.500								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **26-Jun-2024 21:39**
Client ID: Run ID: **ICS-Integrion_470551** SeqNo: **8101792** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	20.71	0.500	20	0	104	90 - 110				
Sulfate	21.61	0.500	20	0	108	90 - 110				

MS Sample ID: **HS24061564-04MS** Units: **mg/L** Analysis Date: **27-Jun-2024 00:37**
Client ID: Run ID: **ICS-Integrion_470551** SeqNo: **8101816** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	468.6	5.00	100	405.2	63.4	80 - 120				SO
Sulfate	498.7	5.00	100	460.3	38.4	80 - 120				SO

MS Sample ID: **HS24061564-02MS** Units: **mg/L** Analysis Date: **26-Jun-2024 23:26**
Client ID: Run ID: **ICS-Integrion_470551** SeqNo: **8101806** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	260.3	5.00	100	166.4	94.0	80 - 120				
Sulfate	421.6	5.00	100	343.5	78.1	80 - 120				S

MSD Sample ID: **HS24061564-04MSD** Units: **mg/L** Analysis Date: **27-Jun-2024 00:43**
Client ID: Run ID: **ICS-Integrion_470551** SeqNo: **8101817** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	470.1	5.00	100	405.2	64.9	80 - 120	468.6	0.328	20	SO
Sulfate	505.6	5.00	100	460.3	45.3	80 - 120	498.7	1.37	20	SO

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: R470551 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY E300.0, REV 2.1, 1993

MSD Sample ID: **HS24061564-02MSD** Units: **mg/L** Analysis Date: **26-Jun-2024 23:32**
Client ID: Run ID: **ICS-Integrion_470551** SeqNo: **8101807** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	259.7	5.00	100	166.4	93.3	80 - 120	260.3	0.254	20	
Sulfate	422.6	5.00	100	343.5	79.1	80 - 120	421.6	0.233	20	S

The following samples were analyzed in this batch: HS24060956-01

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: HS24060956

QC BATCH REPORT

Batch ID: R470778 (0) **Instrument: Skalar 03** **Method: ALKALINITY BY -2011**

MBLK Sample ID: **MBLK-06282024** Units: **mg/L** Analysis Date: **28-Jun-2024 09:20**
Client ID: Run ID: **Skalar 03_470778** SeqNo: **8107018** 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)	ND	5.00								
Alkalinity, Carbonate (As CaCO3)	ND	5.00								
Alkalinity, Total (As CaCO3)	ND	5.00								

LCS Sample ID: **LCS-06282024** Units: **mg/L** Analysis Date: **28-Jun-2024 10:09**
Client ID: Run ID: **Skalar 03_470778** SeqNo: **8107012** 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)	981.6	5.00	1000	0	98.2	85 - 115				
Alkalinity, Total (As CaCO3)	982	5.00	1000	0	98.2	85 - 115				

LCSD Sample ID: **LCSD-06282024** Units: **mg/L** Analysis Date: **28-Jun-2024 10:15**
Client ID: Run ID: **Skalar 03_470778** SeqNo: **8107013** 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)	983.4	5.00	1000	0	98.3	85 - 115	981.6	0.183	20	
Alkalinity, Total (As CaCO3)	985.8	5.00	1000	0	98.6	85 - 115	982	0.386	20	

DUP Sample ID: **HS24060949-01DUP** Units: **mg/L** Analysis Date: **28-Jun-2024 09:51**
Client ID: Run ID: **Skalar 03_470778** SeqNo: **8107021** 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)	717.8	5.00					726.3	1.18	20	
Alkalinity, Carbonate (As CaCO3)	32.4	5.00					32	1.24	20	
Alkalinity, Total (As CaCO3)	750.2	5.00					758.3	1.07	20	

The following samples were analyzed in this batch: HS24060956-01

Client: PDC Energy
Project: Sylvester G 06-30D
WorkOrder: **HS24060956**

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 Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arizona	AZ0793	27-May-2025
Arkansas	88-00356_2024	27-Mar-2025
California	2919; 2025	30-Apr-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Kentucky	123043	30-Apr-2025
Louisiana	03087 2023-2024	30-Jun-2025
Maine	2024017	23-Jun-2026
Maryland	343; 2023-2024	30-Jun-2024
Michigan	9971	30-Apr-2025
North Carolina	624 - 2024	31-Dec-2024
Oklahoma	2023-140	31-Aug-2024
Tennessee	04016	30-Apr-2025
Texas	T104704231 TX-C24-00130	30-Apr-2025
Utah	TX026932023-14	31-Jul-2024

Sample Receipt Checklist

Work Order ID: HS24060956 **Date/Time Received:** **15-Jun-2024 09:00**

Client Name: PDC Energy 80203 **Received by:** **Ruben Estrada-Jr**

Completed By:	/S/ Hoa Tran	15-Jun-2024 10:43	**Reviewed by:**	/S/ Tyler Monroe	17-Jun-2024 08:42
	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):	0.1uc/0.2c	ir31
Cooler(s)/Kit(s):	52172	
Date/Time sample(s) sent to storage:	06/15/2024 1135	

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:

Corrective Action:

ALS Environmental
965 E 11th St
Loveland, CO 80537
PH: 970-305-1648

Chain-of-Custody

WORKORDER #

PAGE 1 of 1

DISPOSAL By Lab or Return to Client

SAMPLER	Jeff Braden	DATE	6/14/24
PROJECT NAME	Sylvester G 06-30D	FACILITY ID	123-33120
PROJECT No.		EDD FORMAT	ECMC EDD, LTE
	PDCE Bradenhead Sampling	PURCHASE ORDER	N/A
COMPANY NAME	PDC Energy	BILL TO COMPANY	PDC Energy
SEND REPORT TO	Jessiac Johannsen,Cassie Gonzalez, Raul Sanchez, Evan Varnas	INVOICE ATTN TO	Christopher Schelich
ADDRESS	1775 Sherman ST, Suite 3000	ADDRESS	1775 Sherman Street, Suite 3000
CITY / STATE / ZIP	Denver, CO 80203	CITY / STATE / ZIP	Denver, Colorado
PHONE	303-860-5815	PHONE	970-415-1881
FAX		FAX	
E-MAIL	Jessica.Johannsen@chevron.com Cassie.Gonzales@chevron.com Raul.Sanchez@chevron.com Evan.Varnas @chevron.com	E-MAIL	Christopher.Schelich@pdce.com

TURNAROUND: Standard

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	Dissolved Methane, Ethane, Propane RSK 175	BTEX & TPH GRO SW8260_25	TPH DRO SW8015M	Alkalinity, Carbonate, Bicarbonate, Total SM2320B	Total Cations - see comments EPA200.7/208	Total Anions - see comments EPA 300.0	Total Dissolved Solids SM2540C
	Sylvester G 06-30D	W	6/14/24	1250	11	1,2	II	X	X	X	X	X	X	X

HS24060956
PDC Energy
Sylvester G 06-30D

*Time Zone: MST

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:

Cations/Anions:

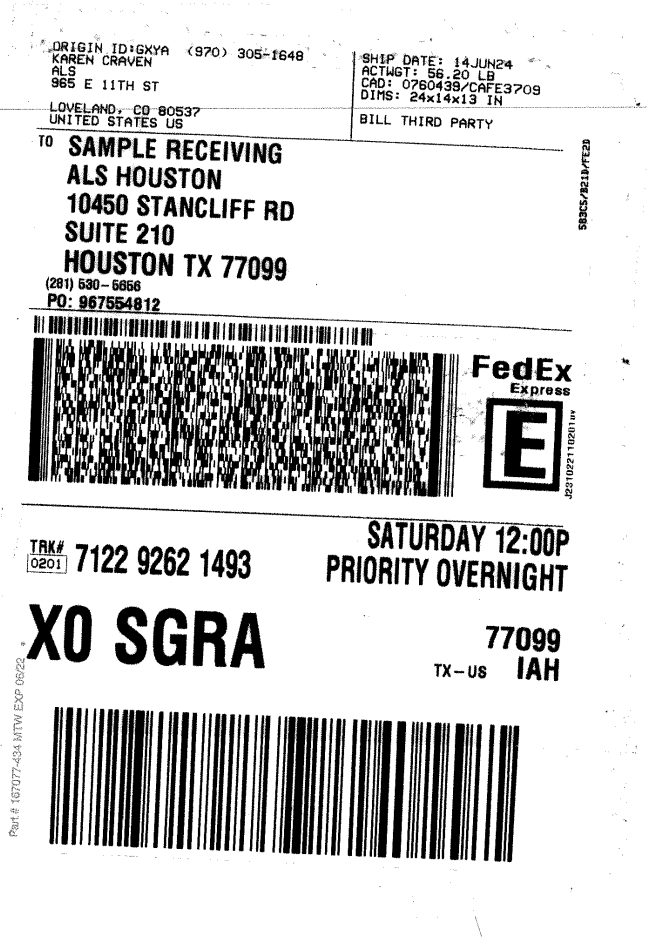
Calcium, Chloride, Magnesium, Potassium, Sodium, Sulfate*
Samples analyzed per
ECMC Bradenhead Sampling Program
If bubbles are present in voas, please proceed with analysis

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		Jeff Braden	6/14/24	1500
RECEIVED BY		Tyler Monroe	6/14/24	1500
RELINQUISHED BY		Tyler Monroe	6/14/24	1600
RECEIVED BY		RUBEN ESTRADA	6/15/24	0900
RELINQUISHED BY				
RECEIVED BY				

IR31 +0.1 1.3c


ORIGIN ID:GXYA (970) 305-1648
KAREN CRAVEN
ALS
965 E 11TH ST

LOVELAND, CO 80537
UNITED STATES US

SHIP DATE: 14JUN24
ACTWGT: 56.20 LB
CAD: 0760439/CAFE3709
DIMS: 24x14x13 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
ALS HOUSTON
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
(281) 530-5656
PO: 967554812

583CS/8219/FE2D

FedEx Express

J23102211020Inv

TRK# 0201 7122 9262 1493

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO SGRA

77099
TX-US IAH

Part # 167077-434 MTW EXP 05/25