PDC Energy, Inc.
Fourth Quarter 2021 Groundwater Monitoring Summary

December 16, 2021

Former Dinner 14 B-1 Wellhead
SESW Section 14 T4N R66W
Remediation # 18114

This groundwater monitoring summary has been prepared by Tasman, Inc. for the former Dinner 14 B-1 Wellhead.

Site History and Background

On July 15, 2021, a historic hydrocarbon release was discovered at the former wellhead. Following the discovery, mitigation activities were initiated and between July 15, and August 9, 2021, approximately 3,189.5 cubic yards of impacted material were removed from the former excavation. During excavation activities, groundwater was encountered in the excavation at approximately 11 feet below ground surface (bgs). Groundwater vacuum recovery was conducted concurrent with excavation activities and 9,685 barrels of groundwater were removed from site.

Monitoring Well Installation Activities

On October 18, 2021, eight monitoring wells (BH01 – BH08) were installed to confirm the absence of dissolved-phase hydrocarbon impacts within and adjacent to the former excavation extent. Lithologic descriptions and volatile organic compound (VOC) concentrations measured using a photoionization detector (PID) were recorded for each monitoring well. Per the Condition of Approval (COC) issued by the COGCC, one sample was collected from each borehole at depths ranging between 17 feet and 23 feet bgs to confirm the absence of hydrocarbon impacts. Additionally, due to elevated PID readings exhibited in borehole BH04, one sample was collected from the interval exhibiting the highest VOC concentration at 22-23 feet bgs, as well as the terminus of the soil boring at 29-30 feet bgs. Nine (9) soil samples were submitted to Summit Scientific Laboratory for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, 1,2,4-trimethylbenzene (TMB), 1,3,5-TMB, total petroleum hydrocarbons (TPH)[C6-C36], fluorene, pyrene, 1-methylnaphthalene (M), 2-M, pH, electrical conductivity (EC), sodium adsorption ratio (SAR), and boron. Boring and well completion logs are included as Attachment A.

Soil analytical results indicated that constituent concentrations were in compliance with the applicable COGCC Table 915-1 regulatory standards in all soil samples collected during monitoring well installation activities. Soil analytical results are summarized in Tables 1 and 2. The laboratory analytical reports are included in Attachment B.

Groundwater Monitoring Activities

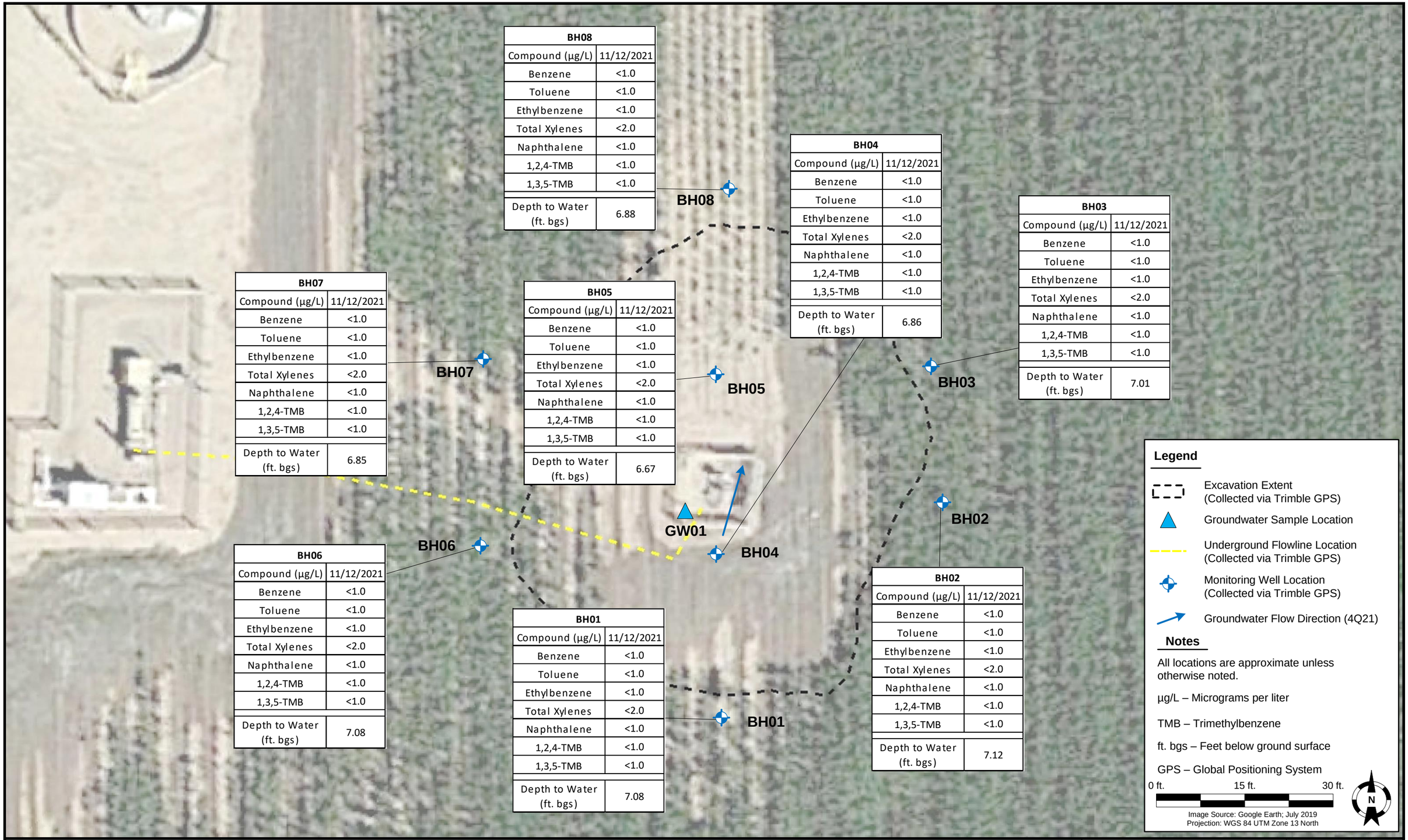
On November 12, 2021, groundwater monitoring was conducted at all eight monitoring wells (BH01 – BH09). Eight (8) groundwater samples were submitted to Summit Scientific Laboratories for analysis of BTEX, naphthalene, 1,2,4-TMB, and 1,3,5-TMB by EPA Method 8260B. Additionally, groundwater samples BH01, BH04, and BH08 were submitted for laboratory analysis of chloride and sulfate anions by EPA Method 300.0 and total dissolved solids (TDS) by Method SM 2540C.

Fourth quarter 2021 analytical results indicated that organic compound concentrations were below the applicable COGCC Table 915-1 groundwater standards in all eight monitoring well locations. Additionally, inorganic parameters were in compliance with the applicable COGCC Table 915-1 regulatory standards or within 1.25x the background concentration of the up-gradient monitoring well (BH01) in monitoring wells BH04 and BH08. Sample locations and corresponding analytical results are illustrated on Figures 1 and 2. Groundwater elevation data is illustrated on Figure 3. Groundwater analytical results are summarized in Tables 3 and 4. The laboratory analytical report is included in Attachment B.

Current Remediation Activities and Path Forward

Monitored natural attenuation (MNA) was selected as the remediation strategy for this site during the fourth quarter 2021 and will remain the selected remediation strategy through the first quarter 2022.

First quarter 2022 groundwater sampling will be conducted in February 2022.



BH08	
Compound (µg/L)	11/12/2021
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalene	<1.0
1,2,4-TMB	<1.0
1,3,5-TMB	<1.0
Depth to Water (ft. bgs)	6.88

BH04	
Compound (µg/L)	11/12/2021
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalene	<1.0
1,2,4-TMB	<1.0
1,3,5-TMB	<1.0
Depth to Water (ft. bgs)	6.86

BH03	
Compound (µg/L)	11/12/2021
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalene	<1.0
1,2,4-TMB	<1.0
1,3,5-TMB	<1.0
Depth to Water (ft. bgs)	7.01

BH07	
Compound (µg/L)	11/12/2021
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalene	<1.0
1,2,4-TMB	<1.0
1,3,5-TMB	<1.0
Depth to Water (ft. bgs)	6.85

BH05	
Compound (µg/L)	11/12/2021
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalene	<1.0
1,2,4-TMB	<1.0
1,3,5-TMB	<1.0
Depth to Water (ft. bgs)	6.67

BH06	
Compound (µg/L)	11/12/2021
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalene	<1.0
1,2,4-TMB	<1.0
1,3,5-TMB	<1.0
Depth to Water (ft. bgs)	7.08

BH01	
Compound (µg/L)	11/12/2021
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalene	<1.0
1,2,4-TMB	<1.0
1,3,5-TMB	<1.0
Depth to Water (ft. bgs)	7.08

BH02	
Compound (µg/L)	11/12/2021
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<2.0
Naphthalene	<1.0
1,2,4-TMB	<1.0
1,3,5-TMB	<1.0
Depth to Water (ft. bgs)	7.12

Legend

- Excavation Extent (Collected via Trimble GPS)
- Groundwater Sample Location
- Underground Flowline Location (Collected via Trimble GPS)
- Monitoring Well Location (Collected via Trimble GPS)
- Groundwater Flow Direction (4Q21)

Notes

All locations are approximate unless otherwise noted.

µg/L – Micrograms per liter

TMB – Trimethylbenzene

ft. bgs – Feet below ground surface

GPS – Global Positioning System

0 ft. 15 ft. 30 ft.

N

Image Source: Google Earth; July 2019
Projection: WGS 84 UTM Zone 13 North

DATE:	December 14, 2021
DESIGNED BY:	B. Nelson
DRAWN BY:	J. Marcus

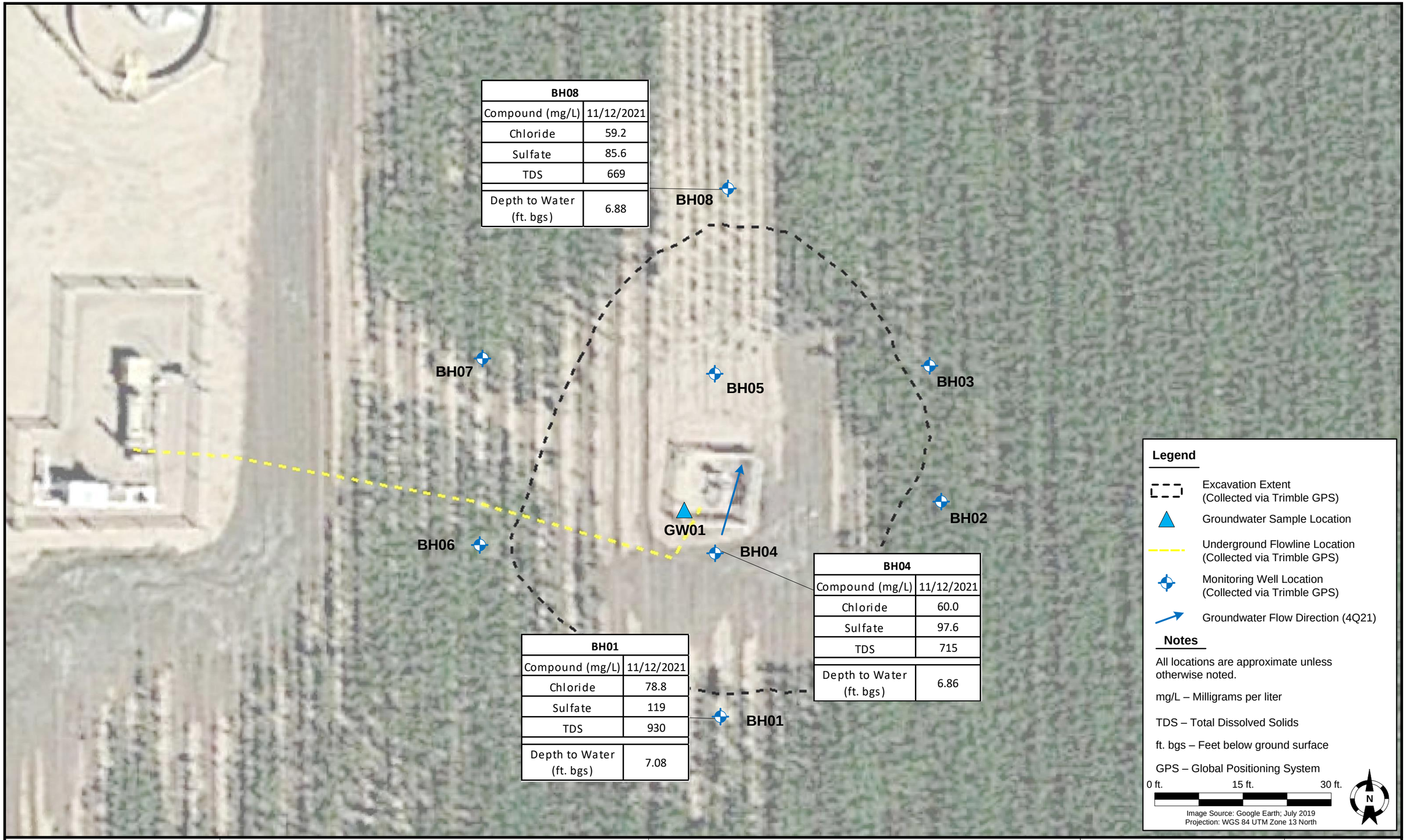
TASMAN

Tasman, Inc.
6855 W. 119th Ave.
Broomfield, CO 80020

PDC Energy, Inc. – DJ Basin
Former Dinner 14 B-1 Wellhead
SESW, Section 14, Township 4 North, Range 66 West
Weld County, Colorado

GROUNDWATER ANALYTICAL RESULTS MAP

FIGURE 1



DATE:	December 16, 2021
DESIGNED BY:	B. Nelson
DRAWN BY:	J. Marcus

TASMAN

Tasman, Inc.
6855 W. 119th Ave.
Broomfield, CO 80020

PDC Energy, Inc. – DJ Basin
Former Dinner 14 B-1 Wellhead
SESW, Section 14, Township 4 North, Range 66 West
Weld County, Colorado

GROUNDWATER ANALYTICAL RESULTS MAP (INORGANIC PARAMETERS)

FIGURE 2

BH08
4707.66

BH07
4707.79

BH05
4707.66

BH03
4707.65

4707.70

BH02
4707.79

GW01

BH06
4707.86

BH04
4707.86

4707.80

BH01
4707.94

4707.90

Legend

- Excavation Extent (Collected via Trimble GPS)
- Groundwater Sample Location
- Underground Flowline Location (Collected via Trimble GPS)
- Monitoring Well Location (Collected via Trimble GPS)
- **4740.36** Groundwater Elevation (ft. AMSL)
- Groundwater Flow Direction (4Q21)

Notes

All locations are approximate unless otherwise noted.

ft. AMSL – Feet Above Mean Sea Level

GPS – Global Positioning System

0 ft. 15 ft. 30 ft.

N

Image Source: Google Earth; July 2019
Projection: WGS 84 UTM Zone 13 North

DATE:	November 30, 2020
DESIGNED BY:	B. Nelson
DRAWN BY:	J. Clonts

TASMAN

Tasman, Inc.
6855 W. 119th Ave.
Broomfield, CO 80020

PDC Energy, Inc. – DJ Basin
Former Dinner 14 B-1 Wellhead
SESW, Section 14, Township 4 North, Range 66 West
Weld County, Colorado

GROUNDWATER ELEVATION CONTOUR MAP (11/12/2021)

FIGURE 3

TABLE 1
FORMER DINNER 14 B-1 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE
CONTAMINANTS OF CONCERN

Sample ID	Date Sampled	Depth	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	1, 2, 4-TMB (mg/kg)	1, 3, 5-TMB (mg/kg)	Naphthalene (mg/kg)	TPH[4] (mg/kg)	Fluorene (mg/kg)	Pyrene (mg/kg)	1-M (mg/kg)	2-M (mg/kg)
Residential SSL [1,2]			**1.2**	**490**	**5.8**	**58**	**30**	**27**	**2**	**500**	**240**	**180**	**18**	**24**
Protection of Groundwater SSL [1,2,3]			**0.0026**	**0.69**	**0.78**	**9.9**	**0.0081**	**0.0087**	**0.0038**	**500**	**0.54**	**1.3**	**0.006**	**0.019**
SS01 @ 10'	7/15/2021	10 ft. bgs	**0.078**	<0.0050	**4.6**	5.1	**59**	**9.3**	**0.092**	**5,210**	0.0818	0.00611	**0.485**	**0.885**
SS02 @ 20'	7/20/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS03 @ 20'	7/30/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS04 @ 18'	7/30/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	1.4	<0.00500	<0.00500	<0.00500	<0.00500
SS05 @ 10'	7/30/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS06 @ 5'	7/30/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS07 @ 20'	8/2/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS08 @ 18'	8/2/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS09 @ 10'	8/2/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS10 @ 5'	8/2/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS11 @ 20'	8/3/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS12 @ 20'	8/3/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS13 @ 18'	8/3/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS14 @ 10'	8/3/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS15 @ 5'	8/3/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS16 @ 20'	8/4/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS17 @ 18'	8/4/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	0.56	<0.00500	<0.00500	<0.00500	<0.00500
SS18 @ 10'	8/4/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS19 @ 5'	8/4/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS20 @ 20'	8/4/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	1.5	<0.00500	<0.00500	<0.00500	<0.00500
SS21 @ 18'	8/4/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	1.9	<0.00500	<0.00500	<0.00500	<0.00500
SS22 @ 10'	8/4/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS23 @ 5'	8/4/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS24 @ 20'	8/4/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS25 @ 18'	8/4/2021	18 ft. bgs	<0.0020	<0.0050	0.010	0.075	**0.037**	**0.028**	<0.0038	6.5	<0.00500	<0.00500	<0.00500	<0.00500
SS26 @ 10'	8/4/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS27 @ 5'	8/4/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS28 @ 18'	8/5/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS29 @ 10'	8/5/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS30 @ 5'	8/5/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS31 @ 20'	8/6/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS32 @ 18'	8/6/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS33 @ 10'	8/6/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS34 @ 5'	8/6/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS35 @ 20'	8/6/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS36 @ 18'	8/6/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS37 @ 10'	8/6/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS38 @ 5'	8/6/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS39 @ 20'	8/9/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS40 @ 18'	8/9/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS41 @ 10'	8/9/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS42 @ 5'	8/9/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS44 @ 20'	8/9/2021	20 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS45 @ 18'	8/9/2021	18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS46 @ 10'	8/9/2021	10 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
SS47 @ 5'	8/9/2021	5 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
BH01 @ 17-18'	10/18/2021	17-18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
BH02 @ 17-18'	10/19/2021	17-18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
BH03 @ 17-18'	10/19/2021	17-18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
BH04 @ 22-23'	10/19/2021	22-23 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
BH04 @ 29-30'	10/19/2021	29-30 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
BH05 @ 22-23'	10/21/2021	22-23 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
BH06 @ 17-18'	10/21/2021	17-18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
BH07 @ 17-18'	10/22/2021	17-18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500
BH08 @ 17-18'	10/22/2021	17-18 ft. bgs	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.00500	<0.00500	<0.00500	<0.00500

Notes:
1. Compounds referenced from the COGCC 2 CCR 404-1, Table 915-1, effective January 15, 2021.
2. Soil Screening Levels (SSL) referenced from EPA Regional Screening Levels (EPA RSLs) for Chemical Contaminants at Superfund Sites, effective November 2020.
3. SSLs are applicable if a pathway for communication with groundwater is present.
4. Value calculated by adding TVPH-GRO, TEPH-DRO, and TEPH-ORO concentrations.

COGCC = Colorado Oil and Gas Conservation Commission
(<) = Analytical result is less than the indicated laboratory reporting limit.
TVPH-GRO = Total volatile petroleum hydrocarbons - gasoline range organics
TEPH-DRO = Total extractable petroleum hydrocarbons - diesel range organics
TEPH-ORO = Total extactable petroleum hydrocarbons - oil range organics
mg/kg = Milligrams per kilogram
TMB = Trimethylbenzene
M = Methylnaphthalene
= Source material characterization sample
ft. = Feet
bgs = Below ground surface
BOLD = Analytical result is in exceedance of applicable standard and above 1.25x background concentration.

TABLE 2
FORMER DINNER 14 B-1 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE
INORGANIC COMPOUNDS

Sample ID	Date Sampled	Depth	pH (units)	EC (mmhos/cm)	SAR (units)	Boron (mg/L)
Soil Suitabilty for Reclamation Standard [(1)]			**6-8.3**	**<4**	**<6**	**2**
SS01 @ 10'	7/15/2021	10 ft. bgs	8.06	0.841	2.19	0.373
SS43 @ 2.5'	8/9/2021	2.5 ft. bgs	8.13	0.978	2.27	0.167
BH01 @ 17-18'	10/18/2021	17-18 ft. bgs	8.21	0.486	2.02	0.168
BH02 @ 17-18'	10/19/2021	17-18 ft. bgs	8.28	0.402	2.18	0.147
BH03 @ 17-18'	10/19/2021	17-18 ft. bgs	8.23	0.864	2.75	0.0976
BH04 @ 22-23'	10/19/2021	22-23 ft. bgs	8.24	0.568	2.24	0.0820
BH04 @ 29-30'	10/19/2021	29-30 ft. bgs	7.48	1.06	2.12	0.0428
BH05 @ 22-23'	10/21/2021	22-23 ft. bgs	8.07	0.711	2.52	0.0512
BH06 @ 17-18'	10/21/2021	17-18 ft. bgs	8.20	0.934	2.90	0.141
BH07 @ 17-18'	10/22/2021	17-18 ft. bgs	8.10	1.03	3.58	0.145
BH08 @ 17-18'	10/22/2021	17-18 ft. bgs	8.13	0.908	2.93	0.120

Notes:
1. Compounds referenced from the COGCC 2 CCR 404-1, Table 915-1, effective January 15, 2021.
COGCC = Colorado Oil and Gas Conservation Commission
EC = Electrical conductivity
SAR = Sodium adsorption ratio
mmhos/cm = millimhos per centimeter
mg/L = millgram per liter
= Source material characterization sample
ft. = Feet
bgs = Below ground surface

TABLE 3
FORMER DINNER 14 B-1 WELLHEAD
GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE
ORGANIC COMPOUNDS

Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Naphthalene (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	Depth to Water [2] (ft.)	Groundwater Elevation (ft. AMSL)
COGCC Table 915-1 Groundwater Standard (µg/L) [1]		**5**	**560**	**700**	**1,400**	**140**	**67**	**67**	**-**	**-**
BH01	11/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.08	4707.94
BH02	11/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.12	4707.79
BH03	11/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.01	4707.65
BH04	11/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.86	4707.86
BH05	11/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.67	4707.66
BH06	11/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.08	4707.86
BH07	11/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.85	4707.79
BH08	11/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.88	4707.66

1. Groundwater standards referenced from 2 CCR 404-1, Table 915-1, January 15, 2021.
2. Depth to water measurements were measured from ground surface for excavation samples. Monitoring well measurements were collected from top of casing and adjusted using survey data to reflect depth of water from ground surface.
TMB = Trimethylbenzene
COGCC = Colorado Oil and Gas Conservation Commission
µg/L = Micrograms per liter
(<) = Analytical result is less than the indicated laboratory reporting limit.
ft. = Feet
AMSL = Above Mean Sea Level

TABLE 4
FORMER DINNER 14 B-1 WELLHEAD
GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE
INORGANIC PARAMETERS

Sample ID	Date Sampled	TDS (unit)	Chloride Ion (mg/L)	Sulfate Ion (mg/L)	Depth to Water [2] (ft.)	Groundwater Elevation (ft. AMSL)
COGCC Table 915-1 Groundwater Standard (mg/L) [1]		**<1.25 x BCKG**	**250 or <1.25 x BCKG**	**250 or <1.25 x BCKG**	**-**	**-**
BH01	11/12/2021	930	78.8	119	7.08	4707.94
BH04	11/12/2021	715	60.0	97.6	6.86	4707.86
BH08	11/12/2021	669	59.2	85.6	6.88	4707.66

Notes:

1. Groundwater standards referenced from 2 CCR 404-1, Table 915-1, January 15, 2021.
2. Depth to water measurements were measured from ground surface for excavation samples. Monitoring well measurements were collected from top of casing and adjusted using survey data to reflect depth of water from ground surface.

TDS = Total dissolved solids
COGCC = Colorado Oil and Gas Conservation Commission
BCKG = Background
mg/L = Milligrams per liter
(<) = Analytical result is less than the indicated laboratory reporting limit.
= Up-gradient well location used for background concentration.
ft. = Feet
AMSL = Above Mean Sea Level

Attachment A

TASMAN GEOSCIENCES

Borehole Logging Form

BOREHOLE ID: BH01	SITE NAME: Dinner 14 B-1	CLIENT NAME: PDC ENERGY
Date Completed: 10/18/21	Location: South upgradient	
Drilling Company: Site Services	Surface Completion: Flush DTW: ~8' TD: ~25'	
Type of Drill: CME 55	Geologist: Kris Shepherd	Project Manager: B. Nelson
Bit Size: 8"	Logging Method: Continuous	
Well Const. Material: Diameter: 2"	Screen: Sch 40 PVC Slotted 0.010	Riser: Sch 40 PVC Blank

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1							Hydrovac, not logged
2							
3							
4							
5							
6							
7		HSA	100%	0.0		SP	Brown, Sand, fine to coarse grain, well sorted, moist, no odor
8 ▽							-Saturated at 8'
9							
10				0.0			
11		HSA	25%				
12				0.0			
13							
14				0.0			
15							
16		HSA	75%				
17				0.0	SB01@ 17-18' (1415)		
18						CL	Tan, sandy clay, fine grain Sand, moderate plasticity, saturated, no odor
19				0.0			
20							
21		HSA	80%	0.0			
22							
23				0.0			
24		HSA	0%				-No Recovery 23'-25'
25							

TASMAN GEOSCIENCES

Borehole Logging Form

BOREHOLE ID: BH02	SITE NAME: Dimmer 14 B-1	CLIENT NAME: PDC ENERGY
Date Completed: 10/19/21	Location: SE upgradient	
Drilling Company: Site Services	Surface Completion: Flush	DTW: ~8' TD: ~25'
Type of Drill: CME 55	Geologist: Kris Shepherd	Project Manager: B. Nelson
Bit Size: 8"	Logging Method: Continuous	
Well Const. Material: Diameter: 2"	Screen: Sch 40 PVC Slotted 0.010	Riser: Sch 40 PVC Blank

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1							Hydrovac, not logged
2							
3							
4							
5							
6							
7		HSA	100%	0.0		SW	Brown, sand, fine to medium grain, poorly sorted, moist, no odor
8 ▽							-Saturated @ 8'
9							
10							
11		HSA	25%				
12				0.0			
13							
14				0.0			
15							
16		HSA	80%	0.1			
17				0.0	BH02@ 17-18' (0915)		
18						CL	Tan to light brown, sandy clay, fine grain sand, moderate plasticity, saturated, no odor
19				0.0			
20							
21		HSA	50%				
22				0.0			
23							
24		HSA	10%	0.0		SP	Tan, sand, fine to coarse grain, well sorted, saturated, no odor
25							

Borehole Logging Form

TASMAN GEOSCIENCES

BOREHOLE ID: BH03	SITE NAME:	CLIENT NAME: PDC ENERGY
Date Completed: 10/19/21	Location: NE upgradient	
Drilling Company: Site Services	Surface Completion: flush	DTW: ~7.5' TD: ~25'
Type of Drill: CME 55	Geologist: Kris Shepherd	Project Manager: B. Nelson
Bit Size: 8"	Logging Method: Continuous	
Well Const. Material: Diameter: 2"	Screen: Sch 40 PVC Slotted 0.010	Riser: Sch 40 PVC Blank

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1							Hydrovac, not logged
2							
3							
4							
5	Silica Sand						
6						SW	Brown, sand, fine to medium grain, poorly sorted, moist no odor
7 ▽		HSA	100%	0.0			
8						SP	Tan, sand, fine to coarse grain, well sorted, saturated, no odor
9							— No recovery 8'-13'
10							
11		HSA	0%				
12							
13							
14				0.0		SP	Tan, sand, fine to coarse grain, well sorted, saturated, no odor
15							
16	Native Flowing Sands	HSA	20%				
17				0.0			
18						CL	Tan to light brown, sandy clay, fine grain sand, moderate plasticity, saturated, no odor
19				0.0			
20							
21		HSA	80%	0.0			
22				0.0			
23							
24		HSA	50%	0.0		SP	Tan, sand, fine to coarse grain, well sorted, saturated, no odor.
25							

TASMAN GEOSCIENCES

Borehole Logging Form

BOREHOLE ID: BH04	SITE NAME: Dinner 14 B-1	CLIENT NAME: PDC ENERGY
Date Completed: 10/19/21	Location: South Source	
Drilling Company: Site Services	Surface Completion: Flush	DTW: ~7.5' TD: 30'
Type of Drill: CME 55	Geologist: Kris Shepherd	Project Manager: B. Nelson
Bit Size: 8"	Logging Method: Continuous	
Well Const. Material: Diameter: 2"	Screen: Sch 40 PVC Slotted 0.010	Riser: Sch 40 PVC Blank

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1							Hydrovac, not logged
2							
3							
4							
5							
6							
7	Silica Sand	HSA	50%	0.1		SC	Brown to tan, clayey sand, fine to coarse grain, well sorted, trace gravel, moist, no odor
8							-Saturated at ~7.5'
9				0.0			
10							
11		HSA	60%				
12				0.0			
13							
14				0.0			
15			50%				
16		HSA					
17				0.2			
18							
19				1.7			
20							
21	Native Heaving Sand	HSA	80%	5.9		CL	Tan, sandy clay, fine grain sand, low plasticity, saturated, no odor
22					BH04@ 22-23' (1500)		
23				156		SP	Tan, sand, fine to coarse grain, well sorted, saturated, no odor
24		HSA	0%				-No recovery 23'-25'
25							

TASMAN GEOSCIENCES

Borehole Logging Form

BOREHOLE ID: BH04	SITE NAME: Dimmer 14 B-1	CLIENT NAME: PDC ENERGY
Date Completed: 10/19/21	Location: South Source	
Drilling Company: Site Services	Surface Completion: flush	DTW: ~7.5' TD: 30'
Type of Drill: CME 55	Geologist: K. Shepherd	Project Manager: B. Nelson
Bit Size: 8"	Logging Method: Continuous	
Well Const. Material: Diameter:	Screen: Sch 40 PVC Slotted 0.010	Riser: Sch 40 PVC Blank

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
26	Native flowing Sand					SP	Tan, sand, fine to coarse grain, well sorted, saturated, no odor
27							
28		HSA	20%				
29					BH04@ 29-30' (1530)		
30				1.6			
31							- While pulling augers out of hole, well pulled up ~2'. Screen interval top originally at 5ft, moved to 3ft.
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

TASMAN GEOSCIENCES

Borehole Logging Form

BOREHOLE ID: BH05	SITE NAME: Dinner 14 B-1	CLIENT NAME: PDC ENERGY
Date Completed: 10/21/21	Location: North Source	
Drilling Company: Site Services	Surface Completion: Flush	DTW: ~8' TD: ~25'
Type of Drill: CME 55	Geologist: Kris Shepherd	Project Manager: B. Nelson
Bit Size: 8"	Logging Method: Continuous	
Well Const. Material: Diameter: 2"	Screen: Sch 40 PVC 0.010 Slot	Riser: Sch 40 PVC Blank

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1							Hydrovac, not Logged
2							
3							
4							
5							
6							
7		HSA	50%	0.0		SC	Brown to tan, clayey sand, fine to coarse grain, trace gravel, moist, no odor
8 ▽							
9				0.0			- As above, Saturated
10							
11		HSA	50%				
12				0.0			
13							
14							
15				1.5			
16		HSA	75%				
17				0.1			
18							
19							
20				0.0			
21		HSA	50%				
22				0.0	BH05@ 22-23' (1145)	CL	Tan, sandy clay, fine grain sand, moderate plasticity, saturated, no odor
23							
24		HSA	20%	0.0		SP	Tan, sand, fine to coarse grain, well sorted, saturated, no odor
25							

TASMAN GEOSCIENCES

Borehole Logging Form

BOREHOLE ID: BH06	SITE NAME: Dinner 14 B-1	CLIENT NAME: PDC ENERGY
Date Completed: 10/21/21	Location: SW POC	
Drilling Company: Site Services	Surface Completion: Flush	DTW: ~7.5' TD: ~25'
Type of Drill: CME 55	Geologist: Kris Shepherd	Project Manager: B. Nelson
Bit Size: 8"	Logging Method:	
Well Const. Material: Diameter: 2"	Screen: Sch 40 PVC 0.010 Slotted	Riser: Sch 40 PVC Blank

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1							Hydrovac, not logged
2							
3							
4							
5							
6							
7		HSA	50%	0.0		SW	Brown, sand, fine to medium grain, poorly sorted, moist, no odor
▽ 8							- As above, saturated
9							
10							
11		HSA	20%	0.0			
12							
13							
14				0.0			
15							
16		HSA	50%				
17				0.0	BH06@ 17-18' (1450)		
18							
19				0.0			
20							
21		HSA	60%	0.0			
22						CL	Tan, sandy clay, fine grain sand, moderate plasticity, saturated, no odor
23				0.0			
24		HSA	50%	0.0			
25							

TASMAN GEOSCIENCES

Borehole Logging Form

BOREHOLE ID: BH07	SITE NAME: Dinner 14 B-1	CLIENT NAME: PDC ENERGY
Date Completed: 10/22/21	Location: NW POC	
Drilling Company: Site Services	Surface Completion: Flush	DTW: ~7.5' TD: ~25
Type of Drill: CME 55	Geologist: Kris Shepherd	Project Manager: B. Nelson
Bit Size: 8"	Logging Method:	
Well Const. Material: Diameter: 2"	Screen: Sch 40 PVC 0.010 slotted	Riser: Sch 40 PVC Blank

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1							Hydrovac, not logged
2							
3							
4							
5							
6							
7		HSA	50%	0.0		SW	Brown to tan, sand, fine to medium grain, poorly sorted, moist, no odor
8							-as above, saturated
9							
10		HSA	20%				
11							
12				0.0			
13							
14							
15				0.0			
16		HSA	50%				
17				0.0	BH07@ 17-18' (1130)		
18							
19							
20							
21		HSA	25%				
22				0.0		CL	Tan, sandy clay, fine grain sand, moderate plasticity, saturated, no odor
23							
24		HSA	50%	0.0			
25							

TASMAN GEOSCIENCES

Borehole Logging Form

BOREHOLE ID: BH08	SITE NAME: Diver 14 B-1	CLIENT NAME: PDC ENERGY
Date Completed: 10/22/24	Location: N POC	
Drilling Company: Site Services	Surface Completion: Push	DTW: ~8' TD: ~25'
Type of Drill: CME 55	Geologist: Kris Shepherd	Project Manager: B. Nelson
Bit Size: 8"	Logging Method: Continuous	

Well Const. Material: Diameter: 2" Screen: Sch 40 PVC Slotted 0.010 Riser: Sch 40 PVC Blank

Depth (feet)	Well Completion	Sample Type	% Recovery	PID (ppm)	Laboratory Sample	USCS	Description
1							Hydrovac, not logged
2							
3							
4							
5							
6							
7		HSA	20%	0.0		SW	Brown, sand, fine to medium grain, poorly sorted, moist, no odor
8 ▽							
9						SP	Tan, sand, fine to coarse grain, well sorted, saturated, no odor
10							
11		HSA	25%				
12				0.0			
13							
14							
15							
16		HSA	20%				
17				0.0	BH08B 17-18' (0850)		
18							
19				0.0			
20							
21		HSA	50%			CL	Tan, sandy clay, fine to medium grain sand, low plasticity, saturated, no odor
22				0.0			
23							
24		HSA	20%	0.0		SP	Tan, sand, fine to coarse grain, saturated, well sorted, no odor
25							

Attachment B

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

December 16, 2021

Mark Longhurst
PDC Energy
1775 Sherman St. STE. 3000
Denver, CO 80203

RE: Dinner 14 B-1 Wellhead
Work Order #2110293

Enclosed are the results of analyses for samples received by Summit Scientific on 10/18/21 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Paul Shrewsbury
President

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/16/21 08:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01@17-18'	2110293-01	Soil	10/18/21 14:15	10/18/21 16:30

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2110293

S_2

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310 ♦ 303-374-5933 (f)

Client: PDC/Tasman
Address: 6855 W 119th Ave
City/State/Zip: Broomfield, CO 80020
Phone: (303) 487-1228
Sampler Name: Kris Shepherd

Project Manager: Mark Longhurst
E-Mail: mark.longhurst@PDCE.com
Project Name: Dinner 14 B-1 Wellhead
Project Number:

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX-B260B	TPH (C6-C36)	1,2,4 & 1,3,5 TMB	PAH's *	pH, EC, SAR	Boron			* PAH's = ~~Acenaphthene~~, ~~Acenaphthylene~~, Pyrene, Fluorene, 1-methylnaphthalene, 2-methylnaphthalene
1	SB20@17-18'	10/18/21	1415	3			X			X			X	X	X	X	X	X			
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time: 10/18/21 1630	Received by:	Date/Time: 10 18 21 1630
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)
Same Day ___ 72 hours ___
24 hours ___ Standard X
48 hours ___

Sample Integrity:
Temperature Upon Receipt: 1.8
Samples Intact: (Yes) No

Notes:
pH, EC, & SAR by saturated paste.

S2 2110293

Sample Receipt Checklist

S2 Work Order#_____

Client: Ac Tasman Client Project ID: Dinner 14 B-1 wellhead.

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☑ Airbill #: _____

Matrix (check all that apply): ☐ Air ☑ Soil/Solid ☐ Water ☐ Other:_____ (Describe)

Temp (°C)	1.8

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C (1)? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	✓			on ICE
Were all samples received intact (1)?	✓			
Was adequate sample volume provided (1)?	✓			
If custody seals are present, are they intact (1)?	✓			
Are samples with holding times due within 48 hours sample due within 48 hours present?		✓		
Is a chain-of-custody (COC) form present and filled out completely (1)?	✓			
Does the COC agree with the number and type of sample bottles received (1)?	✓			
Do the sample IDs on the bottle labels match the COC (1)?	✓			
Is the COC properly relinquished by the client w/ date and time recorded (1)?	✓			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation **(excluding cooling)** (1)? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.			✓	
If samples are acid preserved for metals, is the pH ≤ 2(1)? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

(1) If NO, then contact the client before proceeding with analysis and note in case narrative.

[signature] 10.18.21

Custodian Printed Name or Initials **Date/Time**

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/16/21 08:17

BH01@17-18'

2110293-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0358	10/19/21	10/21/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*96.1 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.9 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0359	10/19/21	10/20/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*106 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/16/21 08:17

BH01@17-18'

2110293-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0337	10/19/21	10/22/21	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*58.9 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*66.8 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/21 14:15**

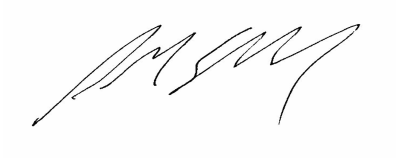
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.168**	0.0100	mg/L	1	BEJ0477	10/25/21	10/25/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

Summit Scientific



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/16/21 08:17

BH01@17-18'

2110293-01 (Soil)

Summit Scientific

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**37.3**	0.0588	mg/L dry	1	BEJ0420	10/21/21	10/25/21	EPA 6020B	
Magnesium	**11.4**	0.0588	"	"	"	"	"	"	
Sodium	**55.0**	0.0588	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**2.02**	0.00100	units	1	BEJ0481	10/25/21	10/25/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**85.1**		%	1	BEJ0343	10/19/21	10/19/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/21 14:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.486**	0.0100	mmhos/cm	1	BEJ0452	10/22/21	10/22/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/18/21 14:15**

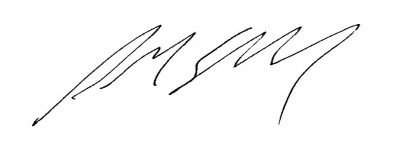
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**8.21**		pH Units	1	BEJ0453	"	10/22/21	EPA 9045D	

PDC Energy	Project: Dinner 14 B-1 Wellhead	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	12/16/21 08:17

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0358 - EPA 5030 Soil MS										
Blank (BEJ0358-BLK1)				Prepared: 10/19/21 Analyzed: 10/21/21						
Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	*0.0399*		*"*	*0.0400*		*99.7*	*23-173*			
Surrogate: Toluene-d8	*0.0393*		*"*	*0.0400*		*98.2*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0399*		*"*	*0.0400*		*99.8*	*21-167*			
LCS (BEJ0358-BS1)				Prepared: 10/19/21 Analyzed: 10/21/21						
Benzene	0.102	0.0020	mg/kg	0.100		102	70-130			
Toluene	0.118	0.0050	"	0.100		118	70-130			
Ethylbenzene	0.122	0.0050	"	0.100		122	70-130			
m,p-Xylene	0.242	0.010	"	0.200		121	70-130			
o-Xylene	0.114	0.0050	"	0.100		114	70-130			
1,2,4-Trimethylbenzene	0.119	0.0050	"	0.100		119	70-130			
1,3,5-Trimethylbenzene	0.115	0.0050	"	0.100		115	70-130			
Naphthalene	0.0890	0.0038	"	0.100		89.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0394*		*"*	*0.0400*		*98.6*	*23-173*			
Surrogate: Toluene-d8	*0.0390*		*"*	*0.0400*		*97.5*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0408*		*"*	*0.0400*		*102*	*21-167*			
Matrix Spike (BEJ0358-MS1)		**Source: 2110251-03**		Prepared: 10/19/21 Analyzed: 10/21/21						
Benzene	0.120	0.0020	mg/kg	0.100	ND	120	70-130			
Toluene	0.128	0.0050	"	0.100	ND	128	70-130			
Ethylbenzene	0.129	0.0050	"	0.100	ND	129	70-130			
m,p-Xylene	0.257	0.010	"	0.200	ND	128	70-130			
o-Xylene	0.124	0.0050	"	0.100	ND	124	70-130			
1,2,4-Trimethylbenzene	0.126	0.0050	"	0.100	ND	126	70-130			
1,3,5-Trimethylbenzene	0.123	0.0050	"	0.100	ND	123	70-130			
Naphthalene	0.0981	0.0038	"	0.100	ND	98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0441*		*"*	*0.0400*		*110*	*23-173*			
Surrogate: Toluene-d8	*0.0390*		*"*	*0.0400*		*97.5*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0397*		*"*	*0.0400*		*99.3*	*21-167*			



Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0358 - EPA 5030 Soil MS										
Matrix Spike Dup (BEJ0358-MSD1)	**Source: 2110251-03**			Prepared: 10/19/21 Analyzed: 10/21/21						
Benzene	0.0971	0.0020	mg/kg	0.100	ND	97.1	70-130	21.4	30	
Toluene	0.120	0.0050	"	0.100	ND	120	70-130	6.74	30	
Ethylbenzene	0.118	0.0050	"	0.100	ND	118	70-130	8.94	30	
m,p-Xylene	0.235	0.010	"	0.200	ND	117	70-130	8.92	30	
o-Xylene	0.113	0.0050	"	0.100	ND	113	70-130	8.76	30	
1,2,4-Trimethylbenzene	0.118	0.0050	"	0.100	ND	118	70-130	6.54	30	
1,3,5-Trimethylbenzene	0.113	0.0050	"	0.100	ND	113	70-130	8.49	30	
Naphthalene	0.104	0.0038	"	0.100	ND	104	70-130	5.76	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0418*		*"*	*0.0400*		*104*	*23-173*			
Surrogate: Toluene-d8	*0.0396*		*"*	*0.0400*		*99.0*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0402*		*"*	*0.0400*		*100*	*21-167*			

PDC Energy	Project: Dinner 14 B-1 Wellhead	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	12/16/21 08:17

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

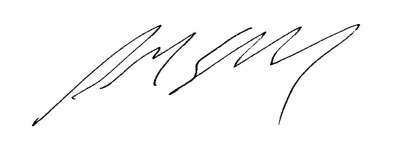
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0359 - EPA 3550A										
Blank (BEJ0359-BLK1)				Prepared: 10/19/21 Analyzed: 10/21/21						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BEJ0359-BS1)				Prepared: 10/19/21 Analyzed: 10/21/21						
C10-C28 (DRO)	462	50	mg/kg	500		92.5	70-130			
Matrix Spike (BEJ0359-MS1)	**Source: 2110251-03**			Prepared: 10/19/21 Analyzed: 10/21/21						
C10-C28 (DRO)	485	50	mg/kg	500	ND	96.9	70-130			
Matrix Spike Dup (BEJ0359-MSD1)	**Source: 2110251-03**			Prepared: 10/19/21 Analyzed: 10/21/21						
C10-C28 (DRO)	479	50	mg/kg	500	ND	95.9	70-130	1.08	20	

PDC Energy	Project: Dinner 14 B-1 Wellhead	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	12/16/21 08:17

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0337 - EPA 5030 Soil MS										
Blank (BEJ0337-BLK1)				Prepared: 10/19/21 Analyzed: 10/22/21						
Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	*0.0252*		*"*	*0.0333*		*75.7*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0286*		*"*	*0.0333*		*85.7*	*40-150*			
LCS (BEJ0337-BS1)				Prepared: 10/19/21 Analyzed: 10/22/21						
Acenaphthene	0.0261	0.00500	mg/kg	0.0333		78.2	31-137			
Anthracene	0.0278	0.00500	"	0.0333		83.3	30-120			
Benzo (a) anthracene	0.0285	0.00500	"	0.0333		85.4	30-120			
Benzo (a) pyrene	0.0271	0.00500	"	0.0333		81.3	30-120			
Benzo (b) fluoranthene	0.0220	0.00500	"	0.0333		66.0	30-120			
Benzo (k) fluoranthene	0.0193	0.00500	"	0.0333		58.0	30-120			
Chrysene	0.0256	0.00500	"	0.0333		76.9	30-120			
Dibenz (a,h) anthracene	0.0175	0.00500	"	0.0333		52.6	30-120			
Fluoranthene	0.0316	0.00500	"	0.0333		94.7	30-120			
Fluorene	0.0271	0.00500	"	0.0333		81.2	30-120			
Indeno (1,2,3-cd) pyrene	0.0325	0.00500	"	0.0333		97.6	30-120			
Pyrene	0.0209	0.00500	"	0.0333		62.8	35-142			
1-Methylnaphthalene	0.0263	0.00500	"	0.0333		78.9	35-142			
2-Methylnaphthalene	0.0266	0.00500	"	0.0333		79.9	35-142			
Surrogate: 2-Methylnaphthalene-d10	*0.0259*		*"*	*0.0333*		*77.8*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0324*		*"*	*0.0333*		*97.1*	*40-150*			

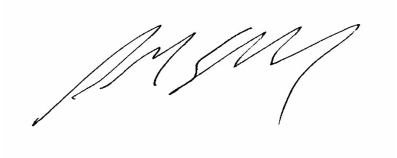


PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/16/21 08:17

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0337 - EPA 5030 Soil MS										
Matrix Spike (BEJ0337-MS1)	**Source: 2110236-01**			Prepared: 10/19/21 Analyzed: 10/22/21						
Acenaphthene	0.0221	0.00500	mg/kg	0.0333	ND	66.4	31-137			
Anthracene	0.0238	0.00500	"	0.0333	ND	71.4	30-120			
Benzo (a) anthracene	0.0244	0.00500	"	0.0333	ND	73.2	30-120			
Benzo (a) pyrene	0.0228	0.00500	"	0.0333	ND	68.3	30-120			
Benzo (b) fluoranthene	0.0189	0.00500	"	0.0333	ND	56.8	30-120			
Benzo (k) fluoranthene	0.0165	0.00500	"	0.0333	ND	49.5	30-120			
Chrysene	0.0216	0.00500	"	0.0333	ND	64.9	30-120			
Dibenz (a,h) anthracene	0.0382	0.00500	"	0.0333	ND	115	30-120			
Fluoranthene	0.0268	0.00500	"	0.0333	ND	80.4	30-120			
Fluorene	0.0229	0.00500	"	0.0333	ND	68.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0269	0.00500	"	0.0333	ND	80.6	30-120			
Pyrene	0.0184	0.00500	"	0.0333	ND	55.1	35-142			
1-Methylnaphthalene	0.0218	0.00500	"	0.0333	ND	65.5	15-130			
2-Methylnaphthalene	0.0223	0.00500	"	0.0333	ND	66.9	15-130			
Surrogate: 2-Methylnaphthalene-d10	*0.0225*		*"*	*0.0333*		*67.6*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0275*		*"*	*0.0333*		*82.5*	*40-150*			
Matrix Spike Dup (BEJ0337-MSD1)	**Source: 2110236-01**			Prepared: 10/19/21 Analyzed: 10/22/21						
Acenaphthene	0.0208	0.00500	mg/kg	0.0333	ND	62.5	31-137	6.11	30	
Anthracene	0.0222	0.00500	"	0.0333	ND	66.5	30-120	7.08	30	
Benzo (a) anthracene	0.0217	0.00500	"	0.0333	ND	65.1	30-120	11.7	30	
Benzo (a) pyrene	0.0202	0.00500	"	0.0333	ND	60.6	30-120	11.9	30	
Benzo (b) fluoranthene	0.0166	0.00500	"	0.0333	ND	49.8	30-120	13.2	30	
Benzo (k) fluoranthene	0.0148	0.00500	"	0.0333	ND	44.3	30-120	11.1	30	
Chrysene	0.0196	0.00500	"	0.0333	ND	58.8	30-120	9.88	30	
Dibenz (a,h) anthracene	0.0339	0.00500	"	0.0333	ND	102	30-120	11.9	30	
Fluoranthene	0.0249	0.00500	"	0.0333	ND	74.7	30-120	7.30	30	
Fluorene	0.0215	0.00500	"	0.0333	ND	64.6	30-120	6.08	30	
Indeno (1,2,3-cd) pyrene	0.0235	0.00500	"	0.0333	ND	70.4	30-120	13.4	30	
Pyrene	0.0165	0.00500	"	0.0333	ND	49.6	35-142	10.6	30	
1-Methylnaphthalene	0.0212	0.00500	"	0.0333	ND	63.7	15-130	2.78	50	
2-Methylnaphthalene	0.0207	0.00500	"	0.0333	ND	62.1	15-130	7.55	50	
Surrogate: 2-Methylnaphthalene-d10	*0.0199*		*"*	*0.0333*		*59.6*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0251*		*"*	*0.0333*		*75.3*	*40-150*			



PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/16/21 08:17

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0477 - EPA 3050B										
Blank (BEJ0477-BLK1)				Prepared & Analyzed: 10/25/21						
Boron	ND	0.0100	mg/L							
LCS (BEJ0477-BS1)				Prepared & Analyzed: 10/25/21						
Boron	5.39	0.0100	mg/L	5.00		108	80-120			
Matrix Spike (BEJ0477-MS1)	**Source: 2110292-01**			Prepared & Analyzed: 10/25/21						
Boron	5.62	0.0100	mg/L	5.00	0.173	109	75-125			
Matrix Spike Dup (BEJ0477-MSD1)	**Source: 2110292-01**			Prepared & Analyzed: 10/25/21						
Boron	5.44	0.0100	mg/L	5.00	0.173	105	75-125	3.27	25	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0420 - General Preparation										
Blank (BEJ0420-BLK1)				Prepared: 10/21/21 Analyzed: 10/25/21						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BEJ0420-BS1)				Prepared: 10/21/21 Analyzed: 10/25/21						
Calcium	5.40	0.0500	mg/L wet	5.00		108	70-130			
Magnesium	5.48	0.0500	"	5.00		110	70-130			
Sodium	5.34	0.0500	"	5.00		107	70-130			

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/16/21 08:17

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

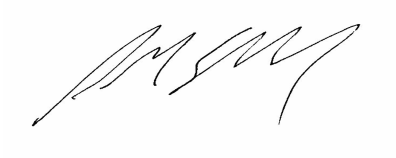
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0343 - General Preparation										
Duplicate (BEJ0343-DUP1)		**Source: 2110280-01**		Prepared & Analyzed: 10/19/21						
% Solids	92.7		%		93.9			1.28	20	

PDC Energy	Project: Dinner 14 B-1 Wellhead	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	12/16/21 08:17

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0452 - General Preparation										
Blank (BEJ0452-BLK1)				Prepared & Analyzed: 10/22/21						
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
LCS (BEJ0452-BS1)				Prepared & Analyzed: 10/22/21						
Specific Conductance (EC)	0.147	0.0100	mmhos/cm	0.150		97.7	95-105			
Duplicate (BEJ0452-DUP1)		**Source: 2110292-01**		Prepared & Analyzed: 10/22/21						
Specific Conductance (EC)	0.412	0.0100	mmhos/cm		0.415			0.701	20	



PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/16/21 08:17

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0453 - General Preparation										
LCS (BEJ0453-BS1)				Prepared & Analyzed: 10/22/21						
pH	9.24		pH Units	9.18		101	95-105			
Duplicate (BEJ0453-DUP1)		**Source: 2110292-01**		Prepared & Analyzed: 10/22/21						
pH	8.60		pH Units		8.61			0.116	20	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/16/21 08:17

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

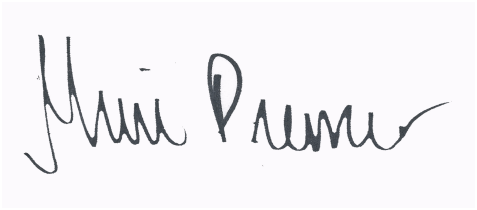
October 28, 2021

Mark Longhurst
PDC Energy
1775 Sherman St. STE. 3000
Denver, CO 80203

RE: Dinner 14 B-1 Wellhead
Work Order #2110324

Enclosed are the results of analyses for samples received by Summit Scientific on 10/19/21 17:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Muri Premer For Paul Shrewsbury
President

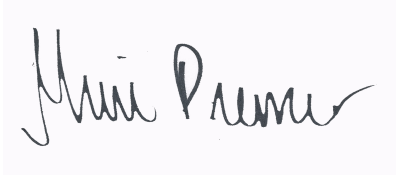
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH02@17-18'	2110324-01	Soil	10/19/21 09:15	10/19/21 17:10
BH03@17-18'	2110324-02	Soil	10/19/21 12:20	10/19/21 17:10
BH04@22-23'	2110324-03	Soil	10/19/21 15:00	10/19/21 17:10
BH04@29-30'	2110324-04	Soil	10/19/21 15:30	10/19/21 17:10

Summit Scientific



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2110324

S2

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310 ♦ 303-374-5933 (f)

Client: PDC/Tasman
Address: 6855 W 119th Ave
City/State/Zip: Broomfield, CO 80020
Phone: (303) 487-1228
Sampler Name: Kris Shepherd

Project Manager: Mark Longhurst
E-Mail: mark.longhurst@PDCE.com
Project Name: Dinner 14 B-1 wellhead
Project Number:

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX-8260B	TPH(C6-C36)	1,2,4 1,3,5 TMB	PAH's *	pH, EC, SAR	Boron			* PAH's = fluorene, pyrene, 1-methyl-naphthalene, & 2-methylnaphthalene
1	BH02@17-18'	10/19/21	0915	3			X			X			X	X	X	X	X	X			
2	BH03@17-18'	↓	1220	3			↓			↓			↓	↓	↓	↓	↓	↓			
3	BH04@22-23'		1500	3																	
4	BH04@29-30'	↓	1530	3			↓			↓			↓	↓	↓	↓	↓	↓			
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time:	Received by:	Date/Time:
[signature]	10/19/21 1710	[signature]	10.19.21 1710
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)

Same Day ___ 72 hours ___
24 hours ___ Standard X
48 hours ___

Sample Integrity:
Temperature Upon Receipt: 7.8
Samples Intact: (Yes) No

Notes:
pH, EC, SAR by saturated paste.

S2

2110324

Sample Receipt Checklist

S2 Work Order#_____

Client: Pbc/Tasman Client Project ID: Dormer 14 B-1 wellhead

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other_____ Airbill #: _____

☐ ☑ ☐ ☐ ☐

Matrix (check all that apply): ☐ Air ☑ Soil/Solid ☐ Water ☐ Other:_____ (Describe)

Temp (°C)	7.8

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C [1]? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	✓			on ICE
Were all samples received intact [1]?	✓			
Was adequate sample volume provided [1]?	✓			
If custody seals are present, are they intact [1]?	✓			
Are samples with holding times due within 48 hours sample due within 48 hours present?		✓		
Is a chain-of-custody (COC) form present and filled out completely [1]?	✓			
Does the COC agree with the number and type of sample bottles received [1]?	✓			
Do the sample IDs on the bottle labels match the COC [1]?	✓			
Is the COC properly relinquished by the client w/ date and time recorded [1]?	✓			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation **(excluding cooling)** [1]? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.			✓	
If samples are acid preserved for metals, is the pH ≤ 2[1]? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

[1] **If NO, then contact the client before proceeding with analysis and note in case narrative.**

Custodian Printed Name or Initials

10·19·21

Date/Time

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH02@17-18'

2110324-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0458	10/22/21	10/25/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*72.2 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*106 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.0 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0459	10/22/21	10/23/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*102 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH02@17-18'

2110324-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluorene	ND	0.00500	mg/kg	1	BEJ0398	10/21/21	10/24/21	EPA 8270D SIM	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*84.8 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*89.2 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.147**	0.0100	mg/L	1	BEJ0477	10/25/21	10/25/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**28.2**	0.0644	mg/L dry	1	BEJ0455	10/22/21	10/26/21	EPA 6020B	
Magnesium	**8.38**	0.0644	"	"	"	"	"	"	
Sodium	**51.2**	0.0644	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**2.18**	0.00100	units	1	BEJ0542	10/27/21	10/27/21	Calculation	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH02@17-18'

2110324-01 (Soil)

Summit Scientific

Calculated Analysis

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**77.6**		%	1	BEJ0385	10/20/21	10/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.402**	0.0100	mmhos/cm	1	BEJ0486	10/25/21	10/25/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/19/21 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**8.28**		pH Units	1	BEJ0487	10/25/21	10/25/21	EPA 9045D	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH03@17-18'

2110324-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0458	10/22/21	10/25/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*75.9 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*106 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*86.2 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

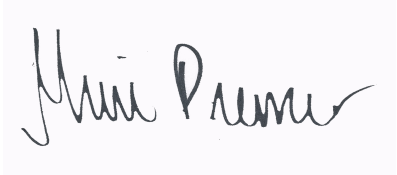
Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0459	10/22/21	10/23/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*102 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH03@17-18'

2110324-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluorene	ND	0.00500	mg/kg	1	BEJ0398	10/21/21	10/24/21	EPA 8270D SIM	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*95.0 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*89.3 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.0976**	0.0100	mg/L	1	BEJ0477	10/25/21	10/25/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**59.2**	0.0580	mg/L dry	1	BEJ0455	10/22/21	10/26/21	EPA 6020B	
Magnesium	**17.6**	0.0580	"	"	"	"	"	"	
Sodium	**93.9**	0.0580	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**2.75**	0.00100	units	1	BEJ0542	10/27/21	10/27/21	Calculation	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH03@17-18'

2110324-02 (Soil)

Summit Scientific

Calculated Analysis

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**86.2**		%	1	BEJ0385	10/20/21	10/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

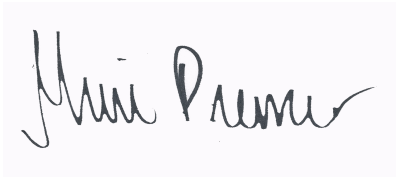
Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.864**	0.0100	mmhos/cm	1	BEJ0486	10/25/21	10/25/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/19/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**8.23**		pH Units	1	BEJ0487	10/25/21	10/25/21	EPA 9045D	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH04@22-23'

2110324-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0458	10/22/21	10/25/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*65.3 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

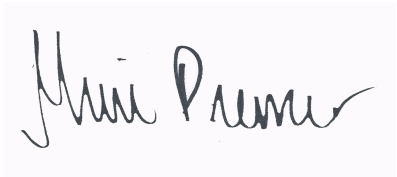
Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0459	10/22/21	10/23/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*101 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH04@22-23'

2110324-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluorene	ND	0.00500	mg/kg	1	BEJ0398	10/21/21	10/24/21	EPA 8270D SIM	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*80.3 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*78.0 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.0820**	0.0100	mg/L	1	BEJ0477	10/25/21	10/25/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**37.9**	0.0566	mg/L dry	1	BEJ0455	10/22/21	10/26/21	EPA 6020B	
Magnesium	**11.2**	0.0566	"	"	"	"	"	"	
Sodium	**61.2**	0.0566	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**2.24**	0.00100	units	1	BEJ0542	10/27/21	10/27/21	Calculation	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH04@22-23'

2110324-03 (Soil)

Summit Scientific

Calculated Analysis

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**88.3**		%	1	BEJ0385	10/20/21	10/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.568**	0.0100	mmhos/cm	1	BEJ0486	10/25/21	10/25/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/19/21 15:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**8.24**		pH Units	1	BEJ0487	10/25/21	10/25/21	EPA 9045D	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH04@29-30'

2110324-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0458	10/22/21	10/25/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*77.3 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*108 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.2 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

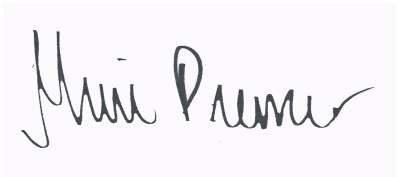
Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0459	10/22/21	10/23/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*102 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH04@29-30'

2110324-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluorene	ND	0.00500	mg/kg	1	BEJ0398	10/21/21	10/24/21	EPA 8270D SIM	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*73.9 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*73.3 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.0428**	0.0100	mg/L	1	BEJ0477	10/25/21	10/25/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**30.6**	0.0533	mg/L dry	1	BEJ0455	10/22/21	10/26/21	EPA 6020B	
Magnesium	**9.03**	0.0533	"	"	"	"	"	"	
Sodium	**52.0**	0.0533	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**2.12**	0.00100	units	1	BEJ0542	10/27/21	10/27/21	Calculation	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

BH04@29-30'

2110324-04 (Soil)

Summit Scientific

Calculated Analysis

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**93.9**		%	1	BEJ0385	10/20/21	10/21/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

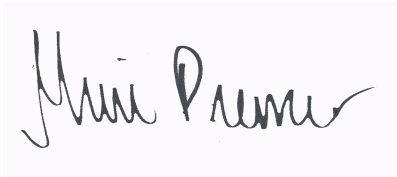
Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**1.06**	0.0100	mmhos/cm	1	BEJ0486	10/25/21	10/25/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/19/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**7.48**		pH Units	1	BEJ0487	10/25/21	10/25/21	EPA 9045D	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0458 - EPA 5030 Soil MS										
Blank (BEJ0458-BLK1)				Prepared: 10/22/21 Analyzed: 10/24/21						
Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	*0.0268*		*"*	*0.0400*		*67.1*	*23-173*			
Surrogate: Toluene-d8	*0.0416*		*"*	*0.0400*		*104*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0355*		*"*	*0.0400*		*88.6*	*21-167*			
LCS (BEJ0458-BS1)				Prepared: 10/22/21 Analyzed: 10/24/21						
Benzene	0.0900	0.0020	mg/kg	0.0750		120	70-130			
Toluene	0.0776	0.0050	"	0.0750		104	70-130			
Ethylbenzene	0.0804	0.0050	"	0.0750		107	70-130			
m,p-Xylene	0.151	0.010	"	0.150		101	70-130			
o-Xylene	0.0652	0.0050	"	0.0750		86.9	70-130			
1,2,4-Trimethylbenzene	0.0652	0.0050	"	0.0750		86.9	70-130			
1,3,5-Trimethylbenzene	0.0708	0.0050	"	0.0750		94.4	70-130			
Naphthalene	0.0742	0.0038	"	0.0750		98.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0302*		*"*	*0.0400*		*75.4*	*23-173*			
Surrogate: Toluene-d8	*0.0452*		*"*	*0.0400*		*113*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0367*		*"*	*0.0400*		*91.8*	*21-167*			
Matrix Spike (BEJ0458-MS1)	**Source: 2110309-01**			Prepared: 10/22/21 Analyzed: 10/25/21						
Benzene	0.0618	0.0020	mg/kg	0.0750	ND	82.4	70-130			
Toluene	0.0787	0.0050	"	0.0750	0.00303	101	70-130			
Ethylbenzene	0.0781	0.0050	"	0.0750	ND	104	70-130			
m,p-Xylene	0.146	0.010	"	0.150	ND	97.5	70-130			
o-Xylene	0.0656	0.0050	"	0.0750	ND	87.5	70-130			
1,2,4-Trimethylbenzene	0.0670	0.0050	"	0.0750	ND	89.4	70-130			
1,3,5-Trimethylbenzene	0.0703	0.0050	"	0.0750	ND	93.7	70-130			
Naphthalene	0.0914	0.0038	"	0.0750	0.0202	94.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0330*		*"*	*0.0400*		*82.6*	*23-173*			
Surrogate: Toluene-d8	*0.0454*		*"*	*0.0400*		*114*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0392*		*"*	*0.0400*		*97.9*	*21-167*			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0458 - EPA 5030 Soil MS										
Matrix Spike Dup (BEJ0458-MSD1)	**Source: 2110309-01**			Prepared: 10/22/21 Analyzed: 10/25/21						
Benzene	0.0602	0.0020	mg/kg	0.0750	ND	80.3	70-130	2.61	30	
Toluene	0.0762	0.0050	"	0.0750	0.00303	97.6	70-130	3.18	30	
Ethylbenzene	0.0785	0.0050	"	0.0750	ND	105	70-130	0.575	30	
m,p-Xylene	0.148	0.010	"	0.150	ND	98.8	70-130	1.36	30	
o-Xylene	0.0655	0.0050	"	0.0750	ND	87.3	70-130	0.183	30	
1,2,4-Trimethylbenzene	0.0657	0.0050	"	0.0750	ND	87.6	70-130	1.99	30	
1,3,5-Trimethylbenzene	0.0704	0.0050	"	0.0750	ND	93.8	70-130	0.128	30	
Naphthalene	0.0908	0.0038	"	0.0750	0.0202	94.2	70-130	0.593	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0338*		*"*	*0.0400*		*84.4*	*23-173*			
Surrogate: Toluene-d8	*0.0447*		*"*	*0.0400*		*112*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0370*		*"*	*0.0400*		*92.6*	*21-167*			

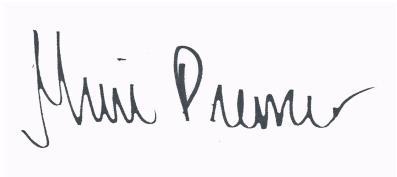
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0459 - EPA 3550A										
Blank (BEJ0459-BLK1)				Prepared: 10/22/21 Analyzed: 10/23/21						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BEJ0459-BS1)				Prepared: 10/22/21 Analyzed: 10/23/21						
C10-C28 (DRO)	470	50	mg/kg	500		94.1	70-130			
Matrix Spike (BEJ0459-MS1)	**Source: 2110309-01**			Prepared: 10/22/21 Analyzed: 10/23/21						
C10-C28 (DRO)	471	50	mg/kg	500	ND	94.3	70-130			
Matrix Spike Dup (BEJ0459-MSD1)	**Source: 2110309-01**			Prepared: 10/22/21 Analyzed: 10/23/21						
C10-C28 (DRO)	502	50	mg/kg	500	ND	100	70-130	6.33	20	



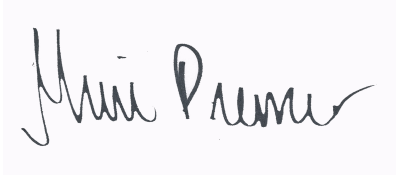
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0398 - EPA 5030 Soil MS										
Blank (BEJ0398-BLK1)				Prepared: 10/21/21 Analyzed: 10/24/21						
Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	*0.0301*		*"*	*0.0333*		*90.4*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0288*		*"*	*0.0333*		*86.5*	*40-150*			
LCS (BEJ0398-BS1)				Prepared: 10/21/21 Analyzed: 10/24/21						
Acenaphthene	0.0292	0.00500	mg/kg	0.0333		87.6	31-137			
Anthracene	0.0283	0.00500	"	0.0333		84.9	30-120			
Benzo (a) anthracene	0.0274	0.00500	"	0.0333		82.1	30-120			
Benzo (a) pyrene	0.0278	0.00500	"	0.0333		83.3	30-120			
Benzo (b) fluoranthene	0.0290	0.00500	"	0.0333		87.0	30-120			
Benzo (k) fluoranthene	0.0322	0.00500	"	0.0333		96.5	30-120			
Chrysene	0.0269	0.00500	"	0.0333		80.7	30-120			
Dibenz (a,h) anthracene	0.0264	0.00500	"	0.0333		79.2	30-120			
Fluoranthene	0.0315	0.00500	"	0.0333		94.6	30-120			
Fluorene	0.0316	0.00500	"	0.0333		94.7	30-120			
Indeno (1,2,3-cd) pyrene	0.0178	0.00500	"	0.0333		53.3	30-120			
Pyrene	0.0292	0.00500	"	0.0333		87.5	35-142			
1-Methylnaphthalene	0.0308	0.00500	"	0.0333		92.3	35-142			
2-Methylnaphthalene	0.0296	0.00500	"	0.0333		88.8	35-142			
Surrogate: 2-Methylnaphthalene-d10	*0.0328*		*"*	*0.0333*		*98.3*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0362*		*"*	*0.0333*		*109*	*40-150*			



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0398 - EPA 5030 Soil MS										
Matrix Spike (BEJ0398-MS1)	**Source: 2110257-01**			Prepared: 10/21/21 Analyzed: 10/24/21						
Acenaphthene	0.0291	0.00500	mg/kg	0.0333	ND	87.2	31-137			
Anthracene	0.0280	0.00500	"	0.0333	ND	83.9	30-120			
Benzo (a) anthracene	0.0220	0.00500	"	0.0333	ND	66.1	30-120			
Benzo (a) pyrene	0.0230	0.00500	"	0.0333	ND	68.9	30-120			
Benzo (b) fluoranthene	0.0237	0.00500	"	0.0333	ND	71.1	30-120			
Benzo (k) fluoranthene	0.0275	0.00500	"	0.0333	ND	82.4	30-120			
Chrysene	0.0258	0.00500	"	0.0333	ND	77.3	30-120			
Dibenz (a,h) anthracene	0.0188	0.00500	"	0.0333	ND	56.4	30-120			
Fluoranthene	0.0272	0.00500	"	0.0333	ND	81.7	30-120			
Fluorene	0.0272	0.00500	"	0.0333	ND	81.7	30-120			
Indeno (1,2,3-cd) pyrene	0.0127	0.00500	"	0.0333	ND	38.1	30-120			
Pyrene	0.0266	0.00500	"	0.0333	ND	79.9	35-142			
1-Methylnaphthalene	0.0273	0.00500	"	0.0333	ND	81.8	15-130			
2-Methylnaphthalene	0.0235	0.00500	"	0.0333	ND	70.5	15-130			
Surrogate: 2-Methylnaphthalene-d10	*0.0267*		*"*	*0.0333*		*80.0*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0272*		*"*	*0.0333*		*81.5*	*40-150*			
Matrix Spike Dup (BEJ0398-MSD1)	**Source: 2110257-01**			Prepared: 10/21/21 Analyzed: 10/24/21						
Acenaphthene	0.0327	0.00500	mg/kg	0.0333	ND	98.2	31-137	11.8	30	
Anthracene	0.0299	0.00500	"	0.0333	ND	89.7	30-120	6.72	30	
Benzo (a) anthracene	0.0241	0.00500	"	0.0333	ND	72.2	30-120	8.70	30	
Benzo (a) pyrene	0.0251	0.00500	"	0.0333	ND	75.2	30-120	8.80	30	
Benzo (b) fluoranthene	0.0255	0.00500	"	0.0333	ND	76.4	30-120	7.23	30	
Benzo (k) fluoranthene	0.0289	0.00500	"	0.0333	ND	86.8	30-120	5.29	30	
Chrysene	0.0279	0.00500	"	0.0333	ND	83.6	30-120	7.85	30	
Dibenz (a,h) anthracene	0.0207	0.00500	"	0.0333	ND	62.1	30-120	9.65	30	
Fluoranthene	0.0288	0.00500	"	0.0333	ND	86.3	30-120	5.54	30	
Fluorene	0.0297	0.00500	"	0.0333	ND	89.2	30-120	8.73	30	
Indeno (1,2,3-cd) pyrene	0.0140	0.00500	"	0.0333	ND	42.0	30-120	9.80	30	
Pyrene	0.0284	0.00500	"	0.0333	ND	85.3	35-142	6.47	30	
1-Methylnaphthalene	0.0298	0.00500	"	0.0333	ND	89.3	15-130	8.75	50	
2-Methylnaphthalene	0.0264	0.00500	"	0.0333	ND	79.3	15-130	11.7	50	
Surrogate: 2-Methylnaphthalene-d10	*0.0270*		*"*	*0.0333*		*80.9*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0287*		*"*	*0.0333*		*86.0*	*40-150*			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

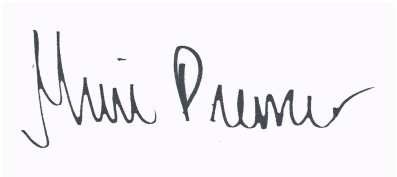
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0477 - EPA 3050B										
Blank (BEJ0477-BLK1)				Prepared & Analyzed: 10/25/21						
Boron	ND	0.0100	mg/L							
LCS (BEJ0477-BS1)				Prepared & Analyzed: 10/25/21						
Boron	5.39	0.0100	mg/L	5.00		108	80-120			
Matrix Spike (BEJ0477-MS1)	**Source: 2110292-01**			Prepared & Analyzed: 10/25/21						
Boron	5.62	0.0100	mg/L	5.00	0.173	109	75-125			
Matrix Spike Dup (BEJ0477-MSD1)	**Source: 2110292-01**			Prepared & Analyzed: 10/25/21						
Boron	5.44	0.0100	mg/L	5.00	0.173	105	75-125	3.27	25	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0455 - General Preparation										
Blank (BEJ0455-BLK1)				Prepared: 10/22/21 Analyzed: 10/26/21						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BEJ0455-BS1)				Prepared: 10/22/21 Analyzed: 10/26/21						
Calcium	5.17	0.0500	mg/L wet	5.00		103	70-130			
Magnesium	5.01	0.0500	"	5.00		100	70-130			
Sodium	4.94	0.0500	"	5.00		98.8	70-130			

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0385 - General Preparation										
Duplicate (BEJ0385-DUP1)		**Source: 2110295-01**		Prepared: 10/20/21 Analyzed: 10/21/21						
% Solids	78.7		%		77.5			1.49	20	

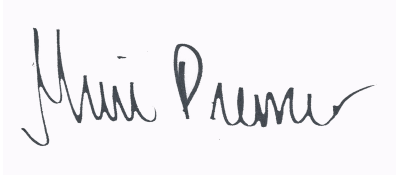
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0486 - General Preparation										
Blank (BEJ0486-BLK1)				Prepared & Analyzed: 10/25/21						
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
LCS (BEJ0486-BS1)				Prepared & Analyzed: 10/25/21						
Specific Conductance (EC)	0.150	0.0100	mmhos/cm	0.150		100	95-105			
Duplicate (BEJ0486-DUP1)		**Source: 2110324-01**		Prepared & Analyzed: 10/25/21						
Specific Conductance (EC)	0.402	0.0100	mmhos/cm		0.402			0.0498	20	



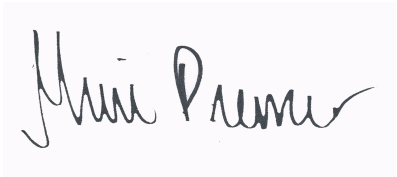
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0487 - General Preparation										
LCS (BEJ0487-BS1)				Prepared & Analyzed: 10/25/21						
pH	9.19		pH Units	9.18		100	95-105			
Duplicate (BEJ0487-DUP1)		**Source: 2110324-01**		Prepared & Analyzed: 10/25/21						
pH	8.23		pH Units		8.28			0.606	20	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/28/21 13:30

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

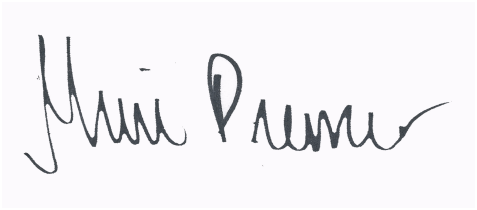
October 29, 2021

Mark Longhurst
PDC Energy
1775 Sherman St. STE. 3000
Denver, CO 80203

RE: Dinner 14 B-1 Wellhead
Work Order #2110371

Enclosed are the results of analyses for samples received by Summit Scientific on 10/21/21 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Muri Premer For Paul Shrewsbury
President

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH05@22-23'	2110371-01	Soil	10/21/21 11:45	10/21/21 17:00
BH06@17-18'	2110371-02	Soil	10/21/21 14:50	10/21/21 17:00

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2110371

S2

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310 ♦ 303-374-5933 (f)

Client: PDC / Tasman
Address: 6855 W 119th Ave
City/State/Zip: Broomfield CO 80020
Phone: (303) 487-1228
Sampler Name: Kris Shepherd

Project Manager: Mark Longhurst
E-Mail: mark.longhurst@PDCE.com
Project Name: Dinner 14 B-1 Wellhead
Project Number:

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX N-8260B	TPH (Gro-C36)	1,2,4,1,3,5 TMB	PAH's*	pH, EC, SAR	Boron			*PAH's = fluorene, 1-M, 2-M, & pyrene
1	BH05 @ 22-23'	10/21/21	1145	3			X			X			X	X	X	X	X	X			
2	BH06 @ 17-18'	10/21/21	1450	3			X			X			X	X	X	X	X	X			
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time:	Received by:	Date/Time:
	10/21/21 1700		10.21.21 1700
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)
Same Day ___ 72 hours ___
24 hours ___ Standard X
48 hours ___

Sample Integrity:
Temperature Upon Receipt: 9.6
Samples Intact: (Yes) No

Notes:
pH, EC, & SAR by Saturated Paste

S2

2110371

Sample Receipt Checklist

S2 Work Order#_____

Client: POC | Tasman Client Project ID: Dinner 14 B-1 wellhead

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other_____ Airbill #: _____

☐ ☑ ☐ ☐ ☐

Matrix (check all that apply): ☐ Air ☑ Soil/Solid ☐ Water ☐ Other:_____ (Describe)

Temp (°C)	9.6

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C (1)? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	✓			on ICE
Were all samples received intact (1)?	✓			
Was adequate sample volume provided (1)?	✓			
If custody seals are present, are they intact (1)?	✓			
Are samples with holding times due within 48 hours sample due within 48 hours present?		✓		
Is a chain-of-custody (COC) form present and filled out completely (1)?	✓			
Does the COC agree with the number and type of sample bottles received (1)?	✓			
Do the sample IDs on the bottle labels match the COC (1)?	✓			
Is the COC properly relinquished by the client w/ date and time recorded (1)?	✓			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation **(excluding cooling)** (1)? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.			✓	
If samples are acid preserved for metals, is the pH ≤ 2(1)? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

(1) **If NO, then contact the client before proceeding with analysis and note in case narrative.**

Custodian Printed Name or Initials 10.21.21 **Date/Time**

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

BH05@22-23'
2110371-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0526	10/26/21	10/27/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

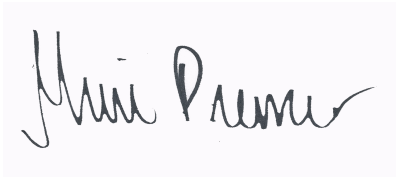
Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0527	10/26/21	10/27/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*122 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

BH05@22-23'

2110371-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluorene	ND	0.00500	mg/kg	1	BEJ0509	10/26/21	10/27/21	EPA 8270D SIM	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*96.1 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*71.7 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.0512**	0.0100	mg/L	1	BEJ0516	10/26/21	10/27/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**63.7**	0.0614	mg/L dry	1	BEJ0538	10/27/21	10/28/21	EPA 6020B	
Magnesium	**20.8**	0.0614	"	"	"	"	"	"	
Sodium	**90.6**	0.0614	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**2.52**	0.00100	units	1	BEJ0605	10/29/21	10/29/21	Calculation	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

BH05@22-23'

2110371-01 (Soil)

Summit Scientific

Calculated Analysis

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**81.4**		%	1	BEJ0448	10/22/21	10/22/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.711**	0.0100	mmhos/cm	1	BEJ0586	10/28/21	10/28/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/21/21 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**8.07**		pH Units	1	BEJ0584	10/28/21	10/28/21	EPA 9045D	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

BH06@17-18'

2110371-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0526	10/26/21	10/27/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*101 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

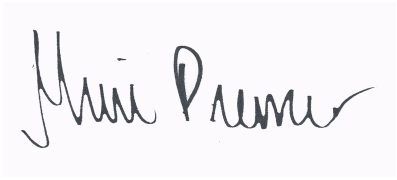
Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0527	10/26/21	10/27/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*113 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

BH06@17-18'

2110371-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluorene	ND	0.00500	mg/kg	1	BEJ0509	10/26/21	10/27/21	EPA 8270D SIM	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*80.6 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*63.0 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.141**	0.0100	mg/L	1	BEJ0516	10/26/21	10/27/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/21/21 14:50**

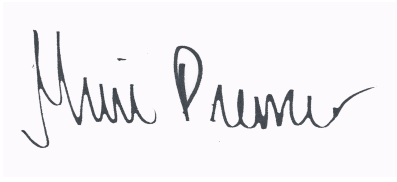
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**76.9**	0.0618	mg/L dry	1	BEJ0538	10/27/21	10/28/21	EPA 6020B	
Magnesium	**21.8**	0.0618	"	"	"	"	"	"	
Sodium	**112**	0.0618	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**2.90**	0.00100	units	1	BEJ0605	10/29/21	10/29/21	Calculation	

Summit Scientific



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

BH06@17-18'

2110371-02 (Soil)

Summit Scientific

Calculated Analysis

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**80.9**		%	1	BEJ0448	10/22/21	10/22/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.934**	0.0100	mmhos/cm	1	BEJ0586	10/28/21	10/28/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/21/21 14:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**8.20**		pH Units	1	BEJ0584	10/28/21	10/28/21	EPA 9045D	

S2

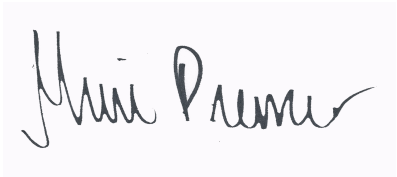
PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0526 - EPA 5030 Soil MS										
Blank (BEJ0526-BLK1)				Prepared & Analyzed: 10/26/21						
Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	*0.0402*		*"*	*0.0400*		*101*	*23-173*			
Surrogate: Toluene-d8	*0.0404*		*"*	*0.0400*		*101*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0404*		*"*	*0.0400*		*101*	*21-167*			
LCS (BEJ0526-BS1)				Prepared: 10/26/21 Analyzed: 10/27/21						
Benzene	0.140	0.0020	mg/kg	0.125		112	70-130			
Toluene	0.134	0.0050	"	0.125		108	70-130			
Ethylbenzene	0.139	0.0050	"	0.125		112	70-130			
m,p-Xylene	0.265	0.010	"	0.250		106	70-130			
o-Xylene	0.114	0.0050	"	0.125		91.1	70-130			
1,2,4-Trimethylbenzene	0.121	0.0050	"	0.125		97.2	70-130			
1,3,5-Trimethylbenzene	0.120	0.0050	"	0.125		96.2	70-130			
Naphthalene	0.0934	0.0038	"	0.125		74.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0387*		*"*	*0.0400*		*96.7*	*23-173*			
Surrogate: Toluene-d8	*0.0404*		*"*	*0.0400*		*101*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0403*		*"*	*0.0400*		*101*	*21-167*			
Matrix Spike (BEJ0526-MS1)	**Source: 2110355-01**			Prepared: 10/26/21 Analyzed: 10/27/21						
Benzene	0.136	0.0020	mg/kg	0.125	ND	109	70-130			
Toluene	0.130	0.0050	"	0.125	ND	104	70-130			
Ethylbenzene	0.133	0.0050	"	0.125	ND	106	70-130			
m,p-Xylene	0.250	0.010	"	0.250	ND	100	70-130			
o-Xylene	0.111	0.0050	"	0.125	ND	88.6	70-130			
1,2,4-Trimethylbenzene	0.116	0.0050	"	0.125	ND	92.7	70-130			
1,3,5-Trimethylbenzene	0.114	0.0050	"	0.125	ND	91.0	70-130			
Naphthalene	0.0993	0.0038	"	0.125	0.00900	72.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0402*		*"*	*0.0400*		*100*	*23-173*			
Surrogate: Toluene-d8	*0.0404*		*"*	*0.0400*		*101*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0406*		*"*	*0.0400*		*101*	*21-167*			

Summit Scientific



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

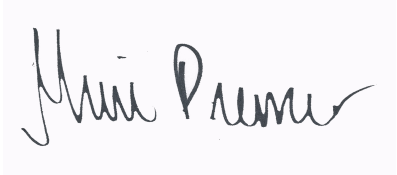
S2

PDC Energy	Project: Dinner 14 B-1 Wellhead	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	10/29/21 10:16

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0526 - EPA 5030 Soil MS										
Matrix Spike Dup (BEJ0526-MSD1)	**Source: 2110355-01**			Prepared: 10/26/21 Analyzed: 10/27/21						
Benzene	0.141	0.0020	mg/kg	0.125	ND	113	70-130	3.64	30	
Toluene	0.135	0.0050	"	0.125	ND	108	70-130	4.01	30	
Ethylbenzene	0.137	0.0050	"	0.125	ND	109	70-130	2.92	30	
m,p-Xylene	0.258	0.010	"	0.250	ND	103	70-130	3.12	30	
o-Xylene	0.114	0.0050	"	0.125	ND	90.8	70-130	2.52	30	
1,2,4-Trimethylbenzene	0.121	0.0050	"	0.125	ND	96.6	70-130	4.16	30	
1,3,5-Trimethylbenzene	0.118	0.0050	"	0.125	ND	94.8	70-130	4.03	30	
Naphthalene	0.109	0.0038	"	0.125	0.00900	80.2	70-130	9.61	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0400*		"	*0.0400*		*100*	*23-173*			
Surrogate: Toluene-d8	*0.0409*		"	*0.0400*		*102*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0399*		"	*0.0400*		*99.8*	*21-167*			



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0527 - EPA 3550A										
Blank (BEJ0527-BLK1)				Prepared: 10/26/21 Analyzed: 10/27/21						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BEJ0527-BS1)				Prepared: 10/26/21 Analyzed: 10/27/21						
C10-C28 (DRO)	579	50	mg/kg	500		116	70-130			
Matrix Spike (BEJ0527-MS1)	**Source: 2110355-01**			Prepared: 10/26/21 Analyzed: 10/27/21						
C10-C28 (DRO)	512	50	mg/kg	500	26.3	97.1	70-130			
Matrix Spike Dup (BEJ0527-MSD1)	**Source: 2110355-01**			Prepared: 10/26/21 Analyzed: 10/27/21						
C10-C28 (DRO)	421	50	mg/kg	500	26.3	79.0	70-130	19.5	20	

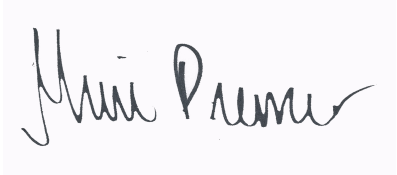
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0509 - EPA 5030 Soil MS										
Blank (BEJ0509-BLK1)				Prepared & Analyzed: 10/26/21						
Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	*0.0357*		*"*	*0.0333*		*107*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0262*		*"*	*0.0333*		*78.5*	*40-150*			
LCS (BEJ0509-BS1)				Prepared & Analyzed: 10/26/21						
Acenaphthene	0.0339	0.00500	mg/kg	0.0333		102	31-137			
Anthracene	0.0334	0.00500	"	0.0333		100	30-120			
Benzo (a) anthracene	0.0319	0.00500	"	0.0333		95.7	30-120			
Benzo (a) pyrene	0.0323	0.00500	"	0.0333		96.9	30-120			
Benzo (b) fluoranthene	0.0347	0.00500	"	0.0333		104	30-120			
Benzo (k) fluoranthene	0.0350	0.00500	"	0.0333		105	30-120			
Chrysene	0.0314	0.00500	"	0.0333		94.1	30-120			
Dibenz (a,h) anthracene	0.0326	0.00500	"	0.0333		97.7	30-120			
Fluoranthene	0.0355	0.00500	"	0.0333		106	30-120			
Fluorene	0.0318	0.00500	"	0.0333		95.5	30-120			
Indeno (1,2,3-cd) pyrene	0.0277	0.00500	"	0.0333		83.1	30-120			
Pyrene	0.0334	0.00500	"	0.0333		100	35-142			
1-Methylnaphthalene	0.0375	0.00500	"	0.0333		113	35-142			
2-Methylnaphthalene	0.0355	0.00500	"	0.0333		107	35-142			
Surrogate: 2-Methylnaphthalene-d10	*0.0384*		*"*	*0.0333*		*115*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0320*		*"*	*0.0333*		*96.0*	*40-150*			



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0509 - EPA 5030 Soil MS										
Matrix Spike (BEJ0509-MS1)	**Source: 2110277-01**			Prepared & Analyzed: 10/26/21						
Acenaphthene	0.0266	0.00500	mg/kg	0.0333	ND	79.8	31-137			
Anthracene	0.0251	0.00500	"	0.0333	ND	75.4	30-120			
Benzo (a) anthracene	0.0244	0.00500	"	0.0333	ND	73.3	30-120			
Benzo (a) pyrene	0.0245	0.00500	"	0.0333	ND	73.5	30-120			
Benzo (b) fluoranthene	0.0254	0.00500	"	0.0333	ND	76.1	30-120			
Benzo (k) fluoranthene	0.0262	0.00500	"	0.0333	ND	78.7	30-120			
Chrysene	0.0246	0.00500	"	0.0333	ND	73.7	30-120			
Dibenz (a,h) anthracene	0.0226	0.00500	"	0.0333	ND	67.7	30-120			
Fluoranthene	0.0268	0.00500	"	0.0333	ND	80.3	30-120			
Fluorene	0.0269	0.00500	"	0.0333	ND	80.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0204	0.00500	"	0.0333	ND	61.3	30-120			
Pyrene	0.0265	0.00500	"	0.0333	ND	79.4	35-142			
1-Methylnaphthalene	0.0282	0.00500	"	0.0333	ND	84.5	15-130			
2-Methylnaphthalene	0.0273	0.00500	"	0.0333	ND	81.8	15-130			
Surrogate: 2-Methylnaphthalene-d10	*0.0307*		*"*	*0.0333*		*92.2*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0253*		*"*	*0.0333*		*75.8*	*40-150*			
Matrix Spike Dup (BEJ0509-MSD1)	**Source: 2110277-01**			Prepared & Analyzed: 10/26/21						
Acenaphthene	0.0218	0.00500	mg/kg	0.0333	ND	65.4	31-137	19.9	30	
Anthracene	0.0212	0.00500	"	0.0333	ND	63.5	30-120	17.1	30	
Benzo (a) anthracene	0.0215	0.00500	"	0.0333	ND	64.5	30-120	12.7	30	
Benzo (a) pyrene	0.0217	0.00500	"	0.0333	ND	65.1	30-120	12.2	30	
Benzo (b) fluoranthene	0.0226	0.00500	"	0.0333	ND	67.7	30-120	11.6	30	
Benzo (k) fluoranthene	0.0233	0.00500	"	0.0333	ND	69.8	30-120	12.0	30	
Chrysene	0.0213	0.00500	"	0.0333	ND	64.0	30-120	14.1	30	
Dibenz (a,h) anthracene	0.0201	0.00500	"	0.0333	ND	60.3	30-120	11.7	30	
Fluoranthene	0.0224	0.00500	"	0.0333	ND	67.3	30-120	17.6	30	
Fluorene	0.0220	0.00500	"	0.0333	ND	66.0	30-120	19.9	30	
Indeno (1,2,3-cd) pyrene	0.0174	0.00500	"	0.0333	ND	52.2	30-120	15.9	30	
Pyrene	0.0227	0.00500	"	0.0333	ND	68.2	35-142	15.2	30	
1-Methylnaphthalene	0.0250	0.00500	"	0.0333	ND	75.0	15-130	11.8	50	
2-Methylnaphthalene	0.0244	0.00500	"	0.0333	ND	73.1	15-130	11.3	50	
Surrogate: 2-Methylnaphthalene-d10	*0.0257*		*"*	*0.0333*		*77.0*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0220*		*"*	*0.0333*		*66.0*	*40-150*			

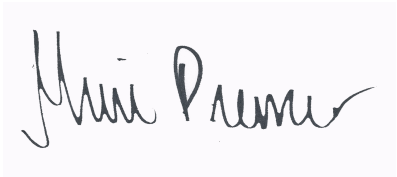
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0516 - EPA 3050B										
Blank (BEJ0516-BLK1)				Prepared: 10/26/21 Analyzed: 10/27/21						
Boron	ND	0.0100	mg/L							
LCS (BEJ0516-BS1)				Prepared: 10/26/21 Analyzed: 10/27/21						
Boron	4.59	0.0100	mg/L	5.00		91.8	80-120			
Duplicate (BEJ0516-DUP1)		**Source: 2110338-01**		Prepared: 10/26/21 Analyzed: 10/27/21						
Boron	0.144	0.0100	mg/L		0.170			16.3	20	
Matrix Spike (BEJ0516-MS1)		**Source: 2110338-01**		Prepared: 10/26/21 Analyzed: 10/27/21						
Boron	4.97	0.0100	mg/L	5.00	0.170	96.0	75-125			
Matrix Spike Dup (BEJ0516-MSD1)		**Source: 2110338-01**		Prepared: 10/26/21 Analyzed: 10/27/21						
Boron	4.91	0.0100	mg/L	5.00	0.170	94.9	75-125	1.16	25	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0538 - General Preparation										
Blank (BEJ0538-BLK1)				Prepared: 10/27/21 Analyzed: 10/28/21						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BEJ0538-BS1)				Prepared: 10/27/21 Analyzed: 10/28/21						
Calcium	5.39	0.0500	mg/L wet	5.00		108	70-130			
Magnesium	5.01	0.0500	"	5.00		100	70-130			
Sodium	5.09	0.0500	"	5.00		102	70-130			

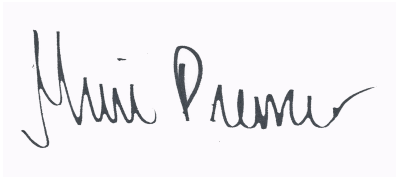
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0448 - General Preparation										
Duplicate (BEJ0448-DUP1)		**Source: 2110363-03**		Prepared & Analyzed: 10/22/21						
% Solids	81.5		%		78.8			3.38	20	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0586 - General Preparation										
Blank (BEJ0586-BLK1)				Prepared & Analyzed: 10/28/21						
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
Duplicate (BEJ0586-DUP1)		**Source: 2110321-01**		Prepared & Analyzed: 10/28/21						
Specific Conductance (EC)	0.726	0.0100	mmhos/cm		0.722			0.594	20	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

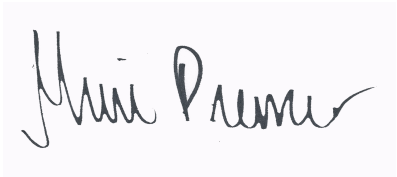
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0584 - General Preparation										
LCS (BEJ0584-BS1)				Prepared & Analyzed: 10/28/21						
pH	9.20		pH Units	9.18		100	95-105			
Duplicate (BEJ0584-DUP1)		**Source: 2110321-01**		Prepared & Analyzed: 10/28/21						
pH	8.06		pH Units		8.02			0.498	20	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 10/29/21 10:16

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

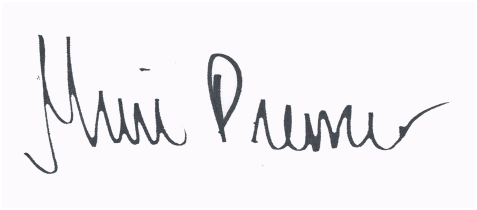
November 02, 2021

Mark Longhurst
PDC Energy
1775 Sherman St. STE. 3000
Denver, CO 80203

RE: Dinner 14 B-1 Wellhead
Work Order #2110392

Enclosed are the results of analyses for samples received by Summit Scientific on 10/22/21 14:54. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Muri Premer For Paul Shrewsbury
President

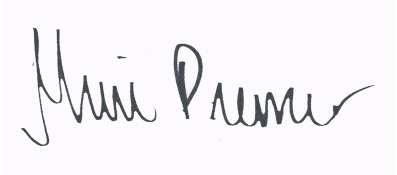
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH08@17-18'	2110392-01	Soil	10/22/21 08:50	10/22/21 14:54
BH07@17-18'	2110392-02	Soil	10/22/21 11:30	10/22/21 14:54

Summit Scientific



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

S_2

2110392

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Page 1 of 1

Client: PDC | Tasman
Address: 6855 W 119th Ave
City/State/Zip: Broomfield, CO 80020
Phone: (303) 487-1228
Sampler Name: Kris Shepherd

Project Manager: Mark Longhurst
E-Mail: mark.longhurst@PDCE.com
Project Name: Dinner 14 B-1 Wellhead
Project Number:

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other ___	Water	Soil	Air-Canister #	Other ___	BTEX-8260B	TPH (C6-C36)	1,2,4 & 1,3,5 TMB	PAH's *	PH, EC, SAR	Boron			* PAH's = fluorene, 1-methylnapthalene, 2-methylnapthalene, Pyrene
1	BH08 @ 17-18'	10/22/21	0850	3			X			X			X	X	X	X	X	X			
2	BH07 @ 17-18'	10/22/21	1130	3			X			X			X	X	X	X	X	X			
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time:	Received by:	Date/Time:
[signature]	10/22/21 1454	[signature]	10.22.21 1454
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Turn Around Time (Check)
Same Day ___ 72 hours ___
24 hours ___ Standard X
48 hours ___

Sample Integrity:
Temperature Upon Receipt: 0.2
Samples Intact: (Yes) No

Notes:
PH, EC, & SAR by Saturated paste

S2

2110392

Sample Receipt Checklist

S2 Work Order#_____

Client: Poc/Tasman Client Project ID: Dinner 14 B-1 wellhead

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ ☑ ☐ ☐ ☐ Airbill #: _____

Matrix (check all that apply): ☐ Air ☑ Soil/Solid ☐ Water ☐ Other: _____ (Describe)

Temp (°C)	6.2

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C (1)? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	✓			on ICE
Were all samples received intact (1)?	✓			
Was adequate sample volume provided (1)?	✓			
If custody seals are present, are they intact (1)?	✓			
Are samples with holding times due within 48 hours sample due within 48 hours present?		✓		
Is a chain-of-custody (COC) form present and filled out completely (1)?	✓			
Does the COC agree with the number and type of sample bottles received (1)?	✓			
Do the sample IDs on the bottle labels match the COC (1)?	✓			
Is the COC properly relinquished by the client w/ date and time recorded (1)?	✓			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation **(excluding cooling)** (1)? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.			✓	
If samples are acid preserved for metals, is the pH ≤ 2(1)? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

(1) **If NO, then contact the client before proceeding with analysis and note in case narrative.**

[signature] 10.22.21

Custodian Printed Name or Initials **Date/Time**

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

BH08@17-18'

2110392-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0562	10/27/21	10/28/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*96.6 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0564	10/27/21	10/27/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*118 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

BH08@17-18'

2110392-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluorene	ND	0.00500	mg/kg	1	BEJ0535	10/27/21	10/28/21	EPA 8270D SIM	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*62.1 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*51.8 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.120**	0.0100	mg/L	1	BEJ0539	10/27/21	10/28/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**82.8**	0.0614	mg/L dry	1	BEJ0579	10/28/21	10/29/21	EPA 6020B	
Magnesium	**25.8**	0.0614	"	"	"	"	"	"	
Sodium	**119**	0.0614	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**2.93**	0.00100	units	1	BEK0006	11/01/21	11/01/21	Calculation	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

BH08@17-18'

2110392-01 (Soil)

Summit Scientific

Calculated Analysis

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**81.5**		%	1	BEJ0490	10/25/21	10/26/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**0.908**	0.0100	mmhos/cm	1	BEJ0616	10/29/21	10/29/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/22/21 08:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**8.13**		pH Units	1	BEJ0615	10/29/21	10/29/21	EPA 9045D	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

BH07@17-18'

2110392-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0562	10/27/21	10/28/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*95.6 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*21-167*		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

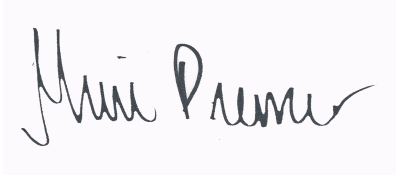
Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0564	10/27/21	10/28/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		*108 %*	*30-150*		"	"	"	"	

PAH by EPA Method 8270D SIM



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

BH07@17-18'

2110392-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Fluorene	ND	0.00500	mg/kg	1	BEJ0535	10/27/21	10/28/21	EPA 8270D SIM	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		*77.1 %*	*40-150*		"	"	"	"	
Surrogate: Fluoranthene-d10		*56.7 %*	*40-150*		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	**0.145**	0.0100	mg/L	1	BEJ0539	10/27/21	10/28/21	EPA 6020B	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	**86.8**	0.0637	mg/L dry	1	BEJ0579	10/28/21	10/29/21	EPA 6020B	
Magnesium	**24.7**	0.0637	"	"	"	"	"	"	
Sodium	**147**	0.0637	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	**3.58**	0.00100	units	1	BEK0006	11/01/21	11/01/21	Calculation	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

BH07@17-18'

2110392-02 (Soil)

Summit Scientific

Calculated Analysis

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	**78.5**		%	1	BEJ0490	10/25/21	10/26/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	**1.03**	0.0100	mmhos/cm	1	BEJ0616	10/29/21	10/29/21	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **10/22/21 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	**8.10**		pH Units	1	BEJ0615	10/29/21	10/29/21	EPA 9045D	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0562 - EPA 5030 Soil MS										
Blank (BEJ0562-BLK1)				Prepared: 10/27/21 Analyzed: 10/28/21						
Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	*0.0419*		*"*	*0.0400*		*105*	*23-173*			
Surrogate: Toluene-d8	*0.0403*		*"*	*0.0400*		*101*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0390*		*"*	*0.0400*		*97.6*	*21-167*			
LCS (BEJ0562-BS1)				Prepared: 10/27/21 Analyzed: 10/28/21						
Benzene	0.137	0.0020	mg/kg	0.150		91.6	70-130			
Toluene	0.139	0.0050	"	0.150		92.5	70-130			
Ethylbenzene	0.137	0.0050	"	0.150		91.1	70-130			
m,p-Xylene	0.279	0.010	"	0.300		92.9	70-130			
o-Xylene	0.138	0.0050	"	0.150		92.1	70-130			
1,2,4-Trimethylbenzene	0.140	0.0050	"	0.150		93.4	70-130			
1,3,5-Trimethylbenzene	0.137	0.0050	"	0.150		91.2	70-130			
Naphthalene	0.136	0.0038	"	0.150		90.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0405*		*"*	*0.0400*		*101*	*23-173*			
Surrogate: Toluene-d8	*0.0402*		*"*	*0.0400*		*101*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0405*		*"*	*0.0400*		*101*	*21-167*			
Matrix Spike (BEJ0562-MS1)	**Source: 2110363-03**			Prepared: 10/27/21 Analyzed: 10/28/21						
Benzene	0.140	0.0020	mg/kg	0.150	ND	93.5	70-130			
Toluene	0.140	0.0050	"	0.150	ND	93.2	70-130			
Ethylbenzene	0.137	0.0050	"	0.150	ND	91.1	70-130			
m,p-Xylene	0.277	0.010	"	0.300	ND	92.3	70-130			
o-Xylene	0.136	0.0050	"	0.150	ND	90.4	70-130			
1,2,4-Trimethylbenzene	0.138	0.0050	"	0.150	ND	92.1	70-130			
1,3,5-Trimethylbenzene	0.137	0.0050	"	0.150	ND	91.3	70-130			
Naphthalene	0.134	0.0038	"	0.150	ND	89.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0416*		*"*	*0.0400*		*104*	*23-173*			
Surrogate: Toluene-d8	*0.0407*		*"*	*0.0400*		*102*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0401*		*"*	*0.0400*		*100*	*21-167*			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

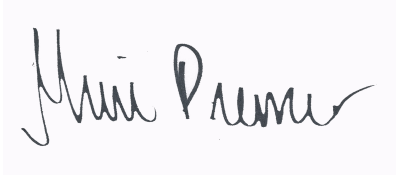
S2

PDC Energy	Project: Dinner 14 B-1 Wellhead	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	11/02/21 13:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0562 - EPA 5030 Soil MS										
Matrix Spike Dup (BEJ0562-MSD1)	**Source: 2110363-03**			Prepared: 10/27/21 Analyzed: 10/28/21						
Benzene	0.141	0.0020	mg/kg	0.150	ND	93.8	70-130	0.363	30	
Toluene	0.141	0.0050	"	0.150	ND	93.9	70-130	0.706	30	
Ethylbenzene	0.139	0.0050	"	0.150	ND	92.6	70-130	1.59	30	
m,p-Xylene	0.282	0.010	"	0.300	ND	94.0	70-130	1.76	30	
o-Xylene	0.137	0.0050	"	0.150	ND	91.5	70-130	1.19	30	
1,2,4-Trimethylbenzene	0.142	0.0050	"	0.150	ND	94.4	70-130	2.47	30	
1,3,5-Trimethylbenzene	0.140	0.0050	"	0.150	ND	93.1	70-130	1.97	30	
Naphthalene	0.137	0.0038	"	0.150	ND	91.6	70-130	2.25	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0411*		"	*0.0400*		*103*	*23-173*			
Surrogate: Toluene-d8	*0.0403*		"	*0.0400*		*101*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*0.0401*		"	*0.0400*		*100*	*21-167*			



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

Extractable Petroleum Hydrocarbons by 8015 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0564 - EPA 3550A										
Blank (BEJ0564-BLK1)				Prepared: 10/27/21 Analyzed: 10/28/21						
C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
LCS (BEJ0564-BS1)				Prepared: 10/27/21 Analyzed: 10/28/21						
C10-C28 (DRO)	451	50	mg/kg	500		90.3	70-130			
Matrix Spike (BEJ0564-MS1)	**Source: 2110363-03**			Prepared: 10/27/21 Analyzed: 10/28/21						
C10-C28 (DRO)	493	50	mg/kg	500	26.8	93.3	70-130			
Matrix Spike Dup (BEJ0564-MSD1)	**Source: 2110363-03**			Prepared: 10/27/21 Analyzed: 10/28/21						
C10-C28 (DRO)	531	50	mg/kg	500	26.8	101	70-130	7.36	20	

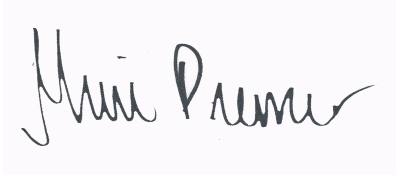
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0535 - EPA 5030 Soil MS										
Blank (BEJ0535-BLK1)				Prepared: 10/27/21 Analyzed: 10/28/21						
Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	*0.0316*		*"*	*0.0333*		*94.8*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0257*		*"*	*0.0333*		*77.2*	*40-150*			
LCS (BEJ0535-BS1)				Prepared: 10/27/21 Analyzed: 10/28/21						
Acenaphthene	0.0308	0.00500	mg/kg	0.0333		92.3	31-137			
Anthracene	0.0311	0.00500	"	0.0333		93.2	30-120			
Benzo (a) anthracene	0.0286	0.00500	"	0.0333		85.9	30-120			
Benzo (a) pyrene	0.0279	0.00500	"	0.0333		83.7	30-120			
Benzo (b) fluoranthene	0.0292	0.00500	"	0.0333		87.6	30-120			
Benzo (k) fluoranthene	0.0310	0.00500	"	0.0333		92.9	30-120			
Chrysene	0.0308	0.00500	"	0.0333		92.3	30-120			
Dibenz (a,h) anthracene	0.0280	0.00500	"	0.0333		83.9	30-120			
Fluoranthene	0.0341	0.00500	"	0.0333		102	30-120			
Fluorene	0.0342	0.00500	"	0.0333		103	30-120			
Indeno (1,2,3-cd) pyrene	0.0222	0.00500	"	0.0333		66.7	30-120			
Pyrene	0.0313	0.00500	"	0.0333		94.0	35-142			
1-Methylnaphthalene	0.0344	0.00500	"	0.0333		103	35-142			
2-Methylnaphthalene	0.0346	0.00500	"	0.0333		104	35-142			
Surrogate: 2-Methylnaphthalene-d10	*0.0327*		*"*	*0.0333*		*98.1*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0279*		*"*	*0.0333*		*83.6*	*40-150*			



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0535 - EPA 5030 Soil MS										
Matrix Spike (BEJ0535-MS1)	**Source: 2110392-01**			Prepared: 10/27/21 Analyzed: 10/28/21						
Acenaphthene	0.0186	0.00500	mg/kg	0.0333	ND	55.9	31-137			
Anthracene	0.0200	0.00500	"	0.0333	ND	59.9	30-120			
Benzo (a) anthracene	0.0212	0.00500	"	0.0333	ND	63.6	30-120			
Benzo (a) pyrene	0.0193	0.00500	"	0.0333	ND	57.8	30-120			
Benzo (b) fluoranthene	0.0196	0.00500	"	0.0333	ND	58.9	30-120			
Benzo (k) fluoranthene	0.0206	0.00500	"	0.0333	ND	61.8	30-120			
Chrysene	0.0215	0.00500	"	0.0333	ND	64.5	30-120			
Dibenz (a,h) anthracene	0.0191	0.00500	"	0.0333	ND	57.2	30-120			
Fluoranthene	0.0218	0.00500	"	0.0333	ND	65.3	30-120			
Fluorene	0.0206	0.00500	"	0.0333	ND	61.9	30-120			
Indeno (1,2,3-cd) pyrene	0.0155	0.00500	"	0.0333	ND	46.5	30-120			
Pyrene	0.0229	0.00500	"	0.0333	ND	68.8	35-142			
1-Methylnaphthalene	0.0209	0.00500	"	0.0333	ND	62.7	15-130			
2-Methylnaphthalene	0.0215	0.00500	"	0.0333	ND	64.6	15-130			
Surrogate: 2-Methylnaphthalene-d10	*0.0221*		*"*	*0.0333*		*66.2*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0195*		*"*	*0.0333*		*58.5*	*40-150*			
Matrix Spike Dup (BEJ0535-MSD1)	**Source: 2110392-01**			Prepared: 10/27/21 Analyzed: 10/28/21						
Acenaphthene	0.0211	0.00500	mg/kg	0.0333	ND	63.2	31-137	12.1	30	
Anthracene	0.0227	0.00500	"	0.0333	ND	68.0	30-120	12.6	30	
Benzo (a) anthracene	0.0237	0.00500	"	0.0333	ND	71.0	30-120	11.0	30	
Benzo (a) pyrene	0.0212	0.00500	"	0.0333	ND	63.5	30-120	9.33	30	
Benzo (b) fluoranthene	0.0215	0.00500	"	0.0333	ND	64.6	30-120	9.31	30	
Benzo (k) fluoranthene	0.0219	0.00500	"	0.0333	ND	65.8	30-120	6.23	30	
Chrysene	0.0235	0.00500	"	0.0333	ND	70.4	30-120	8.79	30	
Dibenz (a,h) anthracene	0.0215	0.00500	"	0.0333	ND	64.5	30-120	11.9	30	
Fluoranthene	0.0250	0.00500	"	0.0333	ND	75.0	30-120	13.8	30	
Fluorene	0.0242	0.00500	"	0.0333	ND	72.5	30-120	15.8	30	
Indeno (1,2,3-cd) pyrene	0.0180	0.00500	"	0.0333	ND	53.9	30-120	14.8	30	
Pyrene	0.0244	0.00500	"	0.0333	ND	73.3	35-142	6.43	30	
1-Methylnaphthalene	0.0244	0.00500	"	0.0333	ND	73.2	15-130	15.4	50	
2-Methylnaphthalene	0.0251	0.00500	"	0.0333	ND	75.4	15-130	15.5	50	
Surrogate: 2-Methylnaphthalene-d10	*0.0248*		*"*	*0.0333*		*74.5*	*40-150*			
Surrogate: Fluoranthene-d10	*0.0219*		*"*	*0.0333*		*65.7*	*40-150*			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0539 - EPA 3050B										
Blank (BEJ0539-BLK1)				Prepared: 10/27/21 Analyzed: 10/28/21						
Boron	ND	0.0100	mg/L							
LCS (BEJ0539-BS1)				Prepared: 10/27/21 Analyzed: 10/28/21						
Boron	5.09	0.0100	mg/L	5.00		102	80-120			
Duplicate (BEJ0539-DUP1)		**Source: 2110389-01**		Prepared: 10/27/21 Analyzed: 10/28/21						
Boron	0.124	0.0100	mg/L		0.136			8.92	20	
Matrix Spike (BEJ0539-MS1)		**Source: 2110389-01**		Prepared: 10/27/21 Analyzed: 10/28/21						
Boron	5.15	0.0100	mg/L	5.00	0.136	100	75-125			
Matrix Spike Dup (BEJ0539-MSD1)		**Source: 2110389-01**		Prepared: 10/27/21 Analyzed: 10/28/21						
Boron	5.11	0.0100	mg/L	5.00	0.136	99.4	75-125	0.883	25	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0579 - General Preparation										
Blank (BEJ0579-BLK1)				Prepared: 10/28/21 Analyzed: 10/29/21						
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							
LCS (BEJ0579-BS1)				Prepared: 10/28/21 Analyzed: 10/29/21						
Calcium	5.33	0.0500	mg/L wet	5.00		107	70-130			
Magnesium	4.91	0.0500	"	5.00		98.2	70-130			
Sodium	4.75	0.0500	"	5.00		95.1	70-130			

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0490 - General Preparation										
Duplicate (BEJ0490-DUP1)		**Source: 2110321-01**		Prepared: 10/25/21 Analyzed: 10/26/21						
% Solids	93.3		%		87.9			6.03	20	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0616 - General Preparation										
Blank (BEJ0616-BLK1)				Prepared & Analyzed: 10/29/21						
Specific Conductance (EC)	ND	0.0100	mmhos/cm							
LCS (BEJ0616-BS1)				Prepared & Analyzed: 10/29/21						
Specific Conductance (EC)	0.150	0.0100	mmhos/cm	0.150		99.7	95-105			
Duplicate (BEJ0616-DUP1)		**Source: 2110378-01**		Prepared & Analyzed: 10/29/21						
Specific Conductance (EC)	0.185	0.0100	mmhos/cm		0.187			1.08	20	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

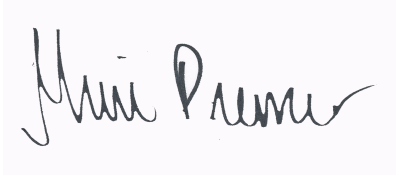
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEJ0615 - General Preparation										
LCS (BEJ0615-BS1)				Prepared & Analyzed: 10/29/21						
pH	9.16		pH Units	9.18		99.8	95-105			
Duplicate (BEJ0615-DUP1)		**Source: 2110378-01**		Prepared & Analyzed: 10/29/21						
pH	7.73		pH Units		7.77			0.516	20	



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 11/02/21 13:57

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

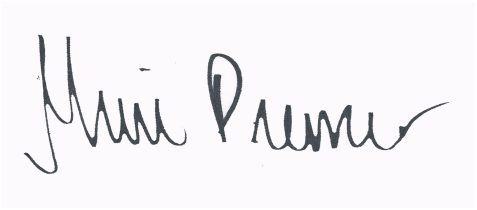
December 14, 2021

Mark Longhurst
PDC Energy
1775 Sherman St. STE. 3000
Denver, CO 80203

RE: Dinner 14 B-1 Wellhead
Work Order #2111247

Enclosed are the results of analyses for samples received by Summit Scientific on 11/12/21 18:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Muri Premer For Paul Shrewsbury
President

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	2111247-01	Water	11/12/21 11:25	11/12/21 18:30
BH02	2111247-02	Water	11/12/21 12:15	11/12/21 18:30
BH03	2111247-03	Water	11/12/21 12:20	11/12/21 18:30
BH04	2111247-04	Water	11/12/21 12:30	11/12/21 18:30
BH05	2111247-05	Water	11/12/21 12:40	11/12/21 18:30
BH06	2111247-06	Water	11/12/21 12:45	11/12/21 18:30
BH07	2111247-07	Water	11/12/21 13:10	11/12/21 18:30
BH08	2111247-08	Water	11/12/21 13:35	11/12/21 18:30

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Summit Scientific

2111247

4653 Table Mountain Drive ♦ Golden, Colorado 80403
303-277-9310

Page 1 of 1

Client: PDC Tasman
Address: 6855 W 119th Ave
City State Zip: Broomfield CO 80020
Phone: 303-487-1228
Sampler Name: David V. / Mike C. / Mataya W.

Project Manager: Mark Longhurst
E-Mail: mark.longhurst@PDCEs.com
Project Name: Dinner 14 B-1 Wellhead
Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative: HCl	Preservative: HNO3	Preservative: None	Preservative: Other	Matrix: Water	Matrix: Soil	Matrix: Air-Canister #	Matrix: Other	Analysis Requested: BTEX - 8260B	TPH - (C6 - C36)	pH, EC, SAR	Boron - HWS	VOC - 915	PAH - 915	Metals - 915	TMB's (1,2,4) (1335)	Special Instructions: pH, EC, SAR by saturated paste
1	BH01	11/12/21	1125	4			X		X				X							X	Inorganic analysis on hold
2	BH02		1215	4			X		X				X							X	
3	BH03		1220	4			X		X				X							X	
4	BH04		1230	4			X		X				X							X	
5	BH05		1240	4			X		X				X							X	
6	BH06		1245	4			X		X				X							X	
7	BH07		1310	4			X		X				X							X	
8	BH08		1335	4			X		X				X							X	
9																					
10																					

Relinquished by: Date/Time: 11/12/21 1520
Received by: Tasman's Lock Box Date/Time:

Relinquished by: Tasman's Lock Box Date/Time:
Received by: Date/Time: 11.12.21 1830

Relinquished by: Date/Time:
Received by: Date/Time:

Turn Around Time (Check)
Same Day ___ 72 hours ___
24 hours ___ Standard X
48 hours ___
Sample Integrity:
Temperature Upon Receipt: 6.1
Samples Intact: (Yes) No

Notes:

S2

S2 Work Order#_____

Sample Receipt Checklist

2111247

Client: Rdc | Tasman Client Project ID: Dinner 14 B-1 wellhead

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other_____ Airbill #: _____

☐ ☑ ☐ ☐ ☐

Matrix (check all that apply): ☐ Air ☐ Soil/Solid ☑ Water ☐ Other:_____ (Describe)

Temp (°C)	6.1

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C (1)? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	✓			on ICE
Were all samples received intact (1)?	✓			
Was adequate sample volume provided (1)?	✓			
If custody seals are present, are they intact (1)?	✓			
Are samples with holding times due within 48 hours sample due within 48 hours present?		✓		
Is a chain-of-custody (COC) form present and filled out completely (1)?	✓			
Does the COC agree with the number and type of sample bottles received (1)?	✓			
Do the sample IDs on the bottle labels match the COC (1)?	✓			
Is the COC properly relinquished by the client w/ date and time recorded (1)?	✓			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**		✓		
Are samples preserved that require preservation **(excluding cooling)** (1)? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.			✓	
If samples are acid preserved for metals, is the pH ≤ 2(1)? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

(1) If NO, then contact the client before proceeding with analysis and note in case narrative.

[signature] 11221

Custodian Printed Name or Initials **Date/Time**

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

BH01

2111247-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/12/21 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BEK0358	11/16/21	11/18/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **11/12/21 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*93.6 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*97.1 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*101 %*	*21-167*		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **11/12/21 11:25**

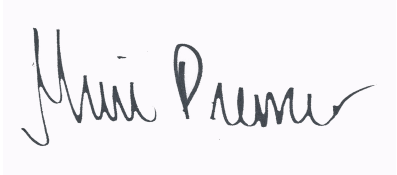
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	**78.8**	12.0	mg/L	200	BEL0259	12/10/21	12/13/21	EPA 300.0	
Sulfate	**119**	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **11/12/21 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	**930**	10.0	mg/L	1	BEL0200	12/09/21	12/10/21	SM2540C	I-04

Summit Scientific



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

BH02

2111247-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/12/21 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BEK0358	11/16/21	11/18/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **11/12/21 12:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*93.2 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*99.7 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.9 %*	*21-167*		"	"	"	"	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

BH03

2111247-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/12/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BEK0358	11/16/21	11/18/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **11/12/21 12:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*95.6 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*98.0 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.7 %*	*21-167*		"	"	"	"	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

BH04

2111247-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/12/21 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BEK0358	11/16/21	11/18/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **11/12/21 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*101 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*94.5 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	*21-167*		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **11/12/21 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	**60.0**	12.0	mg/L	200	BEL0259	12/10/21	12/13/21	EPA 300.0	
Sulfate	**97.6**	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **11/12/21 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	**715**	10.0	mg/L	1	BEL0200	12/09/21	12/10/21	SM2540C	I-04

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

BH05

2111247-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/12/21 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BEK0358	11/16/21	11/18/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **11/12/21 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*96.6 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*97.1 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*96.8 %*	*21-167*		"	"	"	"	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

BH06

2111247-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/12/21 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BEK0358	11/16/21	11/18/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **11/12/21 12:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*95.1 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*98.6 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.9 %*	*21-167*		"	"	"	"	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

BH07

2111247-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/12/21 13:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BEK0358	11/16/21	11/18/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **11/12/21 13:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*94.1 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*99.2 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.6 %*	*21-167*		"	"	"	"	

S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

BH08

2111247-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/12/21 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BEK0358	11/16/21	11/18/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **11/12/21 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		*93.5 %*	*23-173*		"	"	"	"	
Surrogate: Toluene-d8		*96.5 %*	*20-170*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*95.9 %*	*21-167*		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **11/12/21 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	**59.2**	12.0	mg/L	200	BEL0259	12/10/21	12/13/21	EPA 300.0	
Sulfate	**85.6**	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **11/12/21 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	**669**	10.0	mg/L	1	BEL0200	12/09/21	12/10/21	SM2540C	I-04

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

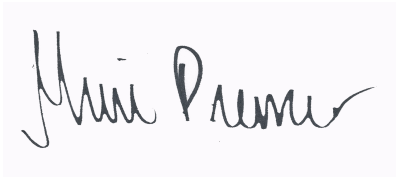
S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEK0358 - EPA 5030 Water MS										
Blank (BEK0358-BLK1)				Prepared: 11/16/21 Analyzed: 11/17/21						
Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Naphthalene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	*13.5*		"	*13.3*		*101*	*23-173*			
Surrogate: Toluene-d8	*13.3*		"	*13.3*		*99.9*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*13.5*		"	*13.3*		*101*	*21-167*			
LCS (BEK0358-BS1)				Prepared: 11/16/21 Analyzed: 11/17/21						
Benzene	33.8	1.0	ug/l	41.7		81.2	51-132			
Toluene	35.4	1.0	"	41.7		84.9	51-138			
Ethylbenzene	41.6	1.0	"	41.7		99.9	58-146			
m,p-Xylene	80.5	2.0	"	83.3		96.6	57-144			
o-Xylene	39.6	1.0	"	41.7		95.1	53-146			
Naphthalene	37.1	1.0	"	41.7		89.0	70-130			
1,2,4-Trimethylbenzene	46.0	1.0	"	41.7		110	70-130			
1,3,5-Trimethylbenzene	45.8	1.0	"	41.7		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	*13.5*		"	*13.3*		*101*	*23-173*			
Surrogate: Toluene-d8	*13.0*		"	*13.3*		*97.9*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*13.5*		"	*13.3*		*101*	*21-167*			
Matrix Spike (BEK0358-MS1)	**Source: 2111221-04**			Prepared: 11/16/21 Analyzed: 11/17/21						
Benzene	33.7	1.0	ug/l	41.7	ND	80.9	34-141			
Toluene	35.4	1.0	"	41.7	ND	85.0	27-151			
Ethylbenzene	41.8	1.0	"	41.7	ND	100	29-160			
m,p-Xylene	80.8	2.0	"	83.3	ND	97.0	20-166			
o-Xylene	38.6	1.0	"	41.7	ND	92.6	33-159			
Naphthalene	38.8	1.0	"	41.7	ND	93.0	70-130			
1,2,4-Trimethylbenzene	46.0	1.0	"	41.7	ND	110	70-130			
1,3,5-Trimethylbenzene	45.9	1.0	"	41.7	ND	110	70-130			
Surrogate: 1,2-Dichloroethane-d4	*13.3*		"	*13.3*		*99.8*	*23-173*			
Surrogate: Toluene-d8	*13.1*		"	*13.3*		*98.0*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*13.2*		"	*13.3*		*99.1*	*21-167*			



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEK0358 - EPA 5030 Water MS										
Matrix Spike Dup (BEK0358-MSD1)	**Source: 2111221-04**			Prepared: 11/16/21 Analyzed: 11/17/21						
Benzene	33.2	1.0	ug/l	41.7	ND	79.7	34-141	1.50	30	
Toluene	35.2	1.0	"	41.7	ND	84.4	27-151	0.765	30	
Ethylbenzene	41.3	1.0	"	41.7	ND	99.2	29-160	1.03	30	
m,p-Xylene	79.9	2.0	"	83.3	ND	95.9	20-166	1.14	30	
o-Xylene	38.7	1.0	"	41.7	ND	93.0	33-159	0.362	30	
Naphthalene	41.1	1.0	"	41.7	ND	98.5	70-130	5.74	30	
1,2,4-Trimethylbenzene	45.3	1.0	"	41.7	ND	109	70-130	1.36	30	
1,3,5-Trimethylbenzene	45.4	1.0	"	41.7	ND	109	70-130	0.964	30	
Surrogate: 1,2-Dichloroethane-d4	*13.9*		*"*	*13.3*		*104*	*23-173*			
Surrogate: Toluene-d8	*13.2*		*"*	*13.3*		*98.7*	*20-170*			
Surrogate: 4-Bromofluorobenzene	*13.0*		*"*	*13.3*		*97.2*	*21-167*			

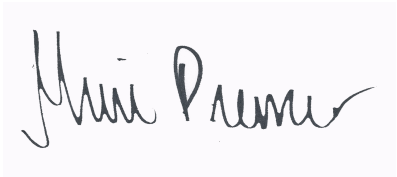
S2

PDC Energy	Project: Dinner 14 B-1 Wellhead	
1775 Sherman St. STE. 3000	Project Number: [none]	**Reported:**
Denver CO, 80203	Project Manager: Mark Longhurst	12/14/21 15:25

Anions by EPA Method 300.0 - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEL0259 - General Preparation										
Blank (BEL0259-BLK1)				Prepared & Analyzed: 12/13/21						
Chloride	ND	0.0600	mg/L							
Sulfate	ND	0.300	"							
LCS (BEL0259-BS1)				Prepared & Analyzed: 12/13/21						
Chloride	3.10	0.0600	mg/L	3.00		103	90-110			
Sulfate	14.4	0.300	"	15.0		95.9	90-110			
Duplicate (BEL0259-DUP1)	**Source: 2112082-01**			Prepared & Analyzed: 12/13/21						
Chloride	93.8	12.0	mg/L		58.4			46.5	20	QR-03
Sulfate	591	60.0	"		619			4.76	20	
Matrix Spike (BEL0259-MS1)	**Source: 2112082-01**			Prepared & Analyzed: 12/13/21						
Chloride	648	12.0	mg/L	600	58.4	98.2	80-120			
Sulfate	3190	60.0	"	3000	619	85.7	80-120			



S2

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

Total Dissolved Solids by SM2540C - Quality Control

Summit Scientific

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch BEL0200 - General Preparation										
Blank (BEL0200-BLK1)				Prepared: 12/09/21 Analyzed: 12/10/21						
Total Dissolved Solids	ND	10.0	mg/L							
Duplicate (BEL0200-DUP1)		**Source: 2112082-01**		Prepared: 12/09/21 Analyzed: 12/10/21						
Total Dissolved Solids	1530	10.0	mg/L		1500			1.65	20	

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

PDC Energy 1775 Sherman St. STE. 3000 Denver CO, 80203	Project: Dinner 14 B-1 Wellhead Project Number: [none] Project Manager: Mark Longhurst	**Reported:** 12/14/21 15:25

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
I-04	Sample was analyzed out of recomended holding time per clients request.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference