

TABLE 1  
FORMER NOFFSINGER 31-33 WELLHEAD  
SOIL ANALYTICAL RESULTS SUMMARY TABLE  
ORGANIC COMPOUNDS

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 <sup>(4)</sup> (mg/kg)
Residential SSL <sup>(1,2)</sup>			1.2	490	5.8	58	30	27	2	500
Protection of Groundwater SSL <sup>(1,2,3)</sup>			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500
SS01 @ 3'	1/3/2023	3 ft. bgs	<0.0020	<0.0050	0.068	<0.010	0.50	0.21	0.028	16

Notes:

- Compounds referenced from the COGCC 2 CCR 404-1, Table 915-1, effective January 15, 2021.
- Soil Screening Levels (SSL) referenced from EPA Regional Screening Levels (EPA RSLs) for Chemical Contaminants at Superfund Sites, effective November 2020.
- SSLs are applicable if a pathway for communication with groundwater is present.
- 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

ft. = Feet

bgs = Below ground surface

**BOLD** = Analytical result is in exceedance of applicable standard.

TABLE 2  
FORMER NOFFSINGER 31-33 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 <sup>(2)</sup> (ft.)	Groundwater Elevation (ft. AMSL)
COGCC Table 915-1 Groundwater Standard (µg/L) <sup>(1)</sup>		5	560	700	1,400	140	67	67	-	-
GW01	1/3/2023	<1.0	12	6.2	86	3.8	33	14	4	NA

**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.  
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  
NA = Not applicable

**TABLE 3**  
**FORMER NOFFSINGER 31-33 WELLHEAD**  
**FIELD DATA SUMMARY TABLE**

Sample ID	Date Sampled	Depth	GPS Data <sup>(1)</sup> Latitude / Longitude		PDOP Value	VOC Concentration <sup>(2)</sup> (ppm)
WH01-N @ 0-6"	1/3/2023	0-6 in. bgs	40.448414	-104.552430	0.9	0.0
WH01-W @ 0-6"	1/3/2023	0-6 in. bgs	40.448328	-104.552486	0.8	0.0
WH01-S @ 0-6"	1/3/2023	0-6 in. bgs	40.448278	-104.552435	0.9	0.0
WH01-E @ 0-6"	1/3/2023	0-6 in. bgs	40.448322	-104.552341	0.8	0.0
SS01 @ 3'	1/3/2023	3 ft. bgs	40.448354	-104.552434	0.8	10.8
SS02 @ 3'	1/3/2023	3 ft. bgs	40.448370	-104.552422	0.8	0.0
SS03 @ 4'	1/3/2023	4 ft. bgs	40.448370	-104.552422	0.8	0.0
SS04 @ 4'	1/3/2023	4 ft. bgs	40.448349	-104.552416	0.8	0.0
SS05 @ 3'	1/3/2023	3 ft. bgs	40.448351	-104.552451	0.8	0.1
SS06 @ 4'	1/3/2023	4 ft. bgs	40.448351	-104.552451	0.8	0.0
SS07 @ 3'	1/3/2023	3 ft. bgs	40.448314	-104.552420	0.8	0.0
SS08 @ 4'	1/3/2023	4 ft. bgs	40.448314	-104.552420	0.8	0.0
SS09 @ 3'	1/3/2023	3 ft. bgs	40.448347	-104.552388	0.8	0.0
SS10 @ 4'	1/3/2023	4 ft. bgs	40.448347	-104.552388	0.8	0.0
SS11 @ 2.5'	1/3/2023	2.5 ft. bgs	40.448367	-104.552399	0.8	0.0
SS12 @ 2.5'	1/3/2023	2.5 ft. bgs	40.448318	-104.552458	0.8	0.0
BKG01 @ 2.5'	1/3/2023	2.5 ft. bgs	40.448259	-104.552607	0.8	0.0
BKG01 @ 3'	1/3/2023	3 ft. bgs	40.448259	-104.552607	0.8	0.0
BKG01 @ 4'	1/3/2023	4 ft. bgs	40.448259	-104.552607	0.8	0.0
BKG02 @ 2.5'	1/3/2023	2.5 ft. bgs	40.448165	-104.552473	0.7	0.0
BKG02 @ 3'	1/3/2023	3 ft. bgs	40.448165	-104.552473	0.7	0.0
BKG02 @ 4'	1/3/2023	4 ft. bgs	40.448165	-104.552473	0.7	0.0

**Notes:**

1. Global Positioning System (GPS) data is provided in decimal degrees using World Geodetic System (WGS) 84 UTM Zone 13 North.

2. Volatile organic compound (VOC) concentrations are measured in the field using a photoionization detector (PID).

PDOP = Position Dilution of Precision

ppm = Parts per million

ft. = Feet

bgs = Below ground surface

in. = Inches

## Attachment A

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

January 04, 2023

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Noffsinger 31-33 Wellhead

Work Order #2301024

Enclosed are the results of analyses for samples received by Summit Scientific on 01/03/23 18:01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury

President



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

Project: Noffsinger 31-33 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
01/04/23 06:03

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW01	2301024-01	Water	01/03/23 10:29	01/03/23 18:01
GW02	2301024-02	Water	01/03/23 11:17	01/03/23 18:01
SS01@3'	2301024-03	Soil	01/03/23 10:09	01/03/23 18:01

Summit Scientific

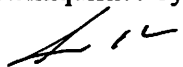
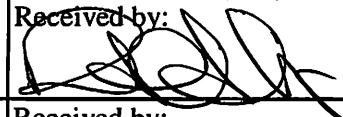
*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

230/024

Page 1 of 1

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	BTEXN - 8260B	TPH - (C6 - C36)	1,2,4 & 1,3,5-TMB	Boron - HWS	pH, EC, SAR	PAHs	Metals		pH, EC, SAR by saturated paste	
1	6W01	1/3/23	1029	4	X				X				X		X							
2	6W02	↓	1117	3	←				←				X		X							
3	SS01e3'	↓	1009	3			X			X			X	X	X	X	X	X	X	X		
4																						
5																						
6																						
7																						
8																						
9																						
10	..																					

Relinquished by:		Date/Time:		Received by:		Date/Time:		Turn Around Time				(Check)		Notes:
		1/3/23 1648		Tasman's Lock Box		1/3/23 1648		Same Day				X 72 hours		
								24 hours				Standard		
								48 hours						
Relinquished by:		Date/Time:		Received by:		Date/Time:		Sample Integrity:						
Tasman's Lock Box		1325 1801				1325 1801								
Relinquished by:		Date/Time:		Received by:		Date/Time:		Temperature Upon Receipt:				7.1		
								Samples Intact:				Yes No		

S<sub>2</sub>

## Sample Receipt Checklist

S2 Work Order# 2301024Client: Pacframan Client Project ID: Norfolk 31-33 wellheadShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☒ Other ☐Temp (°C) 7.1Thermometer # 1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> <b>NOTE:</b> If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ICE
If custody seals are present, are they intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	same day
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HCl
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

Custodian Printed Name

Date/Time

1-3-23





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

Project: Noffsinger 31-33 Wellhead  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
01/04/23 06:03

**GW01**  
**2301024-01 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **01/03/23 10:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGA0028	01/03/23	01/03/23	EPA 8260B	
<b>Toluene</b>	<b>12</b>	1.0		"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>6.2</b>	1.0		"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>86</b>	2.0		"	"	"	"	"	"	
<b>Naphthalene</b>	<b>3.8</b>	1.0		"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>33</b>	1.0		"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>14</b>	1.0		"	"	"	"	"	"	

Date Sampled: **01/03/23 10:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.4	101 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.1	98.0 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.3	99.5 %		21-167		"	"	"	"	

Summit Scientific

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

Project: Noffsinger 31-33 Wellhead  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
01/04/23 06:03

**GW02**  
**2301024-02 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **01/03/23 11:17**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGA0028	01/03/23	01/03/23	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: **01/03/23 11:17**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.5	101 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.0	97.8 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.1	98.0 %		21-167		"	"	"	"	

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

Project: Noffsinger 31-33 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
01/04/23 06:03

**SS01@3'**  
**2301024-03 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **01/03/23 10:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BGA0029	01/03/23	01/04/23	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>0.068</b>	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>0.50</b>	0.0050	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>0.21</b>	0.0050	"	"	"	"	"	"	
<b>Naphthalene</b>	<b>0.028</b>	0.0038	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>16</b>	0.50	"	"	"	"	"	"	

Date Sampled: **01/03/23 10:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0332	83.0 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0470	117 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0611	153 %	50-150		"	"	"	"	S-02

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **01/03/23 10:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BGA0030	"	01/04/23	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/03/23 10:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	15.5	124 %	30-150		"	"	"	"	

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

Project: Noffsinger 31-33 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
01/04/23 06:03

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch BGA0028 - EPA 5030 Water MS

##### Blank (BGA0028-BLK1)

Prepared: 01/03/23 Analyzed: 01/04/23

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	13.0		"	13.3		97.4	23-173			
Surrogate: Toluene-d8	13.2		"	13.3		99.2	20-170			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		100	21-167			

##### LCS (BGA0028-BS1)

Prepared: 01/03/23 Analyzed: 01/04/23

Benzene	38.8	1.0	ug/l	33.3		116	51-132			
Toluene	38.4	1.0	"	33.3		115	51-138			
Ethylbenzene	40.5	1.0	"	33.3		122	58-146			
m,p-Xylene	81.0	2.0	"	66.7		122	57-144			
o-Xylene	38.4	1.0	"	33.3		115	53-146			
Naphthalene	34.5	1.0	"	33.3		103	70-130			
1,2,4-Trimethylbenzene	34.0	1.0	"	33.3		102	70-130			
1,3,5-Trimethylbenzene	35.3	1.0	"	33.3		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	13.4		"	13.3		100	23-173			
Surrogate: Toluene-d8	13.2		"	13.3		98.7	20-170			
Surrogate: 4-Bromofluorobenzene	12.9		"	13.3		96.8	21-167			

##### Matrix Spike (BGA0028-MS1)

Source: 2301001-01

Prepared: 01/03/23 Analyzed: 01/04/23

Benzene	37.9	1.0	ug/l	33.3	ND	114	34-141			
Toluene	38.1	1.0	"	33.3	ND	114	27-151			
Ethylbenzene	40.8	1.0	"	33.3	ND	123	29-160			
m,p-Xylene	81.1	2.0	"	66.7	ND	122	20-166			
o-Xylene	38.7	1.0	"	33.3	ND	116	33-159			
Naphthalene	35.2	1.0	"	33.3	ND	106	70-130			
1,2,4-Trimethylbenzene	33.4	1.0	"	33.3	ND	100	70-130			
1,3,5-Trimethylbenzene	34.4	1.0	"	33.3	ND	103	70-130			
Surrogate: 1,2-Dichloroethane-d4	13.2		"	13.3		99.4	23-173			
Surrogate: Toluene-d8	13.0		"	13.3		97.4	20-170			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.0	21-167			

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

Project: Noffsinger 31-33 Wellhead  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
01/04/23 06:03

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Summit Scientific**

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

**Batch BGA0028 - EPA 5030 Water MS**

Matrix Spike Dup (BGA0028-MSD1)	Source: 2301001-01			Prepared: 01/03/23 Analyzed: 01/04/23						
Benzene	38.1	1.0	ug/l	33.3	ND	114	34-141	0.605	30	
Toluene	37.9	1.0	"	33.3	ND	114	27-151	0.474	30	
Ethylbenzene	40.2	1.0	"	33.3	ND	121	29-160	1.60	30	
m,p-Xylene	80.4	2.0	"	66.7	ND	121	20-166	0.941	30	
o-Xylene	38.6	1.0	"	33.3	ND	116	33-159	0.233	30	
Naphthalene	37.9	1.0	"	33.3	ND	114	70-130	7.52	30	
1,2,4-Trimethylbenzene	32.9	1.0	"	33.3	ND	98.7	70-130	1.54	30	
1,3,5-Trimethylbenzene	33.5	1.0	"	33.3	ND	100	70-130	2.60	30	
Surrogate: 1,2-Dichloroethane-d4	14.1		"	13.3		106	23-173			
Surrogate: Toluene-d8	12.9		"	13.3		97.0	20-170			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.9	21-167			

**Batch BGA0029 - EPA 5030 Soil MS**

Blank (BGA0029-BLK1)	Prepared: 01/03/23 Analyzed: 01/04/23									
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	0.0444		"	0.0400		111	50-150			
Surrogate: Toluene-d8	0.0380		"	0.0400		95.0	50-150			
Surrogate: 4-Bromofluorobenzene	0.0425		"	0.0400		106	50-150			

Summit Scientific

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

Project: Noffsinger 31-33 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
01/04/23 06:03

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

#### Batch BGA0029 - EPA 5030 Soil MS

##### LCS (BGA0029-BS1)

Prepared: 01/03/23 Analyzed: 01/04/23

Benzene	0.100	0.0020	mg/kg	0.100		100	70-130			
Toluene	0.0995	0.0050	"	0.100		99.5	70-130			
Ethylbenzene	0.0975	0.0050	"	0.100		97.5	70-130			
m,p-Xylene	0.190	0.010	"	0.200		95.1	70-130			
o-Xylene	0.0915	0.0050	"	0.100		91.5	70-130			
1,2,4-Trimethylbenzene	0.0989	0.0050	"	0.100		98.9	70-130			
1,3,5-Trimethylbenzene	0.104	0.0050	"	0.100		104	70-130			
Naphthalene	0.0950	0.0038	"	0.100		95.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0351		"	0.0400		87.8	50-150			
Surrogate: Toluene-d8	0.0374		"	0.0400		93.4	50-150			
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101	50-150			

##### Matrix Spike (BGA0029-MS1)

Source: 2301012-01

Prepared: 01/03/23 Analyzed: 01/04/23

Benzene	0.104	0.0020	mg/kg	0.100	ND	104	70-130			
Toluene	0.103	0.0050	"	0.100	ND	103	70-130			
Ethylbenzene	0.100	0.0050	"	0.100	ND	100	70-130			
m,p-Xylene	0.199	0.010	"	0.200	ND	99.5	70-130			
o-Xylene	0.0918	0.0050	"	0.100	ND	91.8	70-130			
1,2,4-Trimethylbenzene	0.100	0.0050	"	0.100	ND	100	70-130			
1,3,5-Trimethylbenzene	0.106	0.0050	"	0.100	ND	106	70-130			
Naphthalene	0.101	0.0038	"	0.100	ND	101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0361		"	0.0400		90.2	50-150			
Surrogate: Toluene-d8	0.0371		"	0.0400		92.7	50-150			
Surrogate: 4-Bromofluorobenzene	0.0381		"	0.0400		95.3	50-150			

##### Matrix Spike Dup (BGA0029-MSD1)

Source: 2301012-01

Prepared: 01/03/23 Analyzed: 01/04/23

Benzene	0.105	0.0020	mg/kg	0.100	ND	105	70-130	0.631	30	
Toluene	0.104	0.0050	"	0.100	ND	104	70-130	0.406	30	
Ethylbenzene	0.100	0.0050	"	0.100	ND	100	70-130	0.180	30	
m,p-Xylene	0.199	0.010	"	0.200	ND	99.4	70-130	0.106	30	
o-Xylene	0.0937	0.0050	"	0.100	ND	93.7	70-130	2.01	30	
1,2,4-Trimethylbenzene	0.101	0.0050	"	0.100	ND	101	70-130	1.10	30	
1,3,5-Trimethylbenzene	0.107	0.0050	"	0.100	ND	107	70-130	0.677	30	
Naphthalene	0.105	0.0038	"	0.100	ND	105	70-130	4.32	30	
Surrogate: 1,2-Dichloroethane-d4	0.0357		"	0.0400		89.2	50-150			
Surrogate: Toluene-d8	0.0376		"	0.0400		94.0	50-150			
Surrogate: 4-Bromofluorobenzene	0.0391		"	0.0400		97.7	50-150			

Summit Scientific

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

Project: Noffsinger 31-33 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
01/04/23 06:03

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

**Batch BGA0030 - EPA 3550A**

**Blank (BGA0030-BLK1)**

Prepared: 01/03/23 Analyzed: 01/04/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	15.8		"	12.5		126	30-150			

**LCS (BGA0030-BS1)**

Prepared: 01/03/23 Analyzed: 01/04/23

C10-C28 (DRO)	510	50	mg/kg	500		102	70-130			
Surrogate: o-Terphenyl	17.0		"	12.5		136	30-150			

**Matrix Spike (BGA0030-MS1)**

Source: 2301012-01

Prepared: 01/03/23 Analyzed: 01/04/23

C10-C28 (DRO)	488	50	mg/kg	500	14.8	94.7	70-130			
Surrogate: o-Terphenyl	15.8		"	12.5		126	30-150			

**Matrix Spike Dup (BGA0030-MSD1)**

Source: 2301012-01

Prepared: 01/03/23 Analyzed: 01/04/23

C10-C28 (DRO)	487	50	mg/kg	500	14.8	94.4	70-130	0.279	20	
Surrogate: o-Terphenyl	16.4		"	12.5		131	30-150			

Summit Scientific

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

Project: Noffsinger 31-33 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
01/04/23 06:03

### Notes and Definitions

S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
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