

**TABLE 1**  
**FORMER VON FELDT 13-12 WELLHEAD**  
**SOIL ANALYTICAL RESULTS SUMMARY TABLE**  
**CONTAMINANTS OF CONCERN**

| Sample ID  | Date Sampled | Depth     | Benzene<br>(mg/kg) | Toluene<br>(mg/kg) | Ethylbenzene<br>(mg/kg) | Total<br>Xylenes<br>(mg/kg) | 1, 2, 4-TMB<br>(mg/kg) | 1, 3, 5-TMB<br>(mg/kg) | Naphthalene<br>(mg/kg) | TPH <sup>(4)</sup><br>(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                           |
| WH01 @ 6'  | 9/2/2021     | 6 ft. bgs | <0.0020            | <0.0050            | <0.00050                | <0.010                      | <0.0050                | <0.0050                | <0.0038                | <50                           |
| WH01-N @ 5'                                      | 9/2/2021     | 5 ft. bgs | <0.0020            | <0.0050            | <0.00050                | <0.010                      | <0.0050                | <0.0050                | <0.0038                | <50                           |

**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 extractable petroleum hydrocarbons - oil range organics

mg/kg = Milligrams per kilogram

TMB = Trimethylbenzene

Source material characterization sample

ft. = Feet

bgs = Below ground surface

**TABLE 2**  
**FORMER VON FELDT 13-12 WELLHEAD**  
**GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE**  
**ORGANIC COMPOUNDS**

| Sample ID   | Date Sampled | Benzene<br>(µg/L) | Toluene<br>(µg/L) | Ethylbenzene<br>(µg/L) | Total<br>Xylenes<br>(µg/L) | Naphthalene<br>(µg/L) | 1,2,4-TMB<br>(µg/L) | 1,3,5-TMB<br>(µg/L) | Depth to<br>Water <sup>(2)</sup><br>(ft.) | Groundwater<br>Elevation<br>(ft. AMSL) |
|---|--------------|-------------------|-------------------|------------------------|----------------------------|-----------------------|---------------------|---------------------|---|--|
| <b>COGCC Table 915-1<br/>Groundwater Standard (µg/L) <sup>(1)</sup></b> |              | <b>5</b>          | <b>560</b>        | <b>700</b>             | <b>1,400</b>               | <b>140</b>            | <b>67</b>           | <b>67</b>           | <b>-</b>                                  | <b>-</b>                               |
| GW01 @ 6'   | 9/2/2021     | <1.0              | <1.0              | <1.0                   | <2.0                       | <1.0                  | <1.0                | <1.0                | 6 ft. bgs                                 | 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 VON FELDT 13-12 WELLHEAD**  
**FIELD DATA SUMMARY TABLE**

| Sample ID      | Date Sampled | Depth         | GPS Data <sup>(1)</sup><br>Latitude / Longitude |             | PDOP Value | VOC<br>Concentration <sup>(2)</sup><br>(ppm) |
|----------------|--------------|---------------|---|-------------|------------|--|
| WH01 @ 6'      | 9/2/2021     | 6 ft. bgs     | 40.49530631                                     | -104.618470 | 1.0        | 2.8  |
| FLR01 @ 3'     | 9/2/2021     | 3 ft. bgs     | 40.49530826                                     | -104.618433 | 1.0        | 0.0  |
| WH01-N @ 5'    | 9/2/2021     | 5 ft. bgs     | 40.49532292                                     | -104.618464 | 1.1        | 0.1  |
| WH01-W @ 5'    | 9/2/2021     | 5 ft. bgs     | 40.49531415                                     | -104.618516 | 1.0        | 0.0  |
| WH01-S @ 5'    | 9/2/2021     | 5 ft. bgs     | 40.49530069                                     | -104.618457 | 1.1        | 0.0  |
| WH01-E @ 5'    | 9/2/2021     | 5 ft. bgs     | 40.49530582                                     | -104.618430 | 1.1        | 0.0  |
| WHS01-N @ 0-6" | 9/2/2021     | 0-6 in. bgs   | 40.49535581                                     | -104.618446 | 1.0        | 0.1  |
| WHS01-E @ 0-6" | 9/2/2021     | 0-6 in. bgs   | 40.49529909                                     | -104.618412 | 1.1        | 0.0  |
| WHS01-S @ 0-6" | 9/2/2021     | 0-6 in. bgs   | 40.49528211                                     | -104.618464 | 1.0        | 0.1  |
| WHS01-W @ 0-6" | 9/2/2021     | 0-6 in. bgs   | 40.49531415                                     | -104.618516 | 1.0        | 0.1  |
| BKG01          | 9/2/2021     | 2.5-6 ft. bgs | 40.49549568                                     | -104.618052 | 1.1        | 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

in. = Inches

bgs = Below ground surface

## Attachment A

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

September 03, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Von Foldt 13-12 Wellhead

Work Order #2109029

Enclosed are the results of analyses for samples received by Summit Scientific on 09/02/21 16:44. 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: Von Foldt 13-12 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
09/03/21 06:14

### ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled   | Date Received  |
|-----------|---------------|--------|----------------|----------------|
| WH01@6'   | 2109029-01    | Soil   | 09/02/21 09:15 | 09/02/21 16:44 |
| WH01-N@5' | 2109029-02    | Soil   | 09/02/21 11:30 | 09/02/21 16:44 |
| GW01@6'   | 2109029-03    | Water  | 09/02/21 13:00 | 09/02/21 16:44 |

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

Page 1 of 1

Project Name: Von Foldt B-12 WH

| Sampler Name: David Vigil |                    |              |              |                 | Project Number: |      |      |       |        | Analysis Requested |                |       |               |                  |             |             |           |           |              | Special Instructions |                                |  |  |
|---------------------------|--------------------|--------------|--------------|-----------------|-----------------|------|------|-------|--------|--------------------|----------------|-------|---------------|------------------|-------------|-------------|-----------|-----------|--------------|----------------------|--------------------------------|--|--|
|                           |                    |              |              |                 | Preservative    |      |      |       | Matrix |                    |                |       |               |                  |             |             |           |           |              |                      |                                |  |  |
| ID                        | Sample Description | Date Sampled | Time Sampled | # of containers | HCl             | HNO3 | None | Other | Water  | Soil               | Air-Canister # | Other | GBENN - 8260B | TPH - (C6 - C36) | pH, EC, SAR | Boron - HWS | VOC - 915 | PAH - 915 | Metals - 915 | DBP (1,2,4) (1,3,5)  | pH, EC, SAR by saturated paste |  |  |
| 1                         | WH01@6'            | 9/2/21       | 0915         | 3               |                 |      | X    |       |        | X                  |                |       | X             | X                | X           | X           |           | X         |              | X                    | BT5XN <sup>915</sup><br>-8260B |  |  |
| 2                         | WH01-N@5'          | ↓            | 1130         | 3               |                 |      | X    |       |        | X                  |                |       | X             | X                | X           | X           |           | X         |              | X                    |                                |  |  |
| 3                         | GW01@6'            | ↓            | 1300         | 3               | X               |      |      |       | X      |                    |                |       |               |                  |             |             |           |           |              | X                    | X                              |  |  |
| 4                         |                    |              |              |                 |                 |      |      |       |        |                    |                |       |               |                  |             |             |           |           |              |                      |                                |  |  |
| 5                         |                    |              |              |                 |                 |      |      |       |        |                    |                |       |               |                  |             |             |           |           |              |                      |                                |  |  |
| 6                         |                    |              |              |                 |                 |      |      |       |        |                    |                |       |               |                  |             |             |           |           |              |                      |                                |  |  |
| 7                         |                    |              |              |                 |                 |      |      |       |        |                    |                |       |               |                  |             |             |           |           |              |                      |                                |  |  |
| 8                         |                    |              |              |                 |                 |      |      |       |        |                    |                |       |               |                  |             |             |           |           |              |                      |                                |  |  |
| 9                         |                    |              |              |                 |                 |      |      |       |        |                    |                |       |               |                  |             |             |           |           |              |                      |                                |  |  |
| 10                        |                    |              |              |                 |                 |      |      |       |        |                    |                |       |               |                  |             |             |           |           |              |                      |                                |  |  |

Relinquished by: David Vigil

Date/Time: 1500 9/2/21

Received by: Tasman's Lock Box

Date/Time: Will fall 9/2/21 1644

Turn Around Time (Check)

Same Day X 72 hours

24 hours Standard

48 hours

Sample Integrity:

Temperature Upon Receipt: 16

Samples Intact: Yes No

Notes:

# Sample Receipt Checklist

S2 Work Order 2109029

Client: PDC/TASMAN Client Project ID: Von Foldt 13-12 WH

Shipped Via: ☐ H.D./P.U./FedEx/UPS/USPS/Other ☒ Airbill #: \_\_\_\_\_

Matrix (check all that apply): ☐ Air ☒ Soil/Solid ☒ Water ☐ Other: \_\_\_\_\_ (Describe)

Temp (°C) 3.8 - 16

Thermometer ID: 61857155-K

|  | Yes                                 | No                       | N/A                                 | Comments (if any) |
|--|-------------------------------------|--------------------------|-------------------------------------|-------------------|
| If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | on ice            |
| NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun. |                                     |                          |                                     |                   |
| 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"/>            |                   |
| If custody seals are present, are they intact <sup>(1)</sup> ?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |                   |
| Are samples with holding times due within 48 hours sample due within 48 hours present?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | same day on ice   |
| 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"/>            |                   |
| 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"/>            |                   |
| 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"/>            |                   |
| For volatiles in water – is there headspace present? If yes, contact client and note in narrative.                                       | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |                   |
| Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | HCl               |
| Note the type of preservative in the Comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , ect                |                                     |                          |                                     |                   |
| If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |                   |
| Record the pH in Comments.   |                                     |                          |                                     |                   |
| 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.

NG  
Custodian Printed Name or Initials

Will Adin  
Signature of Custodian

9/2/21  
Date/Time





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

Project: Von Foldt 13-12 Wellhead  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
09/03/21 06:14

**WH01@6'**  
**2109029-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **09/02/21 09:15**

| Analyte                     | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------|--------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene                     | ND     | 0.0020          | mg/kg | 1        | BEI0067 | 09/02/21 | 09/02/21 | 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: **09/02/21 09:15**

| Analyte                          | Result | Reporting Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 |        | 99.8 %          | 23-173 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 93.4 %          | 20-170 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 99.5 %          | 21-167 |          | "     | "        | "        | "      |       |

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/02/21 09:15**

| Analyte       | Result | Reporting Limit | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|---------------|--------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| C10-C28 (DRO) | ND     | 50              | mg/kg | 1        | BEI0068 | "        | 09/02/21 | EPA 8015M |       |
| C28-C36 (ORO) | ND     | 50              | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **09/02/21 09:15**

| Analyte                | Result | Reporting Limit | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: o-Terphenyl |        | 91.3 %          | 30-150 |          | "     | "        | "        | "      |       |

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

Project: Von Foldt 13-12 Wellhead  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
09/03/21 06:14

**WH01-N@5'**  
**2109029-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **09/02/21 11:30**

| Analyte                     | Result | Reporting | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|-----------------------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
|                             |        | Limit     |       |          |         |          |          |           |       |
| Benzene                     | ND     | 0.0020    | mg/kg | 1        | BEI0067 | 09/02/21 | 09/02/21 | 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: **09/02/21 11:30**

| Analyte                          | Result | Reporting | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
|                                  |        | Limit     |        |          |       |          |          |        |       |
| Surrogate: 1,2-Dichloroethane-d4 |        | 96.4 %    | 23-173 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 95.5 %    | 20-170 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 102 %     | 21-167 |          | "     | "        | "        | "      |       |

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/02/21 11:30**

| Analyte       | Result | Reporting | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|---------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
|               |        | Limit     |       |          |         |          |          |           |       |
| C10-C28 (DRO) | ND     | 50        | mg/kg | 1        | BEI0068 | "        | 09/02/21 | EPA 8015M |       |
| C28-C36 (ORO) | ND     | 50        | "     | "        | "       | "        | "        | "         |       |

Date Sampled: **09/02/21 11:30**

| Analyte                | Result | Reporting | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
|                        |        | Limit     |        |          |       |          |          |        |       |
| Surrogate: o-Terphenyl |        | 92.8 %    | 30-150 |          | "     | "        | "        | "      |       |

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

Project: Von Foldt 13-12 Wellhead  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
09/03/21 06:14

**GW01@6'**  
**2109029-03 (Water)**

**Summit Scientific**

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

Date Sampled: **09/02/21 13:00**

| Analyte                | Result | Reporting | Units | Dilution | Batch   | Prepared | Analyzed | Method    | Notes |
|------------------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
|                        |        | Limit     |       |          |         |          |          |           |       |
| Benzene                | ND     | 1.0       | ug/l  | 1        | BEI0069 | 09/02/21 | 09/02/21 | 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: **09/02/21 13:00**

| Analyte                          | Result | Reporting | Units  | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
|                                  |        | Limit     |        |          |       |          |          |        |       |
| Surrogate: 1,2-Dichloroethane-d4 |        | 85.6 %    | 23-173 |          | "     | "        | "        | "      |       |
| Surrogate: Toluene-d8            |        | 92.0 %    | 20-170 |          | "     | "        | "        | "      |       |
| Surrogate: 4-Bromofluorobenzene  |        | 90.5 %    | 21-167 |          | "     | "        | "        | "      |       |

Summit Scientific

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

Project: Von Foldt 13-12 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
09/03/21 06:14

## 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 BEI0067 - EPA 5030 Soil MS

##### Blank (BEI0067-BLK1)

Prepared: 09/02/21 Analyzed: 09/03/21

|                                  |        |        |       |        |  |      |        |  |  |  |
|----------------------------------|--------|--------|-------|--------|--|------|--------|--|--|--|
| 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 | 0.0378 |        | "     | 0.0400 |  | 94.6 | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 0.0373 |        | "     | 0.0400 |  | 93.3 | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0410 |        | "     | 0.0400 |  | 102  | 21-167 |  |  |  |

##### LCS (BEI0067-BS1)

Prepared: 09/02/21 Analyzed: 09/03/21

|                                  |        |        |       |        |  |      |        |  |  |  |
|----------------------------------|--------|--------|-------|--------|--|------|--------|--|--|--|
| Benzene                          | 0.0917 | 0.0020 | mg/kg | 0.100  |  | 91.7 | 70-130 |  |  |  |
| Toluene                          | 0.0964 | 0.0050 | "     | 0.100  |  | 96.4 | 70-130 |  |  |  |
| Ethylbenzene                     | 0.0743 | 0.0050 | "     | 0.100  |  | 74.3 | 70-130 |  |  |  |
| m,p-Xylene                       | 0.146  | 0.010  | "     | 0.200  |  | 73.1 | 70-130 |  |  |  |
| o-Xylene                         | 0.0791 | 0.0050 | "     | 0.100  |  | 79.1 | 70-130 |  |  |  |
| 1,2,4-Trimethylbenzene           | 0.0793 | 0.0050 | "     | 0.100  |  | 79.3 | 70-130 |  |  |  |
| 1,3,5-Trimethylbenzene           | 0.0735 | 0.0050 | "     | 0.100  |  | 73.5 | 70-130 |  |  |  |
| Naphthalene                      | 0.0951 | 0.0038 | "     | 0.100  |  | 95.1 | 70-130 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0300 |        | "     | 0.0400 |  | 75.0 | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 0.0351 |        | "     | 0.0400 |  | 87.7 | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0381 |        | "     | 0.0400 |  | 95.2 | 21-167 |  |  |  |

##### Matrix Spike (BEI0067-MS1)

Source: 2109028-01

Prepared: 09/02/21 Analyzed: 09/03/21

|                                  |        |        |       |        |    |      |        |  |  |  |
|----------------------------------|--------|--------|-------|--------|----|------|--------|--|--|--|
| Benzene                          | 0.0929 | 0.0020 | mg/kg | 0.100  | ND | 92.9 | 70-130 |  |  |  |
| Toluene                          | 0.0722 | 0.0050 | "     | 0.100  | ND | 72.2 | 70-130 |  |  |  |
| Ethylbenzene                     | 0.0766 | 0.0050 | "     | 0.100  | ND | 76.6 | 70-130 |  |  |  |
| m,p-Xylene                       | 0.154  | 0.010  | "     | 0.200  | ND | 77.2 | 70-130 |  |  |  |
| o-Xylene                         | 0.0826 | 0.0050 | "     | 0.100  | ND | 82.6 | 70-130 |  |  |  |
| 1,2,4-Trimethylbenzene           | 0.0858 | 0.0050 | "     | 0.100  | ND | 85.8 | 70-130 |  |  |  |
| 1,3,5-Trimethylbenzene           | 0.0792 | 0.0050 | "     | 0.100  | ND | 79.2 | 70-130 |  |  |  |
| Naphthalene                      | 0.101  | 0.0038 | "     | 0.100  | ND | 101  | 70-130 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0317 |        | "     | 0.0400 |    | 79.4 | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 0.0382 |        | "     | 0.0400 |    | 95.6 | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0394 |        | "     | 0.0400 |    | 98.4 | 21-167 |  |  |  |

Summit Scientific

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

Project: Von Foldt 13-12 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
09/03/21 06:14

## 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 BEI0067 - EPA 5030 Soil MS

##### Matrix Spike Dup (BEI0067-MSD1)

Source: 2109028-01

Prepared: 09/02/21 Analyzed: 09/03/21

|                                  |        |        |       |        |    |      |        |      |    |  |
|----------------------------------|--------|--------|-------|--------|----|------|--------|------|----|--|
| Benzene                          | 0.0955 | 0.0020 | mg/kg | 0.100  | ND | 95.5 | 70-130 | 2.74 | 30 |  |
| Toluene                          | 0.0746 | 0.0050 | "     | 0.100  | ND | 74.6 | 70-130 | 3.31 | 30 |  |
| Ethylbenzene                     | 0.0758 | 0.0050 | "     | 0.100  | ND | 75.8 | 70-130 | 1.14 | 30 |  |
| m,p-Xylene                       | 0.151  | 0.010  | "     | 0.200  | ND | 75.5 | 70-130 | 2.18 | 30 |  |
| o-Xylene                         | 0.0818 | 0.0050 | "     | 0.100  | ND | 81.8 | 70-130 | 1.02 | 30 |  |
| 1,2,4-Trimethylbenzene           | 0.0830 | 0.0050 | "     | 0.100  | ND | 83.0 | 70-130 | 3.41 | 30 |  |
| 1,3,5-Trimethylbenzene           | 0.0765 | 0.0050 | "     | 0.100  | ND | 76.5 | 70-130 | 3.51 | 30 |  |
| Naphthalene                      | 0.110  | 0.0038 | "     | 0.100  | ND | 110  | 70-130 | 8.35 | 30 |  |
| Surrogate: 1,2-Dichloroethane-d4 | 0.0341 |        | "     | 0.0400 |    | 85.3 | 23-173 |      |    |  |
| Surrogate: Toluene-d8            | 0.0378 |        | "     | 0.0400 |    | 94.6 | 20-170 |      |    |  |
| Surrogate: 4-Bromofluorobenzene  | 0.0391 |        | "     | 0.0400 |    | 97.7 | 21-167 |      |    |  |

#### Batch BEI0069 - EPA 5030 Water MS

##### Blank (BEI0069-BLK1)

Prepared: 09/02/21 Analyzed: 09/03/21

|                                  |      |     |      |      |  |      |        |  |  |  |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|--|
| 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 | 11.0 |     | "    | 13.3 |  | 82.3 | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 12.2 |     | "    | 13.3 |  | 91.7 | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 11.5 |     | "    | 13.3 |  | 86.4 | 21-167 |  |  |  |

##### LCS (BEI0069-BS1)

Prepared: 09/02/21 Analyzed: 09/03/21

|                                  |      |     |      |      |  |      |        |  |  |  |
|----------------------------------|------|-----|------|------|--|------|--------|--|--|--|
| Benzene                          | 27.1 | 1.0 | ug/l | 33.3 |  | 81.2 | 51-132 |  |  |  |
| Toluene                          | 33.0 | 1.0 | "    | 33.3 |  | 99.1 | 51-138 |  |  |  |
| Ethylbenzene                     | 34.3 | 1.0 | "    | 33.3 |  | 103  | 58-146 |  |  |  |
| m,p-Xylene                       | 67.1 | 2.0 | "    | 66.7 |  | 101  | 57-144 |  |  |  |
| o-Xylene                         | 34.0 | 1.0 | "    | 33.3 |  | 102  | 53-146 |  |  |  |
| Naphthalene                      | 30.4 | 1.0 | "    | 33.3 |  | 91.1 | 70-130 |  |  |  |
| 1,2,4-Trimethylbenzene           | 28.1 | 1.0 | "    | 33.3 |  | 84.2 | 70-130 |  |  |  |
| 1,3,5-Trimethylbenzene           | 34.0 | 1.0 | "    | 33.3 |  | 102  | 70-130 |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 11.3 |     | "    | 13.3 |  | 84.6 | 23-173 |  |  |  |
| Surrogate: Toluene-d8            | 13.3 |     | "    | 13.3 |  | 100  | 20-170 |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 11.6 |     | "    | 13.3 |  | 87.2 | 21-167 |  |  |  |

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

Project: Von Foldt 13-12 Wellhead  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
09/03/21 06:14

**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 BEI0069 - EPA 5030 Water MS**

| Matrix Spike (BEI0069-MS1)       |      | Source: 2109029-03 |      |      | Prepared: 09/02/21 |      | Analyzed: 09/03/21 |  |  |  |
|----------------------------------|------|--------------------|------|------|--------------------|------|--------------------|--|--|--|
| Benzene                          | 27.2 | 1.0                | ug/l | 33.3 | ND                 | 81.5 | 34-141             |  |  |  |
| Toluene                          | 31.1 | 1.0                | "    | 33.3 | ND                 | 93.3 | 27-151             |  |  |  |
| Ethylbenzene                     | 34.6 | 1.0                | "    | 33.3 | ND                 | 104  | 29-160             |  |  |  |
| m,p-Xylene                       | 68.2 | 2.0                | "    | 66.7 | ND                 | 102  | 20-166             |  |  |  |
| o-Xylene                         | 34.2 | 1.0                | "    | 33.3 | ND                 | 103  | 33-159             |  |  |  |
| Naphthalene                      | 38.9 | 1.0                | "    | 33.3 | ND                 | 117  | 70-130             |  |  |  |
| 1,2,4-Trimethylbenzene           | 28.4 | 1.0                | "    | 33.3 | ND                 | 85.4 | 70-130             |  |  |  |
| 1,3,5-Trimethylbenzene           | 34.2 | 1.0                | "    | 33.3 | ND                 | 103  | 70-130             |  |  |  |
|                                  |      |                    |      |      |                    |      |                    |  |  |  |
| Surrogate: 1,2-Dichloroethane-d4 | 12.2 |                    | "    | 13.3 |                    | 91.4 | 23-173             |  |  |  |
| Surrogate: Toluene-d8            | 12.3 |                    | "    | 13.3 |                    | 92.2 | 20-170             |  |  |  |
| Surrogate: 4-Bromofluorobenzene  | 11.8 |                    | "    | 13.3 |                    | 88.1 | 21-167             |  |  |  |

| Matrix Spike Dup (BEI0069-MSD1)  |      | Source: 2109029-03 |      |      | Prepared: 09/02/21 |      | Analyzed: 09/03/21 |       |    |  |
|----------------------------------|------|--------------------|------|------|--------------------|------|--------------------|-------|----|--|
| Benzene                          | 26.8 | 1.0                | ug/l | 33.3 | ND                 | 80.4 | 34-141             | 1.26  | 30 |  |
| Toluene                          | 32.6 | 1.0                | "    | 33.3 | ND                 | 97.7 | 27-151             | 4.59  | 30 |  |
| Ethylbenzene                     | 33.2 | 1.0                | "    | 33.3 | ND                 | 99.6 | 29-160             | 4.07  | 30 |  |
| m,p-Xylene                       | 66.1 | 2.0                | "    | 66.7 | ND                 | 99.1 | 20-166             | 3.11  | 30 |  |
| o-Xylene                         | 33.4 | 1.0                | "    | 33.3 | ND                 | 100  | 33-159             | 2.31  | 30 |  |
| Naphthalene                      | 39.2 | 1.0                | "    | 33.3 | ND                 | 118  | 70-130             | 0.717 | 30 |  |
| 1,2,4-Trimethylbenzene           | 27.6 | 1.0                | "    | 33.3 | ND                 | 82.8 | 70-130             | 3.03  | 30 |  |
| 1,3,5-Trimethylbenzene           | 33.2 | 1.0                | "    | 33.3 | ND                 | 99.5 | 70-130             | 3.09  | 30 |  |
|                                  |      |                    |      |      |                    |      |                    |       |    |  |
| Surrogate: 1,2-Dichloroethane-d4 | 13.2 |                    | "    | 13.3 |                    | 98.8 | 23-173             |       |    |  |
| Surrogate: Toluene-d8            | 13.2 |                    | "    | 13.3 |                    | 99.0 | 20-170             |       |    |  |
| Surrogate: 4-Bromofluorobenzene  | 12.2 |                    | "    | 13.3 |                    | 91.3 | 21-167             |       |    |  |

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

Project: Von Foldt 13-12 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
09/03/21 06:14

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

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

**Batch BEI0068 - EPA 3550A**

**Blank (BEI0068-BLK1)**

Prepared: 09/02/21 Analyzed: 09/03/21

|               |    |    |       |  |  |  |  |  |  |  |
|---------------|----|----|-------|--|--|--|--|--|--|--|
| C10-C28 (DRO) | ND | 50 | mg/kg |  |  |  |  |  |  |  |
| C28-C36 (ORO) | ND | 50 | "     |  |  |  |  |  |  |  |

**LCS (BEI0068-BS1)**

Prepared: 09/02/21 Analyzed: 09/03/21

|               |     |    |       |     |     |        |  |  |  |  |
|---------------|-----|----|-------|-----|-----|--------|--|--|--|--|
| C10-C28 (DRO) | 540 | 50 | mg/kg | 500 | 108 | 70-130 |  |  |  |  |
|---------------|-----|----|-------|-----|-----|--------|--|--|--|--|

**Matrix Spike (BEI0068-MS1)**

Source: 2109028-01

Prepared: 09/02/21 Analyzed: 09/03/21

|               |     |    |       |     |      |     |        |  |  |  |
|---------------|-----|----|-------|-----|------|-----|--------|--|--|--|
| C10-C28 (DRO) | 636 | 50 | mg/kg | 500 | 14.8 | 124 | 70-130 |  |  |  |
|---------------|-----|----|-------|-----|------|-----|--------|--|--|--|

**Matrix Spike Dup (BEI0068-MSD1)**

Source: 2109028-01

Prepared: 09/02/21 Analyzed: 09/03/21

|               |     |    |       |     |      |     |        |      |    |  |
|---------------|-----|----|-------|-----|------|-----|--------|------|----|--|
| C10-C28 (DRO) | 605 | 50 | mg/kg | 500 | 14.8 | 118 | 70-130 | 4.98 | 20 |  |
|---------------|-----|----|-------|-----|------|-----|--------|------|----|--|

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

Project: Von Foldt 13-12 Wellhead

Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
09/03/21 06:14

### 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                          |