

TABLE 1
FORMER HALL 28-1 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 ⁽⁴⁾ (mg/kg) |
|---|--------------|------------|-----------------|-----------------|----------------------|-----------------------|---------------------|---------------------|---------------------|----------------------------|
| Residential SSL ^(1,2) | | | 1.2 | 490 | 5.8 | 58 | 30 | 27 | 2 | 500 |
| Protection of Groundwater SSL ^(1,2,3) | | | 0.0026 | 0.69 | 0.78 | 9.9 | 0.0081 | 0.0087 | 0.0038 | 500 |
| WH01 @ 6' | 10/21/2021 | 6 ft. bgs. | <0.0020 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <0.0050 | <0.0038 | <50 |
| FLR01 @ 4' | 10/21/2021 | 4 ft. bgs. | <0.0020 | <0.0050 | <0.0050 | <0.010 | <0.0050 | <0.0050 | <0.0038 | <50 |
| FL01-01 @ 3' | 10/21/2021 | 3 ft. bgs. | <0.0020 | <0.0050 | <0.0050 | <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

ft. = Feet

in. = Inches

bgs = Below ground surface

TABLE 2
FORMER HALL 28-1 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE
INORGANIC COMPOUNDS

| Sample ID | Date Sampled | Depth | pH (units) | EC (mmhos/cm) | SAR (units) | Boron (mg/L) |
|--|--------------|------------|-------------|---------------|-------------|--------------|
| Soil Suitability for Reclamation Standard ⁽¹⁾ | | | 6-8.3 | <4 | <6 | 2 |
| WH01 @ 6' | 10/8/2021 | 6 ft. bgs. | 8.21 | 2.06 | 8.30 | 0.339 |
| FLR01 @ 4' | 10/21/2021 | 4 ft. bgs. | 8.32 | 3.65 | 9.47 | 0.191 |
| BKG01 @ 4' | 10/21/2021 | 4 ft. bgs. | 8.34 | NA | 9.80 | NA |
| BKG01 @ 6' | 10/21/2021 | 6 ft. bgs. | 8.08 | NA | 8.02 | NA |

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 = milligram per liter

ft. = Feet

bgs = Below ground surface

BOLD = Analytical result is in exceedance of applicable standard.

NA = Constituent not analyzed

TABLE 3
FORMER HALL 28-1 WELLHEAD
SOIL ANALYTICAL RESULTS SUMMARY TABLE
ORGANIC COMPOUNDS - PAHs

| Sample ID | Date Sampled | Depth | Acenaphthene (mg/kg) | Anthracene (mg/kg) | Benz(a) (mg/kg) | Benzo(a) (mg/kg) | Benzo(b) (mg/kg) | Benzo(k) (mg/kg) | Chrysene (mg/kg) | A,H (mg/kg) | Fluoranthene (mg/kg) | Fluorene (mg/kg) | 1,2,3-CD (mg/kg) | Pyrene (mg/kg) | 1-M (mg/kg) | 2-M (mg/kg) |
|--|--------------|------------|-------------------------|-----------------------|--------------------|---------------------|---------------------|---------------------|---------------------|----------------|-------------------------|---------------------|---------------------|-------------------|----------------|----------------|
| Residential SSL ^(1,2) | | | 360 | 1,800 | 1.1 | 0.11 | 1.1 | 11 | 110 | 0.11 | 240 | 240 | 1.1 | 180 | 18 | 24 |
| Protection of Groundwater SSL ^(1,2,3) | | | 0.55 | 5.8 | 0.011 | 0.24 | 0.3 | 2.9 | 9 | 0.096 | 8.9 | 0.54 | 0.98 | 1.3 | 0.006 | 0.019 |
| WH01 @ 6' | 10/21/2021 | 6 ft. bgs. | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 |
| FLR01 @ 4' | 10/21/2021 | 4 ft. bgs. | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <0.00500 | <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

COGCC = Colorado Oil and Gas Conservation Commission
 (<) = Analytical result is less than the indicated laboratory reporting limit.
 PAHs = Polycyclic aromatic hydrocarbons
 Benz(a) = Benzanthracene
 Benzo(a) = Benzopyrene
 Benzo(b) = Benzofluoranthene
 Benzo(k) = Benzofluoranthene
 A,H = Dibenzoanthracene
 1,2,3-CD = Indenopyrene
 M = Methylnaphthalene
 mg/kg = Milligrams per kilogram
 ft. = Feet
 bgs = Below ground surface

**TABLE 4
FORMER HALL 28-1 WELLHEAD
FIELD DATA SUMMARY TABLE**

| Sample ID | Date Sampled | Depth | GPS Data ⁽¹⁾ | | PDOP Value | VOC Concentration ⁽²⁾ (ppm) |
|----------------|--------------|--------------|-------------------------|-------------|------------|---|
| | | | Latitude | Longitude | | |
| WH01 @ 6' | 10/21/2021 | 6 ft. bgs. | 40.372954 | -104.548724 | 1.1 | 0.6 |
| FLR01 @ 4' | 10/21/2021 | 4 ft. bgs. | 40.372945 | -104.548702 | 1.0 | 0.2 |
| WHS01-N @ 0-6" | 10/21/2021 | 0-6 in. bgs. | 40.372998 | -104.548731 | 1.0 | 0.2 |
| WHS01-W @ 0-6" | 10/21/2021 | 0-6 in. bgs. | 40.372943 | -104.548797 | 1.0 | 0.2 |
| WHS01-S @ 0-6" | 10/21/2021 | 0-6 in. bgs. | 40.372889 | -104.548740 | 1.0 | 0.1 |
| WHS01-E @ 0-6" | 10/21/2021 | 0-6 in. bgs. | 40.372954 | -104.548661 | 1.0 | 0.0 |
| FL01-01 @ 3' | 10/21/2021 | 3 ft. bgs. | 40.372886 | -104.547801 | 1.1 | 0.0 |
| FL01-02 @ 3' | 10/21/2021 | 3 ft. bgs. | 40.372856 | -104.547127 | 1.0 | 0.1 |
| FL01-03 @ 3' | 10/21/2021 | 3 ft. bgs. | 40.372826 | -104.546530 | 1.0 | 0.0 |
| FL01-04 @ 3' | 10/21/2021 | 3 ft. bgs. | 40.372777 | -104.545775 | 1.0 | 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

TABLE 5
FORMER HALL 28-1 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.) |
|--|--------------|----------------|----------------|---------------------|----------------------|--------------------|------------------|------------------|-------------------------------------|
| COGCC Table 915-1 Groundwater Standard (µg/L) ⁽¹⁾ | | 5 | 560 | 700 | 1,400 | 140 | 67 | 67 | - |
| GW01 | 10/21/2021 | 1.5 | 4.4 | <1.0 | 2.6 | <1.0 | <1.0 | <1.0 | 6 |
| GW02 | 10/21/2021 | <1.0 | <1.0 | <1.0 | <2.0 | <1.0 | <1.0 | <1.0 | 3 |

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

Attachment A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

November 17, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Hall 28-1 Wellhead

Work Order #2110375

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,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury

President



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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|------------|---------------|--------|----------------|----------------|
| FLR01@4' | 2110375-01 | Soil | 10/21/21 14:20 | 10/21/21 17:00 |
| WH01@6' | 2110375-02 | Soil | 10/21/21 14:24 | 10/21/21 17:00 |
| BKG01@4' | 2110375-03 | Soil | 10/21/21 14:38 | 10/21/21 17:00 |
| BKG01@6' | 2110375-04 | Soil | 10/21/21 14:42 | 10/21/21 17:00 |
| FL01-01@3' | 2110375-05 | Soil | 10/21/21 15:08 | 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

S₂

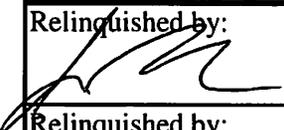
2110375

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

Page 1 of 1

Client: PDC / Tasman Project Manager: Mark Longhurst
Address: 6855 W 119th Ave E-Mail: mark.longhurst@PDCE.com
City/State/Zip: Broomfield/ CO/ 80020
Phone: 303-487-1228 Project Name: Hall 28-1 wellhead
Sampler Name: J. Marcus Project Number: N/A

| ID | Sample Description | Date Sampled | Time Sampled | # of containers | Preservative | | | | Matrix | | | | Analysis Requested | | | | | | | Special Instructions | |
|----|--------------------|--------------|--------------|-----------------|--------------|------|------|-------|--------|------|----------------|-------|--------------------|------------------|-------------------|-------------|-------------|---------|---------|----------------------|--|
| | | | | | 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 | PAH-915 | ON HOLD | | |
| 1 | FLR01@4' | 10/21/21 | 1420 | 3 | | | X | | | X | | | | X | X | X | X | X | X | | |
| 2 | W1101@6' | | 1424 | 3 | | | X | | | X | | | | X | X | X | X | X | X | | |
| 3 | BK601@4' | | 1438 | 1 | | | X | | | X | | | | | | | | | | X | |
| 4 | BK601@6' | | 1442 | 1 | | | X | | | X | | | | | | | | | | X | |
| 5 | FLO1-01@3' | | 1508 | 2 | | | X | | | X | | | | X | X | X | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | |

| | | | | | |
|---|--------------------------|--|--------------------------|--|---------------|
| Relinquished by:  | Date/Time: 10/21/21 1700 | Received by: Tasman's Lock Box | Date/Time: 10/21/21 1700 | Turn Around Time (Check) Same Day _____ 72 hours _____ 24 hours _____ Standard <input checked="" type="checkbox"/> 48 hours _____ Sample Integrity: Temperature Upon Receipt: <u>2.7</u> Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No | Notes: |
| Relinquished by: Tasman's Lock Box | Date/Time: | Received by:  | Date/Time: 10/21/21 1700 | | |
| Relinquished by: | Date/Time: | Received by: | Date/Time: | | |

S₂

Sample Receipt Checklist

S2 Work Order# _____

2110375

Client: Pbc Tasman

Client Project ID: Hall 28-1 wellhead

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

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

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

| | |
|-----------|------------|
| Temp (°C) | <u>2.7</u> |
|-----------|------------|

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. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <u>on ICE</u> |
| Were all samples received intact ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Was adequate sample volume provided ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| If custody seals are present, are they intact ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input 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"/> | <u>Sameday</u> |
| Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ? | <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) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? 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):

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

[Signature]
Custodian Printed Name or Initials

10.21.21
Date/Time



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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

FLR01@4'
2110375-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/21/21 14:20**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | Units | | | | | | |
| 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 14:20**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | Units | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 105 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 100 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 104 % | 21-167 | | " | " | " | " | |

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/21/21 14:20**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | Units | | | | | | |
| 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 14:20**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | Units | | | | | | |
| Surrogate: o-Terphenyl | | 119 % | 30-150 | | " | " | " | " | |

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

FLR01@4'
2110375-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/21/21 14:20**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------|--------|-----------------|-------|----------|---------|----------|----------|---------------|-------|
| Acenaphthene | ND | 0.00500 | mg/kg | 1 | BEJ0509 | 10/26/21 | 10/27/21 | 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: **10/21/21 14:20**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 2-Methylnaphthalene-d10 | | 90.4 % | 40-150 | | " | " | " | " | |
| Surrogate: Fluoranthene-d10 | | 71.1 % | 40-150 | | " | " | " | " | |

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/21/21 14:20**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------|--------------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Boron | 0.191 | 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 14:20**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|

Summit Scientific

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

Project: Hall 28-1 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

FLR01@4'
2110375-01 (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 | 133 | 0.0583 | mg/L dry | 1 | BEJ0538 | 10/27/21 | 10/28/21 | EPA 6020B | |
| Magnesium | 102 | 0.0583 | " | " | " | " | " | " | |
| Sodium | 597 | 0.0583 | " | " | " | " | " | " | |

Calculated Analysis

Date Sampled: **10/21/21 14:20**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------|--------|-----------------|-------|----------|---------|----------|----------|-------------|-------|
| Sodium Adsorption Ratio | 9.47 | 0.00100 | units | 1 | BEJ0605 | 10/29/21 | 10/29/21 | Calculation | |

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/21/21 14:20**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------|--------|-----------------|-------|----------|---------|----------|----------|-------------|-------|
| % Solids | 85.7 | | % | 1 | BEJ0428 | 10/22/21 | 10/22/21 | Calculation | |

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/21/21 14:20**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------|--------|-----------------|----------|----------|---------|----------|----------|-----------|-------|
| Specific Conductance (EC) | 3.65 | 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 14:20**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|-----------------|----------|----------|---------|----------|----------|-----------|-------|
| pH | 8.32 | | pH Units | 1 | BEJ0584 | 10/28/21 | 10/28/21 | EPA 9045D | |

Summit Scientific

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

Project: Hall 28-1 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

WH01@6'
2110375-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/21/21 14:24**

| 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 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 | | 101 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 99.8 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 102 % | 21-167 | | " | " | " | " | |

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/21/21 14:24**

| 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 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: o-Terphenyl | | 97.5 % | 30-150 | | " | " | " | " | |

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

WH01@6'
2110375-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/21/21 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------|--------|-----------------|-------|----------|---------|----------|----------|---------------|-------|
| Acenaphthene | ND | 0.00500 | mg/kg | 1 | BEJ0509 | 10/26/21 | 10/27/21 | 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: **10/21/21 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 2-Methylnaphthalene-d10 | | 92.7 % | 40-150 | | " | " | " | " | |
| Surrogate: Fluoranthene-d10 | | 73.1 % | 40-150 | | " | " | " | " | |

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/21/21 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------|--------------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Boron | 0.339 | 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 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|
|---------|--------|-----------------|-------|----------|-------|----------|----------|--------|-------|

Summit Scientific

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

Project: Hall 28-1 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

WH01@6'
2110375-02 (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 | 53.7 | 0.0582 | mg/L dry | 1 | BEJ0538 | 10/27/21 | 10/28/21 | EPA 6020B | |
| Magnesium | 47.8 | 0.0582 | " | " | " | " | " | " | |
| Sodium | 347 | 0.0582 | " | " | " | " | " | " | |

Calculated Analysis

Date Sampled: **10/21/21 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-------------------------|--------|-----------------|-------|----------|---------|----------|----------|-------------|-------|
| Sodium Adsorption Ratio | 8.30 | 0.00100 | units | 1 | BEJ0605 | 10/29/21 | 10/29/21 | Calculation | |

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/21/21 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------|--------|-----------------|-------|----------|---------|----------|----------|-------------|-------|
| % Solids | 85.9 | | % | 1 | BEJ0428 | 10/22/21 | 10/22/21 | Calculation | |

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/21/21 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------------------------|--------|-----------------|----------|----------|---------|----------|----------|-----------|-------|
| Specific Conductance (EC) | 2.06 | 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 14:24**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---------|--------|-----------------|----------|----------|---------|----------|----------|-----------|-------|
| pH | 8.21 | | pH Units | 1 | BEJ0584 | 10/28/21 | 10/28/21 | EPA 9045D | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

BKG01@4'
2110375-03 (Soil)

Summit Scientific

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

Date Sampled: **10/21/21 14:38**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------|------------|-----------|----------|----------|---------|----------|----------|-----------|-------|
| | | Limit | Units | | | | | | |
| Calcium | 137 | 0.0583 | mg/L dry | 1 | BEK0262 | 11/11/21 | 11/12/21 | EPA 6020B | |
| Magnesium | 134 | 0.0583 | " | " | " | " | " | " | |
| Sodium | 673 | 0.0583 | " | " | " | " | " | " | |

Calculated Analysis

Date Sampled: **10/21/21 14:38**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------|-----------|-------|----------|---------|----------|----------|-------------|-------|
| | | Limit | Units | | | | | | |
| Sodium Adsorption Ratio | 9.80 | 0.00100 | units | 1 | BEK0313 | 11/15/21 | 11/15/21 | Calculation | |

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/21/21 14:38**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|-------------|-----------|-------|----------|---------|----------|----------|-------------|-------|
| | | Limit | Units | | | | | | |
| % Solids | 85.8 | | % | 1 | BEK0265 | 11/11/21 | 11/12/21 | Calculation | |

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

Date Sampled: **10/21/21 14:38**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------|-------------|-----------|----------|----------|---------|----------|----------|-----------|-------|
| | | Limit | Units | | | | | | |
| pH | 8.34 | | pH Units | 1 | BEK0345 | 11/04/21 | 11/04/21 | EPA 9045D | |

Summit Scientific

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

Project: Hall 28-1 Wellhead
Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

BKG01@6'
2110375-04 (Soil)

Summit Scientific

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

Date Sampled: **10/21/21 14:42**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------|-------------|-----------|----------|----------|---------|----------|----------|-----------|-------|
| | | Limit | Units | | | | | | |
| Calcium | 118 | 0.0619 | mg/L dry | 1 | BEK0082 | 11/03/21 | 11/08/21 | EPA 6020B | |
| Magnesium | 97.5 | 0.0619 | " | " | " | " | " | " | |
| Sodium | 486 | 0.0619 | " | " | " | " | " | " | |

Calculated Analysis

Date Sampled: **10/21/21 14:42**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--------------------------------|-------------|-----------|-------|----------|---------|----------|----------|-------------|-------|
| | | Limit | Units | | | | | | |
| Sodium Adsorption Ratio | 8.02 | 0.00100 | units | 1 | BEK0213 | 11/09/21 | 11/09/21 | Calculation | |

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/21/21 14:42**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------------|-------------|-----------|-------|----------|---------|----------|----------|-------------|-------|
| | | Limit | Units | | | | | | |
| % Solids | 80.8 | | % | 1 | BEK0071 | 11/03/21 | 11/03/21 | Calculation | |

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

Date Sampled: **10/21/21 14:42**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|-----------|-------------|-----------|----------|----------|---------|----------|----------|-----------|-------|
| | | Limit | Units | | | | | | |
| pH | 8.08 | | pH Units | 1 | BEK0116 | 11/04/21 | 11/04/21 | EPA 9045D | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

FL01-01@3'
2110375-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/21/21 15:08**

| 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 15:08**

| 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 | | 100 % | 21-167 | | " | " | " | " | |

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/21/21 15:08**

| 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 15:08**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: o-Terphenyl | | 99.8 % | 30-150 | | " | " | " | " | |

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

FL01-01@3'
2110375-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/21/21 15:08**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------|-------------|-----------------|-------|----------|---------|----------|----------|-------------|-------|
| % Solids | 86.0 | | % | 1 | BEK0071 | 11/03/21 | 11/03/21 | Calculation | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

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 | " | | | | | | | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 0.0402 | | " | 0.0400 | | 101 | 23-173 | | | | |
| <i>Surrogate: Toluene-d8</i> | 0.0404 | | " | 0.0400 | | 101 | 20-170 | | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 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 | | | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 0.0387 | | " | 0.0400 | | 96.7 | 23-173 | | | | |
| <i>Surrogate: Toluene-d8</i> | 0.0404 | | " | 0.0400 | | 101 | 20-170 | | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 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 | | | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 0.0402 | | " | 0.0400 | | 100 | 23-173 | | | | |
| <i>Surrogate: Toluene-d8</i> | 0.0404 | | " | 0.0400 | | 101 | 20-170 | | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 0.0406 | | " | 0.0400 | | 101 | 21-167 | | | | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

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 | | |

Summit Scientific

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

Project: Hall 28-1 Wellhead
 Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

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 | |
|---------------|-----|----|-------|-----|------|------|--------|------|----|--|

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

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 | " | | | | | | | | |
| <i>Surrogate: 2-Methylnaphthalene-d10</i> | <i>0.0357</i> | | " | <i>0.0333</i> | <i>107</i> | <i>40-150</i> | | | | | |
| <i>Surrogate: Fluoranthene-d10</i> | <i>0.0262</i> | | " | <i>0.0333</i> | <i>78.5</i> | <i>40-150</i> | | | | | |

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 | | | | | |
| <i>Surrogate: 2-Methylnaphthalene-d10</i> | <i>0.0384</i> | | " | <i>0.0333</i> | <i>115</i> | <i>40-150</i> | | | | | |
| <i>Surrogate: Fluoranthene-d10</i> | <i>0.0320</i> | | " | <i>0.0333</i> | <i>96.0</i> | <i>40-150</i> | | | | | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

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 | | | |
| <i>Surrogate: 2-Methylnaphthalene-d10</i> | <i>0.0307</i> | | <i>"</i> | <i>0.0333</i> | | <i>92.2</i> | <i>40-150</i> | | | |
| <i>Surrogate: Fluoranthene-d10</i> | <i>0.0253</i> | | <i>"</i> | <i>0.0333</i> | | <i>75.8</i> | <i>40-150</i> | | | |

| 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 | |
| <i>Surrogate: 2-Methylnaphthalene-d10</i> | <i>0.0257</i> | | <i>"</i> | <i>0.0333</i> | | <i>77.0</i> | <i>40-150</i> | | | |
| <i>Surrogate: Fluoranthene-d10</i> | <i>0.0220</i> | | <i>"</i> | <i>0.0333</i> | | <i>66.0</i> | <i>40-150</i> | | | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

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

Summit Scientific

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

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

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

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

Summit Scientific

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

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 |

Batch BEK0082 - General Preparation

Blank (BEK0082-BLK1)

Prepared: 11/03/21 Analyzed: 11/08/21

| | | | | | | |
|-----------|----|--------|----------|--|--|--|
| Calcium | ND | 0.0500 | mg/L wet | | | |
| Magnesium | ND | 0.0500 | " | | | |
| Sodium | ND | 0.0500 | " | | | |

LCS (BEK0082-BS1)

Prepared: 11/03/21 Analyzed: 11/08/21

| | | | | | | |
|-----------|------|--------|----------|------|-----|--------|
| Calcium | 6.13 | 0.0500 | mg/L wet | 5.00 | 123 | 70-130 |
| Magnesium | 5.67 | 0.0500 | " | 5.00 | 113 | 70-130 |
| Sodium | 5.65 | 0.0500 | " | 5.00 | 113 | 70-130 |

Batch BEK0262 - General Preparation

Blank (BEK0262-BLK1)

Prepared: 11/11/21 Analyzed: 11/12/21

| | | | | | | |
|-----------|----|--------|----------|--|--|--|
| Calcium | ND | 0.0500 | mg/L wet | | | |
| Magnesium | ND | 0.0500 | " | | | |
| Sodium | ND | 0.0500 | " | | | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

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

Summit Scientific

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

Batch BEK0262 - General Preparation

LCS (BEK0262-BS1)

Prepared: 11/11/21 Analyzed: 11/12/21

| | | | | | | | | | | |
|-----------|------|--------|----------|------|--|-----|--------|--|--|--|
| Calcium | 5.66 | 0.0500 | mg/L wet | 5.00 | | 113 | 70-130 | | | |
| Magnesium | 5.37 | 0.0500 | " | 5.00 | | 107 | 70-130 | | | |
| Sodium | 5.31 | 0.0500 | " | 5.00 | | 106 | 70-130 | | | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

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

Summit Scientific

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

Batch BEJ0428 - General Preparation

| | | | | | | | | | | | |
|---------------------------------|------|---------------------------|---|--|--|--|--|--|------|----|--|
| Duplicate (BEJ0428-DUP1) | | Source: 2110359-01 | | | Prepared & Analyzed: 10/22/21 | | | | | | |
| % Solids | 91.1 | | % | | 92.2 | | | | 1.23 | 20 | |

Batch BEK0071 - General Preparation

| | | | | | | | | | | | |
|---------------------------------|------|---------------------------|---|--|--|--|--|--|-------|----|--|
| Duplicate (BEK0071-DUP1) | | Source: 2110375-04 | | | Prepared & Analyzed: 11/03/21 | | | | | | |
| % Solids | 80.7 | | % | | 80.8 | | | | 0.188 | 20 | |

Batch BEK0265 - General Preparation

| | | | | | | | | | | | |
|---------------------------------|------|---------------------------|---|--|--|--|--|--|-------|----|--|
| Duplicate (BEK0265-DUP1) | | Source: 2110375-03 | | | Prepared: 11/11/21 Analyzed: 11/12/21 | | | | | | |
| % Solids | 85.6 | | % | | 85.8 | | | | 0.149 | 20 | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

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

Summit Scientific

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

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

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

Project: Hall 28-1 Wellhead

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 11/17/21 10:51

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

Summit Scientific

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

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) | | | | | | | | | | | |
| | | | | | | | | | | | Prepared & Analyzed: 10/28/21 |
| pH | 8.06 | | pH Units | | | 8.02 | | | 0.498 | 20 | |

Batch BEK0116 - General Preparation

| LCS (BEK0116-BS1) | | | | | | | | | | | |
|--------------------------|------|--|----------|------|--|------|--|--------|-------|----|-------------------------------|
| | | | | | | | | | | | Prepared & Analyzed: 11/04/21 |
| pH | 9.19 | | pH Units | 9.18 | | 100 | | 95-105 | | | |
| Duplicate (BEK0116-DUP1) | | | | | | | | | | | |
| | | | | | | | | | | | Prepared & Analyzed: 11/04/21 |
| pH | 8.09 | | pH Units | | | 8.08 | | | 0.124 | 20 | |

Batch BEK0345 - General Preparation

| LCS (BEK0345-BS1) | | | | | | | | | | | |
|--------------------------|------|--|----------|------|--|------|--|--------|------|----|-------------------------------|
| | | | | | | | | | | | Prepared & Analyzed: 11/16/21 |
| pH | 9.07 | | pH Units | 9.18 | | 98.8 | | 95-105 | | | |
| Duplicate (BEK0345-DUP1) | | | | | | | | | | | |
| | | | | | | | | | | | Prepared & Analyzed: 11/16/21 |
| pH | 8.48 | | pH Units | | | 8.34 | | | 1.66 | 20 | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
11/17/21 10:51

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 22, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Hall 28-1 Wellhead

Work Order #2110364

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,



Paul Shrewsbury

President



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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
10/22/21 06:31

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|----------------|----------------|
| GW01 | 2110364-01 | Water | 10/21/21 14:09 | 10/21/21 17:00 |
| GW02 | 2110364-02 | Water | 10/21/21 15:30 | 10/21/21 17:00 |

Summit Scientific

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S₂

Sample Receipt Checklist

S2 Work Order# 2110364

Client: Rbc Tasman Client Project ID: Hall 28-1 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) 2.7

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. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | on ICE |
| Were all samples received intact ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Was adequate sample volume provided ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| If custody seals are present, are they intact ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input 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"/> | Sameday |
| Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ? | <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) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? 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):

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

[Signature]
Custodian Printed Name or Initials

10.21.21
Date/Time



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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 10/22/21 06:31

GW01
2110364-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/21/21 14:09**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|------------|-----------------|-------|----------|---------|----------|----------|-----------|-------|
| Benzene | 1.5 | 1.0 | ug/l | 1 | BEJ0410 | 10/21/21 | 10/22/21 | EPA 8260B | |
| Toluene | 4.4 | 1.0 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 1.0 | " | " | " | " | " | " | |
| Xylenes (total) | 2.6 | 2.0 | " | " | " | " | " | " | |
| Naphthalene | ND | 1.0 | " | " | " | " | " | " | |
| 1,2,4-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " | |
| 1,3,5-Trimethylbenzene | ND | 1.0 | " | " | " | " | " | " | |

Date Sampled: **10/21/21 14:09**

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------------|--------|----------|-------|----------|----------|--------|-------|
| Surrogate: 1,2-Dichloroethane-d4 | | 115 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 99.5 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 96.8 % | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Hall 28-1 Wellhead
 Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 10/22/21 06:31

GW02
2110364-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

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

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | BEJ0410 | 10/21/21 | 10/22/21 | 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: **10/21/21 15:30**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 117 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 98.4 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 93.9 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/22/21 06:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BEJ0410 - EPA 5030 Water MS

Blank (BEJ0410-BLK1)

Prepared: 10/21/21 Analyzed: 10/22/21

| | | | | | | | | | | |
|---|------|-----|------|------|--|-----|--------|--|--|--|
| 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 | " | | | | | | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 14.9 | | " | 13.3 | | 112 | 23-173 | | | |
| <i>Surrogate: Toluene-d8</i> | 13.3 | | " | 13.3 | | 100 | 20-170 | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 13.6 | | " | 13.3 | | 102 | 21-167 | | | |

LCS (BEJ0410-BS1)

Prepared: 10/21/21 Analyzed: 10/22/21

| | | | | | | | | | | |
|---|------|-----|------|------|--|------|--------|--|--|--|
| Benzene | 36.1 | 1.0 | ug/l | 33.3 | | 108 | 51-132 | | | |
| Toluene | 43.7 | 1.0 | " | 33.3 | | 131 | 51-138 | | | |
| Ethylbenzene | 42.8 | 1.0 | " | 33.3 | | 128 | 58-146 | | | |
| m,p-Xylene | 82.2 | 2.0 | " | 66.7 | | 123 | 57-144 | | | |
| o-Xylene | 42.7 | 1.0 | " | 33.3 | | 128 | 53-146 | | | |
| Naphthalene | 36.2 | 1.0 | " | 33.3 | | 109 | 70-130 | | | |
| 1,2,4-Trimethylbenzene | 40.2 | 1.0 | " | 33.3 | | 121 | 70-130 | | | |
| 1,3,5-Trimethylbenzene | 39.2 | 1.0 | " | 33.3 | | 118 | 70-130 | | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 15.4 | | " | 13.3 | | 116 | 23-173 | | | |
| <i>Surrogate: Toluene-d8</i> | 13.3 | | " | 13.3 | | 100 | 20-170 | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 12.6 | | " | 13.3 | | 94.5 | 21-167 | | | |

Matrix Spike (BEJ0410-MS1)

Source: 2110271-01

Prepared: 10/21/21 Analyzed: 10/22/21

| | | | | | | | | | | |
|---|------|-----|------|------|----|------|--------|--|--|--|
| Benzene | 35.9 | 1.0 | ug/l | 33.3 | ND | 108 | 34-141 | | | |
| Toluene | 38.9 | 1.0 | " | 33.3 | ND | 117 | 27-151 | | | |
| Ethylbenzene | 42.3 | 1.0 | " | 33.3 | ND | 127 | 29-160 | | | |
| m,p-Xylene | 81.9 | 2.0 | " | 66.7 | ND | 123 | 20-166 | | | |
| o-Xylene | 41.8 | 1.0 | " | 33.3 | ND | 125 | 33-159 | | | |
| Naphthalene | 37.2 | 1.0 | " | 33.3 | ND | 112 | 70-130 | | | |
| 1,2,4-Trimethylbenzene | 40.3 | 1.0 | " | 33.3 | ND | 121 | 70-130 | | | |
| 1,3,5-Trimethylbenzene | 38.4 | 1.0 | " | 33.3 | ND | 115 | 70-130 | | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 15.5 | | " | 13.3 | | 116 | 23-173 | | | |
| <i>Surrogate: Toluene-d8</i> | 13.2 | | " | 13.3 | | 99.3 | 20-170 | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 12.8 | | " | 13.3 | | 95.7 | 21-167 | | | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
 10/22/21 06:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BEJ0410 - EPA 5030 Water MS

| Matrix Spike Dup (BEJ0410-MSD1) | Source: 2110271-01 | | | Prepared: 10/21/21 Analyzed: 10/22/21 | | | | | |
|----------------------------------|--------------------|-----|------|---------------------------------------|----|------|--------|-------|----|
| Benzene | 36.4 | 1.0 | ug/l | 33.3 | ND | 109 | 34-141 | 1.25 | 30 |
| Toluene | 39.2 | 1.0 | " | 33.3 | ND | 118 | 27-151 | 0.768 | 30 |
| Ethylbenzene | 42.1 | 1.0 | " | 33.3 | ND | 126 | 29-160 | 0.427 | 30 |
| m,p-Xylene | 81.0 | 2.0 | " | 66.7 | ND | 122 | 20-166 | 1.06 | 30 |
| o-Xylene | 41.3 | 1.0 | " | 33.3 | ND | 124 | 33-159 | 1.13 | 30 |
| Naphthalene | 40.0 | 1.0 | " | 33.3 | ND | 120 | 70-130 | 7.24 | 30 |
| 1,2,4-Trimethylbenzene | 39.8 | 1.0 | " | 33.3 | ND | 119 | 70-130 | 1.40 | 30 |
| 1,3,5-Trimethylbenzene | 39.1 | 1.0 | " | 33.3 | ND | 117 | 70-130 | 1.57 | 30 |
| Surrogate: 1,2-Dichloroethane-d4 | 17.0 | | " | 13.3 | | 128 | 23-173 | | |
| Surrogate: Toluene-d8 | 13.6 | | " | 13.3 | | 102 | 20-170 | | |
| Surrogate: 4-Bromofluorobenzene | 12.7 | | " | 13.3 | | 95.0 | 21-167 | | |

Summit Scientific

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

Project: Hall 28-1 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
10/22/21 06:31

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