

PDC Energy, Inc.
Third Quarter 2021 Groundwater Monitoring Summary

August 16, 2021

Eberle 13-32 CHZ Facility
NESE Section 32 T1N R66W
Remediation # 15999

This groundwater monitoring summary has been prepared by Tasman Geosciences, Inc. for the Eberle 13-32 CHZ Facility. On July 2, 2021, groundwater monitoring was conducted at all three monitoring wells (BH01 – BH03). Three groundwater samples were submitted to Summit Scientific Laboratories for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, 1,2,4-trimethylbenzene (TMB), and 1,3,5-TMB by EPA Method 8260B. In addition, the samples were submitted for laboratory analysis of total dissolved solids (TDS) by Method SM 2540C, and chloride and sulfate anions by EPA Method 300.0.

Third quarter 2021 analytical results indicated that organic concentrations were below the applicable COGCC Table 915-1 standards in all three monitoring well locations. Based on an evaluation of the Table 915-1 inorganic concentrations, the laboratory results were determined to be potentially erroneous and were subsequently removed from the analytical report. Please refer to the case narrative provided in the associated laboratory report for additional details. Sample locations and corresponding analytical results are illustrated on Figure 1. Groundwater elevation data is illustrated on Figure 2. Analytical results are summarized in Tables 1 and 2. The laboratory analytical report is included in Attachment A.

Per the Condition of Approval (COA) issued by the State and City of Brighton, groundwater monitoring will continue on a quarterly basis to assess and confirm the absence of dissolved-phase impacts at the Eberle 13-32 CHZ production facility.

Fourth quarter 2021 groundwater sampling will be conducted in October 2021.

| BH03 | | |
|--------------------------|-----------|----------|
| Compound (µg/L) | 4/19/2021 | 7/2/2021 |
| Benzene | <1.0 | <1.0 |
| Toluene | <1.0 | <1.0 |
| Ethylbenzene | <1.0 | <1.0 |
| Total Xylenes | <2.0 | <2.0 |
| Naphthalene | <1.0 | <1.0 |
| TMB-1, 2, 4 | <1.0 | <1.0 |
| TMB-1, 3, 5 | <1.0 | <1.0 |
| Depth to Water (ft. bgs) | 24.04 | 22.34 |

| BH01 | | |
|--------------------------|-----------|----------|
| Compound (µg/L) | 4/19/2021 | 7/2/2021 |
| Benzene | <1.0 | <1.0 |
| Toluene | <1.0 | <1.0 |
| Ethylbenzene | <1.0 | <1.0 |
| Total Xylenes | <2.0 | <2.0 |
| Naphthalene | <1.0 | <1.0 |
| TMB-1, 2, 4 | <1.0 | <1.0 |
| TMB-1, 3, 5 | <1.0 | <1.0 |
| Depth to Water (ft. bgs) | 16.04 | 15.09 |

| BH02 | | |
|--------------------------|-----------|----------|
| Compound (µg/L) | 4/19/2021 | 7/2/2021 |
| Benzene | <1.0 | <1.0 |
| Toluene | <1.0 | <1.0 |
| Ethylbenzene | <1.0 | <1.0 |
| Total Xylenes | <2.0 | <2.0 |
| Naphthalene | <1.0 | <1.0 |
| TMB-1, 2, 4 | <1.0 | <1.0 |
| TMB-1, 3, 5 | <1.0 | <1.0 |
| Depth to Water (ft. bgs) | 21.39 | 20.48 |

Legend

-  Monitoring Well Location (Collected via Trimble GPS)
-  Groundwater Flow Direction (3Q21)

Notes

All locations are approximate unless otherwise noted.

GPS – Global Positioning System
 µg/L – Micrograms per liter
 ft. bgs – Feet below ground surface
 TMB – Trimethylbenzene

0 ft. 80 ft. 160 ft.

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



DATE: August 16, 2021

DESIGNED BY: C. Hamlin

DRAWN BY: T. Murrel



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

PDC Energy, Inc. – DJ Basin
Eberle 13-32 CHZ Facility
 NESE, Section 32, Township 1 North, Range 66 West
 Weld County, Colorado

GROUNDWATER ANALYTICAL RESULTS MAP

FIGURE 1



Legend

- Monitoring Well Location (Collected via Trimble GPS)
- Groundwater Elevation Contour (Dashed where inferred)
- 4816.00** Groundwater Elevation (ft. AMSL)
- Groundwater Flow Direction (3Q21)

Notes

All locations are approximate unless otherwise noted.

GPS - Global Positioning System

0 ft. 80 ft. 160 ft.

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

| | |
|--------------|--------------|
| DATE: | July 6, 2021 |
| DESIGNED BY: | B. Nelson |
| DRAWN BY: | A. Dahl |



TASMAN Geosciences, Inc.
6855 W. 119th Ave.
Broomfield, CO 80020

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Eberle 13-32 CHZ Facility
 NESE, Section 32, Township 1 North, Range 66 West
 Weld County, Colorado

GROUNDWATER
 ELEVATION CONTOUR
 MAP (07/02/2021)

FIGURE
 2

TABLE 1
EBERLE 13-32 CHZ FACILITY
GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE

| Sample ID | Date Sampled | Benzene (µg/L) | Toluene (µg/L) | Ethylbenzene (µg/L) | Total Xylenes (µg/L) | Depth to Water ⁽²⁾ (ft.) | Groundwater Elevation (ft. AMSL) |
|---|--------------|-------------------|-------------------|------------------------|----------------------------|---|--|
| COGCC Table 910-1 Groundwater Standard (µg/L) ⁽¹⁾ | | 5 | 560 | 700 | 1,400 | | |
| BH01 | 10/23/2020 | <1.0 | <1.0 | <1.0 | <2.0 | 15.19 | 5007.90 |
| BH01 | 1/15/2021 | <1.0 | <1.0 | <1.0 | <2.0 | 15.45 | 5007.64 |
| BH02 | 10/23/2020 | <1.0 | 1.2 | <1.0 | <2.0 | 20.01 | 5003.10 |
| BH02 | 1/15/2021 | <1.0 | <1.0 | <1.0 | <2.0 | 20.56 | 5002.55 |
| BH03 | 10/23/2020 | <1.0 | <1.0 | <1.0 | <2.0 | 23.51 | 4999.27 |
| BH03 | 1/15/2021 | <1.0 | <1.0 | <1.0 | <2.0 | 23.91 | 4998.87 |

Notes:

1. Groundwater standards referenced from 2 CCR 404-1, Table 910-1, effective May 1, 2018.
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.

COGCC = Colorado Oil and Gas Conservation Commission

µg/L = Micrograms per liter

(<) = Analytical result is less than the indicated laboratory reporting limit.

ft. = Feet

AMSL = Above Mean Sea Level

TABLE 2
EBERLE 13-32 CHZ FACILITY
GROUNDWATER ANALYTICAL RESULTS SUMMARY TABLE
INORGANIC PARAMETERS

| Sample ID | Date Sampled | TDS (unit) | Chloride Ion (mg/L) | Sulfate Ion (mg/L) |
|---|--------------|------------------------|-----------------------------------|-----------------------------------|
| COGCC Table 915-1 Groundwater Standard (mg/L) ⁽¹⁾ | | <1.25 x BCKG | 250 or <1.25 x BCKG | 250 or <1.25 x BCKG |
| BH01 | 4/19/2021 | NR | NR | NR |
| BH01 | 7/2/2021 | NR | NR | NR |
| BH02 | 4/19/2021 | NR | NR | NR |
| BH02 | 7/2/2021 | NR | NR | NR |
| BH03 | 4/19/2021 | NR | NR | NR |
| BH03 | 7/2/2021 | NR | NR | NR |

Notes:

1. Groundwater standards referenced from 2 CCR 404-1, Table 915-1, January 15, 2021.

TDS = Total dissolved solids

COGCC = Colorado Oil and Gas Conservation Commission

BCKG = Background

mg/L = Milligrams per liter

(<) = Analytical result is less than the indicated laboratory reporting limit.

NR = Not Reported. Inorganic groundwater analytical results omitted due to laboratory error. Case narrative provided in the attached laboratory report.

Attachment A

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

September 09, 2021

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

Denver, CO 80203

RE: Eberle 13-32 CHZ Facility

Work Order #2107044

Enclosed are the results of analyses for samples received by Summit Scientific on 07/02/21 18:30. 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', written in a cursive style.

Paul Shrewsbury

President



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

Project: Eberle 13-32 CHZ Facility

Project Number: [none]

Project Manager: Mark Longhurst

Reported:
09/09/21 16:48

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-----------|---------------|--------|----------------|----------------|
| BH01 | 2107044-01 | Water | 07/02/21 10:57 | 07/02/21 18:30 |
| BH02 | 2107044-02 | Water | 07/02/21 11:40 | 07/02/21 18:30 |
| BH03 | 2107044-03 | Water | 07/02/21 11:20 | 07/02/21 18:30 |

CASE NARRATIVE

The inorganics data (anions and TDS) were removed from this report due to lab error

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

2107044

S₂

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: Eberle 13-32 CHZ facility |
| Sampler Name: Brandon VanHorn | 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 | BTEX | Naphthalene | 1,2,4/1,3,5 TMB | Chloride | Sulfate | TDS | | |
| 1 | BH01 | 7/2/2021 | 1057 | 4 | | | x | | x | | | | | x | x | x | x | x | x | |
| 2 | BH02 | 7/2/2021 | 1140 | 4 | | | x | | x | | | | | x | x | x | x | x | x | |
| 3 | BH03 | 7/2/2021 | 1120 | 4 | | | x | | x | | | | | x | x | x | x | x | x | |
| 4 | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | |

| | | | |
|---|--|--|---------------|
| Relinquished by: <i>Brandon V.</i> Date/Time: <i>7/2/21 1300</i> | Received by: <i>Tasman lockbox</i> Date/Time: <i>7/2/21 1300</i> | Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/> Sample Integrity: Temperature Upon Receipt: <i>3.2</i> Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No | Notes: |
| Relinquished by: <i>Tasman lockbox</i> Date/Time: <i>7-2-21 18:30</i> | Received by: <i>[Signature]</i> Date/Time: <i>7-2-21 18:30</i> | | |
| Relinquished by: _____ Date/Time: _____ | Received by: _____ Date/Time: _____ | | |

2107044

Sample Receipt Checklist

S2 Work Order _____

Client: PDC/TASMAN

Client Project ID: EBERLE 13-22 CH2

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

Airbill #: _____

FACILITY

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

| | |
|-----------|------------|
| Temp (°C) | <u>3.2</u> |
|-----------|------------|

Thermometer ID: 61857155-K

| | 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 provided that there is evidence that cooling has begun. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <u>3.2</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 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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 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, ect | <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.

Murci P.
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

7-2-21
Date/Time



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

Project: Eberle 13-32 CHZ Facility

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 09/09/21 16:48

BH01
2107044-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/02/21 10:57**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | BEG0065 | 07/06/21 | 07/07/21 | 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: **07/02/21 10:57**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 93.2 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 133 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 102 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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



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

Project: Eberle 13-32 CHZ Facility

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 09/09/21 16:48

BH02
2107044-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/02/21 11:40**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | Units | | | | | | |
| Benzene | ND | 1.0 | ug/l | 1 | BEG0065 | 07/06/21 | 07/07/21 | 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: **07/02/21 11:40**

| Analyte | Result | Reporting | | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | Units | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 84.4 % | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 141 % | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 105 % | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Eberle 13-32 CHZ Facility

Project Number: [none]
 Project Manager: Mark Longhurst

Reported:
 09/09/21 16:48

BH03
2107044-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/02/21 11:20**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|------------------------|--------|-----------|--|-------|----------|---------|----------|----------|-----------|-------|
| | | Limit | | | | | | | | |
| Benzene | ND | 1.0 | | ug/l | 1 | BEG0065 | 07/06/21 | 07/07/21 | 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: **07/02/21 11:20**

| Analyte | Result | Reporting | | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|----------------------------------|--------|-----------|--|--------|----------|-------|----------|----------|--------|-------|
| | | Limit | | | | | | | | |
| Surrogate: 1,2-Dichloroethane-d4 | | 87.4 % | | 23-173 | | " | " | " | " | |
| Surrogate: Toluene-d8 | | 135 % | | 20-170 | | " | " | " | " | |
| Surrogate: 4-Bromofluorobenzene | | 104 % | | 21-167 | | " | " | " | " | |

Summit Scientific

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

Project: Eberle 13-32 CHZ Facility

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/09/21 16:48

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 BEG0065 - EPA 5030 Water MS

Blank (BEG0065-BLK1)

Prepared & Analyzed: 07/06/21

| | | | | | | | | | | | |
|---|------|-----|------|------|--|-----|--|--------|--|--|--|
| 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> | 16.2 | | " | 13.3 | | 122 | | 23-173 | | | |
| <i>Surrogate: Toluene-d8</i> | 17.1 | | " | 13.3 | | 129 | | 20-170 | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 14.1 | | " | 13.3 | | 106 | | 21-167 | | | |

LCS (BEG0065-BS1)

Prepared & Analyzed: 07/06/21

| | | | | | | | | | | | |
|---|------|-----|------|------|--|------|--|--------|--|--|--|
| Benzene | 33.5 | 1.0 | ug/l | 33.3 | | 100 | | 51-132 | | | |
| Toluene | 45.1 | 1.0 | " | 33.3 | | 135 | | 51-138 | | | |
| Ethylbenzene | 36.8 | 1.0 | " | 33.3 | | 110 | | 58-146 | | | |
| m,p-Xylene | 70.8 | 2.0 | " | 66.7 | | 106 | | 57-144 | | | |
| o-Xylene | 36.2 | 1.0 | " | 33.3 | | 109 | | 53-146 | | | |
| Naphthalene | 30.5 | 1.0 | " | 33.3 | | 91.5 | | 70-130 | | | |
| 1,2,4-Trimethylbenzene | 34.9 | 1.0 | " | 33.3 | | 105 | | 70-130 | | | |
| 1,3,5-Trimethylbenzene | 33.7 | 1.0 | " | 33.3 | | 101 | | 70-130 | | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 12.4 | | " | 13.3 | | 92.8 | | 23-173 | | | |
| <i>Surrogate: Toluene-d8</i> | 16.7 | | " | 13.3 | | 125 | | 20-170 | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 14.6 | | " | 13.3 | | 109 | | 21-167 | | | |

Matrix Spike (BEG0065-MS1)

Source: 2107018-01

Prepared & Analyzed: 07/06/21

| | | | | | | | | | | | |
|---|------|-----|------|------|------|------|--|--------|--|--|-------|
| Benzene | 41.2 | 1.0 | ug/l | 33.3 | 3.71 | 113 | | 34-141 | | | |
| Toluene | 42.2 | 1.0 | " | 33.3 | ND | 127 | | 27-151 | | | |
| Ethylbenzene | 47.9 | 1.0 | " | 33.3 | 3.62 | 133 | | 29-160 | | | |
| m,p-Xylene | 112 | 2.0 | " | 66.7 | 14.1 | 147 | | 20-166 | | | |
| o-Xylene | 38.8 | 1.0 | " | 33.3 | ND | 116 | | 33-159 | | | |
| Naphthalene | 41.8 | 1.0 | " | 33.3 | 1.91 | 120 | | 70-130 | | | |
| 1,2,4-Trimethylbenzene | 63.2 | 1.0 | " | 33.3 | 6.69 | 169 | | 70-130 | | | QM-07 |
| 1,3,5-Trimethylbenzene | 39.8 | 1.0 | " | 33.3 | ND | 119 | | 70-130 | | | |
| <i>Surrogate: 1,2-Dichloroethane-d4</i> | 9.65 | | " | 13.3 | | 72.4 | | 23-173 | | | |
| <i>Surrogate: Toluene-d8</i> | 14.5 | | " | 13.3 | | 109 | | 20-170 | | | |
| <i>Surrogate: 4-Bromofluorobenzene</i> | 14.4 | | " | 13.3 | | 108 | | 21-167 | | | |

Summit Scientific

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



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

Project: Eberle 13-32 CHZ Facility

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
09/09/21 16:48

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 BEG0065 - EPA 5030 Water MS

| Matrix Spike Dup (BEG0065-MSD1) | Source: 2107018-01 | | | Prepared & Analyzed: 07/06/21 | | | | | | | |
|----------------------------------|--------------------|-----|------|-------------------------------|------|-----|--------|------|----|--|-------|
| Benzene | 40.6 | 1.0 | ug/l | 33.3 | 3.71 | 111 | 34-141 | 1.51 | 30 | | |
| Toluene | 44.4 | 1.0 | " | 33.3 | ND | 133 | 27-151 | 5.06 | 30 | | |
| Ethylbenzene | 43.6 | 1.0 | " | 33.3 | 3.62 | 120 | 29-160 | 9.58 | 30 | | |
| m,p-Xylene | 101 | 2.0 | " | 66.7 | 14.1 | 130 | 20-166 | 11.0 | 30 | | |
| o-Xylene | 37.5 | 1.0 | " | 33.3 | ND | 113 | 33-159 | 3.43 | 30 | | |
| Naphthalene | 39.5 | 1.0 | " | 33.3 | 1.91 | 113 | 70-130 | 5.78 | 30 | | |
| 1,2,4-Trimethylbenzene | 53.9 | 1.0 | " | 33.3 | 6.69 | 142 | 70-130 | 15.8 | 30 | | QM-07 |
| 1,3,5-Trimethylbenzene | 37.4 | 1.0 | " | 33.3 | ND | 112 | 70-130 | 6.11 | 30 | | |
| Surrogate: 1,2-Dichloroethane-d4 | 14.7 | | " | 13.3 | | 110 | 23-173 | | | | |
| Surrogate: Toluene-d8 | 14.9 | | " | 13.3 | | 112 | 20-170 | | | | |
| Surrogate: 4-Bromofluorobenzene | 14.9 | | " | 13.3 | | 111 | 21-167 | | | | |

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



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

Project: Eberle 13-32 CHZ Facility

Project Number: [none]
Project Manager: Mark Longhurst

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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- 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