

**PDC Energy, Inc.**  
**Fourth Quarter 2020 Groundwater Monitoring Summary**

November 23, 2020

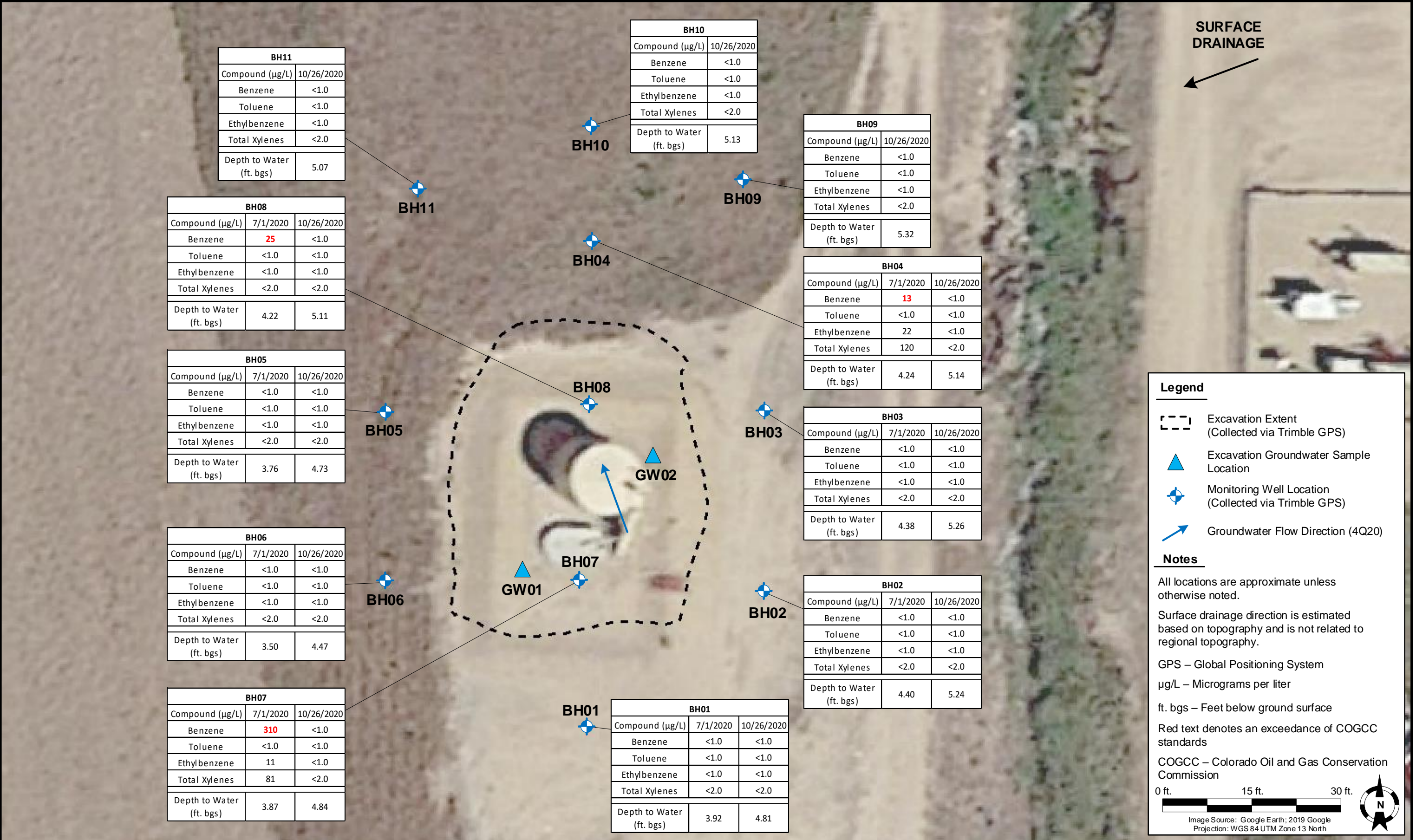
Former Schwab 26-6F Tank Battery  
SENW Section 26 T4N R66W  
Remediation # 15032

This groundwater monitoring summary has been prepared by Tasman Geosciences, Inc. for the former Schwab 26-6F tank battery. On October 26, 2020, groundwater monitoring was conducted at all 11 monitoring wells (BH01 – BH11). Eleven groundwater samples were submitted to Summit Scientific Laboratories for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8260B.

Fourth quarter 2020 analytical results indicated that BTEX concentrations were below the applicable COGCC Table 910-1 groundwater standards in all 11 monitoring well locations. Sample locations and corresponding analytical results are illustrated on Figure 1. Groundwater elevation data is illustrated on Figure 2. Groundwater analytical results are summarized in Table 1. The laboratory analytical report is included in Attachment A.

Monitored natural attenuation (MNA) was selected as the remediation strategy for this site during the second quarter 2020 and will remain the selected remediation strategy through the first quarter 2021.

First quarter 2021 groundwater sampling will be conducted in January 2021.







DATE:	November 2, 2020
DESIGNED BY:	C. Hamlin
DRAWN BY:	A. Dahl



**TASMAN**  
GEOSCIENCES

**Tasman Geosciences, Inc.**  
6855 W. 119<sup>th</sup> Ave.  
Broomfield, CO 80020

**PDC Energy, Inc. – DJ Basin**  
**Former Schwab 26-6F Tank Battery**  
SENW, Section 26, Township 4 North, Range 66 West  
Weld County, Colorado

**GROUNDWATER  
ELEVATION CONTOUR  
MAP (10/26/2020)**

**FIGURE  
2**

**TABLE 1**  
**FORMER SCHWAB 26-6F TANK BATTERY**  
**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 <sup>(2)</sup> (ft)	Groundwater Elevation (ft AMSL)
<b>COGCC Table 910-1 Groundwater Standard (µg/L) <sup>(1)</sup></b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>		
GW01	2/21/2020	<b>35</b>	66	24	390	~ 7	NM
GW02	3/2/2020	<b>120</b>	170	15	430	~ 7	NM
BH01	4/28/2020	3.7	<1.0	<1.0	<2.0	4.10	4755.09
BH01	7/1/2020	<1.0	<1.0	<1.0	<2.0	3.92	4755.27
BH01	10/26/2020	<1.0	<1.0	<1.0	<2.0	4.81	4754.38
BH02	4/28/2020	<1.0	<1.0	<1.0	<2.0	4.65	4754.83
BH02	7/1/2020	<1.0	<1.0	<1.0	<2.0	4.40	4755.08
BH02	10/26/2020	<1.0	<1.0	<1.0	<2.0	5.24	4754.24
BH03	4/28/2020	<1.0	<1.0	<1.0	<2.0	4.62	4754.48
BH03	7/1/2020	<1.0	<1.0	<1.0	<2.0	4.38	4754.72
BH03	10/26/2020	<1.0	<1.0	<1.0	<2.0	5.26	4753.84
BH04	4/28/2020	4.1	<1.0	25	300	4.40	4754.23
BH04	7/1/2020	<b>13</b>	<1.0	22	120	4.24	4754.39
BH04	10/26/2020	<1.0	<1.0	<1.0	<2.0	5.14	4753.49
BH05	4/28/2020	<1.0	<1.0	<1.0	2.1	3.86	4754.58
BH05	7/1/2020	<1.0	<1.0	<1.0	<2.0	3.76	4754.68
BH05	10/26/2020	<1.0	<1.0	<1.0	<2.0	4.73	4753.71
BH06	4/28/2020	<1.0	<1.0	<1.0	<2.0	3.59	4754.84
BH06	7/1/2020	<1.0	<1.0	<1.0	<2.0	3.50	4754.93
BH06	10/26/2020	<1.0	<1.0	<1.0	<2.0	4.47	4753.96
BH07	4/28/2020	<b>83</b>	8.7	23	430	3.78	4755.18
BH07	7/1/2020	<b>310</b>	<1.0	11	81	3.87	4755.09
BH07	10/26/2020	<1.0	<1.0	<1.0	<2.0	4.84	4754.12
BH08	4/28/2020	<b>98</b>	<1.0	1.3	15	4.41	4754.50
BH08	7/1/2020	<b>25</b>	<1.0	<1.0	<2.0	4.22	4754.69
BH08	10/26/2020	<1.0	<1.0	<1.0	<2.0	5.11	4753.80
BH09	10/26/2020	<1.0	<1.0	<1.0	<2.0	5.32	4753.46
BH10	10/26/2020	<1.0	<1.0	<1.0	<2.0	5.13	4753.30
BH11	10/26/2020	<1.0	<1.0	<1.0	<2.0	5.07	4753.32

**TABLE 1**  
**FORMER SCHWAB 26-6F TANK BATTERY**  
**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 <sup>(2)</sup> (ft)	Groundwater Elevation (ft AMSL)
COGCC Table 910-1 Groundwater Standard (µg/L) <sup>(1)</sup>		5	560	700	1,400		

**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

NM = Not measured

**BOLD** = Analytical result is in exceedance of COGCC groundwater standards.

## Attachment A

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

November 02, 2020

Mark Longhurst

PDC Energy

1775 Sherman St. STE. 3000

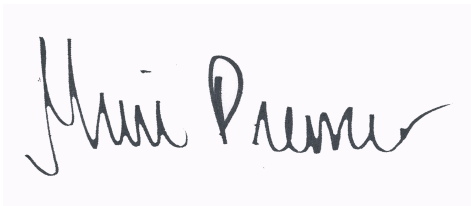
Denver, CO 80203

RE: Schwab 26-6F

Work Order #2010321

Enclosed are the results of analyses for samples received by Summit Scientific on 10/26/20 17:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury  
President



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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	2010321-01	Water	10/26/20 11:08	10/26/20 17:10
BH02	2010321-02	Water	10/26/20 11:15	10/26/20 17:10
BH03	2010321-03	Water	10/26/20 11:20	10/26/20 17:10
BH04	2010321-04	Water	10/26/20 11:30	10/26/20 17:10
BH05	2010321-05	Water	10/26/20 11:32	10/26/20 17:10
BH06	2010321-06	Water	10/26/20 11:38	10/26/20 17:10
BH07	2010321-07	Water	10/26/20 11:43	10/26/20 17:10
BH08	2010321-08	Water	10/26/20 11:40	10/26/20 17:10
BH09	2010321-09	Water	10/26/20 12:10	10/26/20 17:10
BH10	2010321-10	Water	10/26/20 12:10	10/26/20 17:10
BH11	2010321-11	Water	10/26/20 12:14	10/26/20 17:10

Summit Scientific

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# Summit Scientific

2010321.1

741 Corporate Circle Suite 1 ♦ Golden, Colorado 80401

303-277-9310 ♦ 303-374-5933 Fax

Page 1 of 2

Client: PDC/Tasman  
 Address: 6855 W 119th Ave  
 City/State/Zip: Broomfield CO 80020  
 Phone: 303-487-1228 Fax: \_\_\_\_\_  
 Sampler Name: J Marcus

Project Manager: Mark Longhurst  
 E-Mail: mark.longhurst@PDCE.com  
 Project Name: Schwab 26-6F  
 Project Number: N/A

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:												Special Instructions				
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)																
BH01	10/26/20	1108	3			X		X				X															
BH02	10/26/20	1115	3			X		X				X															
BH03	10/26/20	1120	3			X		X				X															
BH04	10/26/20	1130	3			X		X				X															
BH05	10/26/20	1132	3			X		X				X															
BH06	10/26/20	1138	3			X		X				X															
BH07	10/26/20	1143	3			X		X				X															
BH08	10/26/20	1147	3			X		X				X															
BH09	10/26/20	1210	3			X		X				X															
BH10	10/26/20	1210	3			X		X				X															

Relinquished by: <u>[Signature]</u>	Date/Time: <u>10/26/20 1520</u>	Received by: <u>Tasman Lock Box</u>	Date/Time: <u>10/26/20 1520</u>	<b>Turn Around Time (Check)</b> 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"/>  <b>Sample Integrity:</b> Temperature Upon Receipt: <u>3.2</u> Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Notes:
Relinquished by: <u>Tasman Lock Box</u>	Date/Time: <u>10/26/20 1710</u>	Received by: <u>[Signature]</u>	Date/Time: <u>10/26/20 1710</u>		
Relinquished by: _____	Date/Time: _____	Received in Lab by: _____	Date/Time: _____		

## 2010321.2

741 Corporate Circle Suite I ♦ Golden, Colorado 80401  
303-277-9310 ♦ 303-374-5933 Fax

Page 2 of 2

Project Manager: Mark Longhurst  
E-Mail: mark.longhurst@PDCE.COM  
Project Name: Schwab 26-6F  
Project Number: n/a

[illegible]



# Sample Receipt Checklist

S2 Work Order 2010321

Client: POC/Tigman Client Project ID: SCHWAB 26-6F

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

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

Temp (°C) 3.2

Thermometer ID: 61857155-K

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

Additional Comments (if any):

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

Custodian Printed Name or Initials KG

Signature of Custodian [Signature]

Date/Time 10/26/2020



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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH01**  
**2010321-01 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 11:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BDJ0350	10/28/20	10/28/20	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **10/26/20 11:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		104 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		94.2 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.4 %		21-167		"	"	"	"	

Summit Scientific

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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH02**  
**2010321-02 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/28/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		92.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.8 %	21-167		"	"	"	"	

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Denver CO, 80203

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH03**  
**2010321-03 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/28/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		94.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.2 %	21-167		"	"	"	"	

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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH04**  
**2010321-04 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 11:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/28/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 11:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.6 %	21-167		"	"	"	"	

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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH05**  
**2010321-05 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/28/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		108 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.8 %	21-167		"	"	"	"	

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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH06**  
**2010321-06 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 11:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/28/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 11:38**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		94.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.5 %	21-167		"	"	"	"	

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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH07**  
**2010321-07 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 11:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/28/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 11:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		93.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		84.6 %	21-167		"	"	"	"	

Summit Scientific

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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH08**  
**2010321-08 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/28/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		107 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.3 %	21-167		"	"	"	"	

Summit Scientific

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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH09**  
**2010321-09 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 12:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/29/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 12:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		92.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.9 %	21-167		"	"	"	"	

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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH10**  
**2010321-10 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 12:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/29/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 12:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		93.6 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.2 %	21-167		"	"	"	"	

Summit Scientific

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

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

**BH11**  
**2010321-11 (Water)**

**Summit Scientific**

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

Date Sampled: **10/26/20 12:14**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BDJ0350	10/28/20	10/29/20	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **10/26/20 12:14**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		93.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		79.6 %	21-167		"	"	"	"	

Summit Scientific

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1775 Sherman St. STE. 3000  
Denver CO, 80203

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

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

### Summit Scientific

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

#### Batch BDJ0350 - EPA 5030 Water MS

##### Blank (BDJ0350-BLK1)

Prepared & Analyzed: 10/28/20

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.2		"	13.3		99.2	23-173			
Surrogate: Toluene-d8	13.0		"	13.3		97.9	20-170			
Surrogate: 4-Bromofluorobenzene	11.3		"	13.3		84.8	21-167			

##### LCS (BDJ0350-BS1)

Prepared & Analyzed: 10/28/20

Benzene	22.8	1.0	ug/l	33.3		68.5	51-132			
Toluene	31.3	1.0	"	33.3		93.8	51-138			
Ethylbenzene	37.8	1.0	"	33.3		113	58-146			
m,p-Xylene	76.3	2.0	"	66.7		114	57-144			
o-Xylene	36.3	1.0	"	33.3		109	53-146			
Surrogate: 1,2-Dichloroethane-d4	14.0		"	13.3		105	23-173			
Surrogate: Toluene-d8	13.2		"	13.3		98.9	20-170			
Surrogate: 4-Bromofluorobenzene	11.5		"	13.3		86.1	21-167			

##### Matrix Spike (BDJ0350-MS1)

Source: 2010321-01

Prepared & Analyzed: 10/28/20

Benzene	22.2	1.0	ug/l	33.3	ND	66.8	34-141			
Toluene	30.7	1.0	"	33.3	ND	92.1	27-151			
Ethylbenzene	37.4	1.0	"	33.3	ND	112	29-160			
m,p-Xylene	75.5	2.0	"	66.7	ND	113	20-166			
o-Xylene	36.4	1.0	"	33.3	ND	109	33-159			
Surrogate: 1,2-Dichloroethane-d4	14.0		"	13.3		105	23-173			
Surrogate: Toluene-d8	13.0		"	13.3		97.4	20-170			
Surrogate: 4-Bromofluorobenzene	11.4		"	13.3		85.8	21-167			

Summit Scientific

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Denver CO, 80203

Project: Schwab 26-6F  
Project Number: [none]  
Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

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

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

**Batch BDJ0350 - EPA 5030 Water MS**

Matrix Spike Dup (BDJ0350-MSD1)		Source: 2010321-01			Prepared & Analyzed: 10/28/20					
Benzene	22.6	1.0	ug/l	33.3	ND	67.8	34-141	1.60	30	
Toluene	30.6	1.0	"	33.3	ND	91.7	27-151	0.490	30	
Ethylbenzene	37.5	1.0	"	33.3	ND	112	29-160	0.107	30	
m,p-Xylene	76.2	2.0	"	66.7	ND	114	20-166	0.909	30	
o-Xylene	36.5	1.0	"	33.3	ND	109	33-159	0.220	30	
Surrogate: 1,2-Dichloroethane-d4	14.6		"	13.3		110	23-173			
Surrogate: Toluene-d8	13.2		"	13.3		99.3	20-170			
Surrogate: 4-Bromofluorobenzene	11.5		"	13.3		86.3	21-167			

Summit Scientific

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

Project: Schwab 26-6F

Project Number: [none]

Project Manager: Mark Longhurst

**Reported:**  
11/02/20 15:27

### 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