



PDC Energy, Inc.
Third Quarter 2023 Groundwater Monitoring Summary

July 27, 2023

Former Eckhardt 43-34 Wellhead
NESE Section 34 T5N R64W
Remediation # 21647

This groundwater monitoring summary has been prepared by Tasman, Inc. for the former Eckhardt 43-34 wellhead.

Site History and Background

On March 11, 2022, a historic hydrocarbon release was discovered adjacent to the former wellhead during decommissioning activities. Following the discovery, mitigation activities were initiated and approximately 8 cubic yards of impacted material were removed from location. During excavation activities, groundwater was encountered within the excavation at approximately 6.5 feet below ground surface (bgs). On October 10, 2022, five monitoring wells (BH01 – BH05) were installed to confirm the absence of dissolved-phase hydrocarbon impacts within and adjacent to the former excavation extent. Per the approved Supplemental Form 27 (Document No. 403221432), chloride and sulfate anions and TDS were removed from the quarterly sampling and analysis plan following the fourth quarter 2022.

Groundwater Monitoring Activities

On July 14, 2023, groundwater monitoring was conducted at all five monitoring wells (BH01 – BH05). Five groundwater samples were submitted to Summit Scientific Laboratory for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), naphthalene, 1,2,4-trimethylbenzene (TMB) and 1,3,5-TMB by EPA Method 8260B.

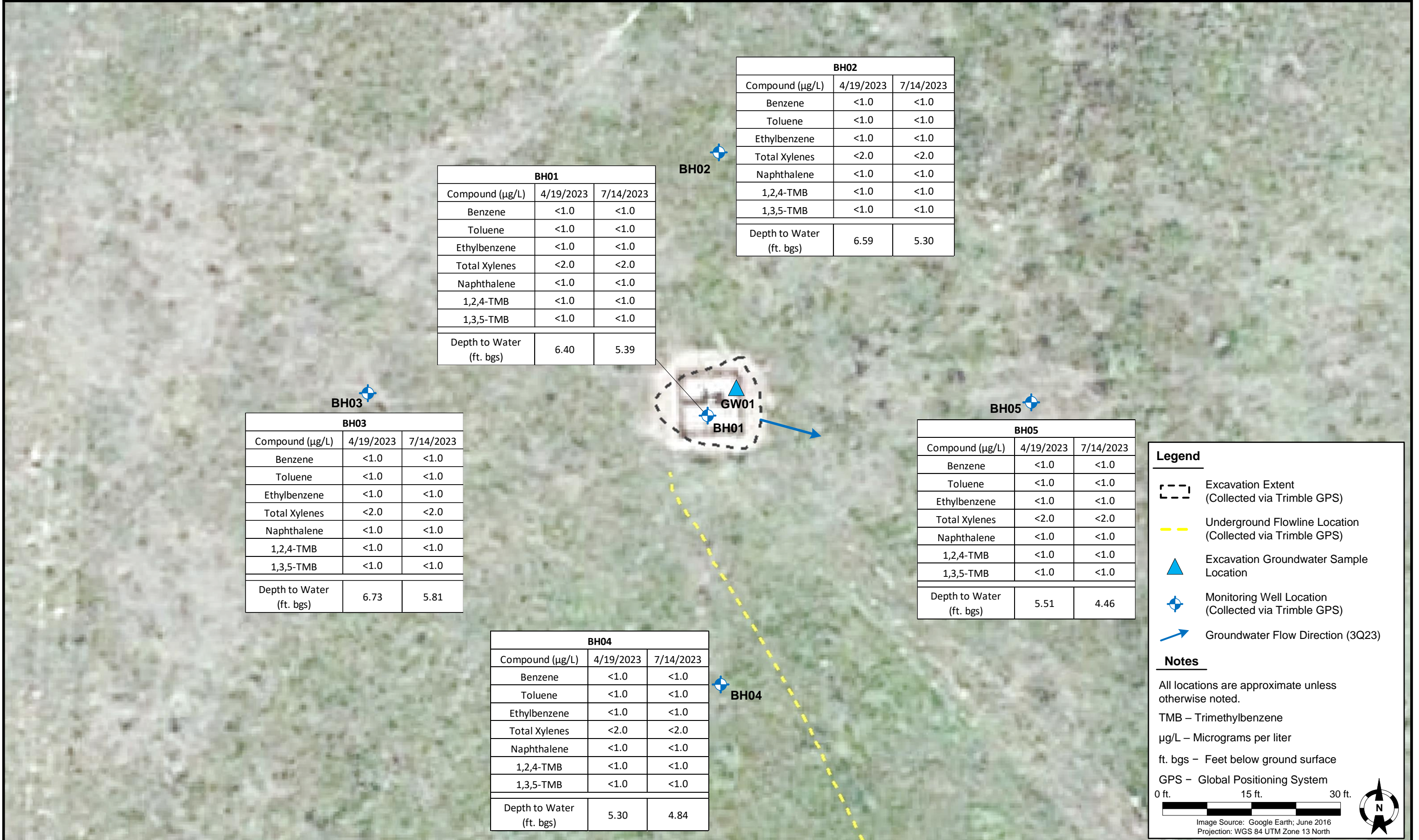
Third quarter 2023 analytical results indicated that organic compound concentrations were in compliance with the applicable COGCC Table 915-1 groundwater standards in all five monitoring well locations. Sample locations and corresponding analytical results are illustrated on Figure 1. Groundwater elevation data is illustrated on Figure 2. Groundwater analytical results are summarized in Table 1. The laboratory analytical report is included in Attachment A.

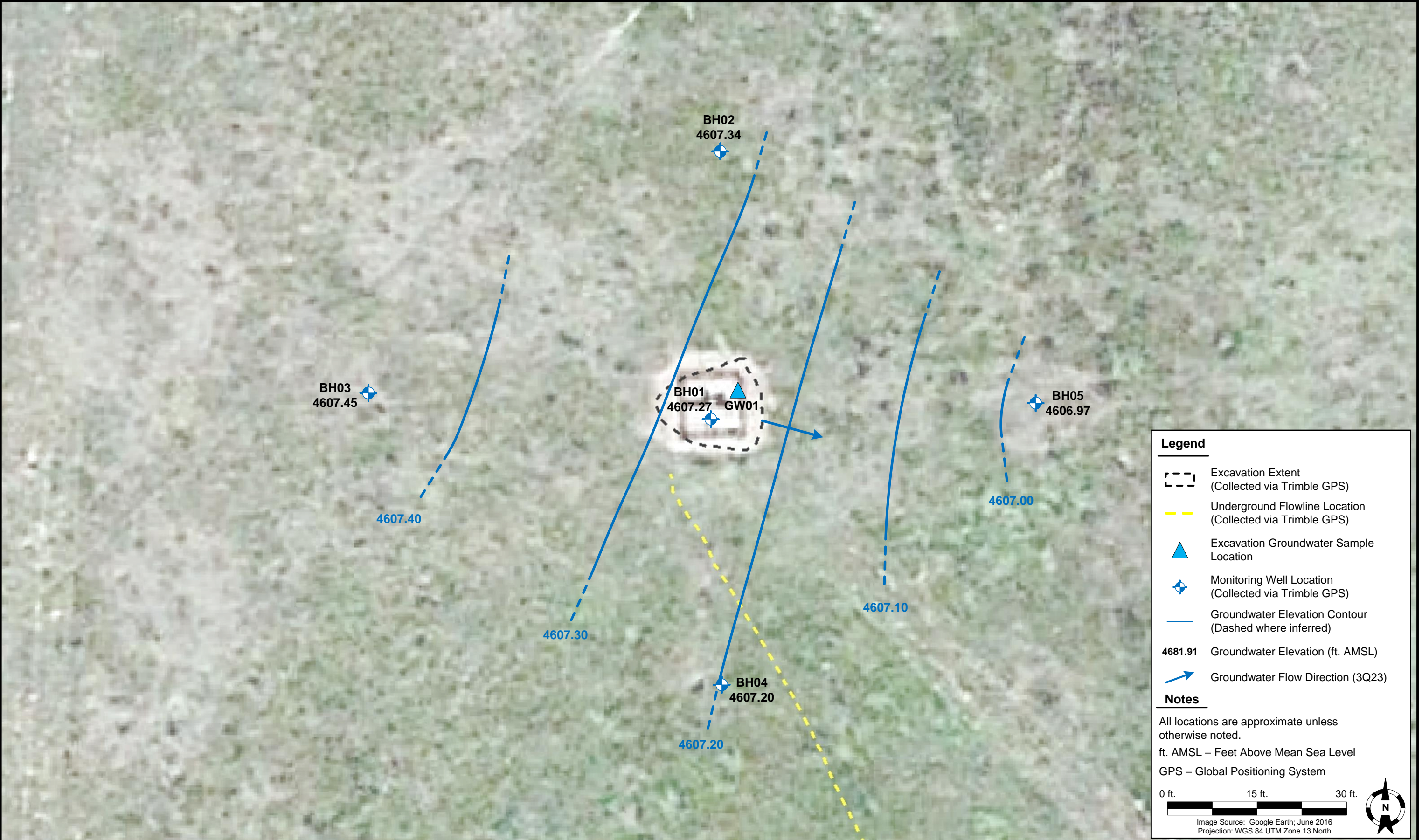
Current Remediation Activities and Path Forward

Monitored natural attenuation (MNA) was selected as the remediation strategy for this site between the fourth quarter 2022 and the third quarter 2023.

During the third quarter 2023, four consecutive quarters of organic compound concentrations in compliance with the applicable COGCC Table 915-1 regulatory standards were achieved. Consequently, PDC is requesting to discontinue groundwater monitoring at this remediation project.

Based on soil analytical results received during March 2023 supplemental site investigation activities, further delineation is necessary to vertically and horizontally define the arsenic and lead exceedances on location. The proposed soil boring locations are illustrated on Figure 3. Site investigation activities will be completed pending landowner negotiations.





DATE:	August 7, 2023
DESIGNED BY:	C. Hamlin
DRAWN BY:	L. Reed

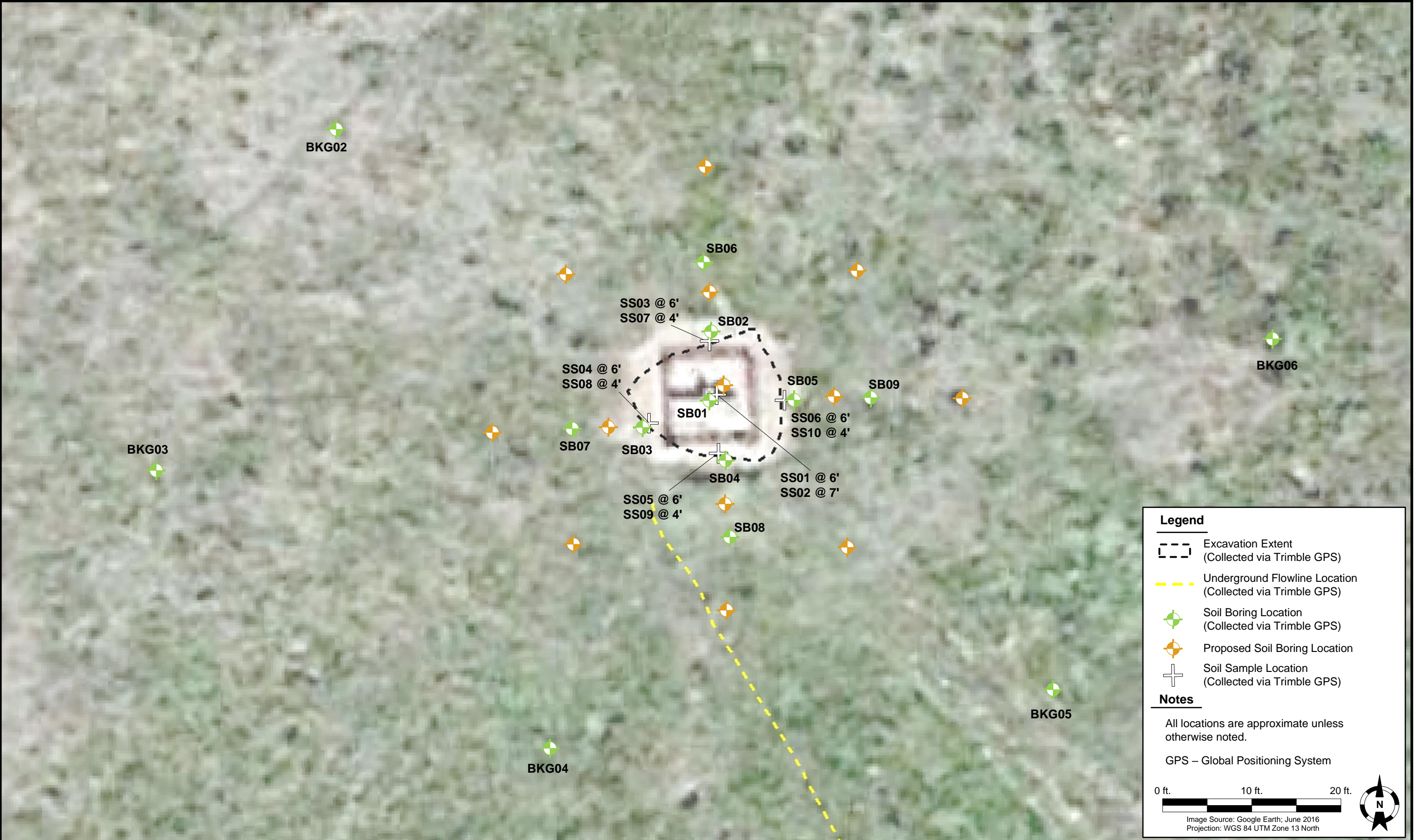


Tasman, Inc.
6855 W. 119th Ave.
Broomfield, CO 80020

PDC Energy, Inc. – DJ Basin
Former Eckhardt 43-34 Wellhead
NESE Section 34, Township 5 North, Range 64 West
Weld County, Colorado

**GROUNDWATER
ELEVATION CONTOUR
MAP (07/14/2023)**

**FIGURE
2**



DATE:	June 6, 2023
DESIGNED BY:	C. Hamlin
DRAWN BY:	J. Marcus



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

PDC Energy, Inc. – DJ Basin
Former Eckhardt 43-34 Wellhead
NESE, Section 34, Township 5 North, Range 64 West
Weld County, Colorado

**PROPOSED
SOIL BORING
LOCATION MAP**

**FIGURE
3**

TABLE 1
FORMER ECKHARDT 43-34 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.)	Groundwater Elevation (ft. AMSL)
COGCC Table 915-1 Groundwater Standard (µg/L) ⁽¹⁾		5	560	700	1,400	140	67	67	-	-
GW01	3/11/2022	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	~6.5	NA
BH01	10/21/2022	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	9.10	4603.56
BH01	1/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.84	4604.82
BH01	4/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.40	4606.26
BH01	7/14/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	5.39	4607.27
BH02	10/21/2022	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	9.07	4603.57
BH02	1/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.98	4604.66
BH02	4/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.59	4606.05
BH02	7/14/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	5.30	4607.34
BH03	10/21/2022	Dry - Not Sampled							Dry	Dry
BH03	1/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	8.25	4605.01
BH03	4/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.73	4606.53
BH03	7/14/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	5.81	4607.45
BH04	10/21/2022	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	8.20	4603.84
BH04	1/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.83	4605.21
BH04	4/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	5.30	4606.74
BH04	7/14/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	4.84	4607.20
BH05	10/21/2022	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	7.91	4603.52
BH05	1/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	6.78	4604.65
BH05	4/19/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	5.51	4605.92
BH05	7/14/2023	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	4.46	4606.97

Notes:

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

July 24, 2023

Mark Longhurst

Tasman Geosciences

6855 W. 119th Ave.

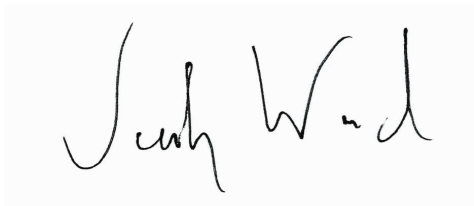
Broomfield, CO 80020

RE: PDC - Eckhardt 43-34 Wellhead

Work Order #2307277

Enclosed are the results of analyses for samples received by Summit Scientific on 07/14/23 17:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jacob Wood". The signature is written in a cursive, flowing style.

Jacob Wood For Paul Shrewsbury

President



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

Project: PDC - Eckhardt 43-34 Wellhead

Project Number: [none]

Project Manager: Mark Longhurst

Reported:

07/24/23 08:38

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	2307277-01	Water	07/14/23 10:55	07/14/23 17:50
BH02	2307277-02	Water	07/14/23 11:00	07/14/23 17:50
BH03	2307277-03	Water	07/14/23 11:06	07/14/23 17:50
BH04	2307277-04	Water	07/14/23 10:56	07/14/23 17:50
BH05	2307277-05	Water	07/14/23 10:43	07/14/23 17:50

Summit Scientific

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SUMMIT SCIENTIFIC

4653 Table Mountain Drive
Golden, CO 80403
303-277-9310

Lab ID	Page 1 of 1
2307277	

Client: PDC PDC / Tasman		Send Data To:		Send Invoice To:	
Address: 6855 W 119th Ave		Project Manager: Mark Longhurst		Company: PDC Energy	
City/State/Zip: Broomfield / CO / 80220		E-Mail: mark.longhurst@PDCE.com		Project Name/Location:	
Phone: 303-487-1228		Project Name: Eckhardt 43-34 Wellhead		AFE#:	
Sampler Name: Jordan Hestmark, GS		Project Number:		PO/Billing Codes:	
				Contact: Mark Longhurst	

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	PAHs	Metals	TDS, SO4, Cl	
1	BH01	7/14/23	1055	3	3		6		X				X		X						
2	BH02		1100																		
3	BH03		1106																		
4	BH04		1056																		
5	BH05		1043																		
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

Relinquished by: Jordan Hestmark	Date/Time: 7/14/23 1431	Received by: Tasman Lockbox	Date/Time: 7/14/23 1431	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by: Tasman Lockbox	Date/Time: 7/14/23 1750	Received by: [Signature]	Date/Time: 7/14/23 1750	1 Day	Field ORP	
				2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	X Field Turb.	
Temperature Upon Receipt: 73	Corrected Temperature: e	IR gun #: 1	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2307277Client: POC/TrasmanClient Project ID: Eckhardt 43-34 wellheadShipped Via: H.D./P.U./FedEx/UPS/USPS/Other

Airbill #: _____

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

Matrix (Check all that apply)

Air

☐

Soil/Solid

☐

Water

☒

Other

☐

Temp (°C)

7.3

Thermometer #

1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°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
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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"/>	
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"/>	
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, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HCl
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.

AS

Custodian Printed Name

7/14/23
Date/Time



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

Project: PDC - Eckhardt 43-34 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/24/23 08:38

BH01
2307277-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/14/23 10:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	BGG0506	07/17/23	07/18/23	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **07/14/23 10:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	19.4	145 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	12.6	94.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	15.6	117 %	21-167		"	"	"	"	

Summit Scientific

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

Project: PDC - Eckhardt 43-34 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/24/23 08:38

BH02
2307277-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/14/23 11:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGG0506	07/17/23	07/18/23	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **07/14/23 11:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	18.2	137 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	12.6	94.1 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	19.3	144 %		21-167		"	"	"	"	

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

Project: PDC - Eckhardt 43-34 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/24/23 08:38

BH03
2307277-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/14/23 11:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGG0506	07/17/23	07/18/23	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **07/14/23 11:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	18.0	135 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	11.9	89.1 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	18.2	136 %		21-167		"	"	"	"	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Eckhardt 43-34 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/24/23 08:38

BH04
2307277-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/14/23 10:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BGG0506	07/17/23	07/18/23	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **07/14/23 10:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	17.7	133 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	11.9	89.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	17.9	135 %	21-167		"	"	"	"	

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

Project: PDC - Eckhardt 43-34 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/24/23 08:38

BH05
2307277-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/14/23 10:43**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BGG0506	07/17/23	07/18/23	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **07/14/23 10:43**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	17.2	129 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	12.8	95.6 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	18.2	136 %		21-167		"	"	"	"	

Summit Scientific

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

Project: PDC - Eckhardt 43-34 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/24/23 08:38

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 BGG0506 - EPA 5030 Water MS

Blank (BGG0506-BLK1)

Prepared: 07/17/23 Analyzed: 07/19/23

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Naphthalene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	20.2		"	13.3		151	23-173			
Surrogate: Toluene-d8	11.8		"	13.3		88.7	20-170			
Surrogate: 4-Bromofluorobenzene	15.0		"	13.3		112	21-167			

LCS (BGG0506-BS1)

Prepared: 07/17/23 Analyzed: 07/19/23

Benzene	43.3	1.0	ug/l	50.0		86.5	51-132			
Toluene	45.2	1.0	"	50.0		90.3	51-138			
Ethylbenzene	40.4	1.0	"	50.0		80.9	58-146			
m,p-Xylene	69.2	2.0	"	100		69.2	57-144			
o-Xylene	40.8	1.0	"	50.0		81.6	53-146			
Naphthalene	37.2	1.0	"	50.0		74.4	70-130			
1,2,4-Trimethylbenzene	45.6	1.0	"	50.0		91.1	70-130			
1,3,5-Trimethylbenzene	39.6	1.0	"	50.0		79.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	17.5		"	13.3		131	23-173			
Surrogate: Toluene-d8	12.3		"	13.3		92.0	20-170			
Surrogate: 4-Bromofluorobenzene	14.6		"	13.3		110	21-167			

Matrix Spike (BGG0506-MS1)

Source: 2307260-01

Prepared: 07/17/23 Analyzed: 07/19/23

Benzene	24.4	1.0	ug/l	50.0	ND	48.9	34-141			
Toluene	20.1	1.0	"	50.0	ND	40.2	27-151			
Ethylbenzene	41.1	1.0	"	50.0	ND	82.2	29-160			
m,p-Xylene	40.4	2.0	"	100	ND	40.4	20-166			
o-Xylene	21.5	1.0	"	50.0	ND	43.0	33-159			
Naphthalene	39.8	1.0	"	50.0	ND	79.5	70-130			
1,2,4-Trimethylbenzene	45.7	1.0	"	50.0	ND	91.4	70-130			
1,3,5-Trimethylbenzene	39.8	1.0	"	50.0	ND	79.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	16.9		"	13.3		127	23-173			
Surrogate: Toluene-d8	12.4		"	13.3		92.8	20-170			
Surrogate: 4-Bromofluorobenzene	14.9		"	13.3		112	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.



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

Project: PDC - Eckhardt 43-34 Wellhead

Project Number: [none]
Project Manager: Mark Longhurst

Reported:
07/24/23 08:38

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 BGG0506 - EPA 5030 Water MS

Matrix Spike Dup (BGG0506-MSD1)	Source: 2307260-01			Prepared: 07/17/23 Analyzed: 07/19/23						
Benzene	27.2	1.0	ug/l	50.0	ND	54.4	34-141	10.7	30	
Toluene	22.4	1.0	"	50.0	ND	44.8	27-151	10.6	30	
Ethylbenzene	43.8	1.0	"	50.0	ND	87.5	29-160	6.29	30	
m,p-Xylene	45.5	2.0	"	100	ND	45.5	20-166	12.0	30	
o-Xylene	24.4	1.0	"	50.0	ND	48.9	33-159	12.7	30	
Naphthalene	46.6	1.0	"	50.0	ND	93.2	70-130	15.9	30	
1,2,4-Trimethylbenzene	50.0	1.0	"	50.0	ND	100	70-130	9.05	30	
1,3,5-Trimethylbenzene	43.0	1.0	"	50.0	ND	86.1	70-130	7.87	30	
Surrogate: 1,2-Dichloroethane-d4	17.4		"	13.3		130	23-173			
Surrogate: Toluene-d8	12.2		"	13.3		91.7	20-170			
Surrogate: 4-Bromofluorobenzene	14.6		"	13.3		109	21-167			

Summit Scientific

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Reported:
07/24/23 08:38

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