

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 08, 2024

Karen Olson

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: PDC - Stephens 7-11,12

Work Order #2410020

Enclosed are the results of analyses for samples received by Summit Scientific on 10/01/24 17:36. 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 - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH21R	2410020-01	Water	10/01/24 11:45	10/01/24 17:36
BH23	2410020-02	Water	10/01/24 12:43	10/01/24 17:36
BH24	2410020-03	Water	10/01/24 13:05	10/01/24 17:36
BH25	2410020-04	Water	10/01/24 11:53	10/01/24 17:36
BH26	2410020-05	Water	10/01/24 12:11	10/01/24 17:36
BH27	2410020-06	Water	10/01/24 12:21	10/01/24 17:36
BH28	2410020-07	Water	10/01/24 12:55	10/01/24 17:36
BH29	2410020-08	Water	10/01/24 13:07	10/01/24 17:36
BH30	2410020-09	Water	10/01/24 13:25	10/01/24 17:36
BH31	2410020-10	Water	10/01/24 13:24	10/01/24 17:36
BH32	2410020-11	Water	10/01/24 12:52	10/01/24 17:36
BH33	2410020-12	Water	10/01/24 12:33	10/01/24 17:36
BH34	2410020-13	Water	10/01/24 12:22	10/01/24 17:36
BH35	2410020-14	Water	10/01/24 13:36	10/01/24 17:36

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.

Client: PDC PDC / Tasman				Send Data To:				Send Invoice To:														
Address: 6855 W 119th Ave				Project Manager: Karen Olson				Company: PDC Energy														
City/State/Zip: Broomfield / CO / 80220				E-Mail: karen.olson@chevron.com				Project Name/Location: Stephens 7-11, 12														
Phone: 303-487-1228				Project Name: Stephens 7-11, 12				AFE#:														
Sampler Name: Jordan Hestmark				Project Number:				PO/Billing Codes:														
				Contact: Karen Olson																		
				Preservative				Matrix				Analysis Requested				Special Instructions						
ID	Sample Description	Date Sampled	Time Sampled	# of containers	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 - 915	Metals - 915	TDS, SO4, Cl		
1	BH 21 R	10/11/24	11:45	4	3		7		X				X	X							X	
2	BH 23		12:48																			
3	BH 24		13:05																			
4	BH 25		11:53																			
5	BH 26		12:11																			
6	BH 27		12:21																			
7	BH 28		12:55																			
8	BH 29		13:07																			
9	BH 30		13:25																			
10	BH 31		13:24																			
11	BH 32		12:52																			
12	BH 33		12:33																			
13	BH 34		12:22																			
14	BH 35	✓	13:26	✓	✓		✓		✓				✓	✓							✓	
15																						
Relinquished by: Jordan Hestmark				Date/Time: 10/11/24 1600				Received by: Tasman Lockbox				Date/Time: 10/11/24 1600				TAT Business Days				Field DO		Notes:
Relinquished by: Tasman Lockbox				Date/Time: 10/24 1734				Received by: [Signature]				Date/Time: 10/24 1734				Same Day		Field EC				
Relinquished by:				Date/Time:				Received by:				Date/Time:				1 Day		Field ORP				
Relinquished by:				Date/Time:				Received by:				Date/Time:				2 Days		Field pH				
Relinquished by:				Date/Time:				Received by:				Date/Time:				3 Days		Field Temp.				
Relinquished by:				Date/Time:				Received by:				Date/Time:				Standard		Field Turb.				
Temperature Upon Receipt: 0.3				Corrected Temperature: 0				IR gun #: 1				HNO3 lot #:										

S₂

Sample Receipt Checklist

S2 Work Order# 2410020Client: ProctermanClient Project ID: Stephens 7-11, 12Shipped 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) 6.3Thermometer # 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"/>	an zce
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.				

Custodian Printed Name

Date/Time



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

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH21R
2410020-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 11:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 11:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	10.8	81.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	22.7	170 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.2	91.7 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 11:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chloride	19.6	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	168	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 11:45**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Total Dissolved Solids	647	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

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Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH23
2410020-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 12:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 12:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	10.9	81.7 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	22.5	169 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.1	90.5 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 12:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	89.3	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	796	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 12:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1930	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

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Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH24
2410020-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	10.4	77.6 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	21.4	160 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.0	89.7 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	61.3	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	541	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 13:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1830	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

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

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH25
2410020-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 11:53**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 11:53**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	9.90	74.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	21.5	161 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.0	90.1 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 11:53**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	81.7	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	646	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 11:53**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1800	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

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Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH26
2410020-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 12:11**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 12:11**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	10.2	76.5 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	21.5	161 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.3	92.2 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 12:11**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	27.4	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	304	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 12:11**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1120	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH27
2410020-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 12:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 12:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	9.24	69.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	18.7	140 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.3	92.0 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 12:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	23.9	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	181	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 12:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	686	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH28
2410020-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 12:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 12:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	8.79	65.9 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	15.0	112 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.0	90.2 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 12:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	53.7	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	467	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 12:55**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1310	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

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

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH29
2410020-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 13:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 13:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	8.91	66.8 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	15.6	117 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	11.9	89.1 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 13:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	59.7	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	777	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 13:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1720	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

Summit Scientific

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

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH30
2410020-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 13:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 13:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	10.5	78.8 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	20.5	154 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.3	92.2 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 13:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	94.3	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	707	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 13:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1590	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH31
2410020-10 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 13:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 13:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	8.92	66.9 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.8	104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.2	91.6 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 13:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	50.8	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	643	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 13:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1760	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH32
2410020-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 12:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 12:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	10.2	76.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.5	101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.2	91.9 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 12:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	34.4	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	270	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 12:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	929	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

Summit Scientific

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

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH33
2410020-12 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	9.58	71.9 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	14.0	105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.5	94.1 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	17.1	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	97.1	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 12:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	345	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH34
2410020-13 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 12:22**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 12:22**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	9.11	68.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.9	104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.4	92.7 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 12:22**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	17.3	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	91.1	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 12:22**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	338	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

BH35
2410020-14 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 13:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHJ0110	10/02/24	10/04/24	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: **10/01/24 13:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.8	103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.3	99.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.2	91.5 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 13:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	31.4	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	259	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 13:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1270	10.0	mg/L	1	BHJ0126	10/03/24	10/07/24	SM2540C	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

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 BHJ0110 - EPA 5030 Water MS

Blank (BHJ0110-BLK1)

Prepared: 10/02/24 Analyzed: 10/04/24

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	9.29		"	13.3		69.7	23-173			
Surrogate: Toluene-d8	19.8		"	13.3		149	20-170			
Surrogate: 4-Bromofluorobenzene	12.3		"	13.3		92.2	21-167			

LCS (BHJ0110-BS1)

Prepared: 10/02/24 Analyzed: 10/04/24

Benzene	21.9	1.0	ug/l	33.3		65.8	51-132			
Toluene	50.5	1.0	"	33.3		151	51-138			QLCS-01
Ethylbenzene	36.3	1.0	"	33.3		109	58-146			
m,p-Xylene	71.1	2.0	"	66.7		107	57-144			
o-Xylene	37.8	1.0	"	33.3		113	53-146			
Naphthalene	28.6	1.0	"	33.3		85.9	70-130			
1,2,4-Trimethylbenzene	35.2	1.0	"	33.3		106	70-130			
1,3,5-Trimethylbenzene	34.9	1.0	"	33.3		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	9.34		"	13.3		70.1	23-173			
Surrogate: Toluene-d8	17.0		"	13.3		127	20-170			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.4	21-167			

LCS Dup (BHJ0110-BSD1)

Prepared: 10/02/24 Analyzed: 10/04/24

Benzene	21.3	1.0	ug/l	33.3		63.8	51-132	3.10	20	
Toluene	51.6	1.0	"	33.3		155	51-138	2.14	20	QLCS-01
Ethylbenzene	35.1	1.0	"	33.3		105	58-146	3.28	20	
m,p-Xylene	69.3	2.0	"	66.7		104	57-144	2.54	20	
o-Xylene	36.3	1.0	"	33.3		109	53-146	4.05	20	
Naphthalene	28.3	1.0	"	33.3		84.8	70-130	1.20	20	
1,2,4-Trimethylbenzene	34.5	1.0	"	33.3		103	70-130	2.10	20	
1,3,5-Trimethylbenzene	34.2	1.0	"	33.3		103	70-130	2.11	20	
Surrogate: 1,2-Dichloroethane-d4	9.36		"	13.3		70.2	23-173			
Surrogate: Toluene-d8	17.4		"	13.3		130	20-170			
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.5	21-167			

Summit Scientific

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

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

Anions by EPA Method 300.0 - Quality Control
Summit Scientific

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

Batch BHJ0274 - General Preparation

Blank (BHJ0274-BLK1)

Prepared & Analyzed: 10/07/24

Chloride	ND	0.0600	mg/L
Sulfate	ND	0.300	"

LCS (BHJ0274-BS1)

Prepared & Analyzed: 10/07/24

Chloride	2.90	0.0600	mg/L	3.00	96.7	90-110
Sulfate	14.3	0.300	"	15.0	95.3	90-110

Duplicate (BHJ0274-DUP1)

Source: 2410013-11

Prepared & Analyzed: 10/07/24

Chloride	45.7	0.0600	mg/L	47.6	3.92	20
Sulfate	314	0.300	"	327	4.07	20

Matrix Spike (BHJ0274-MS1)

Source: 2410013-11

Prepared & Analyzed: 10/07/24

Chloride	194	0.0600	mg/L	150	47.6	97.7	80-120
Sulfate	1040	0.300	"	750	327	94.7	80-120

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

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

Total Dissolved Solids by SM2540C - Quality Control
Summit Scientific

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

Batch BHJ0126 - General Preparation

Blank (BHJ0126-BLK1)

Prepared: 10/03/24 Analyzed: 10/07/24

Total Dissolved Solids ND 10.0 mg/L

Duplicate (BHJ0126-DUP1)

Source: 2410020-01

Prepared: 10/03/24 Analyzed: 10/07/24

Total Dissolved Solids 637 10.0 mg/L 647 1.56 20

Summit Scientific

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

Project: PDC - Stephens 7-11,12

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 15:25

Notes and Definitions

QLCS-01	The spike recovery was outside acceptance limits for this analyte indicating a potential high bias. The corresponding samples did not exhibit concentrations above reporting level for this analyte. Data quality is not affected.
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