

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 14, 2025

Bryce Goldade

Tasman Geosciences

4725 Independence St.

Wheat Ridge, CO 80033

RE: PDC - Ikenouye F29-22, 23 Tank Battery

Work Order #2504037

Enclosed are the results of analyses for samples received by Summit Scientific on 04/01/25 18:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Natalie Tessier For Paul Shrewsbury

President



Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	2504037-01	Water	04/01/25 11:34	04/01/25 18:00
BH02	2504037-02	Water	04/01/25 11:16	04/01/25 18:00
BH03	2504037-03	Water	04/01/25 11:33	04/01/25 18:00
BH04	2504037-04	Water	04/01/25 11:20	04/01/25 18:00
BH05	2504037-05	Water	04/01/25 10:58	04/01/25 18:00
BH06	2504037-06	Water	04/01/25 10:56	04/01/25 18:00
BH07	2504037-07	Water	04/01/25 10:38	04/01/25 18:00
BH08	2504037-08	Water	04/01/25 10:37	04/01/25 18:00
BH09	2504037-09	Water	04/01/25 10:45	04/01/25 18:00
BH10	2504037-10	Water	04/01/25 11:12	04/01/25 18:00
BH11	2504037-11	Water	04/01/25 11:29	04/01/25 18:00

		Send Data To:	Send Invoice To:
Client: Noble/Tasman	Project Manager:		Company: Noble PDC
Address: 6855 W. 119th Ave.	E-Mail: tas-chevron-4@tasman-geo.com		Project Name/Location: ikenouye f29-22,23 Tank Battery
City/State/Zip: Broomfield/CO/ 80020	E-Mail: RBUEUF27@chevron.com		AFE#:
Phone: 720 481 5294	Project Name: ikenouye f29, 22, 23 Tank Battery		PO/Billing Codes:
Sampler Name: <i>David Bell</i>	Project Number:		Contact: Jason Davidson

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	1,2,4 & 1,3,5-TMB	TDS, CL, SO4	
1	BH01	04/01/25	1134	4	3		1		X				X	X	X	SAR, EC, pH by saturated paste
2	BH02		1116						X				X	X		
3	BH03		1133						X				X	X		
4	BH04		1120						X				X	X		
5	BH05		1058						X				X	X		
6	BH06		1056						X				X	X		
7	BH07		1038						X				X	X		
8	BH08		1037						X				X	X		
9	BH09		1045						X				X	X		
10	BH10		1112						X				X	X		
11	BH11		1129						X				X	X		
12																
13																
14																
15																

Relinquished by: <i>[Signature]</i>	Date/Time: 04/01/25 1531	Received by: Tasman Lock Box	Date/Time: 04/21/25 1531	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by: <i>Tasman Lock Box</i>	Date/Time: 4125 1800	Received by: <i>[Signature]</i>	Date/Time: 4125 1800	1 Day	Field ORP	
				2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	Field Turb. <input checked="" type="checkbox"/>	
Temperature Upon Receipt: 2.9	Corrected Temperature: 0	IR gun #: 1	HNO3 lot #:			

S₂

S2 Work Order# 2504037

Sample Receipt Checklist

Client: NOVOT (ASHMAN) Client Project ID: Ikenouye F29, 22, 23 Tank BatteryReceived Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: _____Matrix (Circle all that apply) Air/Soil/Water/Other Temp (°C) 2.9 Thermometer # 1Bottle ware (Circle all that apply) Glass Jar/~~Moal~~/~~Amber~~/~~Poly~~/Other

	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.	-			on 20F
If custody seals are present, are they intact? ⁽¹⁾	-			
Are samples due within 48 hours?		-		
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, Total Residual Chlorine (TRC)		-		
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾	-			
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	-			
Were all samples received intact? ⁽¹⁾	✓			
Was adequate sample volume provided? ⁽¹⁾	✓			
Were samples provided in appropriate bottle ware?	✓			
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	✓			
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	✓			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.		✓		
Are any samples/bottles preserved (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	✓			HCl
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Are there requested analysis that cannot be performed by S2? Note analysis in the comments column		✓		
<u>Additional Comments (if any):</u>				

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

Control Form #: SRC-001

AS
Custodian Printed Name

4/1/25
Date/Time



Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH01
2504037-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 11:34**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 11:34**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	15.3	115 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.6	102 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.2	98.6 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 11:34**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	114	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	265	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 11:34**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	676	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

Summit Scientific

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH02
2504037-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 11:16**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 11:16**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.0	105 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.9	104 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.8	96.3 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 11:16**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	112	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	266	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 11:16**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	720	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

Summit Scientific

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH03
2504037-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 11:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 11:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.3	107 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.6	102 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.8	96.2 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 11:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	104	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	258	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 11:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	709	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

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Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH04
2504037-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.8	111 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.8	103 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.0	97.6 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	110	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	255	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	723	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

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Tasman Geosciences
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Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH05
2504037-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 10:58**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 10:58**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.1	106 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.7	103 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.0	97.1 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 10:58**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	100	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	246	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 10:58**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	693	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH06
2504037-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 10:56**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 10:56**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.1	106 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.9	105 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.7	95.2 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 10:56**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	96.2	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	230	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 10:56**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	490	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

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4725 Independence St.
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Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH07
2504037-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 10:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 10:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	15.0	112 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	14.3	107 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.0	97.7 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 10:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	108	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	259	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 10:38**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	622	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH08
2504037-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 10:37**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 10:37**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.6	102 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.6	102 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.4	92.9 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 10:37**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	118	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	270	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 10:37**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	716	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

Summit Scientific

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH09
2504037-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	13.8	104 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	12.2	91.7 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.0	97.2 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	116	0.0600	mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	267	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 10:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	723	10.0	mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

Summit Scientific

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH10
2504037-10 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 11:12**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 11:12**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	15.5	116 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.9	104 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.6	94.5 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 11:12**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	112	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	257	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 11:12**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	767	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

Summit Scientific

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

BH11
2504037-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/01/25 11:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BID0217	04/03/25	04/04/25	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: **04/01/25 11:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	15.4	115 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	14.0	105 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.6	94.7 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **04/01/25 11:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	113	0.0600		mg/L	50	BID0105	04/02/25	04/08/25	EPA 300.0	
Sulfate	257	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **04/01/25 11:29**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	727	10.0		mg/L	1	BID0088	04/02/25	04/03/25	SM2540C	

Summit Scientific

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BID0217 - EPA 5030 Water MS

Blank (BID0217-BLK1)

Prepared & Analyzed: 04/03/25

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	13.6		"	13.3		102		23-173		
Surrogate: Toluene-d8	13.7		"	13.3		103		20-170		
Surrogate: 4-Bromofluorobenzene	12.9		"	13.3		96.8		21-167		

LCS (BID0217-BS1)

Prepared & Analyzed: 04/03/25

Benzene	33.7	1.0	ug/l	33.3		101		51-132		
Toluene	36.5	1.0	"	33.3		110		51-138		
Ethylbenzene	35.5	1.0	"	33.3		106		58-146		
m,p-Xylene	65.6	2.0	"	66.7		98.3		57-144		
o-Xylene	32.6	1.0	"	33.3		97.7		53-146		
Naphthalene	29.0	1.0	"	33.3		87.0		70-130		
1,2,4-Trimethylbenzene	33.3	1.0	"	33.3		99.8		70-130		
1,3,5-Trimethylbenzene	33.8	1.0	"	33.3		101		70-130		
Surrogate: 1,2-Dichloroethane-d4	15.5		"	13.3		117		23-173		
Surrogate: Toluene-d8	14.4		"	13.3		108		20-170		
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		99.6		21-167		

LCS Dup (BID0217-BSD1)

Prepared & Analyzed: 04/03/25

Benzene	35.7	1.0	ug/l	33.3		107	5.74	51-132	20	
Toluene	38.5	1.0	"	33.3		116	5.25	51-138	20	
Ethylbenzene	36.4	1.0	"	33.3		109	2.45	58-146	20	
m,p-Xylene	66.2	2.0	"	66.7		99.3	0.956	57-144	20	
o-Xylene	32.9	1.0	"	33.3		98.7	1.07	53-146	20	
Naphthalene	31.9	1.0	"	33.3		95.6	9.46	70-130	20	
1,2,4-Trimethylbenzene	34.2	1.0	"	33.3		103	2.76	70-130	20	
1,3,5-Trimethylbenzene	34.6	1.0	"	33.3		104	2.17	70-130	20	
Surrogate: 1,2-Dichloroethane-d4	16.2		"	13.3		121		23-173		
Surrogate: Toluene-d8	14.5		"	13.3		109		20-170		
Surrogate: 4-Bromofluorobenzene	12.5		"	13.3		93.9		21-167		

Summit Scientific

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

Anions by EPA Method 300.0 - Quality Control

Summit Scientific

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

Batch BID0105 - General Preparation

Blank (BID0105-BLK1)

Prepared: 04/02/25 Analyzed: 04/08/25

Chloride	ND	0.0600	mg/L							
Sulfate	ND	0.300	"							

LCS (BID0105-BS1)

Prepared: 04/02/25 Analyzed: 04/08/25

Chloride	2.88	0.0600	mg/L	3.00	95.9	90-110				
Sulfate	14.5	0.300	"	15.0	96.7	90-110				

Duplicate (BID0105-DUP1)

Source: 2503455-01

Prepared: 04/02/25 Analyzed: 04/08/25

Chloride	33.5	0.0600	mg/L		37.4			11.0	20	
Sulfate	454	0.300	"		500			9.67	20	

Matrix Spike (BID0105-MS1)

Source: 2503455-01

Prepared: 04/02/25 Analyzed: 04/08/25

Chloride	154	0.0600	mg/L	150	37.4	77.9	80-120			QM-05
Sulfate	1050	0.300	"	750	500	73.4	80-120			QM-05

Summit Scientific

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Tasman Geosciences
 4725 Independence St.
 Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
 Project Manager: Bryce Goldade

Reported:
 04/14/25 13:08

Total Dissolved Solids by SM2540C - Quality Control

Summit Scientific

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

Batch BID0088 - General Preparation

Blank (BID0088-BLK1)

Prepared: 04/02/25 Analyzed: 04/03/25

Total Dissolved Solids ND 10.0 mg/L

Duplicate (BID0088-DUP1)

Source: 2504029-01

Prepared: 04/02/25 Analyzed: 04/03/25

Total Dissolved Solids 1090 10.0 mg/L 971 11.5 20

Summit Scientific

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Tasman Geosciences
4725 Independence St.
Wheat Ridge CO, 80033

Project: PDC - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
04/14/25 13:08

Notes and Definitions

- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- 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