

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

January 02, 2025

Bryce Goldade

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

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

Work Order #2411410

Enclosed are the results of analyses for samples received by Summit Scientific on 11/21/24 18:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacob Wood". The signature is written in a cursive style with a large initial "J" and a long horizontal stroke at the end.

Jacob Wood For Paul Shrewsbury

President



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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH12@11-12'	2411410-01	Soil	11/21/24 09:45	11/21/24 18:06
BH12@12-12.5'	2411410-02	Soil	11/21/24 09:48	11/21/24 18:06
BH13@11-12'	2411410-04	Soil	11/21/24 10:00	11/21/24 18:06
BH14@11-12'	2411410-07	Soil	11/21/24 10:24	11/21/24 18:06
BH14@13-14'	2411410-09	Soil	11/21/24 10:28	11/21/24 18:06
BH14@17-18'	2411410-10	Soil	11/21/24 10:48	11/21/24 18:06
BH15@11-12'	2411410-11	Soil	11/21/24 11:08	11/21/24 18:06
BKG05@11-12'	2411410-14	Soil	11/21/24 11:30	11/21/24 18:06
BKG05@12-12.5'	2411410-15	Soil	11/21/24 11:34	11/21/24 18:06
BKG05@12.5-13'	2411410-16	Soil	11/21/24 11:34	11/21/24 18:06
BKG06@10-11'	2411410-17	Soil	11/21/24 13:06	11/21/24 18:06
BKG06@11-11.5'	2411410-18	Soil	11/21/24 13:08	11/21/24 18:06
BKG07@11-12'	2411410-19	Soil	11/21/24 13:36	11/21/24 18:06
BKG07@12-12.5'	2411410-20	Soil	11/21/24 13:38	11/21/24 18:06
BKG07@12.5-13'	2411410-21	Soil	11/21/24 13:40	11/21/24 18:06
BKG08@11-12'	2411410-22	Soil	11/21/24 13:50	11/21/24 18:06
BKG08@12-12.5'	2411410-23	Soil	11/21/24 13:52	11/21/24 18:06
BKG08@12.5-13	2411410-24	Soil	11/21/24 13:54	11/21/24 18:06
BKG09@11-12'	2411410-25	Soil	11/21/24 14:10	11/21/24 18:06
BKG09@12-12.5'	2411410-26	Soil	11/21/24 14:12	11/21/24 18:06
BKG09@12.5-13'	2411410-27	Soil	11/21/24 14:14	11/21/24 18:06
BKG04@11-12'	2411410-28	Soil	11/21/24 14:30	11/21/24 18:06
BKG04@12-12.5'	2411410-29	Soil	11/21/24 14:32	11/21/24 18:06
BKG04@12.5-13'	2411410-30	Soil	11/21/24 14:34	11/21/24 18:06

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Case Narrative

This revised report includes corrections to the EC Quality Control results.
This is a revision of the report originally sent on 12/26/2024 at 13:10 MT.

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

Lab ID
24 11410-1
Page 1 of 2

Client: PDC / Tasman		Project Manager: Bryce Goldade		Company: PDC Energy	
Address: 6855 W 119th Ave		E-Mail: tas-chevron-4@tasman-geo.com		Project Name/Location: Kenouye F29-22, 23 Tank Battery	
City/State/Zip: Broomfield / CO / 80020		rbueuf27@chevron.com		AFE#:	
Phone: 303-487-1228		Project Name: Kenouye F29-22, 23 Tank Battery		PO/Billing Codes:	
Sampler Name: Elizabeth Brauer		Project Number:		Contact: Karen Olson	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH		Boron - HWS
1	BH12 @ 11-12'	11/21/24	945	2			X			X			X	X	X	X	X		
2	BH12 @ 12-12.5'		948										X	X	X	X	X		
3	BH12 @ 12.5-13'		950										X	X	X	X	X		X
4	BH13 @ 11-12'		1000										X	X	X	X	X		
5	BH13 @ 12-12.5'		1002																X
6	BH13 @ 12.5-13'		1004																X
7	BH14 @ 11-12'		1024										X	X	X	X	X		
8	BH14 @ 12-12.5-13'		1026																X
9	BH14 @ 13-14'		1028										X	X	X	X	X		
10	BH14 @ 17-18'		1048										X	X	X	X	X		
11	BH15 @ 11-12'		1108										X	X	X	X	X		
12	BH15 @ 12-12.5'		1110																X
13	BH15 @ 12.5-13'		1112																X
14	BKG05 @ 11-12'		1130										X	X			X	X	
15	BKG05 @ 12-12.5'		1134										X	X			X	X	

Relinquished by: <i>Elis</i>	Date/Time: 11/21/24 1640	Received by: Tasman Lockbox	Date/Time: 11/21/24 1640	TAT Business Days	Field DO	Notes:
Relinquished by: Tasman Lockbox	Date/Time: 11/21/24 1800	Received by: <i>[Signature]</i>	Date/Time: 11/21/24 1800	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.	
Temperature Upon Receipt: 5.8	Corrected Temperature: 6	IR gun #: 1	HNO3 lot #:	Standard	X	Field Turb.

Client: PDC / Tasman		Project Manager: Bryce Goldade		Send Invoice To: Company: PDC Energy	
Address: 6855 W 119th Ave		E-Mail: tas-chevron-4@tasman-geo.com		Project Name/Location: Kenouye F29-22, 23 Tank Battery	
City/State/Zip: Broomfield / CO / 80020		rbuev f27@chevron.com		AFE#:	
Phone: 303-487-1228		Project Name: Kenouye F29-22, 23 Tank Battery		PO/Billing Codes:	
Sampler Name: Elizabeth Brauer		Project Number:		Contact: Karen Olson	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH	
1	BKG05 @ 12.5-13'	11/21/24	1134	2			X			X						X	X	
2	BKG06 @ 10-11'		1306															
3	BKG06 @ 11-11.5'		1308															
4	BKG07 @ 11-12'		1336															
5	BKG07 @ 12-12.5'		1338															
6	BKG07 @ 12.5-13'		1340															
7	BKG08 @ 11-12'		1350															
8	BKG08 @ 12-12.5'		1352															
9	BKG08 @ 12.5-13'		1354															
10	BKG09 @ 11-12'		1410															
11	BKG09 @ 12-12.5'		1412															
12	BKG09 @ 12.5-13'		1414															
13	BKG04 @ 11-12'		1430															
14	BKG04 @ 12-12.5'		1432															
15	BKG04 @ 12.5-13'		1434															

Relinquished by: <i>ELB</i>	Date/Time: 11/21/24 1640	Received by: Tasman Lockbox	Date/Time: 11/21/24 1640	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by: Tasman Lockbox	Date/Time: 11/21/24 1806	Received by: <i>[Signature]</i>	Date/Time:	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: 5.8	Corrected Temperature: 6	IR gun #: 1	HNO3 lot #:			

S₂

2/2

Sample Receipt Checklist

S2 Work Order# 2411410

Client: Portman Client Project ID: Kenauye F29-22, 23 Tank Battery

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

Matrix (Check all that apply) Air Soil/Solid Water Other

Temp (°C) Thermometer #

	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"/>	
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	none
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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

AS
Custodian Printed Name

11/21/24
Date/Time



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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH12@11-12'
2411410-01 (Soil)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHL0040	12/02/24	12/03/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0388	97.0 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0390	97.5 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0379	94.7 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHL0044	12/02/24	12/03/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	7.09	56.7 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH12@11-12'
2411410-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHL0013	12/02/24	12/05/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0157	47.0 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0201	60.2 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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6855 W. 119th Ave.
Broomfield CO, 80020

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH12@11-12'
2411410-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.482	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	7.79	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.09	0.400	"	"	"	"	"	"	
Lead	1.78	0.200	"	"	"	"	"	"	
Nickel	0.737	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.27	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 11/21/24 09:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: 11/21/24 09:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	10.1	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	3.66	0.0500	"	"	"	"	"	"	
Sodium	16.1	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 11/21/24 09:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.10	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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2411410-01 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	88.3			%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.146	0.0100		mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.06			pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH12@12-12.5'
2411410-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHL0040	12/02/24	12/03/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0386	96.4 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0383	95.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0386	96.5 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHL0044	12/02/24	12/03/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	8.88	71.0 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH12@12-12.5'
2411410-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHL0013	12/02/24	12/05/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0138	41.4 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0185	55.5 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH12@12-12.5'
2411410-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.389	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	11.5	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.42	0.400	"	"	"	"	"	"	
Lead	1.94	0.200	"	"	"	"	"	"	
Nickel	2.08	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	9.68	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 11/21/24 09:48

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: 11/21/24 09:48

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	14.2	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	5.75	0.0500	"	"	"	"	"	"	
Sodium	28.5	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 11/21/24 09:48

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.61	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH12@12-12.5'
2411410-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	88.2			%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.426	0.0100		mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 09:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.57			pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH13@11-12'
2411410-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHL0040	12/02/24	12/03/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0382	95.6 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0388	97.1 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0384	96.0 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHL0044	12/02/24	12/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	9.38	75.0 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH13@11-12'
2411410-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHL0013	12/02/24	12/08/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0209	62.6 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.00790	23.7 %	40-140		"	"	"	"	S-04

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH13@11-12'
2411410-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.358	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	11.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.12	0.400	"	"	"	"	"	"	
Lead	1.88	0.200	"	"	"	"	"	"	
Nickel	1.60	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	8.82	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 11/21/24 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: 11/21/24 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	26.0	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	10.3	0.0500	"	"	"	"	"	"	
Sodium	47.8	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 11/21/24 10:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.01	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH13@11-12'
2411410-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	88.4			%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.251	0.0100		mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.84			pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@11-12'
2411410-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHL0040	12/02/24	12/03/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0367	91.8 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0391	97.6 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0402	101 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHL0044	12/02/24	12/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.22	73.7 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@11-12'
2411410-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHL0013	12/02/24	12/05/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0141	42.3 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0191	57.2 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@11-12'
2411410-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.468	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	9.00	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.98	0.400	"	"	"	"	"	"	
Lead	2.04	0.200	"	"	"	"	"	"	
Nickel	1.71	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	8.62	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 11/21/24 10:24

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: 11/21/24 10:24

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	14.6	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	5.99	0.0500	"	"	"	"	"	"	
Sodium	29.7	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 11/21/24 10:24

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.65	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@11-12'
2411410-07 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	89.2			%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.261	0.0100		mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 10:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.68			pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@13-14'
2411410-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/21/24 10:28**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHL0040	12/02/24	12/04/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **11/21/24 10:28**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0377	94.4 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0397	99.3 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0412	103 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **11/21/24 10:28**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHL0044	12/02/24	12/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **11/21/24 10:28**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	6.41	51.3 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@13-14'
2411410-09 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **11/21/24 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHL0013	12/02/24	12/08/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **11/21/24 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.00977	29.3 %	40-140		"	"	"	"	S-04
Surrogate: Fluoranthene-d10	-0.00277	%	40-140		"	"	"	"	S-04

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@13-14'
2411410-09 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	3.45	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B
Barium	117	0.400	"	"	"	"	"	"
Cadmium	0.369	0.200	"	"	"	"	"	"
Copper	11.1	0.400	"	"	"	"	"	"
Lead	11.2	0.200	"	"	"	"	"	"
Nickel	9.98	0.400	"	"	"	"	"	"
Silver	0.0766	0.0200	"	"	"	"	"	"
Zinc	34.8	0.400	"	"	"	"	"	"
Selenium	1.42	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: 11/21/24 10:28

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: 11/21/24 10:28

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	41.5	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	12.9	0.0500	"	"	"	"	"	"	
Sodium	41.5	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 11/21/24 10:28

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.44	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 11/21/24 10:28

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@13-14'
2411410-09 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	75.4	%	1	BHL0413	12/10/24	12/10/24	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 10:28**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.232	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.69		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific



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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@17-18'
2411410-10 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHL0040	12/02/24	12/04/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0374	93.5 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0415	104 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0399	99.7 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHL0044	12/02/24	12/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.67	69.4 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@17-18'
2411410-10 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHL0013	12/02/24	12/08/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0223	67.0 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.00723	21.7 %	40-140		"	"	"	"	S-04

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@17-18'
2411410-10 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.779	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	10.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	4.48	0.400	"	"	"	"	"	"	
Lead	1.43	0.200	"	"	"	"	"	"	
Nickel	3.20	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	4.66	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	17.0	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	5.59	0.0500	"	"	"	"	"	"	
Sodium	21.4	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.15	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH14@17-18'
2411410-10 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	91.7			%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.288	0.0100		mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 10:48**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.72			pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH15@11-12'
2411410-11 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHL0040	12/02/24	12/04/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0377	94.2 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0400	100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0407	102 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHL0044	12/02/24	12/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.59	68.7 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH15@11-12'
2411410-11 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHL0013	12/02/24	12/08/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0263	78.8 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0152	45.5 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH15@11-12'
2411410-11 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.529	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	18.5	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.17	0.400	"	"	"	"	"	"	
Lead	2.61	0.200	"	"	"	"	"	"	
Nickel	2.48	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	11.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 11/21/24 11:08

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: 11/21/24 11:08

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	17.3	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	7.05	0.0500	"	"	"	"	"	"	
Sodium	32.7	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 11/21/24 11:08

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.67	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BH15@11-12'
2411410-11 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	85.8			%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.285	0.0100		mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 11:08**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.56			pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG05@11-12'
2411410-14 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.499	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	10.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.80	0.400	"	"	"	"	"	"	
Lead	1.96	0.200	"	"	"	"	"	"	
Nickel	1.51	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	7.66	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.5	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	6.29	0.0500	"	"	"	"	"	"	
Sodium	31.8	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG05@11-12'
2411410-14 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.69	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.9		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.290	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.94		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG05@12-12.5'
2411410-15 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.495	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	9.97	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.94	0.400	"	"	"	"	"	"	
Lead	1.95	0.200	"	"	"	"	"	"	
Nickel	1.59	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	7.42	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	17.0	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	6.29	0.0500	"	"	"	"	"	"	
Sodium	33.6	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG05@12-12.5'
2411410-15 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.77	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.1		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.283	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.04		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG05@12.5-13'
2411410-16 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0894	12/19/24	12/20/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.423	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	13.9	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.12	0.400	"	"	"	"	"	"	
Lead	2.39	0.200	"	"	"	"	"	"	
Nickel	1.85	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	9.05	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.0	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	6.28	0.0500	"	"	"	"	"	"	
Sodium	33.8	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG05@12.5-13'
2411410-16 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.81	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.3		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.291	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 11:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.74		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG06@10-11'
2411410-17 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 13:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 13:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.719	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	6.39	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	7.04	0.400	"	"	"	"	"	"	
Lead	1.15	0.200	"	"	"	"	"	"	
Nickel	1.16	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.05	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 13:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 13:06**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	7.30	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	2.98	0.0500	"	"	"	"	"	"	
Sodium	11.8	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG06@10-11'
2411410-17 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 13:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.930	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 13:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.4		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 13:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.191	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 13:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.74		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG06@11-11.5'
2411410-18 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 13:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 13:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.296	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	4.62	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	0.627	0.400	"	"	"	"	"	"	
Lead	0.773	0.200	"	"	"	"	"	"	
Nickel	0.628	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	2.78	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 13:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 13:08**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	14.5	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	5.12	0.0500	"	"	"	"	"	"	
Sodium	21.6	0.0500	"	"	"	"	"	"	

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 - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG06@11-11.5'
2411410-18 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 13:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.24	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 13:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.5		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 13:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0931	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 13:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.62		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

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 - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG07@11-12'
2411410-19 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 13:36**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 13:36**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.399	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	4.43	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	0.903	0.400	"	"	"	"	"	"	
Lead	1.09	0.200	"	"	"	"	"	"	
Nickel	0.855	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.64	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 13:36**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 13:36**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.2	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	6.64	0.0500	"	"	"	"	"	"	
Sodium	30.7	0.0500	"	"	"	"	"	"	

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 - Ikenouye F29-22, 23 Tank Battery

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG07@11-12'
2411410-19 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 13:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.62	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 13:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.9		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 13:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.259	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 13:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.99		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG07@12-12.5'
2411410-20 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 13:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 13:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.277	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	6.15	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.59	0.400	"	"	"	"	"	"	
Lead	1.95	0.200	"	"	"	"	"	"	
Nickel	1.23	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.41	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 13:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 13:38**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	17.1	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	6.94	0.0500	"	"	"	"	"	"	
Sodium	32.9	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG07@12-12.5'
2411410-20 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 13:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.70	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 13:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.9		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 13:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.307	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 13:38**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.77		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG07@12.5-13'
2411410-21 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 13:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 13:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.321	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	10.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.88	0.400	"	"	"	"	"	"	
Lead	2.06	0.200	"	"	"	"	"	"	
Nickel	1.56	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	7.19	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 13:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 13:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	18.8	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	7.77	0.0500	"	"	"	"	"	"	
Sodium	34.4	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG07@12.5-13'
2411410-21 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.68	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.6		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.293	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.90		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG08@11-12'
2411410-22 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 13:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 13:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.438	0.200	mg/kg dry	1	BHL0808	12/18/24	12/20/24	EPA 6020B	
Barium	7.71	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.01	0.400	"	"	"	"	"	"	
Lead	1.45	0.200	"	"	"	"	"	"	
Nickel	0.787	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	4.73	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 13:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 13:50**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.5	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	6.34	0.0500	"	"	"	"	"	"	
Sodium	25.5	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG08@11-12'
2411410-22 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.35	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.7		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.212	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.84		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG08@12-12.5'
2411410-23 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 13:52**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 13:52**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.538	0.200	mg/kg dry	1	BHL0810	12/18/24	12/20/24	EPA 6020B	
Barium	26.3	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.77	0.400	"	"	"	"	"	"	
Lead	1.85	0.200	"	"	"	"	"	"	
Nickel	1.39	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	7.99	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 13:52**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 13:52**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.7	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	7.32	0.0500	"	"	"	"	"	"	
Sodium	26.7	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG08@12-12.5'
2411410-23 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 13:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.37	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 13:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.2		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 13:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.334	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 13:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.84		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG08@12.5-13
2411410-24 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 13:54**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 13:54**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.495	0.200	mg/kg dry	1	BHL0810	12/18/24	12/20/24	EPA 6020B	
Barium	17.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.26	0.400	"	"	"	"	"	"	
Lead	2.13	0.200	"	"	"	"	"	"	
Nickel	1.64	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	7.83	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 13:54**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 13:54**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	21.1	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	8.77	0.0500	"	"	"	"	"	"	
Sodium	38.4	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG08@12.5-13
2411410-24 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 13:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.77	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 13:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.3		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 13:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.238	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 13:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.89		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG09@11-12'
2411410-25 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 14:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 14:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.505	0.200	mg/kg dry	1	BHL0810	12/18/24	12/20/24	EPA 6020B	
Barium	15.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.69	0.400	"	"	"	"	"	"	
Lead	1.44	0.200	"	"	"	"	"	"	
Nickel	0.989	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	6.37	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 14:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 14:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	14.4	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	5.78	0.0500	"	"	"	"	"	"	
Sodium	25.1	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG09@11-12'
2411410-25 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.41	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.7		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.212	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.79		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG09@12-12.5'
2411410-26 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 14:12**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 14:12**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.370	0.200	mg/kg dry	1	BHL0810	12/18/24	12/20/24	EPA 6020B	
Barium	9.98	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	0.825	0.400	"	"	"	"	"	"	
Lead	0.961	0.200	"	"	"	"	"	"	
Nickel	0.631	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	3.86	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 14:12**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0667	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 14:12**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	18.9	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	7.69	0.0500	"	"	"	"	"	"	
Sodium	35.4	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG09@12-12.5'
2411410-26 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 14:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.73	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 14:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.4		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 14:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.291	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 14:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.95		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG09@12.5-13'
2411410-27 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 14:14**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 14:14**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.425	0.200	mg/kg dry	1	BHL0810	12/18/24	12/20/24	EPA 6020B	
Barium	16.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.14	0.400	"	"	"	"	"	"	
Lead	1.73	0.200	"	"	"	"	"	"	
Nickel	1.78	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	7.53	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 14:14**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0668	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 14:14**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	16.5	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	6.53	0.0500	"	"	"	"	"	"	
Sodium	30.5	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG09@12.5-13'
2411410-27 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 14:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.61	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 14:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.3		%	1	BHL0413	12/10/24	12/10/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 14:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.319	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 14:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.77		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG04@11-12'
2411410-28 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 14:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 14:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.409	0.200	mg/kg dry	1	BHL0810	12/18/24	12/20/24	EPA 6020B	
Barium	5.51	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.39	0.400	"	"	"	"	"	"	
Lead	1.66	0.200	"	"	"	"	"	"	
Nickel	0.982	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.90	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 14:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0668	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 14:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	15.1	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	6.03	0.0500	"	"	"	"	"	"	
Sodium	28.6	0.0500	"	"	"	"	"	"	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG04@11-12'
2411410-28 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.57	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.0		%	1	BHL0437	12/11/24	12/11/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.259	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.65		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG04@12-12.5'
2411410-29 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 14:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 14:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.689	0.200	mg/kg dry	1	BHL0810	12/18/24	12/20/24	EPA 6020B	
Barium	14.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.07	0.400	"	"	"	"	"	"	
Lead	2.42	0.200	"	"	"	"	"	"	
Nickel	2.70	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	11.7	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 14:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0668	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 14:32**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	20.2	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	7.82	0.0500	"	"	"	"	"	"	
Sodium	39.5	0.0500	"	"	"	"	"	"	

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG04@12-12.5'
2411410-29 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 14:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.89	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 14:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.3		%	1	BHL0437	12/11/24	12/11/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 14:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.356	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 14:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.73		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG04@12.5-13'
2411410-30 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **11/21/24 14:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHL0895	12/19/24	12/21/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **11/21/24 14:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	0.572	0.200	mg/kg dry	1	BHL0810	12/18/24	12/20/24	EPA 6020B	
Barium	10.4	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.59	0.400	"	"	"	"	"	"	
Lead	2.92	0.200	"	"	"	"	"	"	
Nickel	2.46	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	9.60	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **11/21/24 14:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHL0668	12/16/24	12/16/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **11/21/24 14:34**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	20.9	0.0500	mg/L dry	1	BHL0896	12/19/24	12/24/24	EPA 6020B	
Magnesium	8.06	0.0500	"	"	"	"	"	"	
Sodium	41.6	0.0500	"	"	"	"	"	"	

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

BKG04@12.5-13'
2411410-30 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **11/21/24 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.96	0.00100	units	1	BHL1203	12/26/24	12/26/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **11/21/24 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.5		%	1	BHL0437	12/11/24	12/11/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **11/21/24 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.345	0.0100	mmhos/cm	1	BHL0931	12/19/24	12/23/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **11/21/24 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.74		pH Units	1	BHL0923	12/19/24	12/23/24	EPA 9045D	

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHL0040 - EPA 5030 Soil MS

Blank (BHL0040-BLK1)

Prepared: 12/02/24 Analyzed: 12/03/24

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0376		"	0.0400		94.0	50-150			
<i>Surrogate: Toluene-d8</i>	0.0392		"	0.0400		98.1	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0389		"	0.0400		97.2	50-150			

LCS (BHL0040-BS1)

Prepared: 12/02/24 Analyzed: 12/03/24

Benzene	0.0940	0.0020	mg/kg	0.100		94.0	70-130			
Toluene	0.0916	0.0050	"	0.100		91.6	70-130			
Ethylbenzene	0.0954	0.0050	"	0.100		95.4	70-130			
m,p-Xylene	0.183	0.010	"	0.200		91.3	70-130			
o-Xylene	0.0911	0.0050	"	0.100		91.1	70-130			
1,2,4-Trimethylbenzene	0.0903	0.0050	"	0.100		90.3	70-130			
1,3,5-Trimethylbenzene	0.0906	0.0050	"	0.100		90.6	70-130			
Naphthalene	0.0931	0.0038	"	0.100		93.1	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0359		"	0.0400		89.8	50-150			
<i>Surrogate: Toluene-d8</i>	0.0394		"	0.0400		98.5	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0371		"	0.0400		92.8	50-150			

Matrix Spike (BHL0040-MS1)

Source: 2411407-01

Prepared: 12/02/24 Analyzed: 12/03/24

Benzene	0.0130	0.0020	mg/kg	0.100	ND	13.0	70-130			QM-01
Toluene	0.0177	0.0050	"	0.100	ND	17.7	70-130			QM-01
Ethylbenzene	0.0457	0.0050	"	0.100	ND	45.7	70-130			QM-01
m,p-Xylene	0.0666	0.010	"	0.200	ND	33.3	70-130			QM-01
o-Xylene	0.0463	0.0050	"	0.100	ND	46.3	70-130			QM-01
1,2,4-Trimethylbenzene	0.0177	0.0050	"	0.100	ND	17.7	70-130			QM-01
1,3,5-Trimethylbenzene	0.0607	0.0050	"	0.100	0.00828	52.4	70-130			QM-01
Naphthalene	0.00411	0.0038	"	0.100	ND	4.11	70-130			QM-01
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0383		"	0.0400		95.8	50-150			
<i>Surrogate: Toluene-d8</i>	0.0375		"	0.0400		93.7	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0410		"	0.0400		102	50-150			

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHL0040 - EPA 5030 Soil MS

Matrix Spike Dup (BHL0040-MSD1)	Source: 2411407-01			Prepared: 12/02/24 Analyzed: 12/03/24						
Benzene	0.0129	0.0020	mg/kg	0.100	ND	12.9	70-130	0.697	30	QM-01
Toluene	0.0158	0.0050	"	0.100	ND	15.8	70-130	11.3	30	QM-01
Ethylbenzene	0.0338	0.0050	"	0.100	ND	33.8	70-130	30.1	30	QM-01
m,p-Xylene	0.0432	0.010	"	0.200	ND	21.6	70-130	42.6	30	QM-01
o-Xylene	0.0343	0.0050	"	0.100	ND	34.3	70-130	29.9	30	QM-01
1,2,4-Trimethylbenzene	0.00684	0.0050	"	0.100	ND	6.84	70-130	88.6	30	QM-01
1,3,5-Trimethylbenzene	0.0407	0.0050	"	0.100	0.00828	32.5	70-130	39.4	30	QM-01
Naphthalene	ND	0.0038	"	0.100	ND		70-130	200	30	QM-01
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0386</i>		<i>"</i>	<i>0.0400</i>		<i>96.4</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0380</i>		<i>"</i>	<i>0.0400</i>		<i>95.0</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0384</i>		<i>"</i>	<i>0.0400</i>		<i>96.0</i>	<i>50-150</i>			

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6855 W. 119th Ave.
Broomfield CO, 80020

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BHL0044 - EPA 3550A

Blank (BHL0044-BLK1)

Prepared: 12/02/24 Analyzed: 12/03/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	10.8		"	12.5		86.7	30-150				

LCS (BHL0044-BS1)

Prepared: 12/02/24 Analyzed: 12/03/24

C10-C28 (DRO)	453	50	mg/kg	500		90.6	70-130				
Surrogate: <i>o</i> -Terphenyl	11.4		"	12.5		91.4	30-150				

Matrix Spike (BHL0044-MS1)

Source: 2411407-01

Prepared: 12/02/24 Analyzed: 12/03/24

C10-C28 (DRO)	439	50	mg/kg	500	24.9	82.9	70-130				
Surrogate: <i>o</i> -Terphenyl	10.8		"	12.5		86.4	30-150				

Matrix Spike Dup (BHL0044-MSD1)

Source: 2411407-01

Prepared: 12/02/24 Analyzed: 12/03/24

C10-C28 (DRO)	488	50	mg/kg	500	24.9	92.6	70-130	10.5	20		
Surrogate: <i>o</i> -Terphenyl	12.1		"	12.5		96.6	30-150				

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHL0013 - EPA 5030 Soil MS

Blank (BHL0013-BLK1)

Prepared: 12/02/24 Analyzed: 12/04/24

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0174</i>		"	<i>0.0333</i>		<i>52.3</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0191</i>		"	<i>0.0333</i>		<i>57.4</i>	<i>40-140</i>			

LCS (BHL0013-BS1)

Prepared: 12/02/24 Analyzed: 12/04/24

Acenaphthene	0.0182	0.00500	mg/kg	0.0333		54.5	40-140			
Anthracene	0.0192	0.00500	"	0.0333		57.6	40-140			
Benzo (a) anthracene	0.0200	0.00500	"	0.0333		59.9	40-140			
Benzo (a) pyrene	0.0187	0.00500	"	0.0333		56.2	40-140			
Benzo (b) fluoranthene	0.0181	0.00500	"	0.0333		54.3	40-140			
Benzo (k) fluoranthene	0.0193	0.00500	"	0.0333		58.0	40-140			
Chrysene	0.0191	0.00500	"	0.0333		57.4	40-140			
Dibenz (a,h) anthracene	0.0144	0.00500	"	0.0333		43.2	40-140			
Fluoranthene	0.0182	0.00500	"	0.0333		54.6	40-140			
Fluorene	0.0184	0.00500	"	0.0333		55.2	40-140			
Indeno (1,2,3-cd) pyrene	0.0145	0.00500	"	0.0333		43.6	40-140			
Pyrene	0.0206	0.00500	"	0.0333		61.8	40-140			
1-Methylnaphthalene	0.0176	0.00500	"	0.0333		52.7	40-140			
2-Methylnaphthalene	0.0173	0.00500	"	0.0333		52.0	40-140			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0168</i>		"	<i>0.0333</i>		<i>50.5</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0193</i>		"	<i>0.0333</i>		<i>57.9</i>	<i>40-140</i>			

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHL0013 - EPA 5030 Soil MS

Matrix Spike (BHL0013-MS1)	Source: 2411407-01			Prepared: 12/02/24 Analyzed: 12/04/24						QM-01
Acenaphthene	0.0151	0.00500	mg/kg	0.0333	ND	45.4	40-140			
Anthracene	0.0158	0.00500	"	0.0333	ND	47.5	40-140			
Benzo (a) anthracene	0.0162	0.00500	"	0.0333	ND	48.7	40-140			
Benzo (a) pyrene	0.0149	0.00500	"	0.0333	ND	44.8	40-140			
Benzo (b) fluoranthene	0.0128	0.00500	"	0.0333	ND	38.5	40-140			
Benzo (k) fluoranthene	0.0133	0.00500	"	0.0333	ND	39.9	40-140			
Chrysene	0.0153	0.00500	"	0.0333	ND	45.8	40-140			
Dibenz (a,h) anthracene	0.0118	0.00500	"	0.0333	ND	35.3	40-140			
Fluoranthene	0.0152	0.00500	"	0.0333	ND	45.6	40-140			
Fluorene	0.0153	0.00500	"	0.0333	ND	46.0	40-140			
Indeno (1,2,3-cd) pyrene	0.0123	0.00500	"	0.0333	ND	36.9	40-140			
Pyrene	0.0154	0.00500	"	0.0333	ND	46.1	40-140			
1-Methylnaphthalene	0.0140	0.00500	"	0.0333	ND	42.0	40-140			
2-Methylnaphthalene	0.0144	0.00500	"	0.0333	ND	43.3	40-140			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0127</i>		<i>"</i>	<i>0.0333</i>		<i>38.0</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0157</i>		<i>"</i>	<i>0.0333</i>		<i>47.0</i>	<i>40-140</i>			

Matrix Spike Dup (BHL0013-MSD1)	Source: 2411407-01			Prepared: 12/02/24 Analyzed: 12/04/24						QM-01
Acenaphthene	0.0142	0.00500	mg/kg	0.0333	ND	42.6	40-140	6.48	30	
Anthracene	0.0151	0.00500	"	0.0333	ND	45.2	40-140	5.03	30	
Benzo (a) anthracene	0.0156	0.00500	"	0.0333	ND	46.8	40-140	3.93	30	
Benzo (a) pyrene	0.0144	0.00500	"	0.0333	ND	43.1	40-140	3.74	30	
Benzo (b) fluoranthene	0.0126	0.00500	"	0.0333	ND	37.7	40-140	2.11	30	
Benzo (k) fluoranthene	0.0123	0.00500	"	0.0333	ND	37.0	40-140	7.55	30	
Chrysene	0.0143	0.00500	"	0.0333	ND	42.9	40-140	6.65	30	
Dibenz (a,h) anthracene	0.0116	0.00500	"	0.0333	ND	34.7	40-140	1.83	30	
Fluoranthene	0.0142	0.00500	"	0.0333	ND	42.7	40-140	6.49	30	
Fluorene	0.0147	0.00500	"	0.0333	ND	44.1	40-140	4.32	30	
Indeno (1,2,3-cd) pyrene	0.0122	0.00500	"	0.0333	ND	36.5	40-140	1.18	30	
Pyrene	0.0148	0.00500	"	0.0333	ND	44.3	40-140	4.03	30	
1-Methylnaphthalene	0.0126	0.00500	"	0.0333	ND	37.8	40-140	10.6	30	
2-Methylnaphthalene	0.0125	0.00500	"	0.0333	ND	37.4	40-140	14.6	30	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0106</i>		<i>"</i>	<i>0.0333</i>		<i>31.7</i>	<i>40-140</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0144</i>		<i>"</i>	<i>0.0333</i>		<i>43.2</i>	<i>40-140</i>			

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control

Summit Scientific

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

Batch BHL0894 - EPA 3050B

Blank (BHL0894-BLK1)

Prepared: 12/19/24 Analyzed: 12/20/24

Boron ND 2.00 mg/L

LCS (BHL0894-BS1)

Prepared: 12/19/24 Analyzed: 12/20/24

Boron 4.64 2.00 mg/L 5.00 92.8 80-120

Duplicate (BHL0894-DUP1)

Source: 2411410-01

Prepared: 12/19/24 Analyzed: 12/20/24

Boron 0.0801 2.00 mg/L 0.107 28.6 20 QR-01

Matrix Spike (BHL0894-MS1)

Source: 2411410-01

Prepared: 12/19/24 Analyzed: 12/20/24

Boron 4.72 2.00 mg/L 5.00 0.107 92.3 75-125

Matrix Spike Dup (BHL0894-MSD1)

Source: 2411410-01

Prepared: 12/19/24 Analyzed: 12/20/24

Boron 5.26 2.00 mg/L 5.00 0.107 103 75-125 10.7 25

Batch BHL0895 - EPA 3050B

Blank (BHL0895-BLK1)

Prepared: 12/19/24 Analyzed: 12/21/24

Boron ND 2.00 mg/L

LCS (BHL0895-BS1)

Prepared: 12/19/24 Analyzed: 12/21/24

Boron 4.91 2.00 mg/L 5.00 98.2 80-120

Duplicate (BHL0895-DUP1)

Source: 2411410-17

Prepared: 12/19/24 Analyzed: 12/21/24

Boron 0.0343 2.00 mg/L 0.0817 81.7 20 QR-01

Matrix Spike (BHL0895-MS1)

Source: 2411410-17

Prepared: 12/19/24 Analyzed: 12/21/24

Boron 4.93 2.00 mg/L 5.00 0.0817 96.9 75-125

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control

Summit Scientific

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

Batch BHL0895 - EPA 3050B

Matrix Spike Dup (BHL0895-MSD1)

Source: 2411410-17

Prepared: 12/19/24 Analyzed: 12/21/24

Boron	5.12	2.00	mg/L	5.00	0.0817	101	75-125	3.92	25	
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHL0808 - EPA 3050B

Blank (BHL0808-BLK1)

Prepared: 12/18/24 Analyzed: 12/20/24

Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							
Selenium	ND	0.260	"							

LCS (BHL0808-BS1)

Prepared: 12/18/24 Analyzed: 12/20/24

Arsenic	39.6	0.200	mg/kg wet	41.7	94.9	80-120				
Barium	40.8	0.400	"	41.7	97.8	80-120				
Cadmium	2.06	0.200	"	2.08	98.9	80-120				
Copper	42.1	0.400	"	41.7	101	80-120				
Lead	20.3	0.200	"	20.8	97.7	80-120				
Nickel	41.9	0.400	"	41.7	101	80-120				
Silver	2.06	0.0200	"	2.08	98.7	80-120				
Zinc	42.3	0.400	"	41.7	101	80-120				
Selenium	4.11	0.260	"	4.17	98.5	80-120				

Duplicate (BHL0808-DUP1)

Source: 2411387-01

Prepared: 12/18/24 Analyzed: 12/20/24

Arsenic	3.94	0.200	mg/kg dry		3.35		16.0	20		
Barium	66.1	0.400	"		60.4		9.15	20		
Cadmium	0.336	0.200	"		0.382		12.7	20		
Copper	5.26	0.400	"		4.60		13.4	20		
Lead	7.22	0.200	"		6.41		11.9	20		
Nickel	5.27	0.400	"		5.26		0.135	20		
Silver	0.0332	0.0200	"		0.0229		36.6	20		QR-01
Zinc	25.1	0.400	"		21.3		16.2	20		
Selenium	0.178	0.260	"		ND		200	20		QR-01

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHL0808 - EPA 3050B

Matrix Spike (BHL0808-MS1)

Source: 2411387-01

Prepared: 12/18/24 Analyzed: 12/20/24

Arsenic	47.8	0.200	mg/kg dry	46.0	3.35	96.5	75-125			
Barium	112	0.400	"	46.0	60.4	112	75-125			
Cadmium	2.69	0.200	"	2.30	0.382	100	75-125			
Copper	40.3	0.400	"	46.0	4.60	77.6	75-125			
Lead	30.5	0.200	"	23.0	6.41	105	75-125			
Nickel	40.4	0.400	"	46.0	5.26	76.5	75-125			
Silver	2.33	0.0200	"	2.30	0.0229	101	75-125			
Zinc	59.1	0.400	"	46.0	21.3	82.2	75-125			
Selenium	4.01	0.260	"	4.60	ND	87.1	75-125			

Matrix Spike Dup (BHL0808-MSD1)

Source: 2411387-01

Prepared: 12/18/24 Analyzed: 12/20/24

Arsenic	46.0	0.200	mg/kg dry	45.3	3.35	94.3	75-125	3.70	25	
Barium	101	0.400	"	45.3	60.4	90.0	75-125	9.95	25	
Cadmium	2.56	0.200	"	2.26	0.382	96.3	75-125	4.80	25	
Copper	39.3	0.400	"	45.3	4.60	76.6	75-125	2.59	25	
Lead	28.7	0.200	"	22.6	6.41	98.5	75-125	6.22	25	
Nickel	38.7	0.400	"	45.3	5.26	74.0	75-125	4.32	25	QM-05
Silver	2.23	0.0200	"	2.26	0.0229	97.6	75-125	4.51	25	
Zinc	58.1	0.400	"	45.3	21.3	81.4	75-125	1.67	25	
Selenium	3.85	0.260	"	4.53	ND	85.0	75-125	4.06	25	

Batch BHL0810 - EPA 3050B

Blank (BHL0810-BLK1)

Prepared: 12/18/24 Analyzed: 12/20/24

Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							
Selenium	ND	0.260	"							

Summit Scientific

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHL0810 - EPA 3050B

LCS (BHL0810-BS1)

Prepared: 12/18/24 Analyzed: 12/20/24

Arsenic	39.7	0.200	mg/kg wet	41.7		95.2	80-120			
Barium	39.9	0.400	"	41.7		95.8	80-120			
Cadmium	2.03	0.200	"	2.08		97.5	80-120			
Copper	41.2	0.400	"	41.7		98.9	80-120			
Lead	20.0	0.200	"	20.8		95.8	80-120			
Nickel	41.1	0.400	"	41.7		98.5	80-120			
Silver	2.03	0.0200	"	2.08		97.6	80-120			
Zinc	41.4	0.400	"	41.7		99.5	80-120			
Selenium	3.97	0.260	"	4.17		95.3	80-120			

Duplicate (BHL0810-DUP1)

Source: 2411405-01

Prepared: 12/18/24 Analyzed: 12/20/24

Arsenic	2.99	0.200	mg/kg dry		2.92			2.24	20	
Barium	96.4	0.400	"		76.8			22.7	20	QR-04
Cadmium	0.324	0.200	"		0.278			15.4	20	
Copper	6.47	0.400	"		6.27			3.04	20	
Lead	11.0	0.200	"		9.43			15.2	20	
Nickel	5.81	0.400	"		5.87			1.06	20	
Silver	0.0521	0.0200	"		0.0544			4.32	20	
Zinc	24.6	0.400	"		23.3			5.38	20	
Selenium	ND	0.260	"		ND				20	

Matrix Spike (BHL0810-MS1)

Source: 2411405-01

Prepared: 12/18/24 Analyzed: 12/20/24

Arsenic	46.3	0.200	mg/kg dry	46.6	2.92	93.1	75-125			
Barium	156	0.400	"	46.6	76.8	171	75-125			QM-05
Cadmium	2.56	0.200	"	2.33	0.278	98.0	75-125			
Copper	36.2	0.400	"	46.6	6.27	64.2	75-125			QM-05
Lead	30.7	0.200	"	23.3	9.43	91.1	75-125			
Nickel	36.1	0.400	"	46.6	5.87	64.9	75-125			QM-05
Silver	2.26	0.0200	"	2.33	0.0544	94.7	75-125			
Zinc	54.2	0.400	"	46.6	23.3	66.3	75-125			QM-05
Selenium	3.84	0.260	"	4.66	ND	82.5	75-125			

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Total Metals by EPA 6020B - Quality Control

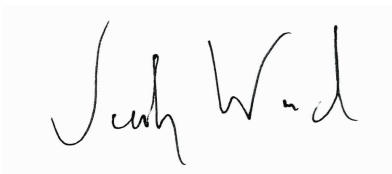
Summit Scientific

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

Batch BHL0810 - EPA 3050B

Matrix Spike Dup (BHL0810-MSD1)	Source: 2411405-01			Prepared: 12/18/24 Analyzed: 12/20/24							
Arsenic	49.5	0.200	mg/kg dry	48.9	2.92	95.2	75-125	6.61	25		
Barium	122	0.400	"	48.9	76.8	92.6	75-125	24.7	25		
Cadmium	2.77	0.200	"	2.45	0.278	102	75-125	7.69	25		
Copper	41.3	0.400	"	48.9	6.27	71.5	75-125	13.0	25	QM-05	
Lead	33.7	0.200	"	24.5	9.43	99.0	75-125	9.36	25		
Nickel	40.7	0.400	"	48.9	5.87	71.1	75-125	11.8	25	QM-05	
Silver	2.52	0.0200	"	2.45	0.0544	101	75-125	10.7	25		
Zinc	59.5	0.400	"	48.9	23.3	73.8	75-125	9.20	25	QM-05	
Selenium	4.16	0.260	"	4.89	ND	85.0	75-125	7.92	25		

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Tasman Geosciences
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Broomfield CO, 80020

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BHL0667 - 3060A Mod

Blank (BHL0667-BLK1)											Prepared & Analyzed: 12/16/24
Chromium, Hexavalent	ND	0.30	mg/kg wet								
LCS (BHL0667-BS1)											Prepared & Analyzed: 12/16/24
Chromium, Hexavalent	26.2	0.30	mg/kg wet	25.0		105	80-120				
Duplicate (BHL0667-DUP1)											Source: 2411410-01 Prepared & Analyzed: 12/16/24
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND					20	
Matrix Spike (BHL0667-MS1)											Source: 2411410-01 Prepared & Analyzed: 12/16/24
Chromium, Hexavalent	28.9	0.30	mg/kg dry	28.3	ND	102	75-125				
Matrix Spike Dup (BHL0667-MSD1)											Source: 2411410-01 Prepared & Analyzed: 12/16/24
Chromium, Hexavalent	29.2	0.30	mg/kg dry	28.3	ND	103	75-125	0.780		20	

Batch BHL0668 - 3060A Mod

Blank (BHL0668-BLK1)											Prepared & Analyzed: 12/16/24
Chromium, Hexavalent	ND	0.30	mg/kg wet								
LCS (BHL0668-BS1)											Prepared & Analyzed: 12/16/24
Chromium, Hexavalent	26.4	0.30	mg/kg wet	25.0		106	80-120				
Duplicate (BHL0668-DUP1)											Source: 2411402-01 Prepared & Analyzed: 12/16/24
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND					20	
Matrix Spike (BHL0668-MS1)											Source: 2411402-01 Prepared & Analyzed: 12/16/24
Chromium, Hexavalent	30.0	0.30	mg/kg dry	28.9	ND	104	75-125				

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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Hexavalent Chromium by EPA Method 7196 - Quality Control

Summit Scientific

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

Batch BHL0668 - 3060A Mod

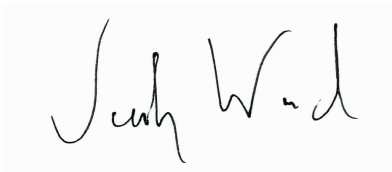
Matrix Spike Dup (BHL0668-MSD1)

Source: 2411402-01

Prepared & Analyzed: 12/16/24

Chromium, Hexavalent	30.7	0.30	mg/kg dry	28.9	ND	106	75-125	2.29	20	
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

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

Batch BHL0896 - General Preparation

Blank (BHL0896-BLK1)

Prepared: 12/19/24 Analyzed: 12/24/24

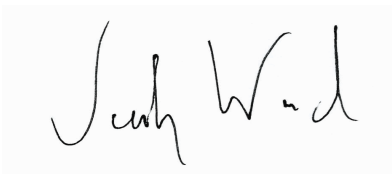
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

LCS (BHL0896-BS1)

Prepared: 12/19/24 Analyzed: 12/24/24

Calcium	4.78	0.0500	mg/L wet	5.00	95.5	70-130				
Magnesium	4.89	0.0500	"	5.00	97.8	70-130				
Sodium	4.83	0.0500	"	5.00	96.6	70-130				

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

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

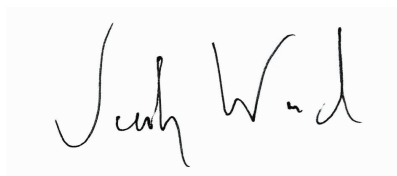
Batch BHL0413 - General Preparation

Duplicate (BHL0413-DUP1)		Source: 2411390-01			Prepared & Analyzed: 12/10/24					
% Solids	89.4		%		89.1			0.347		20

Batch BHL0437 - General Preparation

Duplicate (BHL0437-DUP1)		Source: 2411410-28			Prepared & Analyzed: 12/11/24					
% Solids	90.3		%		91.0			0.757		20

Summit Scientific



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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

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

Batch BHL0931 - General Preparation

Blank (BHL0931-BLK1)

Prepared: 12/19/24 Analyzed: 12/23/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHL0931-BS1)

Prepared: 12/19/24 Analyzed: 12/23/24

Specific Conductance (EC) 1.36 0.0100 mmhos/cm 1.41 96.4 95-105

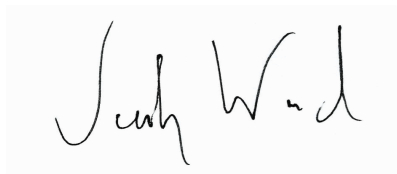
Duplicate (BHL0931-DUP1)

Source: 2411409-01

Prepared: 12/19/24 Analyzed: 12/23/24

Specific Conductance (EC) 0.503 0.0100 mmhos/cm 0.504 0.196 20

Summit Scientific



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

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control

Summit Scientific

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

Batch BHL0923 - General Preparation

LCS (BHL0923-BS1)

Prepared: 12/19/24 Analyzed: 12/23/24

pH	9.17	pH Units	9.18	99.8	95-105
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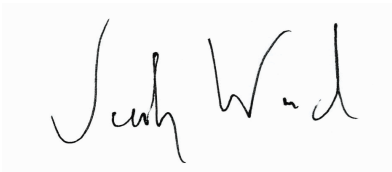
Duplicate (BHL0923-DUP1)

Source: 2411409-01

Prepared: 12/19/24 Analyzed: 12/23/24

pH	8.14	pH Units	8.21	0.953	20
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

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

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
01/02/25 10:56

Notes and Definitions

- S-04 A sample matrix effect prevented complete surrogate recovery.
- QR-04 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- QR-01 Analyses are not controlled on RPD values from sample concentrations below the reporting limit. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- 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.
- QM-01 The spike recovery for this QC sample is outside of established control limits due to sample 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