

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80401

303.277.9310

June 02, 2023

Ben Baugh

Entrada Consulting Group

240 Mesa Avenue

Grand Junction., CO 81501

RE: PDC - Champlin 117 #5

Work Order # 2305529

Enclosed are the results of analyses for samples received by Summit Scientific on 05/23/23 15:53. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jacob Wood For Paul Shrewsbury

President



Entrada Consulting Group  
240 Mesa Avenue  
Grand Junction. CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WH01@6	2305529-01	Soil	05/23/23 09:30	05/23/23 15:53
FLR01@4	2305529-02	Soil	05/23/23 09:35	05/23/23 15:53

Client: <u>Entrada Consulting Group</u>		Send Data To:		Send Invoice To:	
Address:		Project Manager: <u>Ben Baugh</u>		Company: <u>PDC EH S</u>	
City/State/Zip:		E-Mail: <u>Entrada + PDC EH S dist. list</u>		Project Name/Location:	
Phone: <u>586 945 6355</u>		Project Name: <u>Champlin 117 #5</u>		AFE#:	
Sampler Name: <u>Chelsea Vervser</u>		Project Number:		PO/Billing Codes:	
				Contact:	

				Preservative				Matrix				Analysis Requested				Special Instructions			
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEXN	TMBS	TPH	PAHs	Boron	PH, EC, SAR	
1	WH01@6	5/23/23	0930	2			X			X			X	X	X	X	X		
2	FLR01@4	5/23/23	0935	2			X			X			X	X	X	X	X		
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: <u>[Signature]</u>	Date/Time: <u>5/23/23 1550</u>	Received by: <u>John Wood</u>	Date/Time: <u>5/23/2023 15:53</u>	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by: <u>[Signature]</u>	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
				2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	X Field Turb.	
Temperature Upon Receipt: <u>23.2</u>	Corrected Temperature	IR gun #: <u>2</u>	HNO3 lot #:			

S<sub>2</sub>

## Sample Receipt Checklist

S2 Work Order# 2305529Client: Entrada Client Project ID: Champion 117 #5Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐
☒ ☐ ☐ ☐ ☐
Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) 23.2Thermometer # 2

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> <b>NOTE:</b> If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Not on ice
If custody seals are present, are they intact? <sup>(1)</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation ( <b>excluding cooling</b> )? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> 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):

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

John W. Wood  
Custodian Printed Name

5/23/2023 15:53  
Date/Time



Entrada Consulting Group  
240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

**WH01@6**  
**2305529-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **05/23/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGE0860	05/24/23	05/25/23	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: **05/23/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		116 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		113 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **05/23/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGE0858	05/24/23	05/24/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **05/23/23 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		111 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Project: PDC - Champlin 117 #5

Project Number: [none]  
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06/02/23 15:31

**WH01@6**  
**2305529-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **05/23/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGE0849	05/24/23	05/25/23	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: **05/23/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		49.9 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		60.7 %		40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **05/23/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.0493</b>	0.0100		mg/L	1	BGE1013	05/30/23	05/31/23	EPA 6020B	

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

Date Sampled: **05/23/23 09:30**

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

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Entrada Consulting Group  
240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

**WH01@6**  
**2305529-01 (Soil)**

**Summit Scientific**

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

Calcium	34.1	0.0550	mg/L dry	1	BGE1035	05/30/23	06/01/23	EPA 6020B
Magnesium	5.11	0.0550	"	"	"	"	"	"
Sodium	3.63	0.0550	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **05/23/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.153	0.00100		units	1	BGF0084	06/02/23	06/02/23	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **05/23/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.8			%	1	BGE1033	05/30/23	05/30/23	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **05/23/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.175	0.0100		mmhos/cm	1	BGE1072	05/31/23	05/31/23	EPA 120.1	

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

Date Sampled: **05/23/23 09:30**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.61			pH Units	1	BGE1073	05/31/23	05/31/23	EPA 9045D	

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Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

**FLR01@4**  
**2305529-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Benzene	ND	0.0020		mg/kg	1	BGE0860	05/24/23	05/25/23	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: **05/23/23 09:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: 1,2-Dichloroethane-d4		105 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		114 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.6 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
C10-C28 (DRO)	ND	50		mg/kg	1	BGE0858	05/24/23	05/24/23	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	MDL							
Surrogate: o-Terphenyl		110 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

**FLR01@4**  
**2305529-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500		mg/kg	1	BGE0849	05/24/23	05/25/23	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: **05/23/23 09:35**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		63.5 %		40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		61.2 %		40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.158</b>	0.0100		mg/L	1	BGE1013	05/30/23	05/31/23	EPA 6020B	

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

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Entrada Consulting Group  
240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

**FLR01@4**  
**2305529-02 (Soil)**

**Summit Scientific**

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

Calcium	644	0.0554	mg/L dry	1	BGE1035	05/30/23	06/01/23	EPA 6020B
Magnesium	55.1	0.0554	"	"	"	"	"	"
Sodium	4.68	0.0554	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0475	0.00100		units	1	BGF0084	06/02/23	06/02/23	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.2			%	1	BGE1033	05/30/23	05/30/23	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.191	0.0100		mmhos/cm	1	BGE1072	05/31/23	05/31/23	EPA 120.1	

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

Date Sampled: **05/23/23 09:35**

Analyte	Result	Reporting Limit	MDL	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.59			pH Units	1	BGE1073	05/31/23	05/31/23	EPA 9045D	

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240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

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

### Summit Scientific

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

#### Batch BGE0860 - EPA 5030 Soil MS

##### Blank (BGE0860-BLK1)

Prepared: 05/24/23 Analyzed: 05/25/23

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	"							
Surrogate: 1,2-Dichloroethane-d4	0.0411		"	0.0400		103	50-150			
Surrogate: Toluene-d8	0.0457		"	0.0400		114	50-150			
Surrogate: 4-Bromofluorobenzene	0.0375		"	0.0400		93.7	50-150			

##### LCS (BGE0860-BS1)

Prepared: 05/24/23 Analyzed: 05/25/23

Benzene	0.0794	0.0020	mg/kg	0.100		79.4	70-130			
Toluene	0.111	0.0050	"	0.100		111	70-130			
Ethylbenzene	0.108	0.0050	"	0.100		108	70-130			
m,p-Xylene	0.219	0.010	"	0.200		109	70-130			
o-Xylene	0.103	0.0050	"	0.100		103	70-130			
1,2,4-Trimethylbenzene	0.111	0.0050	"	0.100		111	70-130			
1,3,5-Trimethylbenzene	0.113	0.0050	"	0.100		113	70-130			
Naphthalene	0.0996	0.0038	"	0.100		99.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0345		"	0.0400		86.2	50-150			
Surrogate: Toluene-d8	0.0459		"	0.0400		115	50-150			
Surrogate: 4-Bromofluorobenzene	0.0382		"	0.0400		95.4	50-150			

##### Matrix Spike (BGE0860-MS1)

Source: 2305499-01

Prepared: 05/24/23 Analyzed: 05/25/23

Benzene	0.0815	0.0020	mg/kg	0.100	ND	81.5	70-130			
Toluene	0.108	0.0050	"	0.100	ND	108	70-130			
Ethylbenzene	0.107	0.0050	"	0.100	ND	107	70-130			
m,p-Xylene	0.216	0.010	"	0.200	ND	108	70-130			
o-Xylene	0.105	0.0050	"	0.100	ND	105	70-130			
1,2,4-Trimethylbenzene	0.112	0.0050	"	0.100	ND	112	70-130			
1,3,5-Trimethylbenzene	0.114	0.0050	"	0.100	ND	114	70-130			
Naphthalene	0.107	0.0038	"	0.100	ND	107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0375		"	0.0400		93.8	50-150			
Surrogate: Toluene-d8	0.0453		"	0.0400		113	50-150			
Surrogate: 4-Bromofluorobenzene	0.0374		"	0.0400		93.5	50-150			

Summit Scientific

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Entrada Consulting Group  
240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

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

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

**Batch BGE0860 - EPA 5030 Soil MS**

Matrix Spike Dup (BGE0860-MSD1)	Source: 2305499-01			Prepared: 05/24/23 Analyzed: 05/25/23						
Benzene	0.0851	0.0020	mg/kg	0.100	ND	85.1	70-130	4.36	30	
Toluene	0.111	0.0050	"	0.100	ND	111	70-130	3.51	30	
Ethylbenzene	0.115	0.0050	"	0.100	ND	115	70-130	7.07	30	
m,p-Xylene	0.232	0.010	"	0.200	ND	116	70-130	7.19	30	
o-Xylene	0.107	0.0050	"	0.100	ND	107	70-130	2.72	30	
1,2,4-Trimethylbenzene	0.116	0.0050	"	0.100	ND	116	70-130	4.02	30	
1,3,5-Trimethylbenzene	0.121	0.0050	"	0.100	ND	121	70-130	6.16	30	
Naphthalene	0.112	0.0038	"	0.100	ND	112	70-130	4.67	30	
Surrogate: 1,2-Dichloroethane-d4	0.0390		"	0.0400		97.6	50-150			
Surrogate: Toluene-d8	0.0443		"	0.0400		111	50-150			
Surrogate: 4-Bromofluorobenzene	0.0377		"	0.0400		94.3	50-150			

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240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BGE0858 - EPA 3550A**

**Blank (BGE0858-BLK1)**

Prepared & Analyzed: 05/24/23

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	14.2		"	12.5	113		30-150			

**LCS (BGE0858-BS1)**

Prepared & Analyzed: 05/24/23

C10-C28 (DRO)	493	50	mg/kg	500	98.6		70-130			
Surrogate: o-Terphenyl	13.9		"	12.5	111		30-150			

**Matrix Spike (BGE0858-MS1)**

Source: 2305499-01

Prepared & Analyzed: 05/24/23

C10-C28 (DRO)	494	50	mg/kg	500	ND	98.7	70-130			
Surrogate: o-Terphenyl	13.9		"	12.5	111		30-150			

**Matrix Spike Dup (BGE0858-MSD1)**

Source: 2305499-01

Prepared & Analyzed: 05/24/23

C10-C28 (DRO)	499	50	mg/kg	500	ND	99.7	70-130	1.02	20	
Surrogate: o-Terphenyl	13.8		"	12.5	111		30-150			



Entrada Consulting Group  
240 Mesa Avenue  
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Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BGE0849 - EPA 5030 Soil MS

##### Blank (BGE0849-BLK1)

Prepared & Analyzed: 05/24/23

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	"							
Surrogate: 2-Methylnaphthalene-d10	0.0328		"	0.0333		98.4	40-150			
Surrogate: Fluoranthene-d10	0.0286		"	0.0333		85.8	40-150			

##### LCS (BGE0849-BS1)

Prepared & Analyzed: 05/24/23

Acenaphthene	0.0336	0.00500	mg/kg	0.0333	101	31-137	
Anthracene	0.0326	0.00500	"	0.0333	97.8	30-120	
Benzo (a) anthracene	0.0341	0.00500	"	0.0333	102	30-120	
Benzo (a) pyrene	0.0314	0.00500	"	0.0333	94.2	30-120	
Benzo (b) fluoranthene	0.0333	0.00500	"	0.0333	99.9	30-120	
Benzo (k) fluoranthene	0.0328	0.00500	"	0.0333	98.4	30-120	
Chrysene	0.0344	0.00500	"	0.0333	103	30-120	
Dibenz (a,h) anthracene	0.0314	0.00500	"	0.0333	94.1	30-120	
Fluoranthene	0.0326	0.00500	"	0.0333	97.7	30-120	
Fluorene	0.0334	0.00500	"	0.0333	100	30-120	
Indeno (1,2,3-cd) pyrene	0.0327	0.00500	"	0.0333	98.0	30-120	
Pyrene	0.0338	0.00500	"	0.0333	101	35-142	
1-Methylnaphthalene	0.0376	0.00500	"	0.0333	113	35-142	
2-Methylnaphthalene	0.0337	0.00500	"	0.0333	101	35-142	
Surrogate: 2-Methylnaphthalene-d10	0.0381		"	0.0333	114	40-150	
Surrogate: Fluoranthene-d10	0.0342		"	0.0333	103	40-150	

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Entrada Consulting Group  
240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BGE0849 - EPA 5030 Soil MS

Matrix Spike (BGE0849-MS1)			Source: 2305509-01		Prepared & Analyzed: 05/24/23						
Acenaphthene	0.0223	0.00500	mg/kg	0.0333	ND	66.8	31-137				
Anthracene	0.0226	0.00500	"	0.0333	ND	67.9	30-120				
Benzo (a) anthracene	0.0239	0.00500	"	0.0333	ND	71.6	30-120				
Benzo (a) pyrene	0.0215	0.00500	"	0.0333	ND	64.6	30-120				
Benzo (b) fluoranthene	0.0234	0.00500	"	0.0333	ND	70.3	30-120				
Benzo (k) fluoranthene	0.0229	0.00500	"	0.0333	ND	68.8	30-120				
Chrysene	0.0239	0.00500	"	0.0333	ND	71.8	30-120				
Dibenz (a,h) anthracene	0.0213	0.00500	"	0.0333	ND	63.8	30-120				
Fluoranthene	0.0212	0.00500	"	0.0333	ND	63.5	30-120				
Fluorene	0.0222	0.00500	"	0.0333	ND	66.6	30-120				
Indeno (1,2,3-cd) pyrene	0.0182	0.00500	"	0.0333	ND	54.7	30-120				
Pyrene	0.0238	0.00500	"	0.0333	ND	71.4	35-142				
1-Methylnaphthalene	0.0260	0.00500	"	0.0333	ND	78.1	15-130				
2-Methylnaphthalene	0.0230	0.00500	"	0.0333	ND	69.0	15-130				
Surrogate: 2-Methylnaphthalene-d10	0.0242		"	0.0333		72.6	40-150				
Surrogate: Fluoranthene-d10	0.0231		"	0.0333		69.4	40-150				

Matrix Spike Dup (BGE0849-MSD1)			Source: 2305509-01		Prepared & Analyzed: 05/24/23						
Acenaphthene	0.0217	0.00500	mg/kg	0.0333	ND	65.0	31-137	2.77	30		
Anthracene	0.0201	0.00500	"	0.0333	ND	60.3	30-120	11.9	30		
Benzo (a) anthracene	0.0212	0.00500	"	0.0333	ND	63.7	30-120	11.7	30		
Benzo (a) pyrene	0.0202	0.00500	"	0.0333	ND	60.7	30-120	6.19	30		
Benzo (b) fluoranthene	0.0222	0.00500	"	0.0333	ND	66.7	30-120	5.27	30		
Benzo (k) fluoranthene	0.0220	0.00500	"	0.0333	ND	65.9	30-120	4.32	30		
Chrysene	0.0215	0.00500	"	0.0333	ND	64.5	30-120	10.8	30		
Dibenz (a,h) anthracene	0.0200	0.00500	"	0.0333	ND	59.9	30-120	6.25	30		
Fluoranthene	0.0195	0.00500	"	0.0333	ND	58.4	30-120	8.49	30		
Fluorene	0.0218	0.00500	"	0.0333	ND	65.3	30-120	1.99	30		
Indeno (1,2,3-cd) pyrene	0.0175	0.00500	"	0.0333	ND	52.4	30-120	4.43	30		
Pyrene	0.0204	0.00500	"	0.0333	ND	61.2	35-142	15.4	30		
1-Methylnaphthalene	0.0279	0.00500	"	0.0333	ND	83.6	15-130	6.84	50		
2-Methylnaphthalene	0.0232	0.00500	"	0.0333	ND	69.7	15-130	0.982	50		
Surrogate: 2-Methylnaphthalene-d10	0.0262		"	0.0333		78.5	40-150				
Surrogate: Fluoranthene-d10	0.0222		"	0.0333		66.5	40-150				

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Entrada Consulting Group  
240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

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

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

**Batch BGE1013 - EPA 3050B**

**Blank (BGE1013-BLK1)**

Prepared: 05/30/23 Analyzed: 05/31/23

Boron ND 0.0100 mg/L

**LCS (BGE1013-BS1)**

Prepared: 05/30/23 Analyzed: 05/31/23

Boron 5.43 0.0100 mg/L 5.00 109 80-120

**Duplicate (BGE1013-DUP1)**

**Source: 2305160-01**

Prepared: 05/30/23 Analyzed: 05/31/23

Boron 0.114 0.0100 mg/L 0.120 5.01 20

**Matrix Spike (BGE1013-MS1)**

**Source: 2305160-01**

Prepared: 05/30/23 Analyzed: 05/31/23

Boron 5.51 0.0100 mg/L 5.00 0.120 108 75-125

**Matrix Spike Dup (BGE1013-MSD1)**

**Source: 2305160-01**

Prepared: 05/30/23 Analyzed: 05/31/23

Boron 5.87 0.0100 mg/L 5.00 0.120 115 75-125 6.39 25



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240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

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

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

**Batch BGE1035 - General Preparation**

**Blank (BGE1035-BLK1)**

Prepared: 05/30/23 Analyzed: 06/01/23

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

**LCS (BGE1035-BS1)**

Prepared: 05/30/23 Analyzed: 06/01/23

Calcium	4.31	0.0500	mg/L wet	5.00	86.2	70-130
Magnesium	5.44	0.0500	"	5.00	109	70-130
Sodium	5.28	0.0500	"	5.00	106	70-130

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240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

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

#### Summit Scientific

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

#### Batch BGE1033 - General Preparation

Duplicate (BGE1033-DUP1)		Source: 2305500-01			Prepared & Analyzed: 05/30/23					
% Solids	91.2		%		91.9		0.782		20	



Entrada Consulting Group  
240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control**  
**Summit Scientific**

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

**Batch BGE1072 - General Preparation**

**Blank (BGE1072-BLK1)**

Prepared & Analyzed: 05/31/23

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BGE1072-BS1)**

Prepared & Analyzed: 05/31/23

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.150 103 95-105

**Duplicate (BGE1072-DUP1)**

**Source: 2305529-01**

Prepared & Analyzed: 05/31/23

Specific Conductance (EC) 0.175 0.0100 mmhos/cm 0.175 0.172 20



Entrada Consulting Group  
240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

**Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control**  
**Summit Scientific**

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

**Batch BGE1073 - General Preparation**

**LCS (BGE1073-BS1)**

Prepared & Analyzed: 05/31/23

pH	8.99	pH Units	9.18	97.9	95-105
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**Duplicate (BGE1073-DUP1)**

Source: 2305529-01

Prepared & Analyzed: 05/31/23

pH	7.92	pH Units	7.61	3.99	20
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240 Mesa Avenue  
Grand Junction, CO, 81501

Project: PDC - Champlin 117 #5

Project Number: [none]  
Project Manager: Ben Baugh

**Reported:**  
06/02/23 15:31

### Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference