

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

September 28, 2021

Russell Beam

RPG Resources (SWN)

1313 Ben Meris Ave

Broomfield, CO 80020

RE: Pond Liner Removal

Work Order #2109329

Enclosed are the results of analyses for samples received by Summit Scientific on 09/21/21 09:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury

President



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BG1	2109329-01	Soil	09/20/21 11:55	09/21/21 09:20
BG2	2109329-02	Soil	09/20/21 12:12	09/21/21 09:20
BG3	2109329-03	Soil	09/20/21 12:25	09/21/21 09:20

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.

Summit Scientific

S₂

2109389

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310

Page 1 of 1

Client: RP6 Resources

Project Manager: Russell Beam

Address: 1313 Ben Nevis Ave

E-Mail: RBeam@RPResources.com

City/State/Zip: Broomfield, CO 80020

Phone: 303-249-2051

Project Name: Pond Liner Removal

Sampler Name: Russell Beam

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	Full Table 9.15								
1	BG1	9/20/21	11:55	3			X			X				X							
2	BG2	9/20/21	12:12	3			X			X				X							
3	BG3	9/20/21	12:25	3			X			X				X							
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time	(Check)	Notes:
<u>Russell Beam</u>	<u>9/21/21</u>			Same Day	<u>X</u>	72 hours <u> </u> Standard <u> </u> Sample Integrity: <u>4.5</u> Temperature Upon Receipt: <u>4.5</u> Samples Intact: <u>Yes</u> No
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 hours	<u> </u>	
		<u>[Signature]</u>	<u>9/21/21 920</u>	48 hours	<u> </u>	
Relinquished by:	Date/Time:	Received by:	Date/Time:			

Sample Receipt Checklist

S2 Work Order 2109329

Client: RPG Resources Client Project ID: Pond Liner Removal

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

Matrix (check all that apply): ☐ Air ☒ Soil/Solid ☐ Water ☐ Other: _____
(Describe)

Temp (°C)	<u>4.5</u>
-----------	------------

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>On ice.</u>
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"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Same day.</u>
Is a chain-of-custody (COC) form present and filled out completely ⁽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"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽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, H2SO4, NaOH, HNO3, ect	<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.

JB
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

9/21/21
Date/Time



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG1
2109329-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEI0456	09/21/21	09/21/21	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: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		120 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		107 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.4 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEI0455	09/21/21	09/21/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		89.9 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG1
2109329-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEI0462	09/22/21	09/27/21	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: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		82.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		70.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.149	0.0100	mg/L	1	BEI0467	09/22/21	09/25/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG1
2109329-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	4.54	0.215	mg/kg dry	1	BEI0465	09/22/21	09/23/21	EPA 6020B
Barium	124	0.430	"	"	"	"	"	"
Cadmium	ND	0.215	"	"	"	"	"	"
Copper	8.30	0.430	"	"	"	"	"	"
Lead	8.36	0.215	"	"	"	"	"	"
Nickel	7.89	0.430	"	"	"	"	"	"
Selenium	0.720	0.280	"	"	"	"	"	"
Silver	0.0498	0.0215	"	"	"	"	"	"
Zinc	42.8	0.430	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEI0545	09/24/21	09/24/21	EPA 7196A	

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

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	3.00	0.0538	mg/L dry	1	BEI0480	09/22/21	09/23/21	EPA 6020B	
Magnesium	0.739	0.0538	"	"	"	"	"	"	
Sodium	0.151	0.0538	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0202	0.00100	units	1	BEI0541	09/24/21	09/24/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG1
2109329-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	93.0	%	1	BEI0486	09/22/21	09/23/21	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.131	0.0100	mmhos/cm	1	BEI0483	09/22/21	09/23/21	EPA 120.1	

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

Date Sampled: **09/20/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.67		pH Units	1	BEI0484	09/22/21	09/23/21	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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG2
2109329-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEI0456	09/21/21	09/21/21	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: **09/20/21 12:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		109 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.9 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEI0455	09/21/21	09/21/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		91.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG2
2109329-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEI0462	09/22/21	09/27/21	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: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		73.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		65.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.131	0.0100	mg/L	1	BEI0467	09/22/21	09/25/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG2
2109329-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.57	0.215	mg/kg dry	1	BEI0465	09/22/21	09/23/21	EPA 6020B
Barium	101	0.429	"	"	"	"	"	"
Cadmium	ND	0.215	"	"	"	"	"	"
Copper	8.62	0.429	"	"	"	"	"	"
Lead	7.48	0.215	"	"	"	"	"	"
Nickel	6.58	0.429	"	"	"	"	"	"
Selenium	0.895	0.279	"	"	"	"	"	"
Silver	0.0524	0.0215	"	"	"	"	"	"
Zinc	36.3	0.429	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEI0545	09/24/21	09/24/21	EPA 7196A	

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

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	2.34	0.0536	mg/L dry	1	BEI0480	09/22/21	09/23/21	EPA 6020B	
Magnesium	0.741	0.0536	"	"	"	"	"	"	
Sodium	ND	0.0536	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.00674	0.00100	units	1	BEI0541	09/24/21	09/24/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG2
2109329-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.2		%	1	BEI0486	09/22/21	09/23/21	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.122	0.0100	mmhos/cm	1	BEI0483	09/22/21	09/23/21	EPA 120.1	

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

Date Sampled: **09/20/21 12:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.25		pH Units	1	BEI0484	09/22/21	09/23/21	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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG3
2109329-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEI0456	09/21/21	09/21/21	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: **09/20/21 12:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		113 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.6 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEI0455	09/21/21	09/21/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		84.5 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG3
2109329-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEI0462	09/22/21	09/27/21	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: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		71.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		64.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.124	0.0100	mg/L	1	BEI0467	09/22/21	09/25/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG3
2109329-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	5.46	0.220	mg/kg dry	1	BEI0465	09/22/21	09/23/21	EPA 6020B
Barium	122	0.440	"	"	"	"	"	"
Cadmium	ND	0.220	"	"	"	"	"	"
Copper	5.78	0.440	"	"	"	"	"	"
Lead	8.41	0.220	"	"	"	"	"	"
Nickel	10.9	0.440	"	"	"	"	"	"
Selenium	1.07	0.286	"	"	"	"	"	"
Silver	0.0459	0.0220	"	"	"	"	"	"
Zinc	41.5	0.440	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEI0545	09/24/21	09/24/21	EPA 7196A	

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

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	2.37	0.0550	mg/L dry	1	BEI0480	09/22/21	09/23/21	EPA 6020B	
Magnesium	0.801	0.0550	"	"	"	"	"	"	
Sodium	0.0945	0.0550	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0135	0.00100	units	1	BEI0541	09/24/21	09/24/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

BG3
2109329-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	90.9	%	1	BEI0486	09/22/21	09/23/21	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0588	0.0100	mmhos/cm	1	BEI0483	09/22/21	09/23/21	EPA 120.1	

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

Date Sampled: **09/20/21 12:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.69		pH Units	1	BEI0484	09/22/21	09/23/21	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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

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 BEI0456 - EPA 5030 Soil MS

Blank (BEI0456-BLK1)

Prepared: 09/21/21 Analyzed: 09/22/21

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	0.0445		"	0.0400		111	23-173			
Surrogate: Toluene-d8	0.0419		"	0.0400		105	20-170			
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		102	21-167			

LCS (BEI0456-BS1)

Prepared: 09/21/21 Analyzed: 09/22/21

Benzene	0.0651	0.0020	mg/kg	0.100		65.1	70-130			
Toluene	0.0749	0.0050	"	0.100		74.9	70-130			
Ethylbenzene	0.0748	0.0050	"	0.100		74.8	70-130			
m,p-Xylene	0.153	0.010	"	0.200		76.6	70-130			
o-Xylene	0.0800	0.0050	"	0.100		80.0	70-130			
1,2,4-Trimethylbenzene	0.0825	0.0050	"	0.100		82.5	70-130			
1,3,5-Trimethylbenzene	0.0769	0.0050	"	0.100		76.9	70-130			
Naphthalene	0.0944	0.0038	"	0.100		94.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0381		"	0.0400		95.2	23-173			
Surrogate: Toluene-d8	0.0392		"	0.0400		98.0	20-170			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.4	21-167			

Matrix Spike (BEI0456-MS1)

Source: 2109329-01

Prepared: 09/21/21 Analyzed: 09/22/21

Benzene	0.0760	0.0020	mg/kg	0.100	ND	76.0	70-130			
Toluene	0.0722	0.0050	"	0.100	ND	72.2	70-130			
Ethylbenzene	0.0706	0.0050	"	0.100	ND	70.6	70-130			
m,p-Xylene	0.145	0.010	"	0.200	ND	72.5	70-130			
o-Xylene	0.0769	0.0050	"	0.100	ND	76.9	70-130			
1,2,4-Trimethylbenzene	0.0790	0.0050	"	0.100	ND	79.0	70-130			
1,3,5-Trimethylbenzene	0.0727	0.0050	"	0.100	ND	72.7	70-130			
Naphthalene	0.0959	0.0038	"	0.100	ND	95.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0408		"	0.0400		102	23-173			
Surrogate: Toluene-d8	0.0384		"	0.0400		95.9	20-170			
Surrogate: 4-Bromofluorobenzene	0.0383		"	0.0400		95.8	21-167			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

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 BEI0456 - EPA 5030 Soil MS

Matrix Spike Dup (BEI0456-MSD1)		Source: 2109329-01			Prepared: 09/21/21 Analyzed: 09/22/21					
Benzene	0.0780	0.0020	mg/kg	0.100	ND	78.0	70-130	2.57	30	
Toluene	0.0715	0.0050	"	0.100	ND	71.5	70-130	1.00	30	
Ethylbenzene	0.0731	0.0050	"	0.100	ND	73.1	70-130	3.38	30	
m,p-Xylene	0.146	0.010	"	0.200	ND	73.2	70-130	0.988	30	
o-Xylene	0.0777	0.0050	"	0.100	ND	77.7	70-130	1.01	30	
1,2,4-Trimethylbenzene	0.0792	0.0050	"	0.100	ND	79.2	70-130	0.190	30	
1,3,5-Trimethylbenzene	0.0731	0.0050	"	0.100	ND	73.1	70-130	0.576	30	
Naphthalene	0.0991	0.0038	"	0.100	ND	99.1	70-130	3.26	30	
<hr/>										
Surrogate: 1,2-Dichloroethane-d4	0.0398		"	0.0400		99.4	23-173			
Surrogate: Toluene-d8	0.0377		"	0.0400		94.2	20-170			
Surrogate: 4-Bromofluorobenzene	0.0388		"	0.0400		96.9	21-167			

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BEI0455 - EPA 3550A

Blank (BEI0455-BLK1)

Prepared: 09/21/21 Analyzed: 09/22/21

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

LCS (BEI0455-BS1)

Prepared: 09/21/21 Analyzed: 09/22/21

C10-C28 (DRO)	606	50	mg/kg	500	121	70-130
---------------	-----	----	-------	-----	-----	--------

Matrix Spike (BEI0455-MS1)

Source: 2109329-01

Prepared: 09/21/21 Analyzed: 09/22/21

C10-C28 (DRO)	653	50	mg/kg	500	14.0	128	70-130
---------------	-----	----	-------	-----	------	-----	--------

Matrix Spike Dup (BEI0455-MSD1)

Source: 2109329-01

Prepared: 09/21/21 Analyzed: 09/22/21

C10-C28 (DRO)	593	50	mg/kg	500	14.0	116	70-130	9.63	20
---------------	-----	----	-------	-----	------	-----	--------	------	----

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BEI0462 - EPA 5030 Soil MS

Blank (BEI0462-BLK1)

Prepared: 09/22/21 Analyzed: 09/27/21

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	0.0360		"	0.0333		108	40-150			
Surrogate: Fluoranthene-d10	0.0336		"	0.0333		101	40-150			

LCS (BEI0462-BS1)

Prepared: 09/22/21 Analyzed: 09/27/21

Acenaphthene	0.0307	0.00500	mg/kg	0.0333	92.1	31-137
Anthracene	0.0313	0.00500	"	0.0333	93.9	30-120
Benzo (a) anthracene	0.0282	0.00500	"	0.0333	84.7	30-120
Benzo (a) pyrene	0.0325	0.00500	"	0.0333	97.5	30-120
Benzo (b) fluoranthene	0.0281	0.00500	"	0.0333	84.2	30-120
Benzo (k) fluoranthene	0.0276	0.00500	"	0.0333	82.7	30-120
Chrysene	0.0269	0.00500	"	0.0333	80.7	30-120
Dibenz (a,h) anthracene	0.0144	0.00500	"	0.0333	43.2	30-120
Fluoranthene	0.0254	0.00500	"	0.0333	76.3	30-120
Fluorene	0.0339	0.00500	"	0.0333	102	30-120
Indeno (1,2,3-cd) pyrene	0.0157	0.00500	"	0.0333	47.2	30-120
Pyrene	0.0368	0.00500	"	0.0333	110	35-142
1-Methylnaphthalene	0.0142	0.00500	"	0.0333	42.7	35-142
2-Methylnaphthalene	0.0211	0.00500	"	0.0333	63.2	35-142
Surrogate: 2-Methylnaphthalene-d10	0.0238		"	0.0333	71.3	40-150
Surrogate: Fluoranthene-d10	0.0275		"	0.0333	82.4	40-150

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

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 BEI0462 - EPA 5030 Soil MS

Matrix Spike (BEI0462-MS1)

Source: 2109329-01

Prepared: 09/22/21 Analyzed: 09/27/21

Acenaphthene	0.0249	0.00500	mg/kg	0.0333	ND	74.6	31-137		
Anthracene	0.0252	0.00500	"	0.0333	ND	75.7	30-120		
Benzo (a) anthracene	0.0262	0.00500	"	0.0333	ND	78.7	30-120		
Benzo (a) pyrene	0.0265	0.00500	"	0.0333	ND	79.6	30-120		
Benzo (b) fluoranthene	0.0240	0.00500	"	0.0333	ND	72.1	30-120		
Benzo (k) fluoranthene	0.0222	0.00500	"	0.0333	ND	66.7	30-120		
Chrysene	0.0248	0.00500	"	0.0333	ND	74.5	30-120		
Dibenz (a,h) anthracene	0.0111	0.00500	"	0.0333	ND	33.3	30-120		
Fluoranthene	0.0231	0.00500	"	0.0333	ND	69.4	30-120		
Fluorene	0.0280	0.00500	"	0.0333	ND	83.9	30-120		
Indeno (1,2,3-cd) pyrene	0.0157	0.00500	"	0.0333	ND	47.2	30-120		
Pyrene	0.0319	0.00500	"	0.0333	ND	95.7	35-142		
1-Methylnaphthalene	0.0112	0.00500	"	0.0333	ND	33.5	15-130		
2-Methylnaphthalene	0.0168	0.00500	"	0.0333	ND	50.3	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0199		"	0.0333		59.8	40-150		
Surrogate: Fluoranthene-d10	0.0245		"	0.0333		73.4	40-150		

Matrix Spike Dup (BEI0462-MSD1)

Source: 2109329-01

Prepared: 09/22/21 Analyzed: 09/27/21

Acenaphthene	0.0254	0.00500	mg/kg	0.0333	ND	76.3	31-137	2.23	30
Anthracene	0.0263	0.00500	"	0.0333	ND	79.0	30-120	4.35	30
Benzo (a) anthracene	0.0273	0.00500	"	0.0333	ND	81.9	30-120	3.98	30
Benzo (a) pyrene	0.0263	0.00500	"	0.0333	ND	78.9	30-120	0.961	30
Benzo (b) fluoranthene	0.0249	0.00500	"	0.0333	ND	74.6	30-120	3.32	30
Benzo (k) fluoranthene	0.0297	0.00500	"	0.0333	ND	89.0	30-120	28.6	30
Chrysene	0.0258	0.00500	"	0.0333	ND	77.4	30-120	3.83	30
Dibenz (a,h) anthracene	0.0111	0.00500	"	0.0333	ND	33.3	30-120	0.0180	30
Fluoranthene	0.0237	0.00500	"	0.0333	ND	71.2	30-120	2.63	30
Fluorene	0.0288	0.00500	"	0.0333	ND	86.4	30-120	2.94	30
Indeno (1,2,3-cd) pyrene	0.0155	0.00500	"	0.0333	ND	46.5	30-120	1.49	30
Pyrene	0.0328	0.00500	"	0.0333	ND	98.4	35-142	2.73	30
1-Methylnaphthalene	0.0115	0.00500	"	0.0333	ND	34.5	15-130	2.96	50
2-Methylnaphthalene	0.0179	0.00500	"	0.0333	ND	53.6	15-130	6.53	50
Surrogate: 2-Methylnaphthalene-d10	0.0188		"	0.0333		56.5	40-150		
Surrogate: Fluoranthene-d10	0.0248		"	0.0333		74.5	40-150		

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

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 BEI0467 - EPA 3050B

Blank (BEI0467-BLK1)

Prepared: 09/22/21 Analyzed: 09/25/21

Boron ND 0.0100 mg/L

LCS (BEI0467-BS1)

Prepared: 09/22/21 Analyzed: 09/25/21

Boron 4.79 0.0100 mg/L 5.00 95.9 80-120

Duplicate (BEI0467-DUP1)

Source: 2109260-02

Prepared: 09/22/21 Analyzed: 09/25/21

Boron 0.0441 0.0100 mg/L 0.0494 11.3 20

Matrix Spike (BEI0467-MS1)

Source: 2109260-02

Prepared: 09/22/21 Analyzed: 09/25/21

Boron 4.30 0.0100 mg/L 5.00 0.0494 84.9 75-125

Matrix Spike Dup (BEI0467-MSD1)

Source: 2109260-02

Prepared: 09/22/21 Analyzed: 09/25/21

Boron 4.54 0.0100 mg/L 5.00 0.0494 89.8 75-125 5.54 25

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BEI0465 - EPA 3050B

Blank (BEI0465-BLK1)

Prepared: 09/22/21 Analyzed: 09/23/21

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	"
Selenium	ND	0.260	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"

LCS (BEI0465-BS1)

Prepared: 09/22/21 Analyzed: 09/23/21

Arsenic	45.5	0.200	mg/kg wet	40.0	114	80-120
Barium	44.5	0.400	"	40.0	111	80-120
Cadmium	1.75	0.200	"	2.00	87.4	80-120
Copper	44.7	0.400	"	40.0	112	80-120
Lead	22.2	0.200	"	20.0	111	80-120
Nickel	44.1	0.400	"	40.0	110	80-120
Selenium	4.41	0.260	"	4.00	110	80-120
Silver	2.10	0.0200	"	2.00	105	80-120
Zinc	47.5	0.400	"	40.0	119	80-120

Duplicate (BEI0465-DUP1)

Source: 2109287-02

Prepared: 09/22/21 Analyzed: 09/23/21

Arsenic	6.05	0.215	mg/kg dry	6.89	12.9	20
Barium	113	0.429	"	102	10.6	20
Cadmium	0.296	0.215	"	0.328	10.3	20
Copper	9.70	0.429	"	11.2	14.4	20
Lead	11.0	0.215	"	12.8	15.2	20
Nickel	12.7	0.429	"	15.0	16.0	20
Selenium	1.47	0.279	"	1.29	12.8	20
Silver	0.0804	0.0215	"	0.0820	1.94	20
Zinc	69.4	0.429	"	81.3	15.7	20

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BEI0465 - EPA 3050B

Matrix Spike (BEI0465-MS1)		Source: 2109287-02			Prepared: 09/22/21 Analyzed: 09/23/21					
Arsenic	55.7	0.215	mg/kg dry	42.9	6.89	114	75-125			
Barium	148	0.429	"	42.9	102	107	75-125			
Cadmium	2.81	0.215	"	2.15	0.328	116	75-125			
Copper	55.5	0.429	"	42.9	11.2	103	75-125			
Lead	31.9	0.215	"	21.5	12.8	88.6	75-125			
Nickel	62.9	0.429	"	42.9	15.0	112	75-125			
Selenium	4.66	0.279	"	4.29	1.29	78.4	75-125			
Silver	2.09	0.0215	"	2.15	0.0820	93.5	75-125			
Zinc	132	0.429	"	42.9	81.3	118	75-125			

Matrix Spike Dup (BEI0465-MSD1)		Source: 2109287-02			Prepared: 09/22/21 Analyzed: 09/23/21					
Arsenic	55.9	0.215	mg/kg dry	42.9	6.89	114	75-125	0.312	25	
Barium	144	0.429	"	42.9	102	97.6	75-125	2.80	25	
Cadmium	2.82	0.215	"	2.15	0.328	116	75-125	0.325	25	
Copper	56.4	0.429	"	42.9	11.2	105	75-125	1.72	25	
Lead	32.4	0.215	"	21.5	12.8	91.0	75-125	1.60	25	
Nickel	63.0	0.429	"	42.9	15.0	112	75-125	0.0890	25	
Selenium	5.26	0.279	"	4.29	1.29	92.4	75-125	12.2	25	
Silver	2.08	0.0215	"	2.15	0.0820	93.0	75-125	0.496	25	
Zinc	133	0.429	"	42.9	81.3	120	75-125	0.781	25	

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BEI0545 - 3060A Mod

Blank (BEI0545-BLK1)

Prepared & Analyzed: 09/24/21

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BEI0545-BS1)

Prepared & Analyzed: 09/24/21

Chromium, Hexavalent 26.5 0.30 mg/kg wet 25.0 106 80-120

Duplicate (BEI0545-DUP1)

Source: 2109322-01

Prepared & Analyzed: 09/24/21

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BEI0545-MS1)

Source: 2109322-01

Prepared & Analyzed: 09/24/21

Chromium, Hexavalent 29.5 0.30 mg/kg dry 30.1 ND 98.0 75-125

Matrix Spike Dup (BEI0545-MSD1)

Source: 2109322-01

Prepared & Analyzed: 09/24/21

Chromium, Hexavalent 30.7 0.30 mg/kg dry 30.1 ND 102 75-125 4.00 20

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

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 BEI0480 - General Preparation

Blank (BEI0480-BLK1)

Prepared: 09/22/21 Analyzed: 09/23/21

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

LCS (BEI0480-BS1)

Prepared: 09/22/21 Analyzed: 09/23/21

Calcium	5.35	0.0500	mg/L wet	5.00	107	70-130
Magnesium	5.01	0.0500	"	5.00	100	70-130
Sodium	4.87	0.0500	"	5.00	97.4	70-130

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

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 BEI0486 - General Preparation

Duplicate (BEI0486-DUP1)		Source: 2109267-01			Prepared: 09/22/21 Analyzed: 09/23/21					
% Solids	86.5		%		85.3		1.35		20	

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

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

Summit Scientific

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

Batch BEI0483 - General Preparation

Blank (BEI0483-BLK1)

Prepared: 09/22/21 Analyzed: 09/23/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEI0483-BS1)

Prepared: 09/22/21 Analyzed: 09/23/21

Specific Conductance (EC) 0.156 0.0100 mmhos/cm 0.150 104 90-110

Duplicate (BEI0483-DUP1)

Source: 2109240-02

Prepared: 09/22/21 Analyzed: 09/23/21

Specific Conductance (EC) 0.284 0.0100 mmhos/cm 0.276 2.50 20

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

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

Summit Scientific

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

Batch BEI0484 - General Preparation

LCS (BEI0484-BS1)

Prepared: 09/22/21 Analyzed: 09/23/21

pH	9.28	pH Units	9.21	101	95-105
----	------	----------	------	-----	--------

Duplicate (BEI0484-DUP1)

Source: 2109240-02

Prepared: 09/22/21 Analyzed: 09/23/21

pH	7.78	pH Units	7.81	0.385	20
----	------	----------	------	-------	----

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.



RPG Resources (SWN)
1313 Ben Meris Ave
Broomfield CO, 80020

Project: Pond Liner Removal

Project Number: [none]
Project Manager: Russell Beam

Reported:
09/28/21 14:05

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