

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 05, 2021

Ty Smith

Lesair Environmental

11786 Shaffer Place Suite 210

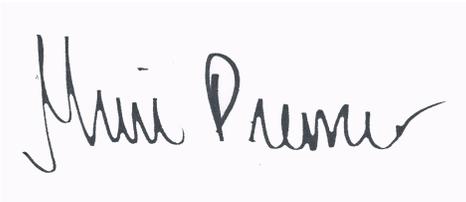
Littleton, CO 80127

RE: Padco Gulley

Work Order #2103409

Enclosed are the results of analyses for samples received by Summit Scientific on 03/26/21 12:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large, stylized initial "M".

Muri Premer For Paul Shrewsbury  
President



Lesair Environmental  
11786 Shaffer Place Suite 210  
Littleton CO, 80127

Project: Padco Gulley

Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
04/05/21 13:54

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GTS1	2103409-01	Soil	03/25/21 14:25	03/26/21 12:00
GTS2	2103409-02	Soil	03/25/21 14:35	03/26/21 12:00

Summit Scientific

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Contact/Billing Information	
Name:	Lesair Environmental
Address:	11786 Shaffer Place, Unit 210
City/State/Zip:	Littleton, CO 80127
Phone Number:	303-904-2525
Fax Number:	
Project Manager:	Ty Smith
Email:	TySmith@Lesair.com

Notes: \_\_\_\_\_  
 PLEASE Invoice... PADCO LLC  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Standard Turn Around  RUSH TURN AROUND

Project Name:	PADCO Gulley	Sampled By:	Ty Smith
Project Number:		Signature:	
Sample Location:	Gulley Tank Battery	Date:	March 25, 2021

Sample Name	Sample Information				Matrix*	Preservation						Analysis				
	Date Sampled	Time Sampled	Number of Samples	G=Grab, C= Composite		HNO <sub>3</sub>	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub>	Methanol	None	Other (Specify)				
GTS1	03/25/21	14:25	1	C	S						X	9/15 EC	✓	✓	✓	✓
GTS2	03/25/21	14:35	1	C	S						X	9/15 SAR	✓	✓	✓	✓
												9/15 PH				
												9/15 Doreen				

Relinquished By:		Date:	3/26/21	Time:	12:00
Received By:		Date:	03/26/2021	Time:	1200

\*Choose from: SL- Sludge, DW-Drinking Water, GW- Groundwater, S- Soil/Solids, WW- Wastewater, Specify Other

### Sample Receipt Checklist

S2 Work Order 2103409

Client: LESAIR Client Project ID: PADCO GULLEY

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

Matrix (check all that apply):  Air  Soil/Solid  Water  Other: \_\_\_\_\_  
(Describe)

Temp (°C)	5.7
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Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	✓			
Were all samples received intact <sup>(1)</sup> ?	✓			
Was adequate sample volume provided <sup>(1)</sup> ?	✓			
If custody seals are present, are they intact <sup>(1)</sup> ?			✓	
Are samples with holding times due within 48 hours sample due within 48 hours present?		✓		
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	✓			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	✓			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	✓			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	✓			
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>			✓	
Are samples preserved that require preservation <b>(excluding cooling)</b> <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			✓	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
<u>Additional Comments (if any):</u>   				
<b><sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.</b>				

RZ

\_\_\_\_\_  
Custodian Printed Name or Initials

\_\_\_\_\_  
Signature of Custodian

3/26/21

\_\_\_\_\_  
Date/Time



Lesair Environmental  
11786 Shaffer Place Suite 210  
Littleton CO, 80127

Project: Padco Gulley

Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
04/05/21 13:54

**GTS1**  
**2103409-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **03/25/21 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.223</b>	0.0100	mg/L	1	BED0033	04/02/21	04/03/21	EPA 6020B	

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

Date Sampled: **03/25/21 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Calcium</b>	<b>144</b>	0.0665	mg/L dry	1	BEC0524	03/30/21	04/01/21	EPA 6020B	
<b>Magnesium</b>	<b>25.3</b>	0.0665	"	"	"	"	"	"	
<b>Sodium</b>	<b>204</b>	0.0665	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **03/25/21 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Sodium Adsorption Ratio</b>	<b>4.12</b>	0.100	units	1	BED0007	04/01/21	04/01/21	Calculation	

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

Date Sampled: **03/25/21 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>% Solids</b>	<b>75.2</b>		%	1	BEC0483	03/29/21	03/30/21	Calculation	

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

Date Sampled: **03/25/21 14:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>1.53</b>	0.0100	mmhos/cm	1	BEC0545	03/31/21	03/31/21	EPA 120.1	

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

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Lesair Environmental  
 11786 Shaffer Place Suite 210  
 Littleton CO, 80127

Project: Padco Gulley

Project Number: [none]  
 Project Manager: Ty Smith

**Reported:**  
 04/05/21 13:54

**GTS1**  
**2103409-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **03/25/21 14:25**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>pH</b>	<b>8.10</b>			pH Units	1	BEC0546	03/31/21	03/31/21	EPA 9045D	

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Project: Padco Gulley

Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
04/05/21 13:54

**GTS2**  
**2103409-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **03/25/21 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.234</b>	0.0100	mg/L	1	BED0033	04/02/21	04/03/21	EPA 6020B	

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

Date Sampled: **03/25/21 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Calcium</b>	<b>91.3</b>	0.0648	mg/L dry	1	BEC0524	03/30/21	04/01/21	EPA 6020B	
<b>Magnesium</b>	<b>19.1</b>	0.0648	"	"	"	"	"	"	
<b>Sodium</b>	<b>244</b>	0.0648	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **03/25/21 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Sodium Adsorption Ratio</b>	<b>6.06</b>	0.100	units	1	BED0007	04/01/21	04/01/21	Calculation	

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

Date Sampled: **03/25/21 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>% Solids</b>	<b>77.2</b>		%	1	BEC0483	03/29/21	03/30/21	Calculation	

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

Date Sampled: **03/25/21 14:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>1.59</b>	0.0100	mmhos/cm	1	BEC0545	03/31/21	03/31/21	EPA 120.1	

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

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 Littleton CO, 80127

Project: Padco Gulley

Project Number: [none]  
 Project Manager: Ty Smith

**Reported:**  
 04/05/21 13:54

**GTS2**  
**2103409-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **03/25/21 14:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>pH</b>	<b>8.12</b>		pH Units	1	BEC0546	03/31/21	03/31/21	EPA 9045D	

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Project: Padco Gulley

Project Number: [none]  
 Project Manager: Ty Smith

**Reported:**  
 04/05/21 13:54

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

**Summit Scientific**

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

**Batch BED0033 - EPA 3050B**

**Blank (BED0033-BLK1)**

Prepared & Analyzed: 04/02/21

Boron ND 0.0100 mg/L

**LCS (BED0033-BS1)**

Prepared & Analyzed: 04/02/21

Boron 4.82 0.0100 mg/L 5.00 96.5 80-120

**Duplicate (BED0033-DUP1)**

Source: 2103400-01

Prepared & Analyzed: 04/02/21

Boron 1.12 0.0100 mg/L 1.13 0.758 20

**Matrix Spike (BED0033-MS1)**

Source: 2103400-01

Prepared & Analyzed: 04/02/21

Boron 5.03 0.0100 mg/L 5.00 1.13 78.1 75-125

**Matrix Spike Dup (BED0033-MSD1)**

Source: 2103400-01

Prepared & Analyzed: 04/02/21

Boron 5.15 0.0100 mg/L 5.00 1.13 80.4 75-125 2.26 25

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 Project Manager: Ty Smith

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

**Summit Scientific**

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

**Batch BEC0524 - General Preparation**

**Blank (BEC0524-BLK1)**

Prepared: 03/30/21 Analyzed: 04/01/21

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

**LCS (BEC0524-BS1)**

Prepared: 03/30/21 Analyzed: 04/01/21

Calcium	5.64	0.0500	mg/L wet	5.00		113	70-130			
Magnesium	5.58	0.0500	"	5.00		112	70-130			
Sodium	5.67	0.0500	"	5.00		113	70-130			

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Project: Padco Gulley

Project Number: [none]  
 Project Manager: Ty Smith

**Reported:**  
 04/05/21 13:54

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

**Summit Scientific**

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

**Batch BEC0483 - General Preparation**

Duplicate (BEC0483-DUP1)	Source: 2103398-02		Prepared: 03/29/21 Analyzed: 03/30/21		
% Solids	94.7	%	94.9	0.207	20

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Project: Padco Gulley

Project Number: [none]  
 Project Manager: Ty Smith

**Reported:**  
 04/05/21 13:54

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

**Summit Scientific**

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

**Batch BEC0545 - General Preparation**

**Blank (BEC0545-BLK1)**

Prepared & Analyzed: 03/31/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BEC0545-BS1)**

Prepared & Analyzed: 03/31/21

Specific Conductance (EC) 0.147 0.0100 mmhos/cm 0.150 98.1 90-110

**Duplicate (BEC0545-DUP1)**

Source: 2103243-03

Prepared & Analyzed: 03/31/21

Specific Conductance (EC) 9.83 0.0100 mmhos/cm 9.80 0.255 20

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Project: Padco Gulley

Project Number: [none]  
 Project Manager: Ty Smith

**Reported:**  
 04/05/21 13:54

**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 BEC0546 - General Preparation**

**LCS (BEC0546-BS1)**

Prepared & Analyzed: 03/31/21

pH	9.28	pH Units	9.21	101	95-105
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**Duplicate (BEC0546-DUP1)**

Source: 2103243-03

Prepared & Analyzed: 03/31/21

pH	7.88	pH Units	7.90	0.253	20
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Project: Padco Gulley  
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Project Manager: Ty Smith

**Reported:**  
04/05/21 13:54

### 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