

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

February 18, 2021

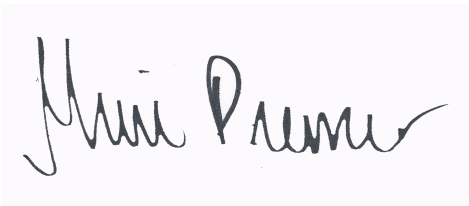
Ty Smith  
Lesair Environmental  
11786 Shaffer Place Suite 210  
Littleton, CO 80127

RE: Gulley West Tank Area

Work Order #2102182

Enclosed are the results of analyses for samples received by Summit Scientific on 02/11/21 16:14. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury  
President



Lesair Environmental  
11786 Shaffer Place Suite 210  
Littleton CO, 80127

Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
02/18/21 17:17

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WTB	2102182-01	Soil	02/11/21 10:30	02/11/21 16:14

Summit Scientific

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# Summit Scientific

S<sub>2</sub>

2102182

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310

Client: PADCO (LCSAIR)

Project Manager: Ty Smith  
E-Mail: TY.SMITH@LCSAIR.COM

Page 1 of 1

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Project Name: GOLLY WEST TANK AREA

Sampler Name: WTD Project Number: \_\_\_\_\_

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested						Special Instructions
					HCl	HNO <sub>3</sub>	None	Other	Water	Soil	Air-Canister #	Other	SAR 9/5	EC 9/5	PH 9/5	BARON 9/5	DRYLO 9/5	GUTER 9/5	
1	WTD	2/11	10:30	1			X			X				X	X	X	X	X	
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by: <u>Ty Smith</u>	Date/Time: <u>2/11/14</u>	Received by: _____	Date/Time: _____	Turn Around Time (Check)	Notes:
Relinquished by: _____	Date/Time: _____	Received by: <u>[Signature]</u>	Date/Time: <u>2.11.21</u>	Same Day _____ 72 hours <u>X</u>	
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: <u>11.14</u>	24 hours _____ Standard _____	
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____	48 hours _____	
				Sample Integrity:	
				Temperature Upon Receipt: <u>6-8°</u>	
				Samples Intact: <u>Yes</u> No	

# Sample Receipt Checklist

S2 Work Order 2102182

Client: Padco / Casair Client Project ID: Gulley West Tank Area

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>6.8</u>
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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.	<u>      </u>	<u>      </u>	<u>      </u>	<u>on ice</u>
Were all samples received intact <sup>(1)</sup> ?	<u>      </u>	<u>      </u>	<u>      </u>	
Was adequate sample volume provided <sup>(1)</sup> ?	<u>      </u>	<u>      </u>	<u>      </u>	
If custody seals are present, are they intact <sup>(1)</sup> ?	<u>      </u>	<u>      </u>	<u>      </u>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<u>      </u>	<u>      </u>	<u>      </u>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<u>      </u>	<u>      </u>	<u>      </u>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<u>      </u>	<u>      </u>	<u>      </u>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<u>      </u>	<u>      </u>	<u>      </u>	
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<u>      </u>	<u>      </u>	<u>      </u>	
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>	<u>      </u>	<u>      </u>	<u>      </u>	
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	<u>      </u>	<u>      </u>	<u>      </u>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.	<u>      </u>	<u>      </u>	<u>      </u>	
If dissolved metals are requested, were samples field filtered?	<u>      </u>	<u>      </u>	<u>      </u>	

Additional Comments (if any):

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

AT  
Custodian Printed Name or Initials

[Signature]  
Signature of Custodian

2-11-21  
Date/Time



Lesair Environmental  
11786 Shaffer Place Suite 210  
Littleton CO, 80127

Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
02/18/21 17:17

**WTB**  
**2102182-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEB0215	02/13/21	02/14/21	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	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		109 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.5 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEB0214	02/13/21	02/14/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		95.8 %	30-150		"	"	"	"	

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

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Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
02/18/21 17:17

**WTB**  
**2102182-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.926	0.0100	mg/L	1	BEB0198	02/12/21	02/13/21	EPA 6020B	

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

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	32.2	0.0578	mg/L dry	1	BEB0243	02/16/21	02/18/21	EPA 6020B	
Magnesium	15.2	0.0578	"	"	"	"	"	"	
Sodium	38.6	0.0578	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.40	0.100	units	1	BEB0281	02/18/21	02/18/21	Calculation	

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

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.6		%	1	BEB0193	02/12/21	02/12/21	Calculation	

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

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.592	0.0100	mmhos/cm	1	BEB0268	02/17/21	02/17/21	EPA 120.1	

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

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Littleton CO, 80127

Project: Gulley West Tank Area  
Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
02/18/21 17:17

**WTB**  
**2102182-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **02/11/21 10:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>pH</b>	<b>8.26</b>			pH Units	1	BEB0269	02/17/21	02/17/21	EPA 9045D	

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Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
02/18/21 17:17

## 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 BEB0215 - EPA 5030 Soil MS

##### Blank (BEB0215-BLK1)

Prepared & Analyzed: 02/13/21

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	0.010	"
Gasoline Range Hydrocarbons	ND	0.50	"

Surrogate: 1,2-Dichloroethane-d4	0.0395	"	0.0400	98.8	23-173
Surrogate: Toluene-d8	0.0409	"	0.0400	102	20-170
Surrogate: 4-Bromofluorobenzene	0.0396	"	0.0400	98.9	21-167

##### LCS (BEB0215-BS1)

Prepared & Analyzed: 02/13/21

Benzene	0.0747	0.0020	mg/kg	0.100	74.7	70-130
Toluene	0.0907	0.0050	"	0.100	90.7	70-130
Ethylbenzene	0.0929	0.0050	"	0.100	92.9	70-130
m,p-Xylene	0.178	0.010	"	0.200	89.1	70-130
o-Xylene	0.0902	0.0050	"	0.100	90.2	70-130

Surrogate: 1,2-Dichloroethane-d4	0.0317	"	0.0400	79.4	23-173
Surrogate: Toluene-d8	0.0385	"	0.0400	96.3	20-170
Surrogate: 4-Bromofluorobenzene	0.0386	"	0.0400	96.4	21-167

##### Matrix Spike (BEB0215-MS1)

Source: 2102169-01

Prepared & Analyzed: 02/13/21

Benzene	0.0794	0.0020	mg/kg	0.100	ND	79.4	70-130
Toluene	0.0922	0.0050	"	0.100	ND	92.2	70-130
Ethylbenzene	0.0893	0.0050	"	0.100	ND	89.3	70-130
m,p-Xylene	0.176	0.010	"	0.200	ND	88.1	70-130
o-Xylene	0.0885	0.0050	"	0.100	ND	88.5	70-130

Surrogate: 1,2-Dichloroethane-d4	0.0273	"	0.0400	68.3	23-173
Surrogate: Toluene-d8	0.0416	"	0.0400	104	20-170
Surrogate: 4-Bromofluorobenzene	0.0384	"	0.0400	96.0	21-167

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Littleton CO, 80127

Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
02/18/21 17:17

### 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 BEB0215 - EPA 5030 Soil MS

Matrix Spike Dup (BEB0215-MSD1)	Source: 2102169-01			Prepared & Analyzed: 02/13/21						
Benzene	0.0701	0.0020	mg/kg	0.100	ND	70.1	70-130	12.4	30	
Toluene	0.107	0.0050	"	0.100	ND	107	70-130	15.2	30	
Ethylbenzene	0.0969	0.0050	"	0.100	ND	96.9	70-130	8.09	30	
m,p-Xylene	0.194	0.010	"	0.200	ND	97.0	70-130	9.55	30	
o-Xylene	0.0970	0.0050	"	0.100	ND	97.0	70-130	9.12	30	
Surrogate: 1,2-Dichloroethane-d4	0.0257		"	0.0400		64.2	23-173			
Surrogate: Toluene-d8	0.0419		"	0.0400		105	20-170			
Surrogate: 4-Bromofluorobenzene	0.0405		"	0.0400		101	21-167			

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Project: Gulley West Tank Area  
Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
02/18/21 17:17

**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 BEB0214 - EPA 3550A**

**Blank (BEB0214-BLK1)**

Prepared: 02/13/21 Analyzed: 02/14/21

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

**LCS (BEB0214-BS1)**

Prepared: 02/13/21 Analyzed: 02/14/21

C10-C28 (DRO)	509	50	mg/kg	500	102	70-130
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**Matrix Spike (BEB0214-MS1)**

Source: 2102156-01

Prepared: 02/13/21 Analyzed: 02/14/21

C10-C28 (DRO)	479	50	mg/kg	500	16.3	92.5	70-130
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**Matrix Spike Dup (BEB0214-MSD1)**

Source: 2102156-01

Prepared: 02/13/21 Analyzed: 02/14/21

C10-C28 (DRO)	484	50	mg/kg	500	16.3	93.6	70-130	1.15	20
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Lesair Environmental  
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Littleton CO, 80127

Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
02/18/21 17:17

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

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

**Batch BEB0198 - EPA 3050B**

**Blank (BEB0198-BLK1)**

Prepared & Analyzed: 02/12/21

Boron ND 0.0100 mg/L

**LCS (BEB0198-BS1)**

Prepared & Analyzed: 02/12/21

Boron 5.04 0.0100 mg/L 5.00 101 80-120

**Duplicate (BEB0198-DUP1)**

**Source: 2101298-03**

Prepared & Analyzed: 02/12/21

Boron 0.411 0.0100 mg/L 0.435 5.82 20

**Matrix Spike (BEB0198-MS1)**

**Source: 2101298-03**

Prepared & Analyzed: 02/12/21

Boron 4.59 0.0100 mg/L 5.00 0.435 83.1 75-125

**Matrix Spike Dup (BEB0198-MSD1)**

**Source: 2101298-03**

Prepared & Analyzed: 02/12/21

Boron 4.64 0.0100 mg/L 5.00 0.435 84.2 75-125 1.15 25

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Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

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02/18/21 17:17

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

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

**Batch BEB0243 - General Preparation**

**Blank (BEB0243-BLK1)**

Prepared: 02/16/21 Analyzed: 02/18/21

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

**LCS (BEB0243-BS1)**

Prepared: 02/16/21 Analyzed: 02/18/21

Calcium	5.24	0.0500	mg/L wet	5.00	105	70-130
Magnesium	5.44	0.0500	"	5.00	109	70-130
Sodium	5.11	0.0500	"	5.00	102	70-130

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Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

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**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 BEB0193 - General Preparation**

**Duplicate (BEB0193-DUP1)**

**Source: 2102171-01**

**Prepared & Analyzed: 02/12/21**

% Solids	75.3	%	75.5	0.274	20
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Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

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

**Summit Scientific**

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

**Batch BEB0268 - General Preparation**

**Blank (BEB0268-BLK1)**

Prepared & Analyzed: 02/17/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BEB0268-BS1)**

Prepared & Analyzed: 02/17/21

Specific Conductance (EC) 0.158 0.0100 mmhos/cm 0.150 105 90-110

**Duplicate (BEB0268-DUP1)**

**Source: 2102122-01**

Prepared & Analyzed: 02/17/21

Specific Conductance (EC) 1.13 0.0100 mmhos/cm 1.21 6.83 20

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Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

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

**Summit Scientific**

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

**Batch BEB0269 - General Preparation**

**LCS (BEB0269-BS1)**

Prepared & Analyzed: 02/17/21

pH	9.30	pH Units	9.21	101	95-105
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**Duplicate (BEB0269-DUP1)**

Source: 2102122-01

Prepared & Analyzed: 02/17/21

pH	8.59	pH Units	8.61	0.233	20
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11786 Shaffer Place Suite 210  
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Project: Gulley West Tank Area

Project Number: [none]  
Project Manager: Ty Smith

**Reported:**  
02/18/21 17:17

### 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