

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

July 13, 2018

Christine Hamlin
Tasman Geosciences
6899 Pecos St, Unit C
Denver, CO 80221
RE: Shook Pad Release

Enclosed are the results of analyses for samples received by Summit Scientific on 07/12/18 17:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury For Ben Shrewsbury
Laboratory Manager



Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@1.5'	1807145-01	Soil	07/12/18 14:45	07/12/18 17:30
SS02@1.5'	1807145-02	Soil	07/12/18 14:47	07/12/18 17:30
SS03@1.5'	1807145-03	Soil	07/12/18 14:49	07/12/18 17:30
SS04@1.5'	1807145-04	Soil	07/12/18 14:51	07/12/18 17:30
SS05@1.5'	1807145-05	Soil	07/12/18 14:55	07/12/18 17:30

Summit Scientific

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1807145

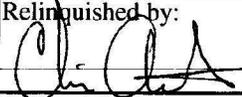
Summit Scientific

741 Corporate Circle Suite I ♦ Golden, Colorado 80401
 303-277-9310 ♦ 303-374-5933 Fax

Client: Tasman Geosciences
 Address: _____
 City/State/Zip: _____
 Phone: _____ Fax: _____
 Sampler Name: Chris Armbruster

Project Manager: Christine Hamlin
 E-Mail: chamlin@tasman-geo.com
 Project Name: Shook Pad Release
 Project Number: _____

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix				Analyze For:						Special Instructions	
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	GBTEXN (8260)	(TPH) DRO/GRO/OR	EC	PH	Hold For Analysis			
SS01@1.5'	7/12/2018	2:45	1		X			X				X	X	X	X				
SS02@1.5'	7/12/2018	2:47	1		X			X				X	X	X	X				
SS03@1.5'	7/13/2018	2:49	1		X			X				X	X	X	X				
SS04@1.5'	7/12/2018	2:51	1		X			X				X	X	X	X				
SS05@1.5'	7/13/2018	2:55	1		X			X				X	X	X	X				

Relinquished by: 	Date/Time: <u>7/12/18 17:10</u>	Received by: 	Date/Time: <u>7-12-18 17:10</u>	Turn Around Time (Check) Same Day <input checked="" type="checkbox"/> 72 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> Standard <input type="checkbox"/> 48 Hours <input type="checkbox"/> Sample Integrity: Temperature Upon Receipt: <u>0.0</u> Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:		
Relinquished by:	Date/Time:	Received in Lab by:	Date/Time:		

1807145

Sample Receipt Checklist

S2 Work Order _____

Client: Tasman Client Project ID: Shook Pad Release

Shipped Via: P.U. Airbill #: _____
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

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

Temp (°C)	<u>8.0</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"/>			
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
If custody seals are present, are they intact ⁽¹⁾ ?			<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input checked="" type="checkbox"/>			
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?			<input checked="" type="checkbox"/>	
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 ⁽¹⁾ ?			<input checked="" type="checkbox"/>	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

Muri
 Custodian Printed Name or Initials

[Signature] 7-12-18
 Signature of Custodian

17:30
 Date/Time



Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

SS01@1.5'
1807145-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/12/18 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1807137	07/12/18	07/12/18	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/12/18 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		118 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/12/18 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1807138	07/12/18	07/12/18	EPA 8015M	

Date Sampled: **07/12/18 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/12/18 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.28		pH Units	1	1807135	"	07/12/18	EPA 9045D	

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Tasman Geosciences
 6899 Pecos St, Unit C
 Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
 Project Manager: Christine Hamlin

Reported:
 07/13/18 06:10

SS01@1.5'
1807145-01 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1

Date Sampled: **07/12/18 14:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	9.90	0.0100	mmhos/cm	1	1807136	07/12/18	07/12/18	EPA 120.1	

Summit Scientific

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Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

SS02@1.5'
1807145-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/12/18 14:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1807137	07/12/18	07/12/18	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/12/18 14:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		113 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		103 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/12/18 14:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1807138	07/12/18	07/12/18	EPA 8015M	

Date Sampled: **07/12/18 14:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		99.1 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/12/18 14:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.45		pH Units	1	1807135	"	07/12/18	EPA 9045D	

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Tasman Geosciences
 6899 Pecos St, Unit C
 Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
 Project Manager: Christine Hamlin

Reported:
 07/13/18 06:10

SS02@1.5'
1807145-02 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1

Date Sampled: **07/12/18 14:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	8.50	0.0100	mmhos/cm	1	1807136	07/12/18	07/12/18	EPA 120.1	

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Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

SS03@1.5'
1807145-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/12/18 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1807137	07/12/18	07/12/18	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	0.54	0.50	"	"	"	"	"	"	

Date Sampled: **07/12/18 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		119 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/12/18 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	83	50	mg/kg	1	1807138	07/12/18	07/12/18	EPA 8015M	

Date Sampled: **07/12/18 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		103 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/12/18 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.20		pH Units	1	1807135	"	07/12/18	EPA 9045D	

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Project: Shook Pad Release

Project Number: [none]
 Project Manager: Christine Hamlin

Reported:
 07/13/18 06:10

SS03@1.5'
1807145-03 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1

Date Sampled: **07/12/18 14:49**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	9.40	0.0100	mmhos/cm	1	1807136	07/12/18	07/12/18	EPA 120.1	

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6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

SS04@1.5'
1807145-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/12/18 14:51**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1807137	07/12/18	07/12/18	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/12/18 14:51**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		121 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/12/18 14:51**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1807138	07/12/18	07/12/18	EPA 8015M	

Date Sampled: **07/12/18 14:51**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/12/18 14:51**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.22		pH Units	1	1807135	"	07/12/18	EPA 9045D	

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Project: Shook Pad Release

Project Number: [none]
 Project Manager: Christine Hamlin

Reported:
 07/13/18 06:10

SS04@1.5'
1807145-04 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1

Date Sampled: **07/12/18 14:51**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	9.62	0.0100	mmhos/cm	1	1807136	07/12/18	07/12/18	EPA 120.1	

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Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

SS05@1.5'
1807145-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **07/12/18 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1807137	07/12/18	07/13/18	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **07/12/18 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		110 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		103 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **07/12/18 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1807138	07/12/18	07/12/18	EPA 8015M	

Date Sampled: **07/12/18 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		97.8 %	30-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **07/12/18 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.48		pH Units	1	1807135	"	07/12/18	EPA 9045D	

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 6899 Pecos St, Unit C
 Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
 Project Manager: Christine Hamlin

Reported:
 07/13/18 06:10

SS05@1.5'
1807145-05 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1

Date Sampled: **07/12/18 14:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	9.05	0.0100	mmhos/cm	1	1807136	07/12/18	07/12/18	EPA 120.1	

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Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch 1807137 - EPA 5030 Soil MS

Blank (1807137-BLK1)

Prepared & Analyzed: 07/12/18

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0391		"	0.0396		98.7	23-173			
Surrogate: Toluene-d8	0.0405		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0421		"	0.0400		105	21-167			

LCS (1807137-BS1)

Prepared & Analyzed: 07/12/18

Benzene	0.0994	0.0020	mg/kg	0.100		99.4	70-130			
Toluene	0.103	0.0050	"	0.100		103	70-130			
Ethylbenzene	0.117	0.0050	"	0.100		117	70-130			
m,p-Xylene	0.212	0.010	"	0.200		106	70-130			
o-Xylene	0.102	0.0050	"	0.100		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0416		"	0.0396		105	23-173			
Surrogate: Toluene-d8	0.0401		"	0.0400		100	20-170			
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	21-167			

Matrix Spike (1807137-MS1)

Source: 1807144-02

Prepared: 07/12/18 Analyzed: 07/13/18

Benzene	0.101	0.0020	mg/kg	0.100	ND	101	70-130			
Toluene	0.105	0.0050	"	0.100	ND	105	70-130			
Ethylbenzene	0.118	0.0050	"	0.100	ND	118	70-130			
m,p-Xylene	0.214	0.010	"	0.200	ND	107	70-130			
o-Xylene	0.102	0.0050	"	0.100	ND	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0417		"	0.0396		105	23-173			
Surrogate: Toluene-d8	0.0404		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	21-167			

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Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

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

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

Batch 1807137 - EPA 5030 Soil MS

Matrix Spike Dup (1807137-MSD1)	Source: 1807144-02			Prepared: 07/12/18		Analyzed: 07/13/18				
Benzene	0.105	0.0020	mg/kg	0.100	ND	105	70-130	3.78	30	
Toluene	0.109	0.0050	"	0.100	ND	109	70-130	3.63	30	
Ethylbenzene	0.126	0.0050	"	0.100	ND	126	70-130	6.48	30	
m,p-Xylene	0.230	0.010	"	0.200	ND	115	70-130	7.10	30	
o-Xylene	0.110	0.0050	"	0.100	ND	110	70-130	7.31	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0407</i>		<i>"</i>	<i>0.0396</i>		<i>103</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0398</i>		<i>"</i>	<i>0.0400</i>		<i>99.6</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0394</i>		<i>"</i>	<i>0.0400</i>		<i>98.6</i>	<i>21-167</i>			

Summit Scientific

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Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1807138 - EPA 3550A

Blank (1807138-BLK1)

Prepared: 07/12/18 Analyzed: 07/13/18

C10-C28 (DRO) ND 50 mg/kg

LCS (1807138-BS1)

Prepared: 07/12/18 Analyzed: 07/13/18

C10-C28 (DRO) 496 50 mg/kg 70-130

Matrix Spike (1807138-MS1)

Source: 1807144-02

Prepared: 07/12/18 Analyzed: 07/13/18

C10-C28 (DRO) 459 50 mg/kg 29.5 70-130

Matrix Spike Dup (1807138-MSD1)

Source: 1807144-02

Prepared: 07/12/18 Analyzed: 07/13/18

C10-C28 (DRO) 461 50 mg/kg 29.5 70-130 0.579 20

Summit Scientific

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Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

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

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

Batch 1807135 - General Preparation

LCS (1807135-BS1)

Prepared & Analyzed: 07/12/18

pH	9.1	pH Units	9.18	99.3	95-105
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Duplicate (1807135-DUP1)

Source: 1807145-01

Prepared & Analyzed: 07/12/18

pH	8.2	pH Units	8.3	1.22	20
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Summit Scientific

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Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

Specific Conductance by EPA Method 120.1 - Quality Control
Summit Scientific

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

Batch 1807136 - General Preparation

LCS (1807136-BS1)

Prepared & Analyzed: 07/12/18

Specific Conductance (EC)	0.750	0.0100	mmhos/cm			90-110
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Duplicate (1807136-DUP1)

Source: 1807145-01

Prepared & Analyzed: 07/12/18

Specific Conductance (EC)	9.86	0.0100	mmhos/cm	9.90		0.455	20
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Summit Scientific

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Tasman Geosciences
6899 Pecos St, Unit C
Denver CO, 80221

Project: Shook Pad Release

Project Number: [none]
Project Manager: Christine Hamlin

Reported:
07/13/18 06:10

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