

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

June 03, 2015

Travis Johansen
Tasman Geosciences
6899 Pecos Street
Denver, CO 80221
RE: Tammer Release

Enclosed are the results of analyses for samples received by Summit Scientific on 06/02/15 18:30. 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



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@1'	1506010-01	Soil	06/02/15 09:10	06/02/15 18:30
SS02@1'	1506010-02	Soil	06/02/15 09:15	06/02/15 18:30
SS03@1'	1506010-03	Soil	06/02/15 10:35	06/02/15 18:30
SS04@1'	1506010-04	Soil	06/02/15 11:05	06/02/15 18:30

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

Summit Scientific *S₂* 1506010

741 Corporate Circle, Suite J&K ♦ Golden, Colorado 80401
303-277-9310 ♦ 303-374-5933

Page 1 of 1

Client: *Tasman / DCP*

Project Manager: *Travis Johansen*

Address:

E-Mail:

City/State/Zip:

Phone:

Fax:

Project Name: *Tammer Release*

Sampler Name: *Eric Siegel*

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Special Instructions
					HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air-Canister #	Other (Specify)	BTEX	GRD	DRD	
1	<i>SS01e1'</i>	<i>6/2/15</i>	<i>9:10</i>	<i>1</i>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2	<i>SS02e1'</i>	<i>↓</i>	<i>9:15</i>	<i>↓</i>									<i>↓</i>	<i>↓</i>	<i>↓</i>	
3	<i>SS03e1'</i>	<i>↓</i>	<i>10:35</i>	<i>↓</i>									<i>↓</i>	<i>↓</i>	<i>↓</i>	
4	<i>SS04e1'</i>	<i>↓</i>	<i>11:05</i>	<i>↓</i>									<i>↓</i>	<i>↓</i>	<i>↓</i>	
5																
6																
7																
8																
9																
10																

Relinquished by: <i>C. A. Hild</i>	Date/Time: <i>6/2/15 1544</i>	Received by: <i>Travis Johansen</i>	Date/Time: <i>6/2/15 1544</i>	Turn Around Time (Check) Same Day <input checked="" type="checkbox"/> 72 hours 24 hours <input type="checkbox"/> Standard 48 hours <input type="checkbox"/>	Notes: <i>From the field</i>
Relinquished by: <i>AO</i>	Date/Time: <i>6/2/15 1830</i>	Received by:	Date/Time:	Sample Integrity: <i>4.7</i>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Temperature Upon Receipt: <i>4.7</i> Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	

www.s2scientific.com

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

SS01@1'
1506010-01 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 06/02/15 09:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1506039	06/02/15	06/02/15	8015M	

Date Sampled: 06/02/15 09:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		96.5 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 06/02/15 09:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1506038	06/02/15	06/02/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 06/02/15 09:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		118 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

SS02@1'
1506010-02 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 06/02/15 09:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1506039	06/02/15	06/03/15	8015M	

Date Sampled: 06/02/15 09:15

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

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 06/02/15 09:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1506038	06/02/15	06/02/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 06/02/15 09:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		119 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

SS03@1'
1506010-03 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 06/02/15 10:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1506039	06/02/15	06/03/15	8015M	

Date Sampled: 06/02/15 10:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		93.7 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 06/02/15 10:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1506038	06/02/15	06/02/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 06/02/15 10:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		116 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.8 %	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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

SS04@1'
1506010-04 (Soil)

Summit Scientific

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: 06/02/15 11:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	1506039	06/02/15	06/03/15	8015M	

Date Sampled: 06/02/15 11:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		95.3 %	30-150		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 06/02/15 11:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	1506038	06/02/15	06/02/15	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: 06/02/15 11:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		117 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch 1506039 - EPA 3550A

Blank (1506039-BLK1)

Prepared: 06/02/15 Analyzed: 06/03/15

C10-C28 (DRO) ND 50 mg/kg

Surrogate: o-Terphenyl 12.8 " 12.2 105 30-150

LCS (1506039-BS1)

Prepared: 06/02/15 Analyzed: 06/03/15

C10-C28 (DRO) 456 50 mg/kg 501 91.0 73-134

Surrogate: o-Terphenyl 13.2 " 12.2 108 30-150

Matrix Spike (1506039-MS1)

Source: 1506010-01

Prepared: 06/02/15 Analyzed: 06/03/15

C10-C28 (DRO) 458 50 mg/kg 496 45.3 83.2 50-148

Surrogate: o-Terphenyl 13.5 " 12.1 112 30-150

Matrix Spike Dup (1506039-MSD1)

Source: 1506010-01

Prepared: 06/02/15 Analyzed: 06/03/15

C10-C28 (DRO) 489 50 mg/kg 498 45.3 89.0 50-148 6.51 13

Surrogate: o-Terphenyl 13.6 " 12.1 112 30-150

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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

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 1506038 - EPA 5030 Soil MS

Blank (1506038-BLK1)

Prepared: 06/02/15 Analyzed: 06/03/15

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0442		"	0.0396	112	23-173				
Surrogate: Toluene-d8	0.0398		"	0.0400	99.4	20-170				
Surrogate: 4-Bromofluorobenzene	0.0407		"	0.0400	102	21-167				

LCS (1506038-BS1)

Prepared: 06/02/15 Analyzed: 06/03/15

Benzene	0.108	0.0020	mg/kg	0.100	108	58-130				
Toluene	0.113	0.0050	"	0.100	113	61-134				
Ethylbenzene	0.123	0.0050	"	0.0992	124	74-139				
m,p-Xylene	0.240	0.010	"	0.200	120	73-137				
o-Xylene	0.128	0.0050	"	0.0984	130	73-141				
Surrogate: 1,2-Dichloroethane-d4	0.0445		"	0.0396	112	23-173				
Surrogate: Toluene-d8	0.0408		"	0.0400	102	20-170				
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400	101	21-167				

LCS (1506038-BS2)

Prepared: 06/02/15 Analyzed: 06/03/15

Benzene	0.112	0.0020	mg/kg	0.100	112	58-130				
Toluene	0.118	0.0050	"	0.100	118	61-134				
Ethylbenzene	0.133	0.0050	"	0.0992	134	74-139				
m,p-Xylene	0.257	0.010	"	0.200	129	73-137				
o-Xylene	0.135	0.0050	"	0.0984	137	73-141				
Surrogate: 1,2-Dichloroethane-d4	0.0430		"	0.0396	109	23-173				
Surrogate: Toluene-d8	0.0403		"	0.0400	101	20-170				
Surrogate: 4-Bromofluorobenzene	0.0411		"	0.0400	103	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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

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 1506038 - EPA 5030 Soil MS

Matrix Spike (1506038-MS1)		Source: 1506007-01			Prepared: 06/02/15		Analyzed: 06/03/15			
Benzene	0.110	0.0020	mg/kg	0.0998	ND	110	30-131			
Toluene	0.116	0.0050	"	0.0998	ND	116	30-134			
Ethylbenzene	0.129	0.0050	"	0.0990	ND	131	22-153			
m,p-Xylene	0.257	0.010	"	0.199	ND	129	10-159			
o-Xylene	0.135	0.0050	"	0.0982	ND	138	31-151			
Surrogate: 1,2-Dichloroethane-d4	0.0476		"	0.0395		120	23-173			
Surrogate: Toluene-d8	0.0404		"	0.0399		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0417		"	0.0399		104	21-167			

Matrix Spike (1506038-MS2)		Source: 1506007-02			Prepared: 06/02/15		Analyzed: 06/03/15			
Benzene	0.109	0.0020	mg/kg	0.0992	ND	110	30-131			
Toluene	0.114	0.0050	"	0.0992	ND	115	30-134			
Ethylbenzene	0.127	0.0050	"	0.0984	ND	129	22-153			
m,p-Xylene	0.247	0.010	"	0.198	ND	125	10-159			
o-Xylene	0.129	0.0050	"	0.0976	ND	132	31-151			
Surrogate: 1,2-Dichloroethane-d4	0.0457		"	0.0393		116	23-173			
Surrogate: Toluene-d8	0.0402		"	0.0397		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0399		"	0.0397		101	21-167			

Matrix Spike Dup (1506038-MSD1)		Source: 1506007-01			Prepared: 06/02/15		Analyzed: 06/03/15			
Benzene	0.101	0.0020	mg/kg	0.0929	ND	109	30-131	8.38	34	
Toluene	0.107	0.0050	"	0.0929	ND	115	30-134	7.95	30	
Ethylbenzene	0.120	0.0050	"	0.0922	ND	130	22-153	7.35	24	
m,p-Xylene	0.233	0.010	"	0.186	ND	126	10-159	10.0	68	
o-Xylene	0.120	0.0050	"	0.0914	ND	132	31-151	11.6	38	
Surrogate: 1,2-Dichloroethane-d4	0.0426		"	0.0368		116	23-173			
Surrogate: Toluene-d8	0.0369		"	0.0372		99.4	20-170			
Surrogate: 4-Bromofluorobenzene	0.0383		"	0.0372		103	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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release
Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

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 1506038 - EPA 5030 Soil MS

Matrix Spike Dup (1506038-MSD2)				Source: 1506007-02		Prepared: 06/02/15		Analyzed: 06/03/15		
Benzene	0.103	0.0020	mg/kg	0.0938	ND	110	30-131	6.00	34	
Toluene	0.108	0.0050	"	0.0938	ND	116	30-134	5.39	30	
Ethylbenzene	0.122	0.0050	"	0.0931	ND	131	22-153	4.01	24	
m,p-Xylene	0.239	0.010	"	0.187	ND	128	10-159	3.39	68	
o-Xylene	0.125	0.0050	"	0.0923	ND	136	31-151	2.88	38	
Surrogate: 1,2-Dichloroethane-d4	0.0423		"	0.0371		114	23-173			
Surrogate: Toluene-d8	0.0377		"	0.0375		100	20-170			
Surrogate: 4-Bromofluorobenzene	0.0380		"	0.0375		101	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.



Tasman Geosciences
6899 Pecos Street
Denver CO, 80221

Project: Tammer Release

Project Number: [none]
Project Manager: Travis Johansen

Reported:
06/03/15 06:28

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

Summit Scientific

A handwritten signature in black ink, appearing to be 'MSM'.

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.