



April 16, 2018

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

Project Name - KMG - Tuttle L 17-6

Project Number - [none]

Attached are your analytical results for KMG - Tuttle L 17-6 received by Origins Laboratory, Inc. April 09, 2018. This project is associated with Origins project number Y804165-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.  
303.433.1322  
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01R - 4/9/18	Y804165-01	Water	April 9, 2018 12:55	04/09/2018 17:10
BH02R - 4/9/18	Y804165-02	Water	April 9, 2018 12:45	04/09/2018 17:10
BH04 - 4/9/18	Y804165-03	Water	April 9, 2018 12:40	04/09/2018 17:10
BH08 - 4/9/18	Y804165-04	Water	April 9, 2018 12:34	04/09/2018 17:10
BH09 - 4/9/18	Y804165-05	Water	April 9, 2018 12:20	04/09/2018 17:10
BH10 - 4/9/18	Y804165-06	Water	April 9, 2018 12:25	04/09/2018 17:10
BH11 - 4/9/18	Y804165-07	Water	April 9, 2018 13:00	04/09/2018 17:10
BH12 - 4/9/18	Y804165-08	Water	April 9, 2018 12:30	04/09/2018 17:10
BH13 - 4/9/18	Y804165-09	Water	April 9, 2018 12:10	04/09/2018 17:10
BH14 - 4/9/18	Y804165-10	Water	April 9, 2018 12:15	04/09/2018 17:10

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

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page 1 of 1

**ORIGINS**  
LABORATORY, INC

Client: ARC/TASMAN Project Manager/Send Report To: Bob Cornez

Address: 6899 N. Pecos St. Email Address: lcornez@tasman-geo.com

1410 Denver/CO/80221 Project Name/Number: Tuttle L17-6/89156407

Telephone Number: 970486909 Samples Collected By: Max Dahlgren

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative	Matrix	Analysis/Method	Sample Instructions
BH01R - 4/9/18	4/9/18	1255	3	Unpreserved	Soil	BTEX	1
BH02R - 4/9/18	4/9/18	1245	1	Groundwater	Other		2
BH04 - 4/9/18	4/9/18	1240	1	Other			3
BH06 - 4/9/18	4/9/18	1234	1	HNO <sub>3</sub>			4
BH09 - 4/9/18	4/9/18	1220	1	HCl			5
BH10 - 4/9/18	4/9/18	1225	1	Unpreserved			6
BH11 - 4/9/18	4/9/18	1300	1				7
BH12 - 4/9/18	4/9/18	1230	1				8
BH13 - 4/9/18	4/9/18	1200	1				9
BH14 - 4/9/18	4/9/18	1215	1				10
Relinquished By: <u>[Signature]</u>	Date: <u>4/9/18</u>	Time: <u>1710</u>	Received By: <u>[Signature]</u>	Date: <u>4/9/18</u>	Time: <u>1710</u>	Turnaround Time: Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input checked="" type="checkbox"/> Standard	
Relinquished By: <u>[Signature]</u>	Date: <u>4/9/18</u>	Time: <u>1710</u>	Received By: <u>[Signature]</u>	Date: <u>4/9/18</u>	Time: <u>1710</u>		

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

Origins Laboratory

F-012207-01-R1  
Effective Date: 01/09/12

## Sample Receipt Checklist

Origins Work Order: Y804165

Client: Tasman

Client Project ID: KMG-Tuttle L17-6

Checklist Completed by: JG

Shipped Via: Pick up  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 4/10/2018

Airbill #: N/A

Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other: ☐ (Describe)

Cooler Number/Temperature: 1 / 5.5 °C 1 / 5.5 °C 1 / 5.5 °C 1 / 5.5 °C

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH >10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

<sup>(1)</sup>If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) [Signature]

Date/Time Reviewed 4/11/18

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH01R - 4/9/18

4/9/2018 12:55:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-01 (Water)

**BTEX by EPA 8260C**

Benzene	913	20.0	ug/L	20	B8D1303	04/13/2018	04/16/2018	
Toluene	ND	4.00	"	4	"	"	04/13/2018	U
Ethylbenzene	38.7	4.00	"	"	"	"	"	
Xylenes, total	92.6	4.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	97.9 %	84-121			"	"	"
Surrogate: Toluene-d8	97.7 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	100 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
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Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH02R - 4/9/18

4/9/2018 12:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-02 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8D1303	04/13/2018	04/13/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

100 % 84-121  
97.9 % 85-115  
101 % 84-114

" "  
" "  
" "

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH04 - 4/9/18

4/9/2018 12:40:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-03 (Water)

**BTEX by EPA 8260C**

Benzene	2870	50.0	ug/L	50	B8D1303	04/13/2018	04/13/2018	
Toluene	ND	50.0	"	"	"	"	"	U
Ethylbenzene	111	50.0	"	"	"	"	"	
Xylenes, total	1400	50.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	99.7 %	84-121			"	"	"	
Surrogate: Toluene-d8	97.4 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH08 - 4/9/18

4/9/2018 12:34:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-04 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8D1303	04/13/2018	04/13/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

99.8 % 84-121  
97.6 % 85-115  
98.5 % 84-114

" " "  
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" " "

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH09 - 4/9/18

4/9/2018 12:20:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-05 (Water)

**BTEX by EPA 8260C**

Benzene	2590	20.0	ug/L	20	B8D1303	04/13/2018	04/13/2018	
Toluene	ND	20.0	"	"	"	"	"	U
Ethylbenzene	62.0	20.0	"	"	"	"	"	
Xylenes, total	479	20.0	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	99.0 %	84-121			"	"	"
Surrogate: Toluene-d8	100 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH10 - 4/9/18

4/9/2018 12:25:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-06 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8D1303	04/13/2018	04/13/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

100 %  
99.3 %  
102 %

84-121  
85-115  
84-114

"  
"  
"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH11 - 4/9/18

4/9/2018 1:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-07 (Water)

**BTEX by EPA 8260C**

Benzene	10400	100	ug/L	100	B8D1303	04/13/2018	04/13/2018	
Toluene	ND	100	"	"	"	"	"	U
Ethylbenzene	102	100	"	"	"	"	"	
Xylenes, total	5440	100	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	98.4 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH12 - 4/9/18

4/9/2018 12:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-08 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8D1303	04/13/2018	04/13/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

100 % 84-121  
99.1 % 85-115  
101 % 84-114

" "  
" "  
" "

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH13 - 4/9/18

4/9/2018 12:10:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-09 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8D1303	04/13/2018	04/13/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

101 % 84-121  
100 % 85-115  
102 % 84-114

" " "  
" " "  
" " "

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

BH14 - 4/9/18

4/9/2018 12:15:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y804165-10 (Water)

**BTEX by EPA 8260C**

Benzene	1.42	1.00	ug/L	1	B8D1303	04/13/2018	04/13/2018	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	100 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.4 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	

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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B8D1303 - EPA 5030B (Water)</b>										
<b>Blank (B8D1303-BLK1)</b>					Prepared: 04/13/2018 Analyzed: 04/13/2018					
Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		102	84-121			
Surrogate: Toluene-d8	61		"	62.5		98.2	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		102	84-114			

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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8D1303 - EPA 5030B (Water)**

**LCS (B8D1303-BS1)**

Prepared: 04/13/2018 Analyzed: 04/13/2018

Benzene	55.3	1.00	ug/L	50.0		111	73.3-129			
Toluene	57.3	1.00	"	50.0		115	76.2-123			
Ethylbenzene	53.0	1.00	"	50.0		106	73.6-130			
m,p-Xylene	116	2.00	"	100		116	76.1-126			
o-Xylene	54.4	1.00	"	50.0		109	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		95.1	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.1	85-115			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	84-114			

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Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8D1303 - EPA 5030B (Water)**

Matrix Spike (B8D1303-MS1)		Source: Y804165-02			Prepared: 04/13/2018 Analyzed: 04/13/2018					
Benzene	61.9	1.00	ug/L	50.0	ND	124	74-130			
Toluene	64.2	1.00	"	50.0	ND	128	73-131			
Ethylbenzene	60.7	1.00	"	50.0	ND	121	76-132			
m,p-Xylene	131	2.00	"	100	0.290	131	69-139			
o-Xylene	60.0	1.00	"	50.0	ND	120	74-131			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.0	84-121			
Surrogate: Toluene-d8	62		"	62.5		98.8	85-115			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	84-114			

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8D1303 - EPA 5030B (Water)**

Matrix Spike Dup (B8D1303-MSD1)		Source: Y804165-02			Prepared: 04/13/2018 Analyzed: 04/13/2018					
Benzene	61.2	1.00	ug/L	50.0	ND	122	74-130	1.17	20	
Toluene	64.0	1.00	"	50.0	ND	128	73-131	0.312	20	
Ethylbenzene	60.9	1.00	"	50.0	ND	122	76-132	0.313	20	
m,p-Xylene	132	2.00	"	100	0.290	132	69-139	0.638	20	
o-Xylene	61.0	1.00	"	50.0	ND	122	74-131	1.64	20	
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		92.8	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.3	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

## Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



*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.*



July 30, 2018

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Tuttle L 17-6**

**Project Number - 89156407**

Attached are your analytical results for KMG - Tuttle L 17-6 received by Origins Laboratory, Inc. July 25, 2018. This project is associated with Origins project number Y807345-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.  
303.433.1322  
o-squad@oelabinc.com



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 89156407

Project: KMG - Tuttle L 17-6

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01R - 072518	Y807345-01	Water	July 25, 2018 13:15	07/25/2018 17:00
BH02R - 072518	Y807345-02	Water	July 25, 2018 13:25	07/25/2018 17:00
BH04 - 072518	Y807345-03	Water	July 25, 2018 13:30	07/25/2018 17:00
BH08 - 072518	Y807345-04	Water	July 25, 2018 13:08	07/25/2018 17:00
BH09 - 072518	Y807345-05	Water	July 25, 2018 13:03	07/25/2018 17:00
BH10 - 072518	Y807345-06	Water	July 25, 2018 12:50	07/25/2018 17:00
BH11 - 072518	Y807345-07	Water	July 25, 2018 13:10	07/25/2018 17:00
BH12 - 072518	Y807345-08	Water	July 25, 2018 13:00	07/25/2018 17:00
BH13 - 072518	Y807345-09	Water	July 25, 2018 13:00	07/25/2018 17:00
BH14 - 072518	Y807345-10	Water	July 25, 2018 12:35	07/25/2018 17:00

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

www.originslaboratory.com

Y967345

page 1 of 1

ORIGINS LABORATORY, INC

Client: APC / Tasman Project Manager/Send Report To: Bob Cornez

Address: 6899 Pecos Email Address: BCornez@Tasman-geo.com

Denver, CO Project Name/Number: Tuttle L 17-6 / 89156407

Telephone Number: Samples Collected By: Max Dahlgren

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative					Matrix			Analysis/Method	Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa Continer #	Other		
BH01R-072518	7-25-2018	1315	3	X	X			X				STEX	1
BH02R-072518		1325	3										2
BH04 - 072518		1330	3										3
BH08 - 072518		1308	3										4
BH09 - 072518		1303	3										5
BH10 - 072518		1250	3										6
BH11 - 072518		1310	3										7
BH12 - 072518		1300	3										8
BH13 - 072518		1300	3										9
BH14 - 072518		1235	3										10
Relinquished By: <i>Min Dahl</i>	Date: 7/25/2018	Time: 1700	Time: 1700	Received By: <i>BC</i>				Received By:				Date: 7/25/18	Time: 1700
Relinquished By:	Date:	Time:	Time:	Turnaround Time:				Standard <input checked="" type="checkbox"/>				Same Day <input type="checkbox"/>	24 Hr <input type="checkbox"/>
												48 Hr <input type="checkbox"/>	72 Hr <input type="checkbox"/>

Origins Laboratory, Inc.

*Jefe Pellegrini*

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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

Origins Laboratory

F-012207-01-R1  
Effective Date: 01/09/12

## Sample Receipt Checklist

Origins Work Order: Y807345

Client: Tasman

Client Project ID: KMG-Tuttle L 17-6

Checklist Completed by: JG

Shipped Via: HD

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 7/26/2018

Airbill #: N/A

Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other: ☐ (Describe)

Cooler Number/Temperature: 1 / 4.8 °C        /        °C        /        °C        /        °C

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH >10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

<sup>(1)</sup>If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) JG

Date/Time Reviewed 7/27/18

Origins Laboratory, Inc.

*Jefe Pellegrini*

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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**BH01R - 072518**

**7/25/2018 1:15:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y807345-01 (Water)**

**BTEX by EPA 8260C**

Benzene	416	10.0	ug/L	10	B8G2606	07/26/2018	07/26/2018	
Toluene	ND	10.0	"	"	"	"	"	U
Ethylbenzene	24.9	10.0	"	"	"	"	"	
Xylenes, total	63.6	10.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	93.6 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.5 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**BH02R - 072518**

**7/25/2018 1:25:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y807345-02 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8G2606	07/26/2018	07/26/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	92.7 %	84-121			"	"	"	
Surrogate: Toluene-d8	100 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	100 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**BH04 - 072518**

**7/25/2018 1:30:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y807345-03 (Water)**

## BTEX by EPA 8260C

Benzene	3330	50.0	ug/L	50	B8G2606	07/26/2018	07/27/2018	
Toluene	ND	50.0	"	"	"	"	"	U
Ethylbenzene	127	50.0	"	"	"	"	"	
Xylenes, total	1220	50.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	92.7 %	84-121			"	"	"	
Surrogate: Toluene-d8	100 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.3 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**BH08 - 072518**

**7/25/2018 1:08:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y807345-04 (Water)**

## BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B8G2606	07/26/2018	07/27/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	92.6 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.4 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.0 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**BH09 - 072518**

**7/25/2018 1:03:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y807345-05 (Water)**

**BTEX by EPA 8260C**

Benzene	4000	50.0	ug/L	50	B8G2606	07/26/2018	07/27/2018	
Toluene	ND	10.0	"	10	"	"	07/27/2018	U
Ethylbenzene	95.0	10.0	"	"	"	"	"	
Xylenes, total	558	10.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	93.8 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.5 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**BH10 - 072518**

**7/25/2018 12:50:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y807345-06 (Water)**

## BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B8G2606	07/26/2018	07/27/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	93.4 %	84-121			"	"	"	
Surrogate: Toluene-d8	100 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.7 %	84-114			"	"	"	

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**BH11 - 072518**  
**7/25/2018 1:10:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y807345-07 (Water)**

## BTEX by EPA 8260C

Benzene	10800	100	ug/L	100	B8G2606	07/26/2018	07/27/2018	
Toluene	ND	100	"	"	"	"	"	U
Ethylbenzene	174	100	"	"	"	"	"	
Xylenes, total	5010	100	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	93.9 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	100 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**BH12 - 072518**  
**7/25/2018 1:00:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y807345-08 (Water)**

## BTEX by EPA 8260C

Benzene	ND	1.00	ug/L	1	B8G2606	07/26/2018	07/27/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	93.1 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.8 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	100 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

BH13 - 072518  
7/25/2018 1:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
Y807345-09 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8G2606	07/26/2018	07/27/2018	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	93.1 %	84-121	"	"	"
Surrogate: Toluene-d8	99.4 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	99.3 %	84-114	"	"	"

Origins Laboratory, Inc.



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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**BH14 - 072518**

**7/25/2018 12:35:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y807345-10 (Water)**

**BTEX by EPA 8260C**

Benzene	1.51	1.00	ug/L	1	B8G2606	07/26/2018	07/27/2018	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	93.5 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.6 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8G2606 - EPA 5030B (Water)**

**Blank (B8G2606-BLK1)**

Prepared: 07/26/2018 Analyzed: 07/27/2018

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5	93.0		84-121			
Surrogate: Toluene-d8	63		"	62.5	101		85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5	101		84-114			

Origins Laboratory, Inc.



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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8G2606 - EPA 5030B (Water)**

**LCS (B8G2606-BS1)**

Prepared: 07/26/2018 Analyzed: 07/27/2018

Benzene	55.0	1.00	ug/L	50.0	110	73.3-129
Toluene	55.6	1.00	"	50.0	111	76.2-123
Ethylbenzene	55.7	1.00	"	50.0	111	73.6-130
m,p-Xylene	110	2.00	"	100	110	76.1-126
o-Xylene	55.6	1.00	"	50.0	111	76.6-124
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5	90.7	84-121
Surrogate: Toluene-d8	63		"	62.5	100	85-115
Surrogate: 4-Bromofluorobenzene	63		"	62.5	101	84-114

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8G2606 - EPA 5030B (Water)**

Matrix Spike (B8G2606-MS1)		Source: Y807345-02			Prepared: 07/26/2018 Analyzed: 07/26/2018					
Benzene	58.0	1.00	ug/L	50.0	ND	116	74-130			
Toluene	58.8	1.00	"	50.0	ND	118	73-131			
Ethylbenzene	59.4	1.00	"	50.0	0.130	119	76-132			
m,p-Xylene	118	2.00	"	100	0.440	117	69-139			
o-Xylene	58.5	1.00	"	50.0	ND	117	74-131			
Surrogate: 1,2-Dichloroethane-d4	56		"	62.5		90.2	84-121			
Surrogate: Toluene-d8	63		"	62.5		101	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 89156407  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8G2606 - EPA 5030B (Water)**

Matrix Spike Dup (B8G2606-MSD1)		Source: Y807345-02			Prepared: 07/26/2018 Analyzed: 07/26/2018					
Benzene	59.4	1.00	ug/L	50.0	ND	119	74-130	2.40	20	
Toluene	62.3	1.00	"	50.0	ND	125	73-131	5.70	20	
Ethylbenzene	62.0	1.00	"	50.0	0.130	124	76-132	4.35	20	
m,p-Xylene	123	2.00	"	100	0.440	122	69-139	4.12	20	
o-Xylene	61.5	1.00	"	50.0	ND	123	74-131	4.90	20	
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		90.6	84-121			
Surrogate: Toluene-d8	64		"	62.5		102	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



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, Unit C

Denver CO 80211

Bob Cornez

Project Number: 89156407

Project: KMG - Tuttle L 17-6

### Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



*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.*

Jen Pellegrini For Noelle Doyle Mathis, President

October 12, 2018

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Tuttle L 17-6****Project Number - [none]**

Attached are your analytical results for KMG - Tuttle L 17-6 received by Origins Laboratory, Inc. October 09, 2018. This project is associated with Origins project number Y810147-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.  
303.433.1322  
o-squad@oelabinc.com



Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: [none]

Project: KMG - Tuttle L 17-6

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01R - 100918	Y810147-01	Water	October 9, 2018 13:00	10/09/2018 16:45
BH02R - 100918	Y810147-02	Water	October 9, 2018 12:36	10/09/2018 16:45
BH04 - 100918	Y810147-03	Water	October 9, 2018 13:10	10/09/2018 16:45
BH08 - 100918	Y810147-04	Water	October 9, 2018 12:48	10/09/2018 16:45
BH09 - 100918	Y810147-05	Water	October 9, 2018 12:58	10/09/2018 16:45
BH10 - 100918	Y810147-06	Water	October 9, 2018 12:38	10/09/2018 16:45
BH11 - 100918	Y810147-07	Water	October 9, 2018 13:11	10/09/2018 16:45
BH12 - 100918	Y810147-08	Water	October 9, 2018 12:25	10/09/2018 16:45
BH13 - 100918	Y810147-09	Water	October 9, 2018 12:47	10/09/2018 16:45
BH14 - 100918	Y810147-10	Water	October 9, 2018 12:27	10/09/2018 16:45

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Corneze  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

www.originslaboratory.com

Y810147

page 1 of 1

ORIGINS  
LABORATORY, INC

Client: APC/Tasman  
Address: 6899 N Pecos St.  
Denver, CO 80221  
Telephone Number: 303.487.1228

Project Manager/Send Report To: Bob Corneze  
Email Address: rcorneze@tasman-geo.com  
Project Name/Number: Tuttle L 17-6/89156407  
Samples Collected By: Brian G. Alison D

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative	Matrix	Analysis/Method	Sample Instructions
BH01R-100918	10/09/2018	1300	3	Unpreserved	Soil	OTEX	1
BH02R-100918	10/09/2018	1236	1	Unpreserved	Soil	OTEX	2
BH04R-100918	10/09/2018	1310	1	Unpreserved	Soil	OTEX	3
BH08-100918	10/09/2018	1248	1	Unpreserved	Soil	OTEX	4
BH09-100918	10/09/2018	1258	1	Unpreserved	Soil	OTEX	5
BH10-100918	10/09/2018	1238	1	Unpreserved	Soil	OTEX	6
BH11-100918	10/09/2018	1311	1	Unpreserved	Soil	OTEX	7
BH12-100918	10/09/2018	1225	1	Unpreserved	Soil	OTEX	8
BH13-100918	10/09/2018	1247	1	Unpreserved	Soil	OTEX	9
BH14-100918	10/09/2018	1227	1	Unpreserved	Soil	OTEX	10
Relinquished By: [Signature]	Date: 10/09/18	Time: 1045					Turnaround Time: Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input checked="" type="checkbox"/> Standard
Relinquished By: [Signature]	Date: 10/09/18	Time: 1045					

1725 Elk Place | Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Origins Laboratory, Inc.

Jefe Pellegrini

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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

Origins Laboratory

F-012207-01-R1  
Effective Date: 01/09/12

### Sample Receipt Checklist

Origins Work Order: Y610147

Client: Tasman

Client Project ID: KMG-Tuttle L 17-6

Checklist Completed by: JG

Shipped Via: HD  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 10/10/2018

Airbill #: N/A

Matrix(s) Received: (Check all that apply): Soil/Solid ☒ Water ☐ Other: ☐

Cooler Number/Temperature: 1 / 4.5 °C          /          °C          /          °C          /          °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water — is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH > 10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) JG

Date/Time Reviewed 10/11/18

Origins Laboratory, Inc.

*Jefe Pellegrini*

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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH01R - 100918**

**10/9/2018 1:00:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-01 (Water)**

**BTEX by EPA 8260C**

Benzene	337	10.0	ug/L	10	B8J1001	KDK	10/10/2018	10/10/2018	
Toluene	ND	10.0	"	"	"	KDK	"	"	U
Ethylbenzene	20.8	10.0	"	"	"	KDK	"	"	
Xylenes, total	ND	10.0	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4  
Surrogate: Toluene-d8  
Surrogate: 4-Bromofluorobenzene

110 % 84-121  
93.6 % 85-115  
107 % 84-114

" " "  
" " "  
" " "

Origins Laboratory, Inc.



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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH02R - 100918**

**10/9/2018 12:36:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-02 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8J1001	KDK	10/10/2018	10/10/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	113 %	84-121	"	"	"
Surrogate: Toluene-d8	93.6 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	109 %	84-114	"	"	"

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH04 - 100918**  
**10/9/2018 1:10:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-03 (Water)**

**BTEX by EPA 8260C**

Benzene	3270	50.0	ug/L	50	B8J1001	KDK	10/10/2018	10/10/2018	
Toluene	ND	50.0	"	"	"	KDK	"	"	U
Ethylbenzene	112	50.0	"	"	"	KDK	"	"	
Xylenes, total	1140	50.0	"	"	"	KDK	"	"	

Surrogate: 1,2-Dichloroethane-d4	111 %	84-121	"	"	"
Surrogate: Toluene-d8	93.2 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	107 %	84-114	"	"	"

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH08 - 100918**

**10/9/2018 12:48:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-04 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8J1001	KDK	10/10/2018	10/10/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	113 %	84-121	"	"	"
Surrogate: Toluene-d8	94.5 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	107 %	84-114	"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH09 - 100918**

**10/9/2018 12:58:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-05 (Water)**

**BTEX by EPA 8260C**

Benzene	3530	100	ug/L	100	B8J1001	JTD	10/10/2018	10/11/2018	
Toluene	ND	20.0	"	20	"	KDK	"	10/10/2018	U
Ethylbenzene	99.2	20.0	"	"	"	KDK	"	"	
Xylenes, total	656	20.0	"	"	"	KDK	"	"	

Surrogate: 1,2-Dichloroethane-d4	113 %	84-121	"	"	"
Surrogate: Toluene-d8	92.9 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	108 %	84-114	"	"	"

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH10 - 100918**  
**10/9/2018 12:38:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-06 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8J1001	KDK	10/10/2018	10/10/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	107 %	84-121	"	"	"
Surrogate: Toluene-d8	93.8 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	107 %	84-114	"	"	"

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH11 - 100918**  
**10/9/2018 1:11:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-07 (Water)**

**BTEX by EPA 8260C**

Benzene	12200	100	ug/L	100	B8J1001	KDK	10/10/2018	10/10/2018	
Toluene	ND	100	"	"	"	KDK	"	"	U
Ethylbenzene	162	100	"	"	"	KDK	"	"	
Xylenes, total	5290	100	"	"	"	KDK	"	"	
Surrogate: 1,2-Dichloroethane-d4	110 %	84-121			"	"		"	
Surrogate: Toluene-d8	93.7 %	85-115			"	"		"	
Surrogate: 4-Bromofluorobenzene	106 %	84-114			"	"		"	

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH12 - 100918**

**10/9/2018 12:25:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-08 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8J1001	KDK	10/10/2018	10/10/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	112 %	84-121	"	"	"
Surrogate: Toluene-d8	92.5 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	107 %	84-114	"	"	"

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH13 - 100918**

**10/9/2018 12:47:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-09 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8J1001	KDK	10/10/2018	10/10/2018	U
Toluene	ND	1.00	"	"	"	KDK	"	"	U
Ethylbenzene	ND	1.00	"	"	"	KDK	"	"	U
Xylenes, total	ND	1.00	"	"	"	KDK	"	"	U

Surrogate: 1,2-Dichloroethane-d4	112 %	84-121	"	"	"
Surrogate: Toluene-d8	93.4 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	107 %	84-114	"	"	"

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**BH14 - 100918**

**10/9/2018 12:27:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y810147-10 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B8J1001	JTD	10/10/2018	10/10/2018	U
Toluene	ND	1.00	"	"	"	JTD	"	"	U
Ethylbenzene	ND	1.00	"	"	"	JTD	"	"	U
Xylenes, total	ND	1.00	"	"	"	JTD	"	"	U

Surrogate: 1,2-Dichloroethane-d4	111 %	84-121	"	"	"
Surrogate: Toluene-d8	93.6 %	85-115	"	"	"
Surrogate: 4-Bromofluorobenzene	107 %	84-114	"	"	"

Origins Laboratory, Inc.



*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, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8J1001 - EPA 5030B (Water)**

**Blank (B8J1001-BLK1)**

Prepared: 10/10/2018 Analyzed: 10/10/2018

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	68		"	62.5	109		84-121			
Surrogate: Toluene-d8	59		"	62.5	94.6		85-115			
Surrogate: 4-Bromofluorobenzene	68		"	62.5	109		84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8J1001 - EPA 5030B (Water)**

**LCS (B8J1001-BS1)**

Prepared: 10/10/2018 Analyzed: 10/10/2018

Benzene	55.9	1.00	ug/L	50.0		112	73.3-129			
Toluene	50.1	1.00	"	50.0		100	76.2-123			
Ethylbenzene	50.2	1.00	"	50.0		100	73.6-130			
m,p-Xylene	98.5	2.00	"	100		98.5	76.1-126			
o-Xylene	46.7	1.00	"	50.0		93.5	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	67		"	62.5		107	84-121			
Surrogate: Toluene-d8	59		"	62.5		94.8	85-115			
Surrogate: 4-Bromofluorobenzene	68		"	62.5		109	84-114			

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Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8J1001 - EPA 5030B (Water)**

Matrix Spike (B8J1001-MS1)		Source: Y810147-06			Prepared: 10/10/2018 Analyzed: 10/10/2018					
Benzene	44.1	1.00	ug/L	50.0	ND	88.2	74-130			
Toluene	41.6	1.00	"	50.0	ND	83.2	73-131			
Ethylbenzene	42.0	1.00	"	50.0	ND	84.1	76-132			
m,p-Xylene	82.0	2.00	"	100	0.200	81.8	69-139			
o-Xylene	38.7	1.00	"	50.0	ND	77.4	74-131			
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5		105	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.4	85-115			
Surrogate: 4-Bromofluorobenzene	71		"	62.5		114	84-114			

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Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Tuttle L 17-6

**Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch B8J1001 - EPA 5030B (Water)**

Matrix Spike Dup (B8J1001-MSD1)		Source: Y810147-06			Prepared: 10/10/2018 Analyzed: 10/10/2018					
Benzene	62.2	1.00	ug/L	50.0	ND	124	74-130	34.0	20	QR-02
Toluene	56.6	1.00	"	50.0	ND	113	73-131	30.4	20	QR-02
Ethylbenzene	57.3	1.00	"	50.0	ND	115	76-132	30.8	20	QR-02
m,p-Xylene	111	2.00	"	100	0.200	111	69-139	30.3	20	QR-02
o-Xylene	52.6	1.00	"	50.0	ND	105	74-131	30.4	20	QR-02
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5		104	84-121			
Surrogate: Toluene-d8	60		"	62.5		95.3	85-115			
Surrogate: 4-Bromofluorobenzene	68		"	62.5		108	84-114			

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Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: [none]

Project: KMG - Tuttle L 17-6

## Notes and Definitions

U Sample is Non-Detect.

QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

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