

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver CO 80211

Project Name - KMG - Guy Jones GU 1

Project Number - [none]

Attached are your analytical results for KMG - Guy Jones GU 1 received by Origins Laboratory, Inc. September 08, 2017. This project is associated with Origins project number Y709111-01.

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 - Guy Jones GU 1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B01@7'	Y709111-01	Soil	September 8, 2017 13:30	09/08/2017 16:55
N01@6'	Y709111-02	Soil	September 8, 2017 13:32	09/08/2017 16:55
S01@6'	Y709111-03	Soil	September 8, 2017 13:34	09/08/2017 16:55
E01@6'	Y709111-04	Soil	September 8, 2017 13:36	09/08/2017 16:55
W01@6'	Y709111-05	Soil	September 8, 2017 13:38	09/08/2017 16:55

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Jen Pellegrini For Noelle Doyle Mathis, President



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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: 4709111

Client: Tasman

Client Project ID: KMG - Guy Jones GU 1

Checklist Completed by: Jan W  
 Date/time completed: 9-8-12 11:5

Shipped Via: Priority  
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Airbill #: N/A

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

Cooler Number/Temperature:  / 19.3 °C  / \_\_\_\_\_ °C  / \_\_\_\_\_ °C  / \_\_\_\_\_ °C

Thermometer ID: 1203

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"/>		<u>Sampled same day</u>
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" 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 checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			<u>pH</u>
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? <b>If yes, contact client and note in narrative.</b>			<input checked="" 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 checked="" 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 9-8-12 11:5

Origins Laboratory, Inc.

*Jefe Pellegrini*

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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**B01@7'**  
**9/8/2017 1:30:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709111-01 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	37.8	25.0	mg/kg	1	B710805	09/08/2017	09/11/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 81.8 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	266	5.00	mg/kg	25	B710804	"	09/08/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	1.11	0.050	"	"	"	"	"	
Xylenes, total	13.7	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 103 % 70-130 " " "  
 Surrogate: Toluene-d8 88.4 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 130 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	8.81		pH Units	1	B710806	"	09/08/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.276		mmhos/cm	"	B710807	"	"	
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 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**N01@6'**  
**9/8/2017 1:32:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709111-02 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	<b>200</b>	25.0	mg/kg	1	B710805	09/08/2017	09/11/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 89.1 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>44.8</b>	5.00	mg/kg	25	B710804	"	09/08/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	<b>0.058</b>	0.050	"	"	"	"	"	
Xylenes, total	ND	0.050	"	"	"	"	"	U

*Surrogate: 1,2-Dichloroethane-d4* 109 % 70-130 " " "  
*Surrogate: Toluene-d8* 102 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 102 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.75</b>		pH Units	1	B710806	"	09/08/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.0558</b>		mmhos/cm	"	B710807	"	"	
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**S01@6'**  
**9/8/2017 1:34:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709111-03 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	576	25.0	mg/kg	1	B710805	09/08/2017	09/11/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 98.8 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	242	5.00	mg/kg	25	B710804	"	09/08/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	0.165	0.050	"	"	"	"	"	
Xylenes, total	4.14	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 106 % 70-130 " " "  
 Surrogate: Toluene-d8 94.6 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 130 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	8.58		pH Units	1	B710806	"	09/08/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.0626		mmhos/cm	"	B710807	"	"	
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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**E01@6'**  
**9/8/2017 1:36:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709111-04 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	1520	25.0	mg/kg	1	B710805	09/08/2017	09/11/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 88.1 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	2450	50.0	mg/kg	250	B710804	"	09/08/2017	
Benzene	ND	0.050	"	25	"	"	09/08/2017	U
Toluene	ND	0.498	"	250	"	"	09/08/2017	R-05, U
Ethylbenzene	7.16	0.498	"	"	"	"	"	
Xylenes, total	112	0.498	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 106 % 70-130 " " "  
 Surrogate: Toluene-d8 89.4 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 127 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	8.16		pH Units	1	B710806	"	09/08/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.175		mmhos/cm	"	B710807	"	"	
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 Project Number: [none]  
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**W01@6'**  
**9/8/2017 1:38:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709111-05 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	939	25.0	mg/kg	1	B710805	09/08/2017	09/11/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 86.2 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	593	50.0	mg/kg	250	B710804	"	09/08/2017	
Benzene	ND	0.050	"	25	"	"	09/08/2017	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	0.554	0.050	"	"	"	"	"	
Xylenes, total	12.1	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 103 % 70-130 " " "  
 Surrogate: Toluene-d8 82.9 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 105 % 70-130 " " 09/08/2017

**pH in Soil by EPA 9045D**

pH	8.41		pH Units	1	B710806	"	09/08/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.130		mmhos/cm	"	B710807	"	"	
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 Denver CO 80211

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 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B710804 - EPA 5030 (soil)**

**Blank (B710804-BLK1)**

Prepared: 09/08/2017 Analyzed: 09/08/2017

Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	68		ug/kg	62.5		109	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.2	70-130			

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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B710804 - EPA 5030 (soil)**

**LCS (B710804-BS1)**

Prepared: 09/08/2017 Analyzed: 09/08/2017

Benzene	0.092	0.002	mg/kg	0.100		92.0	77.1-124			
Toluene	0.096	0.002	"	0.100		95.8	74.5-128			
Ethylbenzene	0.096	0.002	"	0.100		96.4	66.4-127			
m,p-Xylene	0.194	0.004	"	0.200		97.0	76.6-124			
o-Xylene	0.098	0.002	"	0.100		98.1	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		96.1	70-130			

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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B710804 - EPA 5030 (soil)

Matrix Spike (B710804-MS1)	Source: Y709106-01			Prepared: 09/08/2017 Analyzed: 09/08/2017						
Benzene	0.087	0.002	mg/kg	0.100	ND	86.7	71.8-126			
Toluene	0.086	0.002	"	0.100	ND	86.0	65.1-130			
Ethylbenzene	0.087	0.002	"	0.100	ND	86.6	62.2-130			
m,p-Xylene	0.173	0.004	"	0.200	ND	86.6	46.5-137			
o-Xylene	0.088	0.002	"	0.100	ND	88.0	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		106	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		96.7	70-130			

Origins Laboratory, Inc.



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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B710804 - EPA 5030 (soil)

Matrix Spike Dup (B710804-MSD1)	Source: Y709106-01			Prepared: 09/08/2017 Analyzed: 09/08/2017						
Benzene	0.079	0.002	mg/kg	0.100	ND	79.2	71.8-126	8.97	11.3	
Toluene	0.082	0.002	"	0.100	ND	81.6	65.1-130	5.32	15.4	
Ethylbenzene	0.081	0.002	"	0.100	ND	80.9	62.2-130	6.78	19.6	
m,p-Xylene	0.162	0.004	"	0.200	ND	81.1	46.5-137	6.61	19.2	
o-Xylene	0.082	0.002	"	0.100	ND	82.3	54.2-134	6.76	17.9	
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.8	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		96.9	70-130			

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Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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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**Extractable Petroleum Hydrocarbons by 8015C - 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 B710805 - EPA 3550B**

**Blank (B710805-BLK1)**

Prepared: 09/08/2017 Analyzed: 09/10/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	46		"	50.0		91.1	59-131			

**LCS (B710805-BS1)**

Prepared: 09/08/2017 Analyzed: 09/10/2017

Diesel (C10-C28)	925	50.0	mg/kg	1000		92.5	64-121			
Residual Range Organics (C28-C40)	1080	200	"	1000		108	58-124			
Surrogate: o-Terphenyl	47		"	50.0		94.1	59-131			

**Matrix Spike (B710805-MS1)**

Source: Y709106-01

Prepared: 09/08/2017 Analyzed: 09/11/2017

Diesel (C10-C28)	992	50.0	mg/kg	1000	16.7	97.5	53-125			
Residual Range Organics (C28-C40)	1170	200	"	1000	19.5	116	47-133			
Surrogate: o-Terphenyl	53		"	50.0		106	59-131			

**Matrix Spike Dup (B710805-MSD1)**

Source: Y709106-01

Prepared: 09/08/2017 Analyzed: 09/10/2017

Diesel (C10-C28)	898	50.0	mg/kg	1000	16.7	88.1	53-125	10.1	20	
Residual Range Organics (C28-C40)	1050	200	"	1000	19.5	103	47-133	11.0	20	
Surrogate: o-Terphenyl	47		"	50.0		95.0	59-131			

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**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B710806 - NO PREP</b>										
<b>Duplicate (B710806-DUP1)</b>		<b>Source: Y709106-01</b>			Prepared: 09/08/2017 Analyzed: 09/08/2017					
pH	7.96		pH Units		7.97			0.126	25	
<b>Batch B710807 - NO PREP</b>										
<b>Blank (B710807-BLK1)</b>		Prepared: 09/08/2017 Analyzed: 09/08/2017								
Specific Conductance (EC)	0.00240		mmhos/cm							
<b>Duplicate (B710807-DUP1)</b>		<b>Source: Y709106-01</b>			Prepared: 09/08/2017 Analyzed: 09/08/2017					
Specific Conductance (EC)	0.519		mmhos/cm		0.413			22.7	25	

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Bob Cornez  
Project Number: [none]  
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**Notes and Definitions**

U Sample is Non-Detect.

R-05 The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.

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.



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---

Jen Pellegrini For Noelle Doyle Mathis, President

September 14, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver CO 80211

Project Name - KMG - Guy Jones GU 1

Project Number - [none]

Attached are your analytical results for KMG - Guy Jones GU 1 received by Origins Laboratory, Inc. September 13, 2017. This project is associated with Origins project number Y709163-01.

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 - Guy Jones GU 1

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N02@10'	Y709163-01	Soil	September 13, 2017 15:00	09/13/2017 16:50
E02@10'	Y709163-02	Soil	September 13, 2017 15:02	09/13/2017 16:50
S02@10'	Y709163-03	Soil	September 13, 2017 15:04	09/13/2017 16:50
S03@10'	Y709163-04	Soil	September 13, 2017 15:06	09/13/2017 16:50
W02@10'	Y709163-05	Soil	September 13, 2017 15:08	09/13/2017 16:50
W03@10'	Y709163-06	Soil	September 13, 2017 15:10	09/13/2017 16:50
B02@11'	Y709163-07	Soil	September 13, 2017 15:12	09/13/2017 16:50
B03@11'	Y709163-08	Soil	September 13, 2017 15:14	09/13/2017 16:50
B04@11'	Y709163-09	Soil	September 13, 2017 15:16	09/13/2017 16:50

Origins Laboratory, Inc.



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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: 1709163 Client: Tasman  
 Client Project ID: KMG - Guy Jones GU 1  
 Checklist Completed by: [Signature] Shipped Via: Package  
 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Date/time completed: 9-13-11 1713 Airbill #: N/A  
 Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_ (Describe)  
 Cooler Number/Temperature: 157 °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C / \_\_\_\_\_ °C  
 Thermometer ID: 1003

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"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" 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 checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			pH
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? <b>If yes, contact client and note in narrative.</b>			<input checked="" 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 checked="" 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 9-13-11 1715

Origins Laboratory, Inc.

*Jefe Pellegrini*

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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**N02@10'**  
**9/13/2017 3:00:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709163-01 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B711306	09/13/2017	09/13/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 74.6 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>21.6</b>	5.00	mg/kg	25	B711302	"	09/13/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	<b>0.417</b>	0.050	"	"	"	"	"	
Xylenes, total	<b>0.648</b>	0.050	"	"	"	"	"	

*Surrogate: 1,2-Dichloroethane-d4* 88.6 % 70-130 " " "  
*Surrogate: Toluene-d8* 102 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 102 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.81</b>		pH Units	1	B711303	09/13/2017	09/13/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.373</b>		mmhos/cm	"	B711304	"	09/13/2017	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**E02@10'**  
**9/13/2017 3:02:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709163-02 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B711306	09/13/2017	09/13/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 69.7 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>14.1</b>	5.00	mg/kg	25	B711302	"	09/13/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	ND	0.050	"	"	"	"	"	U

*Surrogate: 1,2-Dichloroethane-d4* 88.3 % 70-130 " " "  
*Surrogate: Toluene-d8* 102 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 104 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.77</b>		pH Units	1	B711303	09/13/2017	09/13/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.354</b>		mmhos/cm	"	B711304	"	09/13/2017	
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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 - Guy Jones GU 1

**S02@10'**  
**9/13/2017 3:04:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709163-03 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B711306	09/13/2017	09/13/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 74.2 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>157</b>	5.00	mg/kg	25	B711302	"	09/13/2017	
Benzene	<b>0.689</b>	0.050	"	"	"	"	"	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	<b>0.962</b>	0.050	"	"	"	"	"	
Xylenes, total	<b>3.59</b>	0.050	"	"	"	"	"	

*Surrogate: 1,2-Dichloroethane-d4* 89.0 % 70-130 " " "  
*Surrogate: Toluene-d8* 94.9 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 119 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>9.00</b>		pH Units	1	B711303	09/13/2017	09/13/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.394</b>		mmhos/cm	"	B711304	"	09/13/2017	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**S03@10'**  
**9/13/2017 3:06:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709163-04 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B711306	09/13/2017	09/13/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 76.9 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	B711302	"	09/13/2017	U
Benzene	ND	0.002	"	"	"	"	"	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	<b>0.002</b>	0.002	"	"	"	"	"	
Xylenes, total	ND	0.002	"	"	"	"	"	U

*Surrogate: 1,2-Dichloroethane-d4* 96.6 % 70-130 " " "  
*Surrogate: Toluene-d8* 102 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 99.0 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.14</b>		pH Units	1	B711303	09/13/2017	09/13/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.970</b>		mmhos/cm	"	B711304	"	09/13/2017	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**W02@10'**  
**9/13/2017 3:08:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709163-05 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	215	25.0	mg/kg	1	B711306	09/13/2017	09/13/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 76.4 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	520	50.0	mg/kg	250	B711302	"	09/13/2017	
Benzene	ND	0.050	"	25	"	"	09/14/2017	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	2.26	0.050	"	"	"	"	"	
Xylenes, total	14.5	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 89.5 % 70-130 " " "  
 Surrogate: Toluene-d8 80.4 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 105 % 70-130 " " 09/13/2017

**pH in Soil by EPA 9045D**

pH	9.02		pH Units	1	B711303	09/13/2017	09/13/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.429		mmhos/cm	"	B711304	"	09/13/2017	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**W03@10'**  
**9/13/2017 3:10:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709163-06 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	60.4	25.0	mg/kg	1	B711306	09/13/2017	09/13/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 69.7 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	43.0	5.00	mg/kg	25	B711302	"	09/13/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4 88.2 % 70-130 " " "  
 Surrogate: Toluene-d8 103 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 113 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	9.00		pH Units	1	B711303	09/13/2017	09/13/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.411		mmhos/cm	"	B711304	"	09/13/2017	
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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**B02@11'**  
**9/13/2017 3:12:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709163-07 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B711306	09/13/2017	09/13/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 72.7 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	B711302	"	09/13/2017	U
Benzene	ND	0.002	"	"	"	"	"	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

*Surrogate: 1,2-Dichloroethane-d4* 99.7 % 70-130 " " "  
*Surrogate: Toluene-d8* 100 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 103 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	8.59		pH Units	1	B711303	09/13/2017	09/13/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.578		mmhos/cm	"	B711304	"	09/13/2017	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**B03@11'**  
**9/13/2017 3:14:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709163-08 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B711306	09/13/2017	09/13/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 78.6 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>34.9</b>	5.00	mg/kg	25	B711302	"	09/13/2017	
Benzene	<b>0.064</b>	0.050	"	"	"	"	"	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	<b>0.142</b>	0.050	"	"	"	"	"	
Xylenes, total	<b>0.114</b>	0.050	"	"	"	"	"	

*Surrogate: 1,2-Dichloroethane-d4* 90.1 % 70-130 " " "  
*Surrogate: Toluene-d8* 102 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 103 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.66</b>		pH Units	1	B711303	09/13/2017	09/13/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.565</b>		mmhos/cm	"	B711304	"	09/13/2017	
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Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**B04@11'**  
**9/13/2017 3:16:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709163-09 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B711306	09/13/2017	09/13/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 68.9 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	B711302	"	09/13/2017	U
Benzene	ND	0.002	"	"	"	"	"	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

*Surrogate: 1,2-Dichloroethane-d4* 100 % 70-130 " " "  
*Surrogate: Toluene-d8* 102 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 101 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	8.37		pH Units	1	B711303	09/13/2017	09/13/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.879		mmhos/cm	"	B711304	"	09/13/2017	
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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 - Guy Jones GU 1

**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 B711302 - EPA 5030 (soil)**

**Blank (B711302-BLK1)**

Prepared: 09/13/2017 Analyzed: 09/13/2017

Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	58		ug/kg	62.5		92.8	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.5	70-130			

Origins Laboratory, Inc.



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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711302 - EPA 5030 (soil)**

**LCS (B711302-BS1)**

Prepared: 09/13/2017 Analyzed: 09/13/2017

Benzene	0.092	0.002	mg/kg	0.100		92.0	77.1-124			
Toluene	0.094	0.002	"	0.100		94.2	74.5-128			
Ethylbenzene	0.088	0.002	"	0.100		87.6	66.4-127			
m,p-Xylene	0.170	0.004	"	0.200		84.9	76.6-124			
o-Xylene	0.087	0.002	"	0.100		86.9	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	56		ug/kg	62.5		89.1	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		95.8	70-130			

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 - Guy Jones GU 1

**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 B711302 - EPA 5030 (soil)

Matrix Spike (B711302-MS1)	Source: Y709138-01			Prepared: 09/13/2017 Analyzed: 09/13/2017						
Benzene	0.102	0.002	mg/kg	0.100	0.009	93.4	71.8-126			
Toluene	0.114	0.002	"	0.100	0.055	59.0	65.1-130			QM-07
Ethylbenzene	0.114	0.002	"	0.100	0.038	76.2	62.2-130			
m,p-Xylene	0.260	0.004	"	0.200	0.165	47.6	46.5-137			
o-Xylene	0.136	0.002	"	0.100	0.081	55.3	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	57		ug/kg	62.5		91.9	70-130			
Surrogate: Toluene-d8	56		"	62.5		90.0	70-130			
Surrogate: 4-Bromofluorobenzene	67		"	62.5		107	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711302 - EPA 5030 (soil)

Matrix Spike Dup (B711302-MSD1)	Source: Y709138-01			Prepared: 09/13/2017 Analyzed: 09/13/2017						
Benzene	0.103	0.002	mg/kg	0.100	0.009	94.6	71.8-126	1.15	11.3	
Toluene	0.127	0.002	"	0.100	0.055	71.5	65.1-130	10.4	15.4	
Ethylbenzene	0.128	0.002	"	0.100	0.038	89.7	62.2-130	11.1	19.6	
m,p-Xylene	0.308	0.004	"	0.200	0.165	71.4	46.5-137	16.8	19.2	
o-Xylene	0.161	0.002	"	0.100	0.081	80.1	54.2-134	16.6	17.9	
Surrogate: 1,2-Dichloroethane-d4	60		ug/kg	62.5		95.3	70-130			
Surrogate: Toluene-d8	55		"	62.5		87.7	70-130			
Surrogate: 4-Bromofluorobenzene	69		"	62.5		111	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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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**Extractable Petroleum Hydrocarbons by 8015C - 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 B711306 - EPA 3580**

**Blank (B711306-BLK1)**

Prepared: 09/13/2017 Analyzed: 09/13/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	44		"	50.0		88.7	59-131			

**Blank (B711306-BLK2)**

Prepared: 09/13/2017 Analyzed: 09/14/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	45		"	50.0		89.2	59-131			

**LCS (B711306-BS1)**

Prepared: 09/13/2017 Analyzed: 09/13/2017

Diesel (C10-C28)	875	50.0	mg/kg	1000		87.5	64-121			
Residual Range Organics (C28-C40)	1010	200	"	1000		101	58-124			
Surrogate: o-Terphenyl	45		"	50.0		90.6	59-131			

**LCS (B711306-BS2)**

Prepared: 09/13/2017 Analyzed: 09/14/2017

Diesel (C10-C28)	887	50.0	mg/kg	1000		88.7	64-121			
Residual Range Organics (C28-C40)	1060	200	"	1000		106	58-124			
Surrogate: o-Terphenyl	46		"	50.0		91.1	59-131			

**Matrix Spike (B711306-MS1)**

Source: Y709138-01

Prepared: 09/13/2017 Analyzed: 09/13/2017

Diesel (C10-C28)	1000	50.0	mg/kg	1000	198	80.7	53-125			
Residual Range Organics (C28-C40)	1080	200	"	1000	91.8	98.4	47-133			

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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**Extractable Petroleum Hydrocarbons by 8015C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B711306 - EPA 3580</b>										
<b>Matrix Spike (B711306-MS1)</b>		<b>Source: Y709138-01</b>			Prepared: 09/13/2017 Analyzed: 09/13/2017					
Surrogate: o-Terphenyl	47		mg/kg	50.0		94.3	59-131			
<b>Matrix Spike (B711306-MS2)</b>		<b>Source: Y709159-01</b>			Prepared: 09/13/2017 Analyzed: 09/14/2017					
Diesel (C10-C28)	1180	50.0	mg/kg	1000	22.6	115	53-125			
Residual Range Organics (C28-C40)	1400	200	"	1000	26.0	137	47-133			QM-07
Surrogate: o-Terphenyl	63		"	50.0		126	59-131			
<b>Matrix Spike Dup (B711306-MSD1)</b>		<b>Source: Y709138-01</b>			Prepared: 09/13/2017 Analyzed: 09/13/2017					
Diesel (C10-C28)	1130	50.0	mg/kg	1000	198	93.0	53-125	14.2	20	
Residual Range Organics (C28-C40)	1110	200	"	1000	91.8	102	47-133	3.47	20	
Surrogate: o-Terphenyl	51		"	50.0		102	59-131			
<b>Matrix Spike Dup (B711306-MSD2)</b>		<b>Source: Y709159-01</b>			Prepared: 09/13/2017 Analyzed: 09/14/2017					
Diesel (C10-C28)	1050	50.0	mg/kg	1000	22.6	103	53-125	11.5	20	
Residual Range Organics (C28-C40)	1270	200	"	1000	26.0	124	47-133	9.98	20	
Surrogate: o-Terphenyl	57		"	50.0		114	59-131			

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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B711303 - NO PREP</b>										
<b>Duplicate (B711303-DUP1)</b>		<b>Source: Y709070-01</b>			Prepared: 09/13/2017 Analyzed: 09/13/2017					
pH	8.08		pH Units		8.26			2.20	25	
<b>Duplicate (B711303-DUP2)</b>		<b>Source: Y709070-02</b>			Prepared: 09/13/2017 Analyzed: 09/13/2017					
pH	8.52		pH Units		8.66			1.63	25	
<b>Batch B711304 - NO PREP</b>										
<b>Blank (B711304-BLK1)</b>		Prepared: 09/11/2017 Analyzed: 09/13/2017								
Specific Conductance (EC)	0.00390		mmhos/cm							
<b>Duplicate (B711304-DUP1)</b>		<b>Source: Y709070-01</b>			Prepared: 09/11/2017 Analyzed: 09/13/2017					
Specific Conductance (EC)	0.336		mmhos/cm		0.368			9.05	25	
<b>Duplicate (B711304-DUP2)</b>		<b>Source: Y709070-02</b>			Prepared: 09/11/2017 Analyzed: 09/13/2017					
Specific Conductance (EC)	0.193		mmhos/cm		0.182			5.88	25	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Guy Jones GU 1

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**Notes and Definitions**

U Sample is Non-Detect.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

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

September 15, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver CO 80211

Project Name - KMG - Guy Jones GU 1

Project Number - [none]

Attached are your analytical results for KMG - Guy Jones GU 1 received by Origins Laboratory, Inc. September 14, 2017. This project is associated with Origins project number Y709184-01.

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 - Guy Jones GU 1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
E03@10'	Y709184-01	Soil	September 14, 2017 15:20	09/14/2017 17:00
S04@10'	Y709184-02	Soil	September 14, 2017 15:25	09/14/2017 17:00
S05@10'	Y709184-03	Soil	September 14, 2017 15:32	09/14/2017 17:00
W04@10'	Y709184-04	Soil	September 14, 2017 15:38	09/14/2017 17:00
N03@10'	Y709184-05	Soil	September 14, 2017 15:45	09/14/2017 17:00

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 7709184 Client: Tasman  
 Client Project ID: KMG - Guy Jones GU # 1  
 Checklist Completed by: DL Shipped Via: pick-up  
 Date/time completed: 9-14-12 1737 (UPS, FedEx, Hand Delivered, Pick-Up, etc.)  
 Airbill #: NA  
 Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_  
 Cooler Number/Temperature: 16.0 °C  °C  °C (Describe)  
 Thermometer ID: 1003

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"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" 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 checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			pH
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? <b>If yes, contact client and note in narrative.</b>			<input checked="" 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 checked="" 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 9-14-12 1737

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 - Guy Jones GU 1

**E03@10'**  
**9/14/2017 3:20:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709184-01 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B711403	09/14/2017	09/14/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 84.2 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	ND	5.00	mg/kg	25	B711402	09/14/2017	09/14/2017	U
Benzene	<b>0.100</b>	0.050	"	"	"	"	"	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	<b>0.127</b>	0.050	"	"	"	"	"	
Xylenes, total	<b>0.207</b>	0.050	"	"	"	"	"	

*Surrogate: 1,2-Dichloroethane-d4* 91.5 % 70-130 " " "  
*Surrogate: Toluene-d8* 102 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 98.2 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.79</b>		pH Units	1	B711307	09/14/2017	09/14/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.682</b>		mmhos/cm	"	B711308	09/14/2017	"	
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Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**S04@10'**  
**9/14/2017 3:25:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709184-02 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	260	25.0	mg/kg	1	B711403	09/14/2017	09/15/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 108 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	73.7	5.00	mg/kg	25	B711402	09/14/2017	09/14/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4 90.3 % 70-130 " " "  
 Surrogate: Toluene-d8 101 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 124 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	8.19		pH Units	1	B711307	09/14/2017	09/14/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	1.01		mmhos/cm	"	B711308	09/14/2017	"	
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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 - Guy Jones GU 1

**S05@10'**

**9/14/2017 3:32:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709184-03 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	<b>474</b>	25.0	mg/kg	1	B711403	09/14/2017	09/14/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 117 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>340</b>	5.00	mg/kg	25	B711402	09/14/2017	09/14/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	<b>0.461</b>	0.050	"	"	"	"	"	
Xylenes, total	<b>0.630</b>	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 90.9 % 70-130 " " "  
 Surrogate: Toluene-d8 104 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 189 % 70-130 " " " S-04

**pH in Soil by EPA 9045D**

pH	<b>8.16</b>		pH Units	1	B711307	09/14/2017	09/14/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>1.75</b>		mmhos/cm	"	B711308	09/14/2017	"	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**W04@10'**  
**9/14/2017 3:38:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709184-04 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	<b>86.4</b>	25.0	mg/kg	1	B711403	09/14/2017	09/14/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 118 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>81.0</b>	5.00	mg/kg	25	B711402	09/14/2017	09/14/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	<b>0.331</b>	0.050	"	"	"	"	"	
Xylenes, total	<b>0.351</b>	0.050	"	"	"	"	"	

*Surrogate: 1,2-Dichloroethane-d4* 89.1 % 70-130 " " "  
*Surrogate: Toluene-d8* 99.6 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 117 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.60</b>		pH Units	1	B711307	09/14/2017	09/14/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>1.70</b>		mmhos/cm	"	B711308	09/14/2017	"	
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Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**N03@10'**  
**9/14/2017 3:45:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709184-05 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	108	25.0	mg/kg	1	B711403	09/14/2017	09/14/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 110 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	77.9	5.00	mg/kg	25	B711402	09/14/2017	09/14/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	0.173	0.050	"	"	"	"	"	
Xylenes, total	ND	0.050	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4 87.5 % 70-130 " " "  
 Surrogate: Toluene-d8 102 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 122 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	8.81		pH Units	1	B711307	09/14/2017	09/14/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.808		mmhos/cm	"	B711308	09/14/2017	"	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711402 - EPA 5030 (soil)**

**Blank (B711402-BLK1)**

Prepared: 09/14/2017 Analyzed: 09/14/2017

Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	56		ug/kg	62.5		89.4	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

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 Project: KMG - Guy Jones GU 1

**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 B711402 - EPA 5030 (soil)</b>										
<b>Blank (B711402-BLK2)</b>										
					Prepared: 09/14/2017 Analyzed: 09/14/2017					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	61		ug/kg	62.5		97.4	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.9	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711402 - EPA 5030 (soil)

**LCS (B711402-BS1)**

Prepared: 09/14/2017 Analyzed: 09/14/2017

Benzene	0.096	0.002	mg/kg	0.100		96.2	77.1-124			
Toluene	0.096	0.002	"	0.100		95.9	74.5-128			
Ethylbenzene	0.093	0.002	"	0.100		93.4	66.4-127			
m,p-Xylene	0.180	0.004	"	0.200		90.0	76.6-124			
o-Xylene	0.092	0.002	"	0.100		92.1	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	55		ug/kg	62.5		87.6	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.6	70-130			

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 Project: KMG - Guy Jones GU 1

**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 B711402 - EPA 5030 (soil)**

**LCS (B711402-BS2)**

Prepared: 09/14/2017 Analyzed: 09/14/2017

Benzene	0.097	0.002	mg/kg	0.100		97.4	77.1-124			
Toluene	0.096	0.002	"	0.100		96.3	74.5-128			
Ethylbenzene	0.094	0.002	"	0.100		94.2	66.4-127			
m,p-Xylene	0.184	0.004	"	0.200		92.2	76.6-124			
o-Xylene	0.094	0.002	"	0.100		94.2	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	56		ug/kg	62.5		89.8	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.7	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.6	70-130			

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Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711402 - EPA 5030 (soil)

Matrix Spike (B711402-MS1)	Source: Y709160-01			Prepared: 09/14/2017 Analyzed: 09/14/2017						
Benzene	0.100	0.002	mg/kg	0.100	ND	99.9	71.8-126			
Toluene	0.100	0.002	"	0.100	ND	99.8	65.1-130			
Ethylbenzene	0.096	0.002	"	0.100	ND	95.6	62.2-130			
m,p-Xylene	0.186	0.004	"	0.200	ND	92.8	46.5-137			
o-Xylene	0.095	0.002	"	0.100	ND	95.1	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	57		ug/kg	62.5		90.8	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.4	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.4	70-130			

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Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711402 - EPA 5030 (soil)

Matrix Spike (B711402-MS2)	Source: Y709160-02			Prepared: 09/14/2017 Analyzed: 09/14/2017						
Benzene	0.088	0.002	mg/kg	0.100	ND	88.4	71.8-126			
Toluene	0.088	0.002	"	0.100	ND	88.2	65.1-130			
Ethylbenzene	0.086	0.002	"	0.100	ND	85.6	62.2-130			
m,p-Xylene	0.164	0.004	"	0.200	ND	82.2	46.5-137			
o-Xylene	0.085	0.002	"	0.100	ND	84.7	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	57		ug/kg	62.5		90.7	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.6	70-130			

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 Project: KMG - Guy Jones GU 1

**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 B711402 - EPA 5030 (soil)

Matrix Spike Dup (B711402-MSD1)	Source: Y709160-01			Prepared: 09/14/2017 Analyzed: 09/14/2017						
Benzene	0.080	0.002	mg/kg	0.100	ND	79.5	71.8-126	22.8	11.3	QR-02
Toluene	0.079	0.002	"	0.100	ND	79.5	65.1-130	22.7	15.4	QR-02
Ethylbenzene	0.075	0.002	"	0.100	ND	75.3	62.2-130	23.8	19.6	QR-02
m,p-Xylene	0.148	0.004	"	0.200	ND	74.2	46.5-137	22.3	19.2	QR-02
o-Xylene	0.075	0.002	"	0.100	ND	75.1	54.2-134	23.6	17.9	QR-02
Surrogate: 1,2-Dichloroethane-d4	58		ug/kg	62.5		93.6	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.2	70-130			

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Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711402 - EPA 5030 (soil)

Matrix Spike Dup (B711402-MSD2)	Source: Y709160-02			Prepared: 09/14/2017 Analyzed: 09/14/2017						
Benzene	0.088	0.002	mg/kg	0.100	ND	87.9	71.8-126	0.499	11.3	
Toluene	0.088	0.002	"	0.100	ND	88.4	65.1-130	0.226	15.4	
Ethylbenzene	0.084	0.002	"	0.100	ND	83.9	62.2-130	1.96	19.6	
m,p-Xylene	0.163	0.004	"	0.200	ND	81.6	46.5-137	0.782	19.2	
o-Xylene	0.083	0.002	"	0.100	ND	83.3	54.2-134	1.69	17.9	
Surrogate: 1,2-Dichloroethane-d4	58		ug/kg	62.5		93.3	70-130			
Surrogate: Toluene-d8	63		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.8	70-130			

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Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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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**Extractable Petroleum Hydrocarbons by 8015C - 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 B711403 - EPA 3550B**

**Blank (B711403-BLK1)**

Prepared: 09/14/2017 Analyzed: 09/14/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	65		"	50.0		130	59-131			

**Blank (B711403-BLK2)**

Prepared: 09/14/2017 Analyzed: 09/15/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	57		"	50.0		115	59-131			

**LCS (B711403-BS1)**

Prepared: 09/14/2017 Analyzed: 09/14/2017

Diesel (C10-C28)	1210	50.0	mg/kg	1000		121	64-121			
Residual Range Organics (C28-C40)	1210	200	"	1000		121	58-124			
Surrogate: o-Terphenyl	65		"	50.0		130	59-131			

**LCS (B711403-BS2)**

Prepared: 09/14/2017 Analyzed: 09/15/2017

Diesel (C10-C28)	1120	50.0	mg/kg	1000		112	64-121			
Residual Range Organics (C28-C40)	1090	200	"	1000		109	58-124			
Surrogate: o-Terphenyl	65		"	50.0		131	59-131			

**Matrix Spike (B711403-MS1)**

**Source: Y709166-03**

Prepared: 09/14/2017 Analyzed: 09/15/2017

Diesel (C10-C28)	2090	50.0	mg/kg	1000	1970	11.5	53-125			QM-02
Residual Range Organics (C28-C40)	2260	200	"	1000	812	145	47-133			QM-02

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 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**Extractable Petroleum Hydrocarbons by 8015C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B711403 - EPA 3550B</b>										
<b>Matrix Spike (B711403-MS1)</b>			<b>Source: Y709166-03</b>		Prepared: 09/14/2017 Analyzed: 09/15/2017					
Surrogate: o-Terphenyl	42		mg/kg	50.0		83.5	59-131			
<b>Matrix Spike (B711403-MS2)</b>			<b>Source: Y709166-02</b>		Prepared: 09/14/2017 Analyzed: 09/14/2017					
Diesel (C10-C28)	1570	50.0	mg/kg	1000	451	112	53-125			
Residual Range Organics (C28-C40)	1270	200	"	1000	199	107	47-133			
Surrogate: o-Terphenyl	63		"	50.0		127	59-131			
<b>Matrix Spike Dup (B711403-MSD1)</b>			<b>Source: Y709166-03</b>		Prepared: 09/14/2017 Analyzed: 09/14/2017					
Diesel (C10-C28)	2100	50.0	mg/kg	1000	1970	13.2	53-125	14.0	20	QM-02
Residual Range Organics (C28-C40)	1480	200	"	1000	812	67.2	47-133	73.1	20	QM-02
Surrogate: o-Terphenyl	65		"	50.0		131	59-131			
<b>Matrix Spike Dup (B711403-MSD2)</b>			<b>Source: Y709166-02</b>		Prepared: 09/14/2017 Analyzed: 09/15/2017					
Diesel (C10-C28)	1170	50.0	mg/kg	1000	451	71.9	53-125	43.3	20	QR-02
Residual Range Organics (C28-C40)	1150	200	"	1000	199	94.7	47-133	11.9	20	
Surrogate: o-Terphenyl	58		"	50.0		117	59-131			

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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B711307 - NO PREP</b>										
<b>Duplicate (B711307-DUP1)</b>		<b>Source: Y709138-01</b>			Prepared: 09/13/2017 Analyzed: 09/14/2017					
pH	8.02		pH Units		8.06			0.498	25	
<b>Batch B711308 - NO PREP</b>										
<b>Blank (B711308-BLK1)</b>		Prepared: 09/14/2017 Analyzed: 09/14/2017								
Specific Conductance (EC)	0.00390		mmhos/cm							
<b>Duplicate (B711308-DUP1)</b>		<b>Source: Y709138-01</b>			Prepared: 09/13/2017 Analyzed: 09/14/2017					
Specific Conductance (EC)	0.0544		mmhos/cm		0.0537			1.30	25	

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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Guy Jones GU 1

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**Notes and Definitions**

- U Sample is Non-Detect.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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.
- QM-02 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
- 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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September 19, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver CO 80211

Project Name - KMG - Guy Jones GU 1

Project Number - [none]

Attached are your analytical results for KMG - Guy Jones GU 1 received by Origins Laboratory, Inc. September 18, 2017. This project is associated with Origins project number Y709230-01.

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 - Guy Jones GU 1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W05@9'	Y709230-01	Soil	September 18, 2017 14:25	09/18/2017 16:48
B05@10'	Y709230-02	Soil	September 18, 2017 14:30	09/18/2017 16:48
E04@7'	Y709230-03	Soil	September 18, 2017 14:35	09/18/2017 16:48
B06@8'	Y709230-04	Soil	September 18, 2017 14:40	09/18/2017 16:48
N04@7'	Y709230-05	Soil	September 18, 2017 14:45	09/18/2017 16:48
S06@7'	Y709230-06	Soil	September 18, 2017 14:50	09/18/2017 16:48

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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: 1709230

Client: Tasman

Client Project ID: KMG - Guy Jones GU 1

Checklist Completed by: DHL

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

Date/time completed: 9-18-17

Airbill #: NA

Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_

Cooler Number/Temperature: 1 27.4 °C 1 °C 1 °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"/>		sampled same day
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" 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 checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)?</sup>	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)?</sup>	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)?</sup>	<input checked="" type="checkbox"/>			pH
Is a chain-of-custody (COC) present and filled out completely <sup>(1)?</sup>	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)?</sup>	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)?</sup>	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)?</sup>	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" 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 HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)		<input checked="" 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 9-18-17

Origins Laboratory, Inc.

*Jefe Pellegrini*

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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**W05@9'**  
**9/18/2017 2:25:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709230-01 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B71803	09/18/2017	09/18/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 77.0 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>0.789</b>	0.200	mg/kg	1	B71805	09/18/2017	09/18/2017	
Benzene	<b>0.021</b>	0.002	"	"	"	"	"	
Toluene	<b>0.034</b>	0.002	"	"	"	"	"	
Ethylbenzene	<b>0.007</b>	0.002	"	"	"	"	"	
Xylenes, total	<b>0.100</b>	0.002	"	"	"	"	"	

*Surrogate: 1,2-Dichloroethane-d4* 100 % 70-130 " " "  
*Surrogate: Toluene-d8* 96.3 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 104 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.50</b>		pH Units	1	B71806	09/18/2017	09/18/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.552</b>		mmhos/cm	"	B71807	09/18/2017	"	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**B05@10'**  
**9/18/2017 2:30:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709230-02 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B711803	09/18/2017	09/18/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 69.9 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	B711805	09/18/2017	09/18/2017	U
Benzene	<b>0.017</b>	0.002	"	"	"	"	"	
Toluene	<b>0.024</b>	0.002	"	"	"	"	"	
Ethylbenzene	<b>0.004</b>	0.002	"	"	"	"	"	
Xylenes, total	<b>0.054</b>	0.002	"	"	"	"	"	

*Surrogate: 1,2-Dichloroethane-d4* 102 % 70-130 " " "  
*Surrogate: Toluene-d8* 97.2 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 97.4 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.19</b>		pH Units	1	B711806	09/18/2017	09/18/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.525</b>		mmhos/cm	"	B711807	09/18/2017	"	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**E04@7'**

**9/18/2017 2:35:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709230-03 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	441	25.0	mg/kg	1	B711803	09/18/2017	09/18/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 77.8 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	2400	50.0	mg/kg	250	B711805	09/18/2017	09/18/2017	
Benzene	6.30	0.498	"	"	"	"	"	
Toluene	43.5	0.498	"	"	"	"	"	
Ethylbenzene	11.1	0.498	"	"	"	"	"	
Xylenes, total	147	0.498	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 91.8 % 70-130 " " "

Surrogate: Toluene-d8 87.2 % 70-130 " " "

Surrogate: 4-Bromofluorobenzene 121 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	8.93		pH Units	1	B711806	09/18/2017	09/18/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.353		mmhos/cm	"	B711807	09/18/2017	"	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**B06@8'**  
**9/18/2017 2:40:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709230-04 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	148	25.0	mg/kg	1	B711803	09/18/2017	09/18/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 88.0 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	2860	50.0	mg/kg	250	B711805	09/18/2017	09/19/2017	
Benzene	7.35	0.050	"	25	"	"	09/18/2017	
Toluene	18.9	0.498	"	250	"	"	09/19/2017	
Ethylbenzene	7.76	0.050	"	25	"	"	09/18/2017	
Xylenes, total	163	0.498	"	250	"	"	09/19/2017	

Surrogate: 1,2-Dichloroethane-d4 87.5 % 70-130 " " 09/18/2017

Surrogate: Toluene-d8 84.0 % 70-130 " " "

Surrogate: 4-Bromofluorobenzene 120 % 70-130 " " 09/19/2017

**pH in Soil by EPA 9045D**

pH	9.08		pH Units	1	B711806	09/18/2017	09/18/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.184		mmhos/cm	"	B711807	09/18/2017	"	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**N04@7'**  
**9/18/2017 2:45:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709230-05 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B71803	09/18/2017	09/18/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 96.9 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>18.5</b>	5.00	mg/kg	25	B71805	09/18/2017	09/18/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	<b>0.080</b>	0.050	"	"	"	"	"	
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	<b>0.493</b>	0.050	"	"	"	"	"	

*Surrogate: 1,2-Dichloroethane-d4* 86.5 % 70-130 " " "  
*Surrogate: Toluene-d8* 102 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 99.1 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.63</b>		pH Units	1	B71806	09/18/2017	09/18/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.163</b>		mmhos/cm	"	B71807	09/18/2017	"	
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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**S06@7'**  
**9/18/2017 2:50:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709230-06 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	68.8	25.0	mg/kg	1	B711803	09/18/2017	09/18/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 74.9 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	359	5.00	mg/kg	25	B711805	09/18/2017	09/19/2017	
Benzene	0.096	0.050	"	"	"	"	"	
Toluene	0.148	0.050	"	"	"	"	"	
Ethylbenzene	0.940	0.050	"	"	"	"	"	
Xylenes, total	6.29	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 89.6 % 70-130 " " "  
 Surrogate: Toluene-d8 80.9 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 169 % 70-130 " " " S-04

**pH in Soil by EPA 9045D**

pH	9.10		pH Units	1	B711806	09/18/2017	09/18/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.279		mmhos/cm	"	B711807	09/18/2017	"	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711805 - EPA 5030 (soil)**

**Blank (B711805-BLK1)**

Prepared: 09/18/2017 Analyzed: 09/18/2017

Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		100	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		102	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711805 - EPA 5030 (soil)**

**Blank (B711805-BLK2)**

Prepared: 09/18/2017 Analyzed: 09/18/2017

Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	61		ug/kg	62.5		97.0	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		100	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711805 - EPA 5030 (soil)**

**LCS (B711805-BS1)**

Prepared: 09/18/2017 Analyzed: 09/18/2017

Benzene	0.102	0.002	mg/kg	0.100		102	77.1-124			
Toluene	0.100	0.002	"	0.100		100	74.5-128			
Ethylbenzene	0.100	0.002	"	0.100		100	66.4-127			
m,p-Xylene	0.194	0.004	"	0.200		97.0	76.6-124			
o-Xylene	0.098	0.002	"	0.100		98.2	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711805 - EPA 5030 (soil)**

**LCS (B711805-BS2)**

Prepared: 09/18/2017 Analyzed: 09/18/2017

Benzene	0.096	0.002	mg/kg	0.100		95.5	77.1-124			
Toluene	0.091	0.002	"	0.100		91.0	74.5-128			
Ethylbenzene	0.088	0.002	"	0.100		88.5	66.4-127			
m,p-Xylene	0.171	0.004	"	0.200		85.6	76.6-124			
o-Xylene	0.085	0.002	"	0.100		85.3	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	59		ug/kg	62.5		93.7	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.4	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.6	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711805 - EPA 5030 (soil)

Matrix Spike (B711805-MS1)	Source: Y709207-01			Prepared: 09/18/2017 Analyzed: 09/18/2017						
Benzene	0.095	0.002	mg/kg	0.100	ND	95.2	71.8-126			
Toluene	0.096	0.002	"	0.100	ND	95.6	65.1-130			
Ethylbenzene	0.092	0.002	"	0.100	ND	92.2	62.2-130			
m,p-Xylene	0.177	0.004	"	0.200	ND	88.5	46.5-137			
o-Xylene	0.088	0.002	"	0.100	ND	88.1	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711805 - EPA 5030 (soil)

Matrix Spike (B711805-MS2)	Source: Y709230-01			Prepared: 09/18/2017 Analyzed: 09/18/2017						
Benzene	0.091	0.002	mg/kg	0.100	0.021	70.6	71.8-126			QM-07
Toluene	0.092	0.002	"	0.100	0.034	57.9	65.1-130			QM-07
Ethylbenzene	0.078	0.002	"	0.100	0.007	70.7	62.2-130			QM-07
m,p-Xylene	0.174	0.004	"	0.200	0.080	47.0	46.5-137			
o-Xylene	0.079	0.002	"	0.100	0.020	59.2	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		100	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.5	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711805 - EPA 5030 (soil)

Matrix Spike Dup (B711805-MSD1)	Source: Y709207-01			Prepared: 09/18/2017 Analyzed: 09/18/2017						
Benzene	0.095	0.002	mg/kg	0.100	ND	95.2	71.8-126	0.0630	11.3	
Toluene	0.095	0.002	"	0.100	ND	95.1	65.1-130	0.587	15.4	
Ethylbenzene	0.088	0.002	"	0.100	ND	88.3	62.2-130	4.28	19.6	
m,p-Xylene	0.170	0.004	"	0.200	ND	84.8	46.5-137	4.23	19.2	
o-Xylene	0.085	0.002	"	0.100	ND	85.4	54.2-134	3.13	17.9	
Surrogate: 1,2-Dichloroethane-d4	66		ug/kg	62.5		105	70-130			
Surrogate: Toluene-d8	65		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

Origins Laboratory, Inc.



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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711805 - EPA 5030 (soil)

Matrix Spike Dup (B711805-MSD2)	Source: Y709230-01			Prepared: 09/18/2017 Analyzed: 09/18/2017						
Benzene	0.083	0.002	mg/kg	0.100	0.021	62.4	71.8-126	9.36	11.3	QM-07
Toluene	0.083	0.002	"	0.100	0.034	48.8	65.1-130	10.4	15.4	QM-07
Ethylbenzene	0.070	0.002	"	0.100	0.007	63.1	62.2-130	10.2	19.6	QM-07
m,p-Xylene	0.155	0.004	"	0.200	0.080	37.2	46.5-137	11.9	19.2	QM-07
o-Xylene	0.072	0.002	"	0.100	0.020	52.3	54.2-134	9.16	17.9	QM-07
Surrogate: 1,2-Dichloroethane-d4	64		ug/kg	62.5		102	70-130			
Surrogate: Toluene-d8	60		"	62.5		95.4	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.0	70-130			

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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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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**Extractable Petroleum Hydrocarbons by 8015C - 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 B711803 - EPA 3550B**

**Blank (B711803-BLK1)**

Prepared: 09/18/2017 Analyzed: 09/18/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	55		"	50.0		110	59-131			

**Blank (B711803-BLK2)**

Prepared: 09/18/2017 Analyzed: 09/18/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	40		"	50.0		80.9	59-131			

**LCS (B711803-BS1)**

Prepared: 09/18/2017 Analyzed: 09/18/2017

Diesel (C10-C28)	1030	50.0	mg/kg				64-121			
Residual Range Organics (C28-C40)	884	200	"				58-124			
Surrogate: o-Terphenyl	55		"	50.0		110	59-131			

**LCS (B711803-BS2)**

Prepared: 09/18/2017 Analyzed: 09/18/2017

Diesel (C10-C28)	968	50.0	mg/kg	1000		96.8	64-121			
Residual Range Organics (C28-C40)	816	200	"	1000		81.6	58-124			
Surrogate: o-Terphenyl	50		"	50.0		101	59-131			

**Matrix Spike (B711803-MS1)**

Source: Y709222-01

Prepared: 09/18/2017 Analyzed: 09/18/2017

Diesel (C10-C28)	895	50.0	mg/kg		20.2		53-125			
Residual Range Organics (C28-C40)	724	200	"		83.6		47-133			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**Extractable Petroleum Hydrocarbons by 8015C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B711803 - EPA 3550B</b>										
<b>Matrix Spike (B711803-MS1)</b>		<b>Source: Y709222-01</b>			Prepared: 09/18/2017 Analyzed: 09/18/2017					
Surrogate: o-Terphenyl	48		mg/kg	50.0		95.8	59-131			
<b>Matrix Spike (B711803-MS2)</b>		<b>Source: Y709207-01</b>			Prepared: 09/18/2017 Analyzed: 09/18/2017					
Diesel (C10-C28)	906	50.0	mg/kg	1000	ND	90.6	53-125			
Residual Range Organics (C28-C40)	740	200	"	1000	26.4	71.4	47-133			
Surrogate: o-Terphenyl	45		"	50.0		90.4	59-131			
<b>Matrix Spike Dup (B711803-MSD1)</b>		<b>Source: Y709222-01</b>			Prepared: 09/18/2017 Analyzed: 09/18/2017					
Diesel (C10-C28)	943	50.0	mg/kg		20.2		53-125		20	
Residual Range Organics (C28-C40)	789	200	"		83.6		47-133		20	
Surrogate: o-Terphenyl	54		"	50.0		107	59-131			
<b>Matrix Spike Dup (B711803-MSD2)</b>		<b>Source: Y709207-01</b>			Prepared: 09/18/2017 Analyzed: 09/18/2017					
Diesel (C10-C28)	1000	50.0	mg/kg	1000	ND	100	53-125	9.96	20	
Residual Range Organics (C28-C40)	845	200	"	1000	26.4	81.8	47-133	13.7	20	
Surrogate: o-Terphenyl	52		"	50.0		105	59-131			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B711806 - NO PREP</b>										
<b>Duplicate (B711806-DUP1)</b>		<b>Source: Y709228-01</b>			Prepared: 09/18/2017 Analyzed: 09/18/2017					
pH	6.96		pH Units		7.91			12.8	25	
<b>Batch B711807 - NO PREP</b>										
<b>Blank (B711807-BLK1)</b>		Prepared: 09/18/2017 Analyzed: 09/18/2017								
Specific Conductance (EC)	0.00570		mmhos/cm							
<b>Duplicate (B711807-DUP1)</b>		<b>Source: Y709228-01</b>			Prepared: 09/18/2017 Analyzed: 09/18/2017					
Specific Conductance (EC)	0.753		mmhos/cm		0.821			8.63	25	

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 - Guy Jones GU 1

---

**Notes and Definitions**

U Sample is Non-Detect.

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

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

September 20, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver CO 80211

Project Name - KMG - Guy Jones GU 1

Project Number - [none]

Attached are your analytical results for KMG - Guy Jones GU 1 received by Origins Laboratory, Inc. September 19, 2017. This project is associated with Origins project number Y709254-01.

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 - Guy Jones GU 1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B07@14'	Y709254-01	Soil	September 19, 2017 11:00	09/19/2017 17:45

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 Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 7709254

Client: Tasman  
 Client Project ID: KMG Guy Jones GU 1

Checklist Completed by: Dr. W  
 Date/time completed: 9-19-12 12:15

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

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

Cooler Number/Temperature:  15.4 °C  \_\_\_\_\_ °C  \_\_\_\_\_ °C  \_\_\_\_\_ °C

Thermometer ID: 603

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"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" 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 checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			pH
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" 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 checked="" 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 9-19-12 12:15

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 - Guy Jones GU 1

**B07@14'**

**9/19/2017 11:00:00AM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709254-01 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	131	25.0	mg/kg	1	B71902	09/19/2017	09/19/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl 85.9 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	223	50.0	mg/kg	250	B71901	09/19/2017	09/19/2017	
Benzene	0.068	0.050	"	25	"	"	09/20/2017	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	0.494	0.050	"	"	"	"	"	
Xylenes, total	6.31	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 91.4 % 70-130 " " "

Surrogate: Toluene-d8 89.9 % 70-130 " " "

Surrogate: 4-Bromofluorobenzene 128 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	9.67		pH Units	1	B71903	09/19/2017	09/20/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.156		mmhos/cm	"	B71904	"	"	
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Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711901 - EPA 5030 (soil)</b>										
<b>Blank (B711901-BLK1)</b>										
					Prepared: 09/19/2017 Analyzed: 09/19/2017					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	54		ug/kg	62.5		86.0	70-130			
Surrogate: Toluene-d8	64		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.7	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711901 - EPA 5030 (soil)**

**LCS (B711901-BS1)**

Prepared: 09/19/2017 Analyzed: 09/19/2017

Benzene	0.099	0.002	mg/kg	0.100		99.0	77.1-124			
Toluene	0.097	0.002	"	0.100		96.9	74.5-128			
Ethylbenzene	0.091	0.002	"	0.100		91.0	66.4-127			
m,p-Xylene	0.173	0.004	"	0.200		86.3	76.6-124			
o-Xylene	0.087	0.002	"	0.100		87.0	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	51		ug/kg	62.5		82.1	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.7	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711901 - EPA 5030 (soil)

Matrix Spike (B711901-MS1)	Source: Y709211-02			Prepared: 09/19/2017 Analyzed: 09/19/2017						
Benzene	0.104	0.002	mg/kg	0.100	ND	104	71.8-126			
Toluene	0.101	0.002	"	0.100	ND	101	65.1-130			
Ethylbenzene	0.094	0.002	"	0.100	ND	93.6	62.2-130			
m,p-Xylene	0.178	0.004	"	0.200	ND	88.9	46.5-137			
o-Xylene	0.089	0.002	"	0.100	ND	88.6	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	51		ug/kg	62.5		82.4	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		95.0	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B711901 - EPA 5030 (soil)

Matrix Spike Dup (B711901-MSD1)	Source: Y709211-02			Prepared: 09/19/2017 Analyzed: 09/19/2017						
Benzene	0.100	0.002	mg/kg	0.100	ND	99.7	71.8-126	4.07	11.3	
Toluene	0.099	0.002	"	0.100	ND	98.7	65.1-130	2.68	15.4	
Ethylbenzene	0.093	0.002	"	0.100	ND	93.0	62.2-130	0.600	19.6	
m,p-Xylene	0.176	0.004	"	0.200	ND	87.9	46.5-137	1.13	19.2	
o-Xylene	0.090	0.002	"	0.100	ND	89.6	54.2-134	1.10	17.9	
Surrogate: 1,2-Dichloroethane-d4	53		ug/kg	62.5		85.3	70-130			
Surrogate: Toluene-d8	63		"	62.5		101	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		98.2	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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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**Extractable Petroleum Hydrocarbons by 8015C - 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 B711902 - EPA 3550B**

**Blank (B711902-BLK1)**

Prepared: 09/19/2017 Analyzed: 09/19/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	49		"	50.0		97.4	59-131			

**LCS (B711902-BS1)**

Prepared: 09/19/2017 Analyzed: 09/19/2017

Diesel (C10-C28)	1130	50.0	mg/kg	1000		113	64-121			
Residual Range Organics (C28-C40)	966	200	"	1000		96.6	58-124			
Surrogate: o-Terphenyl	60		"	50.0		120	59-131			

**Matrix Spike (B711902-MS1)**

Source: Y709211-02

Prepared: 09/19/2017 Analyzed: 09/19/2017

Diesel (C10-C28)	1010	50.0	mg/kg	1000	ND	101	53-125			
Residual Range Organics (C28-C40)	895	200	"	1000	15.4	88.0	47-133			
Surrogate: o-Terphenyl	55		"	50.0		110	59-131			

**Matrix Spike Dup (B711902-MSD1)**

Source: Y709211-02

Prepared: 09/19/2017 Analyzed: 09/19/2017

Diesel (C10-C28)	884	50.0	mg/kg	1000	ND	88.4	53-125	13.5	20	
Residual Range Organics (C28-C40)	731	200	"	1000	15.4	71.6	47-133	20.5	20	QR-02
Surrogate: o-Terphenyl	46		"	50.0		91.4	59-131			

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 - Guy Jones GU 1

**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B711903 - NO PREP</b>										
<b>Duplicate (B711903-DUP1)</b>		<b>Source: Y709211-01</b>			Prepared: 09/19/2017 Analyzed: 09/19/2017					
pH	6.72		pH Units		6.95			3.37	25	
<b>Batch B711904 - NO PREP</b>										
<b>Blank (B711904-BLK1)</b>		Prepared: 09/19/2017 Analyzed: 09/19/2017								
Specific Conductance (EC)	0.00550		mmhos/cm							
<b>Duplicate (B711904-DUP1)</b>		<b>Source: Y709211-01</b>			Prepared: 09/19/2017 Analyzed: 09/19/2017					
Specific Conductance (EC)	0.0299		mmhos/cm		0.0324			8.03	25	

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 - Guy Jones GU 1

---

**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.

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

September 25, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver CO 80211

Project Name - KMG - Guy Jones GU 1

Project Number - [none]

Attached are your analytical results for KMG - Guy Jones GU 1 received by Origins Laboratory, Inc. September 22, 2017. This project is associated with Origins project number Y709313-01.

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 - Guy Jones GU 1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
E05@13'	Y709313-01	Soil	September 22, 2017 14:00	09/22/2017 17:10
S07@13'	Y709313-02	Soil	September 22, 2017 14:02	09/22/2017 17:10
N05@13'	Y709313-03	Soil	September 22, 2017 14:04	09/22/2017 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 - Guy Jones GU 1

Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: 770933 Client: Tasman  
 Client Project ID: KMG - Guy Jones GU 1  
 Checklist Completed by: DL Shipped Via: Pick-up  
 Date/time completed: 9-22-12 1833 (UPS, FedEx, Hand Delivered, Pick-up, etc.)  
 Airbill #: 1833  
 Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_  
 Cooler Number/Temperature: 1 / 4.2 °C 1 / \_\_\_\_\_ °C 1 / \_\_\_\_\_ °C (Describe)  
 Thermometer ID: 1803

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>pH</u>
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? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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)

Date/Time Reviewed

1833

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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**E05@13'**  
**9/22/2017 2:00:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709313-01 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	164	25.0	mg/kg	1	B712205	09/22/2017	09/23/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 91.8 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	99.1	5.00	mg/kg	25	B712204	"	09/22/2017	
Benzene	0.170	0.050	"	"	"	"	"	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	0.415	0.050	"	"	"	"	"	
Xylenes, total	3.54	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 92.4 % 70-130 " " "  
 Surrogate: Toluene-d8 96.8 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 112 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	9.71		pH Units	1	B712206	09/22/2017	09/22/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.278		mmhos/cm	"	B712207	09/22/2017	"	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**S07@13'**  
**9/22/2017 2:02:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709313-02 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B712205	09/22/2017	09/23/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 81.9 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>2.46</b>	0.200	mg/kg	1	B712204	"	09/23/2017	
Benzene	<b>0.012</b>	0.002	"	"	"	"	"	
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	<b>0.028</b>	0.002	"	"	"	"	"	
Xylenes, total	<b>0.067</b>	0.002	"	"	"	"	"	

*Surrogate: 1,2-Dichloroethane-d4* 97.7 % 70-130 " " "  
*Surrogate: Toluene-d8* 97.0 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 108 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.96</b>		pH Units	1	B712206	09/22/2017	09/22/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.168</b>		mmhos/cm	"	B712207	09/22/2017	"	
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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**N05@13'**  
**9/22/2017 2:04:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y709313-03 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	<b>503</b>	25.0	mg/kg	1	B712205	09/22/2017	09/23/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: *o*-Terphenyl 94.9 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>899</b>	50.0	mg/kg	250	B712204	"	09/25/2017	
Benzene	<b>0.460</b>	0.050	"	25	"	"	09/23/2017	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	<b>4.16</b>	0.050	"	"	"	"	"	
Xylenes, total	<b>46.7</b>	0.498	"	250	"	"	09/25/2017	

Surrogate: 1,2-Dichloroethane-d4 90.9 % 70-130 " " 09/23/2017  
 Surrogate: Toluene-d8 84.8 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 110 % 70-130 " " 09/25/2017

**pH in Soil by EPA 9045D**

pH	<b>10.0</b>		pH Units	1	B712206	09/22/2017	09/22/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.196</b>		mmhos/cm	"	B712207	09/22/2017	"	
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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B712204 - EPA 5030 (soil)**

**Blank (B712204-BLK1)**

Prepared: 09/22/2017 Analyzed: 09/22/2017

Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.4	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B712204 - EPA 5030 (soil)</b>										
<b>Blank (B712204-BLK2)</b>										
					Prepared: 09/22/2017 Analyzed: 09/22/2017					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	65		ug/kg	62.5		104	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.6	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	70-130			

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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B712204 - EPA 5030 (soil)**

**LCS (B712204-BS1)**

Prepared: 09/22/2017 Analyzed: 09/22/2017

Benzene	0.100	0.002	mg/kg	0.100		100	77.1-124			
Toluene	0.092	0.002	"	0.100		92.1	74.5-128			
Ethylbenzene	0.090	0.002	"	0.100		90.1	66.4-127			
m,p-Xylene	0.175	0.004	"	0.200		87.4	76.6-124			
o-Xylene	0.087	0.002	"	0.100		86.7	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	62		ug/kg	62.5		99.3	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.2	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.7	70-130			

Origins Laboratory, Inc.



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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B712204 - EPA 5030 (soil)

**LCS (B712204-BS2)**

Prepared: 09/22/2017 Analyzed: 09/22/2017

Benzene	0.104	0.002	mg/kg	0.100		104	77.1-124			
Toluene	0.095	0.002	"	0.100		95.0	74.5-128			
Ethylbenzene	0.095	0.002	"	0.100		94.9	66.4-127			
m,p-Xylene	0.182	0.004	"	0.200		91.2	76.6-124			
o-Xylene	0.091	0.002	"	0.100		91.4	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	62		ug/kg	62.5		99.5	70-130			
Surrogate: Toluene-d8	59		"	62.5		94.7	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.6	70-130			

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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B712204 - EPA 5030 (soil)

Matrix Spike (B712204-MS1)	Source: Y709308-02			Prepared: 09/22/2017 Analyzed: 09/22/2017						
Benzene	0.095	0.002	mg/kg	0.100	ND	95.0	71.8-126			
Toluene	0.085	0.002	"	0.100	ND	85.4	65.1-130			
Ethylbenzene	0.082	0.002	"	0.100	ND	81.8	62.2-130			
m,p-Xylene	0.156	0.004	"	0.200	ND	77.9	46.5-137			
o-Xylene	0.078	0.002	"	0.100	ND	77.9	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		101	70-130			
Surrogate: Toluene-d8	61		"	62.5		98.4	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		98.1	70-130			

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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B712204 - EPA 5030 (soil)

Matrix Spike (B712204-MS2)	Source: Y709308-04			Prepared: 09/22/2017 Analyzed: 09/22/2017						
Benzene	0.103	0.002	mg/kg	0.100	ND	103	71.8-126			
Toluene	0.096	0.002	"	0.100	ND	95.7	65.1-130			
Ethylbenzene	0.091	0.002	"	0.100	ND	91.0	62.2-130			
m,p-Xylene	0.176	0.004	"	0.200	ND	88.0	46.5-137			
o-Xylene	0.088	0.002	"	0.100	ND	88.2	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	61		ug/kg	62.5		98.0	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.2	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		98.2	70-130			

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 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B712204 - EPA 5030 (soil)

Matrix Spike Dup (B712204-MSD1)	Source: Y709308-02			Prepared: 09/22/2017 Analyzed: 09/22/2017						
Benzene	0.091	0.002	mg/kg	0.100	ND	90.9	71.8-126	4.35	11.3	
Toluene	0.083	0.002	"	0.100	ND	82.6	65.1-130	3.36	15.4	
Ethylbenzene	0.081	0.002	"	0.100	ND	81.3	62.2-130	0.662	19.6	
m,p-Xylene	0.152	0.004	"	0.200	ND	75.8	46.5-137	2.79	19.2	
o-Xylene	0.078	0.002	"	0.100	ND	78.5	54.2-134	0.742	17.9	
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		101	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.5	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	70-130			

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 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B712204 - EPA 5030 (soil)

Matrix Spike Dup (B712204-MSD2)	Source: Y709308-04			Prepared: 09/22/2017 Analyzed: 09/22/2017						
Benzene	0.092	0.002	mg/kg	0.100	ND	91.6	71.8-126	12.0	11.3	QR-02
Toluene	0.082	0.002	"	0.100	ND	82.3	65.1-130	15.0	15.4	
Ethylbenzene	0.076	0.002	"	0.100	ND	76.4	62.2-130	17.5	19.6	
m,p-Xylene	0.146	0.004	"	0.200	ND	73.2	46.5-137	18.3	19.2	
o-Xylene	0.074	0.002	"	0.100	ND	74.3	54.2-134	17.1	17.9	
Surrogate: 1,2-Dichloroethane-d4	62		ug/kg	62.5		98.9	70-130			
Surrogate: Toluene-d8	60		"	62.5		95.2	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		100	70-130			

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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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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**Extractable Petroleum Hydrocarbons by 8015C - 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 B712205 - EPA 3550B**

**Blank (B712205-BLK1)**

Prepared: 09/22/2017 Analyzed: 09/22/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	37		"	50.0		73.3	59-131			

**Blank (B712205-BLK2)**

Prepared: 09/22/2017 Analyzed: 09/22/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	42		"	50.0		83.7	59-131			

**LCS (B712205-BS1)**

Prepared: 09/22/2017 Analyzed: 09/22/2017

Diesel (C10-C28)	836	50.0	mg/kg	1000		83.6	64-121			
Residual Range Organics (C28-C40)	872	200	"	1000		87.2	58-124			
Surrogate: o-Terphenyl	39		"	50.0		77.6	59-131			

**LCS (B712205-BS2)**

Prepared: 09/22/2017 Analyzed: 09/22/2017

Diesel (C10-C28)	933	50.0	mg/kg	1000		93.3	64-121			
Residual Range Organics (C28-C40)	1010	200	"	1000		101	58-124			
Surrogate: o-Terphenyl	45		"	50.0		90.6	59-131			

**Matrix Spike (B712205-MS1)**

Source: Y709308-02

Prepared: 09/22/2017 Analyzed: 09/25/2017

Diesel (C10-C28)	1410	50.0	mg/kg	1000	275	113	53-125			
Residual Range Organics (C28-C40)	1550	200	"	1000	283	126	47-133			

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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**Extractable Petroleum Hydrocarbons by 8015C - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B712205 - EPA 3550B</b>										
<b>Matrix Spike (B712205-MS1)</b>			<b>Source: Y709308-02</b>		Prepared: 09/22/2017 Analyzed: 09/25/2017					
Surrogate: o-Terphenyl	54		mg/kg	50.0		108	59-131			
<b>Matrix Spike (B712205-MS2)</b>			<b>Source: Y709308-04</b>		Prepared: 09/22/2017 Analyzed: 09/22/2017					
Diesel (C10-C28)	1040	50.0	mg/kg	1000	204	83.2	53-125			
Residual Range Organics (C28-C40)	1130	200	"	1000	302	82.9	47-133			
Surrogate: o-Terphenyl	49		"	50.0		97.3	59-131			
<b>Matrix Spike Dup (B712205-MSD1)</b>			<b>Source: Y709308-02</b>		Prepared: 09/22/2017 Analyzed: 09/22/2017					
Diesel (C10-C28)	1410	50.0	mg/kg	1000	275	113	53-125	0.0623	20	
Residual Range Organics (C28-C40)	1510	200	"	1000	283	123	47-133	2.87	20	
Surrogate: o-Terphenyl	51		"	50.0		102	59-131			
<b>Matrix Spike Dup (B712205-MSD2)</b>			<b>Source: Y709308-04</b>		Prepared: 09/22/2017 Analyzed: 09/22/2017					
Diesel (C10-C28)	1160	50.0	mg/kg	1000	204	95.9	53-125	14.2	20	
Residual Range Organics (C28-C40)	1200	200	"	1000	302	90.2	47-133	8.51	20	
Surrogate: o-Terphenyl	47		"	50.0		94.4	59-131			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B712206 - NO PREP</b>										
<b>Duplicate (B712206-DUP1)</b>		<b>Source: Y709308-01</b>			Prepared: 09/22/2017 Analyzed: 09/22/2017					
pH	9.14		pH Units		9.18			0.437	25	
<b>Duplicate (B712206-DUP2)</b>		<b>Source: Y709315-02</b>			Prepared: 09/22/2017 Analyzed: 09/22/2017					
pH	8.84		pH Units		8.89			0.564	25	
<b>Batch B712207 - NO PREP</b>										
<b>Blank (B712207-BLK1)</b>					Prepared: 09/22/2017 Analyzed: 09/22/2017					
Specific Conductance (EC)	0.00210		mmhos/cm							
<b>Duplicate (B712207-DUP1)</b>		<b>Source: Y709308-01</b>			Prepared: 09/22/2017 Analyzed: 09/22/2017					
Specific Conductance (EC)	1.21		mmhos/cm		1.27			4.89	25	
<b>Duplicate (B712207-DUP2)</b>		<b>Source: Y709315-01</b>			Prepared: 09/22/2017 Analyzed: 09/22/2017					
Specific Conductance (EC)	0.0335		mmhos/cm		0.0346			3.23	25	

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Guy Jones GU 1

---

### 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.

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 05, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver CO 80211

Project Name - KMG - Guy Jones GU 1

Project Number - [none]

Attached are your analytical results for KMG - Guy Jones GU 1 received by Origins Laboratory, Inc. October 04, 2017. This project is associated with Origins project number Y710074-01.

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 - Guy Jones GU 1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
E06@13'	Y710074-01	Soil	October 4, 2017 14:52	10/04/2017 17:17
N06@13'	Y710074-02	Soil	October 4, 2017 14:54	10/04/2017 17:17

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



Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

Origins Laboratory

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

**Sample Receipt Checklist**

Origins Work Order: 1710074

Client: Tasman

Client Project ID: Mrs. Guy Jones GU 1

Checklist Completed by: Dan K

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

Date/time completed: 10-4-12 1737

Airbill #: NA

Matrix(s) Received: (Check all that apply):  Soil/Solid  Water  Other: \_\_\_\_\_

Cooler Number/Temperature: 1 / 5.7 °C 1 / \_\_\_\_\_ °C 1 / \_\_\_\_\_ °C (Describe) \_\_\_\_\_ °C

Thermometer ID: 1003

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"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" 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 checked="" type="checkbox"/>		
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			<u>PH</u>
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? <b>If yes, contact client and note in narrative.</b>			<input checked="" 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 Na <sub>2</sub> SO <sub>2</sub> +NaOH, ZnAc+NaOH)		<input checked="" 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: [Signature] (Project Manager) Date/Time Reviewed: 10-4-12 1737

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 - Guy Jones GU 1

**E06@13'**  
**10/4/2017 2:52:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y710074-01 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	148	25.0	mg/kg	1	B7J0407	10/04/2017	10/04/2017	
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

Surrogate: o-Terphenyl 83.8 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	131	5.00	mg/kg	25	B7J0406	10/04/2017	10/05/2017	
Benzene	0.064	0.050	"	"	"	"	"	
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	0.348	0.050	"	"	"	"	"	
Xylenes, total	4.72	0.050	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 91.7 % 70-130 " " 10/04/2017  
 Surrogate: Toluene-d8 104 % 70-130 " " "  
 Surrogate: 4-Bromofluorobenzene 98.6 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	9.04		pH Units	1	B7J0408	10/04/2017	10/04/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	0.170		mmhos/cm	"	B7J0409	10/04/2017	"	
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Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**N06@13'**  
**10/4/2017 2:54:00PM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y710074-02 (Soil)**

**DRO/RRO by EPA8015C**

Diesel (C10-C28)	ND	25.0	mg/kg	1	B7J0407	10/04/2017	10/04/2017	U
Residual Range Organics (C28-C40)	ND	100	"	"	"	"	"	U

*Surrogate: o-Terphenyl* 70.5 % 59-131 " " "

**GBTEX by EPA 8260C**

Gasoline Range Hydrocarbons	<b>9.53</b>	5.00	mg/kg	25	B7J0406	10/04/2017	10/04/2017	
Benzene	ND	0.050	"	"	"	"	"	U
Toluene	ND	0.050	"	"	"	"	"	U
Ethylbenzene	ND	0.050	"	"	"	"	"	U
Xylenes, total	ND	0.050	"	"	"	"	"	U

*Surrogate: 1,2-Dichloroethane-d4* 88.9 % 70-130 " " "  
*Surrogate: Toluene-d8* 104 % 70-130 " " "  
*Surrogate: 4-Bromofluorobenzene* 100 % 70-130 " " "

**pH in Soil by EPA 9045D**

pH	<b>8.81</b>		pH Units	1	B7J0408	10/04/2017	10/04/2017	
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**Specific Conductance by Modified 9050A**

Specific Conductance (EC)	<b>0.250</b>		mmhos/cm	"	B7J0409	10/04/2017	"	
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Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B7J0406 - EPA 5030 (soil)</b>										
<b>Blank (B7J0406-BLK1)</b>										
					Prepared: 10/04/2017 Analyzed: 10/04/2017					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							U
Benzene	ND	0.002	"							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	57		ug/kg	62.5		90.4	70-130			
Surrogate: Toluene-d8	65		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.5	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B7J0406 - EPA 5030 (soil)

**LCS (B7J0406-BS1)**

Prepared: 10/04/2017 Analyzed: 10/04/2017

Benzene	0.090	0.002	mg/kg	0.100		89.7	77.1-124			
Toluene	0.093	0.002	"	0.100		93.2	74.5-128			
Ethylbenzene	0.101	0.002	"	0.100		101	66.4-127			
m,p-Xylene	0.210	0.004	"	0.200		105	76.6-124			
o-Xylene	0.098	0.002	"	0.100		98.5	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	55		ug/kg	62.5		87.4	70-130			
Surrogate: Toluene-d8	64		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	60		"	62.5		96.0	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B7J0406 - EPA 5030 (soil)**

<b>Matrix Spike (B7J0406-MS1)</b>	<b>Source: Y710072-02</b>			<b>Prepared: 10/04/2017 Analyzed: 10/04/2017</b>						
Benzene	0.085	0.002	mg/kg	0.100	ND	85.3	71.8-126			
Toluene	0.089	0.002	"	0.100	ND	89.1	65.1-130			
Ethylbenzene	0.098	0.002	"	0.100	ND	97.6	62.2-130			
m,p-Xylene	0.199	0.004	"	0.200	ND	99.6	46.5-137			
o-Xylene	0.095	0.002	"	0.100	ND	95.0	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	55		ug/kg	62.5		88.7	70-130			
Surrogate: Toluene-d8	65		"	62.5		103	70-130			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.0	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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 B7J0406 - EPA 5030 (soil)**

<b>Matrix Spike Dup (B7J0406-MSD1)</b>	<b>Source: Y710072-02</b>			<b>Prepared: 10/04/2017 Analyzed: 10/04/2017</b>						
Benzene	0.081	0.002	mg/kg	0.100	ND	80.9	71.8-126	5.37	11.3	
Toluene	0.082	0.002	"	0.100	ND	82.4	65.1-130	7.82	15.4	
Ethylbenzene	0.092	0.002	"	0.100	ND	92.1	62.2-130	5.86	19.6	
m,p-Xylene	0.187	0.004	"	0.200	ND	93.6	46.5-137	6.20	19.2	
o-Xylene	0.088	0.002	"	0.100	ND	88.4	54.2-134	7.26	17.9	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	57		<i>ug/kg</i>	62.5		90.7	70-130			
<i>Surrogate: Toluene-d8</i>	64		"	62.5		102	70-130			
<i>Surrogate: 4-Bromofluorobenzene</i>	61		"	62.5		97.8	70-130			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**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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**Extractable Petroleum Hydrocarbons by 8015C - 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 B7J0407 - EPA 3550B**

**Blank (B7J0407-BLK1)**

Prepared: 10/04/2017 Analyzed: 10/04/2017

Diesel (C10-C28)	ND	50.0	mg/kg							U
Residual Range Organics (C28-C40)	ND	200	"							U
Surrogate: o-Terphenyl	48		"	50.0		95.4	59-131			

**LCS (B7J0407-BS1)**

Prepared: 10/04/2017 Analyzed: 10/04/2017

Diesel (C10-C28)	1040	50.0	mg/kg	1000		104	64-121			
Residual Range Organics (C28-C40)	991	200	"	1000		99.1	58-124			
Surrogate: o-Terphenyl	47		"	50.0		93.4	59-131			

**Matrix Spike (B7J0407-MS1)**

**Source: Y710072-02**

Prepared: 10/04/2017 Analyzed: 10/04/2017

Diesel (C10-C28)	1120	50.0	mg/kg	1000	ND	112	53-125			
Residual Range Organics (C28-C40)	1070	200	"	1000	23.0	105	47-133			
Surrogate: o-Terphenyl	52		"	50.0		104	59-131			

**Matrix Spike Dup (B7J0407-MSD1)**

**Source: Y710072-02**

Prepared: 10/04/2017 Analyzed: 10/04/2017

Diesel (C10-C28)	898	50.0	mg/kg	1000	ND	89.8	53-125	22.5	20	QR-02
Residual Range Organics (C28-C40)	950	200	"	1000	23.0	92.7	47-133	12.4	20	
Surrogate: o-Terphenyl	43		"	50.0		85.9	59-131			

Origins Laboratory, Inc.



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Tasman Geosciences  
 6899 Pecos Street, Unit C  
 Denver CO 80211

Bob Cornez  
 Project Number: [none]  
 Project: KMG - Guy Jones GU 1

**Classical Chemistry Parameters - Quality Control**  
**Origins Laboratory, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch B7J0408 - NO PREP</b>										
<b>Duplicate (B7J0408-DUP1)</b>		<b>Source: Y710072-01</b>			Prepared: 10/04/2017 Analyzed: 10/04/2017					
pH	7.95		pH Units		8.02			0.877	25	
<b>Batch B7J0409 - NO PREP</b>										
<b>Blank (B7J0409-BLK1)</b>					Prepared: 10/04/2017 Analyzed: 10/04/2017					
Specific Conductance (EC)	0.00200		mmhos/cm							
<b>Duplicate (B7J0409-DUP1)</b>		<b>Source: Y710072-01</b>			Prepared: 10/04/2017 Analyzed: 10/04/2017					
Specific Conductance (EC)	0.264		mmhos/cm		0.222			17.2	25	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Guy Jones GU 1

---

**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.

Origins Laboratory, Inc.



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---

Jen Pellegrini For Noelle Doyle Mathis, President