

November 06, 2015

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Platteville 1-19**

**Project Number - [none]**

Attached are your analytical results for KMG - Platteville 1-19 received by Origins Laboratory, Inc. October 30, 2015. This project is associated with Origins project number X511011-02.

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 - Platteville 1-19

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH02	X511011-02	Water	October 30, 2015 13:04	10/30/2015 16:15
BH03	X511011-03	Water	October 30, 2015 13:10	10/30/2015 16:15
BH04	X511011-04	Water	October 30, 2015 13:07	10/30/2015 16:15

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

www.originslaboratory.com

XS11011

ORIGINS  
LABORATORY, INC

page 1 of 1

Client: Tasman Geosciences  
Address:  
Telephone Number: 352 262 9910  
Email Address: jcornez@tasmangeo.com

Project Manager: Bob Cornez  
Project Name: Platteville 1-19  
Project Number:  
Samples Collected By: Kate Forsmark

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa Canister #		
BH01 - HOLD	10/30/15	1422	3	X							BH08260	1
BH02		1304										2
BH03		1310										3
BH04		1307										4
												5
												6
												7
												8
												9
												10

  

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
[Signature]	10/30/15	1400	[Signature]	10/30/15	1615	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>

Date Results Needed

5.8

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 - Platteville 1-19

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: XS11011

Client: Tasman  
Client Project ID: KMG - Platteville 1-19

Checklist Completed by: Jeff Smith

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

Date/time completed: 11/2/15

Airbill #: N/A

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

Cooler Number/Temperature: 1 15.8 °C 1 °C 1 °C (Describe)

Thermometer ID: TOLB

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> ?	X			
Is there ice present (document if blue ice is used)	X			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact <sup>(1)</sup> ?	X			
Was adequate sample volume provided <sup>(1)</sup> ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?		X		
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	X			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	X			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	X			
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	X	<u>11/2/15</u> <u>X</u>		<u>BH04 (A,B,C)</u>
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)	X			<u>HCL</u>
Additional Comments (if any): <u>Bob C. was notified by email regarding sample headspace.</u>				
<u>11/14/15 Jeff Smith</u>				

<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: Jeff Smith  
(Project Manager)

11/2/15  
Date/Time Reviewed

Origins Laboratory, Inc.

*Jen Pellegrini*

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

BH02

10/30/2015 1:04:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X511011-02 (Water)**

**BTEX by EPA 8260C**

Benzene	10.8	1.0	ug/L	1	B5K0302	11/03/2015	11/03/2015	
Toluene	1.2	1.0	"	"	"	"	"	
Ethylbenzene	59.0	1.0	"	"	"	"	"	
Xylenes, total	103	1.0	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"	
Surrogate: Toluene-d8	125 %	85-115			"	"	"	S-04
Surrogate: 4-Bromofluorobenzene	107 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

BH03

10/30/2015 1:10:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X511011-03 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	4.0	ug/L	4	B5K0302	11/03/2015	11/03/2015
Toluene	ND	4.0	"	"	"	"	"
Ethylbenzene	ND	4.0	"	"	"	"	"
Xylenes, total	ND	4.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"
Surrogate: Toluene-d8	102 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

BH04

10/30/2015 1:07:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X511011-04 (Water)**

**BTEX by EPA 8260C**

Benzene	8070	200	ug/L	200	B5K0302	11/03/2015	11/04/2015
Toluene	18900	200	"	"	"	"	"
Ethylbenzene	548	20.0	"	20	"	"	11/03/2015
Xylenes, total	7330	20.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	108 %	84-121			"	"	"
Surrogate: Toluene-d8	103 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	98.3 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

**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 B5K0302 - EPA 5030B (Water)**

**Blank (B5K0302-BLK1)**

Prepared: 11/03/2015 Analyzed: 11/03/2015

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	67		"	62.5	107		84-121			
Surrogate: Toluene-d8	63		"	62.5	101		85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5	98.9		84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

**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 B5K0302 - EPA 5030B (Water)**

**LCS (B5K0302-BS1)**

Prepared: 11/03/2015 Analyzed: 11/03/2015

Benzene	41.8	1.0	ug/L	50.0		83.6	75-126			
Toluene	43.2	1.0	"	50.0		86.3	78.7-126			
Ethylbenzene	44.4	1.0	"	50.0		88.7	80-130			
m,p-Xylene	88.1	2.0	"	100		88.1	77.2-133			
o-Xylene	43.1	1.0	"	50.0		86.3	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5		97.5	84-121			
Surrogate: Toluene-d8	65		"	62.5		103	85-115			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

**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 B5K0302 - EPA 5030B (Water)**

Matrix Spike (B5K0302-MS1)		Source: X511004-01			Prepared: 11/03/2015 Analyzed: 11/03/2015					
Benzene	35.9	1.0	ug/L	50.0	ND	71.8	74-130			QM-07
Toluene	35.8	1.0	"	50.0	ND	71.7	73-131			QM-07
Ethylbenzene	37.0	1.0	"	50.0	0.3	73.3	76-132			QM-07
m,p-Xylene	73.6	2.0	"	100	ND	73.6	69-139			
o-Xylene	38.1	1.0	"	50.0	ND	76.1	74-131			
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5		99.7	84-121			
Surrogate: Toluene-d8	64		"	62.5		102	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

**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 B5K0302 - EPA 5030B (Water)**

Matrix Spike Dup (B5K0302-MSD1)		Source: X511004-01			Prepared: 11/03/2015 Analyzed: 11/03/2015					
Benzene	35.1	1.0	ug/L	50.0	ND	70.2	74-130	2.28	20	QM-07
Toluene	35.2	1.0	"	50.0	ND	70.3	73-131	1.86	20	QM-07
Ethylbenzene	35.8	1.0	"	50.0	0.3	71.1	76-132	3.11	20	QM-07
m,p-Xylene	72.0	2.0	"	100	ND	72.0	69-139	2.22	20	
o-Xylene	37.4	1.0	"	50.0	ND	74.9	74-131	1.67	20	
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5		98.6	84-121			
Surrogate: Toluene-d8	64		"	62.5		102	85-115			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		102	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: [none]

Project: KMG - Platteville 1-19

## Notes and Definitions

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.



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January 11, 2016

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Platteville 1-19**

**Project Number - [none]**

Attached are your analytical results for KMG - Platteville 1-19 received by Origins Laboratory, Inc. January 04, 2016. This project is associated with Origins project number X601011-01.

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

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

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

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

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

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



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

Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: [none]

Project: KMG - Platteville 1-19

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH02	X601011-01	Water	January 4, 2016 14:12	01/04/2016 15:06
BH03	X601011-02	Water	January 4, 2016 14:13	01/04/2016 15:06

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

**ORIGINS**  
LABORATORY, INC

www.originslaboratory.com

page 1 of 1

Client: Tasman Geo  
Address:  
Project Manager: Bob Cornez  
Project Name: Platteville 1-19  
Project Number:  
Telephone Number: 352 262 9910  
Email Address: bcornez@tasman-geo.com  
Samples Collected By: Kate Forsmark

1 725 Elk Place | Phone: 303.433.1322 | Fax: 303.265.9645 | Denver, CO 80211

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions	
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summation			Other
B102	11/4/16	1412	3		X			X					1
B103	11/4/16	1413	3		X			X					2
													3
													4
													5
													6
													7
													8
													9
													10

  

Relinquished By: [Signature]	Date: 11/4/16	Time: 1506	Received By: [Signature]	Date: 11/4/16	Time: 1506
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Turnaround Time: Same Day ☐ 24 Hr ☐ 48 Hr ☐ 72 Hr ☒ Standard

Date Results Needed

Temp Received

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 - Platteville 1-19

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: X69011

Client: Tasman

Client Project ID: Platteville 1-19

Checklist Completed by: J. Pellegrini

Shipped Via: H/O

Date/time completed: 1/4/15 1506

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

Airbill #: W

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

Cooler Number/Temperature: 1 16.8 °C 1 °C 1 °C 1 °C (Describe)

Thermometer ID: 7003

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

Date/Time Reviewed: 01/04/16

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 - Platteville 1-19

BH02

1/4/2016 2:12:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X601011-01 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.0	ug/L	1	B6A0503	01/05/2016	01/06/2016
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	96.1 %	84-121			"	"	"
Surrogate: Toluene-d8	99.9 %	85-115			"	"	" S-04
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

BH03

1/4/2016 2:13:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X601011-02 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.0	ug/L	1	B6A0503	01/05/2016	01/06/2016
Toluene	ND	1.0	"	"	"	"	"
Ethylbenzene	ND	1.0	"	"	"	"	"
Xylenes, total	ND	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"
Surrogate: Toluene-d8	101 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	99.5 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B6A0503 - EPA 5030B (Water)**

**Blank (B6A0503-BLK1)**

Prepared: 01/05/2016 Analyzed: 01/05/2016

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5	101		84-121			
Surrogate: Toluene-d8	63		"	62.5	101		85-115			
Surrogate: 4-Bromofluorobenzene	60		"	62.5	96.4		84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

**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 B6A0503 - EPA 5030B (Water)**

**LCS (B6A0503-BS1)**

Prepared: 01/05/2016 Analyzed: 01/05/2016

Benzene	53.0	1.0	ug/L	50.0	106	73.3-129
Toluene	53.6	1.0	"	50.0	107	76.2-123
Ethylbenzene	50.1	1.0	"	50.0	100	73.6-130
m,p-Xylene	101	2.0	"	100	101	76.1-126
o-Xylene	53.0	1.0	"	50.0	106	76.6-124
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5	99.3	84-121
Surrogate: Toluene-d8	64		"	62.5	102	85-115
Surrogate: 4-Bromofluorobenzene	64		"	62.5	102	84-114

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

**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 B6A0503 - EPA 5030B (Water)**

Matrix Spike (B6A0503-MS1)		Source: X601015-01			Prepared: 01/05/2016 Analyzed: 01/05/2016					
Benzene	65.4	1.0	ug/L	50.0	ND	131	74-130			QM-07
Toluene	68.9	1.0	"	50.0	ND	138	73-131			QM-07
Ethylbenzene	66.1	1.0	"	50.0	ND	132	76-132			
m,p-Xylene	128	2.0	"	100	ND	128	69-139			
o-Xylene	64.1	1.0	"	50.0	ND	128	74-131			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.6	84-121			
Surrogate: Toluene-d8	63		"	62.5		100	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Platteville 1-19

**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 B6A0503 - EPA 5030B (Water)</b>										
<b>Matrix Spike Dup (B6A0503-MSD1)</b>			<b>Source: X601015-01</b>		Prepared: 01/05/2016 Analyzed: 01/05/2016					
Benzene	63.9	1.0	ug/L	50.0	ND	128	74-130	2.29	20	
Toluene	67.8	1.0	"	50.0	ND	136	73-131	1.74	20	QM-07
Ethylbenzene	67.8	1.0	"	50.0	ND	136	76-132	2.57	20	QM-07
m,p-Xylene	128	2.0	"	100	ND	128	69-139	0.00782	20	
o-Xylene	64.6	1.0	"	50.0	ND	129	74-131	0.668	20	
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		95.1	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.1	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

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Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: [none]

Project: KMG - Platteville 1-19

## Notes and Definitions

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.*



May 06, 2016

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Platteville 1-19**

**Project Number - 88838013**

Attached are your analytical results for KMG - Platteville 1-19 received by Origins Laboratory, Inc. April 28, 2016. This project is associated with Origins project number X604322-01.

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

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

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

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

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

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



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



Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville 1-19

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH02 - 04/28/16	X604322-01	Water	April 28, 2016 16:45	04/28/2016 18:47
BH03 - 04/28/16	X604322-02	Water	April 28, 2016 16:50	04/28/2016 18:47
BH05 - 04/28/16	X604322-03	Water	April 28, 2016 17:00	04/28/2016 18:47
BH06 - 04/28/16	X604322-04	Water	April 28, 2016 17:10	04/28/2016 18:47
BH07 - 04/28/16	X604322-05	Water	April 28, 2016 17:20	04/28/2016 18:47
BH08 - 04/28/16	X604322-06	Water	April 28, 2016 17:30	04/28/2016 18:47

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

www.originslaboratory.com

ORIGINS  
LABORATORY, INC

X000322

page of

Client: APC/Tasman Geosciences  
Project Manager: Bob Cornez  
Address: Platteville 1-19  
Project Name: 88838013  
Project Number: 88838013  
Telephone Number: 970-215-6266  
Email Address: rcornez@tasman-geo.com  
Samples Collected By: Eve Bugnion & Dan Cuervo  
APC Invoice Phil Handa

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions	
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa Canister #			Other
BH02-4/28/16	4/28/16	16:45	3	X				X				1	
BH03-4/28/16	4/28/16	16:50	3	X				X				2	
BH05-4/28/16	4/28/16	17:00	3	X				X				3	
BH06-4/28/16	4/28/16	17:10	3	X				X				4	
BH07-4/28/16	4/28/16	17:20	3	X				X				5	
BH08-4/28/16	4/28/16	17:30	3	X				X				6	
BH09-4/28/16	4/28/16	17:40	3	X				X				7	Sample removed from COC per phone call from Eve on 4/29/16
Op												10	
Relinquished By: <i>Joe M. Bugnion</i>	Date: 4/28/16	Time:		Received By: <i>K...</i>	Date: 4/28/16	Time: 1847	Turnaround Time: Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>						

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

Date Results Needed

Temp Received

Origins Laboratory, Inc.

*Joe Pellegrini*

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Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville 1-19

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: **X604322**

Client: **Tasman**

Client Project ID: **KMG-Platteville 1-19**

Checklist Completed by: **Jeff Smith**

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

Date/time completed: **4/29/16**

Airbill #: **NA**

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

Cooler Number/Temperature: **1** / **5.1** °C \_\_\_\_\_ / \_\_\_\_\_ °C \_\_\_\_\_ / \_\_\_\_\_ °C (Describe)

Thermometer ID: **TCUB**

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"/>		
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"/>			<b>hcl</b>
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.

**Jeff Smith**  
Reviewed by (Project Manager)

**4/29/16**  
Date/Time Reviewed

Origins Laboratory, Inc.

*Jeff Pellegrini*

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH02 - 04/28/16  
4/28/2016 4:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X604322-01 (Water)

## BTEX by EPA 8260C

Benzene	5.7	1.0	ug/L	1	B6E0201	05/02/2016	05/03/2016	
Toluene	ND	1.0	"	"	"	"	"	U
Ethylbenzene	3.0	1.0	"	"	"	"	"	
Xylenes, total	3.9	1.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	112 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	100 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH03 - 04/28/16  
4/28/2016 4:50:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X604322-02 (Water)

## BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B6E0201	05/02/2016	05/03/2016	U
Toluene	ND	1.0	"	"	"	"	"	U
Ethylbenzene	1.0	1.0	"	"	"	"	"	
Xylenes, total	ND	1.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH05 - 04/28/16  
4/28/2016 5:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X604322-03 (Water)

## BTEX by EPA 8260C

Benzene	ND	1.0	ug/L	1	B6E0201	05/02/2016	05/03/2016	U
Toluene	ND	1.0	"	"	"	"	"	U
Ethylbenzene	ND	1.0	"	"	"	"	"	U
Xylenes, total	ND	1.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	105 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	105 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH06 - 04/28/16  
4/28/2016 5:10:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X604322-04 (Water)**

**BTEX by EPA 8260C**

Benzene	2100	50.0	ug/L	50	B6E0201	05/02/2016	05/03/2016
Toluene	769	4.0	"	4	"	"	05/03/2016
Ethylbenzene	297	4.0	"	"	"	"	"
Xylenes, total	3920	50.0	"	50	"	"	05/03/2016
Surrogate: 1,2-Dichloroethane-d4	99.3 %	84-121			"	"	05/03/2016
Surrogate: Toluene-d8	101 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	99.1 %	84-114			"	"	"

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH07 - 04/28/16  
4/28/2016 5:20:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X604322-05 (Water)**

**BTEX by EPA 8260C**

Benzene	8480	100	ug/L	100	B6E0201	05/02/2016	05/04/2016	
Toluene	ND	1.0	"	1	"	"	05/03/2016	U
Ethylbenzene	142	1.0	"	"	"	"	"	
Xylenes, total	706	100	"	100	"	"	05/04/2016	
Surrogate: 1,2-Dichloroethane-d4	78.4 %	84-121			"	"	"	S-04
Surrogate: Toluene-d8	97.6 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	94.8 %	84-114			"	"	"	

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH08 - 04/28/16

4/28/2016 5:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X604322-06 (Water)**

**BTEX by EPA 8260C**

Benzene	18.6	4.0	ug/L	4	B6E0201	05/02/2016	05/04/2016	
Toluene	ND	4.0	"	"	"	"	"	U
Ethylbenzene	ND	4.0	"	"	"	"	"	U
Xylenes, total	ND	4.0	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	05/03/2016	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.5 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B6E0201 - EPA 5030B (Water)</b>										
<b>Blank (B6E0201-BLK1)</b>					Prepared: 05/02/2016 Analyzed: 05/03/2016					
Benzene	ND	1.0	ug/L							U
Toluene	ND	1.0	"							U
Ethylbenzene	ND	1.0	"							U
Xylenes, total	ND	1.0	"							U
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5	104		84-121			
Surrogate: Toluene-d8	62		"	62.5	100		85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5	97.7		84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B6E0201 - EPA 5030B (Water)**

**LCS (B6E0201-BS1)**

Prepared: 05/02/2016 Analyzed: 05/03/2016

Benzene	49.0	1.0	ug/L	50.0		98.1	73.3-129			
Toluene	50.5	1.0	"	50.0		101	76.2-123			
Ethylbenzene	52.1	1.0	"	50.0		104	73.6-130			
m,p-Xylene	103	2.0	"	100		103	76.1-126			
o-Xylene	55.5	1.0	"	50.0		111	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5		97.2	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.9	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.7	84-114			

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B6E0201 - EPA 5030B (Water)**

Matrix Spike (B6E0201-MS1)		Source: X604288-01			Prepared: 05/02/2016 Analyzed: 05/03/2016					
Benzene	40.6	1.0	ug/L	50.0	ND	81.1	74-130			
Toluene	40.4	1.0	"	50.0	ND	80.7	73-131			
Ethylbenzene	41.1	1.0	"	50.0	ND	82.1	76-132			
m,p-Xylene	81.4	2.0	"	100	ND	81.4	69-139			
o-Xylene	43.5	1.0	"	50.0	ND	87.0	74-131			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.8	84-121			
Surrogate: Toluene-d8	63		"	62.5		100	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.2	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B6E0201 - EPA 5030B (Water)**

Matrix Spike Dup (B6E0201-MSD1)		Source: X604288-01			Prepared: 05/02/2016 Analyzed: 05/03/2016					
Benzene	42.2	1.0	ug/L	50.0	ND	84.5	74-130	4.06	20	
Toluene	42.1	1.0	"	50.0	ND	84.2	73-131	4.24	20	
Ethylbenzene	42.6	1.0	"	50.0	ND	85.1	76-132	3.54	20	
m,p-Xylene	84.4	2.0	"	100	ND	84.4	69-139	3.67	20	
o-Xylene	44.2	1.0	"	50.0	ND	88.3	74-131	1.46	20	
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		95.5	84-121			
Surrogate: Toluene-d8	63		"	62.5		100	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville 1-19

### 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.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



July 14, 2016

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Platteville - 62N66W  
19SWSW**

**Project Number - 88838013**

Attached are your analytical results for KMG - Platteville - 62N66W 19SWSW received by Origins Laboratory, Inc. July 08, 2016. This project is associated with Origins project number X607113-01.

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

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

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

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

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

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



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

Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville - 62N66W 19SWSW

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH02 - 7/8/16	X607113-01	Water	July 8, 2016 10:00	07/08/2016 16:30
BH03 - 7/8/16	X607113-02	Water	July 8, 2016 10:15	07/08/2016 16:30
BH05 - 7/8/16	X607113-03	Water	July 8, 2016 10:30	07/08/2016 16:30
BH06 - 7/8/16	X607113-04	Water	July 8, 2016 10:45	07/08/2016 16:30
BH07 - 7/8/16	X607113-05	Water	July 8, 2016 11:00	07/08/2016 16:30
BH08 - 7/8/16	X607113-06	Water	July 8, 2016 11:15	07/08/2016 16:30
BH09 - 7/8/16	X607113-07	Water	July 8, 2016 11:30	07/08/2016 16:30

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: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

XL607113

page 1 of 1

Client: Tasman Geo

Project Manager: Bob Cornez

Address:

Project Name: Platteville - 62N66W 19SWSW

Telephone Number:

Project Number: 88838013

Email Address:

Samples Collected By: R. Irvin B. Nelson

9704709042  
rcornez@tasman-geo.com

APC Invoice #111111

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix				Analysis	Sample Instructions	
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa Canister #	Other			
BH02-7/8/16	7/8/16	1000	3	X				X						1
BH03-7/8/16	7/8/16	1015	3	X				X						2
BH05-7/8/16	7/8/16	1030	3	X				X						3
BH06-7/8/16	7/8/16	1045	3	X				X						4
BH07-7/8/16	7/8/16	1100	3	X				X						5
BH08-7/8/16	7/8/16	1115	3	X				X						6
BH09-7/8/16	7/8/16	1130	3	X				X						7
														8
														9
														10

  

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
<i>[Signature]</i>	7/8/16		<i>[Signature]</i>	7-8-16	1630	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/>
						48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/>

Temp Received: 5/1 Date Results Needed

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: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: X4607113

Client: Tasman

Client Project ID: Platteville -

Checklist Completed by: Jen Pellegrini

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

Date/time completed: 7/18/16

Airbill #: NA

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

Cooler Number/Temperature: 1 / 5.4 °C 1 / 5.4 °C 1 / 5.4 °C (Describe)

Thermometer ID: TC03

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

Date/Time Reviewed: 7/18/16

Origins Laboratory, Inc.

*Jen Pellegrini*

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

BH02 - 7/8/16  
7/8/2016 10:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X607113-01 (Water)**

**BTEX by EPA 8260C**

Benzene	12.6	1.00	ug/L	1	B6G1202	07/12/2016	07/12/2016	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	23.3	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	98.5 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	108 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

BH03 - 7/8/16  
7/8/2016 10:15:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X607113-02 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B6G1202	07/12/2016	07/12/2016	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	5.41	1.00	"	"	"	"	"	
Xylenes, total	4.96	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	100 %	84-121			"	"	"	
Surrogate: Toluene-d8	104 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	145 %	84-114			"	"	" S-04	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

BH05 - 7/8/16  
7/8/2016 10:30:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X607113-03 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B6G1202	07/12/2016	07/12/2016	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.6 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

BH06 - 7/8/16  
7/8/2016 10:45:00AM

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Notes
		Limit							

**Origins Laboratory, Inc.**  
**X607113-04 (Water)**

**BTEX by EPA 8260C**

Benzene	1910	10.0	ug/L	10	B6G1202	07/12/2016	07/12/2016
Toluene	249	10.0	"	"	"	"	"
Ethylbenzene	383	10.0	"	"	"	"	"
Xylenes, total	4100	10.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"
Surrogate: Toluene-d8	110 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	99.6 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

**BH07 - 7/8/16**  
**7/8/2016 11:00:00AM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X607113-05 (Water)**

**BTEX by EPA 8260C**

Benzene	<b>6630</b>	50.0	ug/L	50	B6G1202	07/12/2016	07/13/2016	
Toluene	ND	4.00	"	4	"	"	07/12/2016	U
Ethylbenzene	<b>109</b>	4.00	"	"	"	"	"	
Xylenes, total	<b>454</b>	4.00	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	102 %	84-121			"	"	07/13/2016	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

BH08 - 7/8/16  
7/8/2016 11:15:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X607113-06 (Water)

**BTEX by EPA 8260C**

Benzene	65.1	4.00	ug/L	4	B6G1202	07/12/2016	07/12/2016	
Toluene	ND	4.00	"	"	"	"	"	U
Ethylbenzene	5.04	4.00	"	"	"	"	"	
Xylenes, total	ND	4.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	108 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	120 %	84-114			"	"	"	S-04

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

BH09 - 7/8/16  
7/8/2016 11:30:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X607113-07 (Water)**

**BTEX by EPA 8260C**

Benzene	1320	20.0	ug/L	20	B6G1202	07/12/2016	07/13/2016
Toluene	174	4.00	"	4	"	"	07/12/2016
Ethylbenzene	96.1	4.00	"	"	"	"	"
Xylenes, total	1300	4.00	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	100 %	84-121			"	"	"
Surrogate: Toluene-d8	109 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

**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 B6G1202 - EPA 5030B (Water)**

**Blank (B6G1202-BLK1)**

Prepared: 07/12/2016 Analyzed: 07/12/2016

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5	92.4		84-121			
Surrogate: Toluene-d8	60		"	62.5	95.4		85-115			
Surrogate: 4-Bromofluorobenzene	64		"	62.5	103		84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

**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 B6G1202 - EPA 5030B (Water)**

**LCS (B6G1202-BS1)**

Prepared: 07/12/2016 Analyzed: 07/12/2016

Benzene	51.3	1.00	ug/L	50.0	103	73.3-129
Toluene	48.1	1.00	"	50.0	96.2	76.2-123
Ethylbenzene	50.2	1.00	"	50.0	100	73.6-130
m,p-Xylene	100	2.00	"	100	100	76.1-126
o-Xylene	49.6	1.00	"	50.0	99.3	76.6-124
Surrogate: 1,2-Dichloroethane-d4	55		"	62.5	88.5	84-121
Surrogate: Toluene-d8	63		"	62.5	102	85-115
Surrogate: 4-Bromofluorobenzene	63		"	62.5	100	84-114

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

**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 B6G1202 - EPA 5030B (Water)**

Matrix Spike (B6G1202-MS1)		Source: X607114-01			Prepared: 07/12/2016 Analyzed: 07/12/2016					
Benzene	52.7	1.00	ug/L	50.0	ND	105	74-130			
Toluene	51.3	1.00	"	50.0	0.120	102	73-131			
Ethylbenzene	49.5	1.00	"	50.0	ND	99.1	76-132			
m,p-Xylene	100	2.00	"	100	0.180	100	69-139			
o-Xylene	50.4	1.00	"	50.0	ND	101	74-131			
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		100	84-121			
Surrogate: Toluene-d8	64		"	62.5		102	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.1	84-114			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 62N66W 19SWSW

**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 B6G1202 - EPA 5030B (Water)**

Matrix Spike Dup (B6G1202-MSD1)		Source: X607114-01			Prepared: 07/12/2016 Analyzed: 07/12/2016					
Benzene	52.0	1.00	ug/L	50.0	ND	104	74-130	1.41	20	
Toluene	50.2	1.00	"	50.0	0.120	100	73-131	2.15	20	
Ethylbenzene	46.8	1.00	"	50.0	ND	93.6	76-132	5.67	20	
m,p-Xylene	96.1	2.00	"	100	0.180	96.0	69-139	4.33	20	
o-Xylene	47.8	1.00	"	50.0	ND	95.7	74-131	5.19	20	
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5		103	84-121			
Surrogate: Toluene-d8	64		"	62.5		103	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.7	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville - 62N66W 19SWSW

### 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.

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.*

October 18, 2016

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Platteville - 63N66W  
19SWSW**

**Project Number - 88838013**

Attached are your analytical results for KMG - Platteville - 63N66W 19SWSW received by Origins Laboratory, Inc. October 12, 2016. This project is associated with Origins project number X610127-01.

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: 88838013

Project: KMG - Platteville - 63N66W 19SWSW

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01 - 10/12/16	X610127-01	Water	October 12, 2016 10:50	10/12/2016 13:10
BH02 - 10/12/16	X610127-02	Water	October 12, 2016 11:03	10/12/2016 13:10
BH03 - 10/12/16	X610127-03	Water	October 12, 2016 11:06	10/12/2016 13:10
BH04 - 10/12/16	X610127-04	Water	October 12, 2016 11:13	10/12/2016 13:10
BH05 - 10/12/16	X610127-05	Water	October 12, 2016 11:21	10/12/2016 13:10
BH06 - 10/12/16	X610127-06	Water	October 12, 2016 11:28	10/12/2016 13:10
BH07 - 10/12/16	X610127-07	Water	October 12, 2016 11:35	10/12/2016 13:10
BH08 - 10/12/16	X610127-08	Water	October 12, 2016 11:40	10/12/2016 13:10
BH09 - 10/12/16	X610127-09	Water	October 12, 2016 11:54	10/12/2016 13:10

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

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page of

**ORIGINS** LABORATORY, INC

Client: Atascadero / Tasman

Project Manager: Bob Cornez

Address: 6899 Pecos St, Unit C

Project Name: Platteville 63N66W/19SWSW

Denver, CO 80211

Project Number: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Samples Collected By: Michael Walker / Max Cornez

Email Address: TCORNEZ@TASMAN-geo.com

Sample ID Description	Date Sampled	Time Sampled	Preservative				Matrix			Analysis		Sample Instructions
			Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	At Summer #	Other	Blank	
BH01 - 10/12/16	10-12-16	1050	X				X					1
BH02 - 10/12/16		1105										2
BH03 - 10/12/16		1106										3
BH04 - 10/12/16		1115										4
BH05 - 10/12/16		1121										5
BH06 - 10/12/16		1125										6
BH07 - 10/12/16		1155										7
BH08 - 10/12/16		1140										8
BH09 - 10/12/16		1154										9
												10

Relinquished By: Michael Walker Date: 10-12-16 Time: 1310

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Turnaround Time: Same Day ☐ 24 Hr ☐ 48 Hr ☐ 72 Hr ☒ Standard

Temp Received: 14 Date Results Needed: \_\_\_\_\_

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

Origins Laboratory, Inc.

*Jefe Pellegrini*

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: X 610127

Client: Tasman

Client Project ID: Platteville 63N/19SWSW

Checklist Completed by: Jeff Smith

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

Date/time completed: 10/13/16

Airbill #: NA

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

Cooler Number/Temperature: 1 11.4 °C            °C            °C            °C

Thermometer ID: TC03

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

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

Reviewed By (Project Manager):                     

Date/Time Reviewed: 10/13/16

Origins Laboratory, Inc.

*Jeff Pellegrini*

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH01 - 10/12/16  
10/12/2016 10:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X610127-01 (Water)

## BTEX by EPA 8260C

Benzene	4080	100	ug/L	100	B6J1401	10/14/2016	10/18/2016	
Toluene	ND	4.00	"	4	"	"	10/14/2016	U
Ethylbenzene	231	4.00	"	"	"	"	"	
Xylenes, total	2670	100	"	100	"	"	10/18/2016	

Surrogate: 1,2-Dichloroethane-d4	98.5 %	84-121			"	"	"	
Surrogate: Toluene-d8	98.1 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH02 - 10/12/16  
10/12/2016 11:03:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X610127-02 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B6J1401	10/14/2016	10/14/2016	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	2.63	1.00	"	"	"	"	"	
Xylenes, total	6.44	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	93.8 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	106 %	84-114			"	"	"	

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH03 - 10/12/16  
10/12/2016 11:06:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X610127-03 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B6J1401	10/14/2016	10/14/2016	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	8.44	1.00	"	"	"	"	"	
Xylenes, total	7.15	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	94.4 %	84-121			"	"	"	
Surrogate: Toluene-d8	107 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	108 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH04 - 10/12/16  
10/12/2016 11:13:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X610127-04 (Water)**

**BTEX by EPA 8260C**

Benzene	685	4.00	ug/L	4	B6J1401	10/14/2016	10/14/2016	
Toluene	493	4.00	"	"	"	"	"	
Ethylbenzene	357	4.00	"	"	"	"	"	
Xylenes, total	6910	50.0	"	50	"	"	10/18/2016	

Surrogate: 1,2-Dichloroethane-d4	96.2 %	84-121			"	"	10/14/2016	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.9 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH05 - 10/12/16  
10/12/2016 11:21:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X610127-05 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B6J1401	10/14/2016	10/14/2016	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	<b>1.08</b>	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	95.0 %	84-121			"	"	"
Surrogate: Toluene-d8	101 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	97.7 %	84-114			"	"	"

Origins Laboratory, Inc.



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Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH06 - 10/12/16  
10/12/2016 11:28:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X610127-06 (Water)**

**BTEX by EPA 8260C**

Benzene	340	10.0	ug/L	10	B6J1401	10/14/2016	10/14/2016	
Toluene	ND	10.0	"	"	"	"	"	U
Ethylbenzene	54.2	10.0	"	"	"	"	"	
Xylenes, total	809	10.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	96.8 %	84-121			"	"	"	
Surrogate: Toluene-d8	98.2 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"	

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Project: KMG - Platteville - 63N66W 19SWSW

BH07 - 10/12/16  
10/12/2016 11:35:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X610127-07 (Water)**

**BTEX by EPA 8260C**

Benzene	1410	50.0	ug/L	50	B6J1401	10/14/2016	10/14/2016	
Toluene	ND	50.0	"	"	"	"	"	U
Ethylbenzene	ND	50.0	"	"	"	"	"	U
Xylenes, total	ND	50.0	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	94.4 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.0 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

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Project: KMG - Platteville - 63N66W 19SWSW

BH08 - 10/12/16  
10/12/2016 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X610127-08 (Water)**

**BTEX by EPA 8260C**

Benzene	34.6	1.00	ug/L	1	B6J1401	10/14/2016	10/14/2016	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	4.53	1.00	"	"	"	"	"	
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	98.1 %	84-121			"	"	"	
Surrogate: Toluene-d8	114 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH09 - 10/12/16  
10/12/2016 11:54:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X610127-09 (Water)**

**BTEX by EPA 8260C**

Benzene	96.6	10.0	ug/L	10	B6J1401	10/14/2016	10/14/2016	
Toluene	ND	10.0	"	"	"	"	"	U
Ethylbenzene	46.9	10.0	"	"	"	"	"	
Xylenes, total	586	10.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	96.3 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.0 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B6J1401 - EPA 5030B (Water)**

**Blank (B6J1401-BLK1)**

Prepared: 10/14/2016 Analyzed: 10/14/2016

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5	97.9	84-121				
Surrogate: Toluene-d8	62		"	62.5	98.8	85-115				
Surrogate: 4-Bromofluorobenzene	62		"	62.5	98.6	84-114				

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B6J1401 - EPA 5030B (Water)**

**LCS (B6J1401-BS1)**

Prepared: 10/14/2016 Analyzed: 10/14/2016

Benzene	50.4	1.00	ug/L	50.0		101	73.3-129			
Toluene	46.6	1.00	"	50.0		93.3	76.2-123			
Ethylbenzene	47.8	1.00	"	50.0		95.7	73.6-130			
m,p-Xylene	93.0	2.00	"	100		93.0	76.1-126			
o-Xylene	46.7	1.00	"	50.0		93.5	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		90.5	84-121			
Surrogate: Toluene-d8	65		"	62.5		105	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B6J1401 - EPA 5030B (Water)**

Matrix Spike (B6J1401-MS1)		Source: X610127-05			Prepared: 10/14/2016 Analyzed: 10/14/2016					
Benzene	51.8	1.00	ug/L	50.0	ND	104	74-130			
Toluene	45.9	1.00	"	50.0	ND	91.7	73-131			
Ethylbenzene	48.3	1.00	"	50.0	ND	96.7	76-132			
m,p-Xylene	93.9	2.00	"	100	1.08	92.8	69-139			
o-Xylene	46.7	1.00	"	50.0	ND	93.4	74-131			
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		92.0	84-121			
Surrogate: Toluene-d8	62		"	62.5		98.7	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	84-114			

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B6J1401 - EPA 5030B (Water)**

Matrix Spike Dup (B6J1401-MSD1)		Source: X610127-05			Prepared: 10/14/2016 Analyzed: 10/14/2016					
Benzene	59.3	1.00	ug/L	50.0	ND	119	74-130	13.6	20	
Toluene	52.6	1.00	"	50.0	ND	105	73-131	13.7	20	
Ethylbenzene	54.5	1.00	"	50.0	ND	109	76-132	12.0	20	
m,p-Xylene	108	2.00	"	100	1.08	107	69-139	14.1	20	
o-Xylene	53.7	1.00	"	50.0	ND	107	74-131	13.9	20	
Surrogate: 1,2-Dichloroethane-d4	56		"	62.5		90.2	84-121			
Surrogate: Toluene-d8	63		"	62.5		101	85-115			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville - 63N66W 19SWSW

### Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Jen Pellegrini For Noelle Doyle Mathis, President





January 10, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Platteville 1-19**

**Project Number - 88838013**

Attached are your analytical results for KMG - Platteville 1-19 received by Origins Laboratory, Inc. January 03, 2017. This project is associated with Origins project number X701052-01.

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

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

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

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

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

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



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

Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville 1-19

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH02-1/3/17	X701052-01	Water	January 3, 2017 13:05	01/03/2017 14:30
BH03-1/3/17	X701052-02	Water	January 3, 2017 12:48	01/03/2017 14:30
BH05-1/3/17	X701052-03	Water	January 3, 2017 13:17	01/03/2017 14:30
BH07-1/3/17	X701052-04	Water	January 3, 2017 12:55	01/03/2017 14:30
BH08-1/3/17	X701052-05	Water	January 3, 2017 13:00	01/03/2017 14:30

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: 88838013  
Project: KMG - Platteville 1-19

**ORIGINS**  
LABORATORY, INC

www.originslaboratory.com

X701052

page 1 of 1

Client: Amadorco / Tasman Geosciences Project Manager: Bob Cornez  
Address: 6899 Pecos St, Unit C Project Name: Platteville 1-19  
Denver, CO 80221 Project Number: 88838013  
Telephone Number: \_\_\_\_\_ Samples Collected By: Mitch Weller, Max Cornez  
Email Address: Cornez@tasman-geo.com

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

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa Canister #		
BH02-1/3/17	1-3-17	1305	3	X				X			DTX	1
BH03-1/3/17	1-3-17	1248	3									2
BH05-1/3/17	1-3-17	1317	1									3
BH07-1/3/17	1-3-17	1255	3									4
BH08-1/3/17	1-3-17	1310	3									5
												6
												7
												8
												9
												10

  

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
<u>Michael Weller</u>	<u>1-3-17</u>	<u>1430</u>	<u>[Signature]</u>	<u>1-3-17</u>	<u>1430</u>	Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>

Date Results Needed

Temp Received- 56°

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: 88838013  
Project: KMG - Platteville 1-19

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: X701052

Client: Tasman

Client Project ID: Platteville 1-19

Checklist Completed by: Jeff Smith

Shipped Via: HD

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

Date/time completed: 1-3-17

Airbill #: NT

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

Cooler Number/Temperature: 1 15.6 °C 1 °C 1 °C 1 °C

Thermometer ID: TD03

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 checked="" type="checkbox"/>	<input type="checkbox"/>	Only 1x vial for B405-1/3/17
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity) / (pH <2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH >10 for samples preserved with NaAsO <sub>2</sub> +NaOH, ZnAc+NaOH)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

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

Reviewed by: [Signature] (Project Manager)

Date/Time Reviewed: 01/04/17

Origins Laboratory, Inc.

[Signature]

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: 88838013  
Project: KMG - Platteville 1-19

BH02-1/3/17  
1/3/2017 1:05:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X701052-01 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7A0506	01/05/2017	01/05/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	<b>1.65</b>	1.00	"	"	"	"	"	
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"
Surrogate: Toluene-d8	105 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH03-1/3/17  
1/3/2017 12:48:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X701052-02 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7A0506	01/05/2017	01/05/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	5.86	1.00	"	"	"	"	"	
Xylenes, total	1.29	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	107 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	108 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH05-1/3/17  
1/3/2017 1:17:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X701052-03 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7A0506	01/05/2017	01/05/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	100 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH07-1/3/17  
1/3/2017 12:55:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X701052-04 (Water)**

**BTEX by EPA 8260C**

Benzene	52.5	1.00	ug/L	1	B7A0506	01/05/2017	01/06/2017	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	84-121			"	"	01/05/2017	
Surrogate: Toluene-d8	100 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	97.1 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH08-1/3/17  
1/3/2017 1:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**X701052-05 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7A0506	01/05/2017	01/05/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.9 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B7A0506 - EPA 5030B (Water)**

**Blank (B7A0506-BLK1)**

Prepared: 01/05/2017 Analyzed: 01/05/2017

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5	101		84-121			
Surrogate: Toluene-d8	63		"	62.5	101		85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5	98.3		84-114			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B7A0506 - EPA 5030B (Water)**

**LCS (B7A0506-BS1)**

Prepared: 01/05/2017 Analyzed: 01/05/2017

Benzene	56.7	1.00	ug/L	50.0	113	73.3-129
Toluene	57.9	1.00	"	50.0	116	76.2-123
Ethylbenzene	58.8	1.00	"	50.0	118	73.6-130
m,p-Xylene	117	2.00	"	100	117	76.1-126
o-Xylene	57.2	1.00	"	50.0	114	76.6-124
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5	94.2	84-121
Surrogate: Toluene-d8	63		"	62.5	101	85-115
Surrogate: 4-Bromofluorobenzene	63		"	62.5	101	84-114

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B7A0506 - EPA 5030B (Water)**

Matrix Spike (B7A0506-MS1)		Source: X701047-02			Prepared: 01/05/2017 Analyzed: 01/05/2017					
Benzene	61.4	1.00	ug/L	50.0	ND	123	74-130			
Toluene	63.7	1.00	"	50.0	ND	127	73-131			
Ethylbenzene	64.7	1.00	"	50.0	1.12	127	76-132			
m,p-Xylene	127	2.00	"	100	0.350	126	69-139			
o-Xylene	63.1	1.00	"	50.0	0.240	126	74-131			
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5		99.7	84-121			
Surrogate: Toluene-d8	63		"	62.5		102	85-115			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	84-114			

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch B7A0506 - EPA 5030B (Water)**

Matrix Spike Dup (B7A0506-MSD1)		Source: X701047-02			Prepared: 01/05/2017 Analyzed: 01/05/2017					
Benzene	57.6	1.00	ug/L	50.0	ND	115	74-130	6.37	20	
Toluene	58.8	1.00	"	50.0	ND	118	73-131	7.98	20	
Ethylbenzene	60.3	1.00	"	50.0	1.12	118	76-132	7.00	20	
m,p-Xylene	119	2.00	"	100	0.350	118	69-139	6.57	20	
o-Xylene	59.8	1.00	"	50.0	0.240	119	74-131	5.50	20	
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		92.9	84-121			
Surrogate: Toluene-d8	63		"	62.5		101	85-115			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	84-114			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville 1-19

### Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



April 17, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Platteville - 63N66W  
19SWSW**

**Project Number - 88838013**

Attached are your analytical results for KMG - Platteville - 63N66W 19SWSW received by Origins Laboratory, Inc. April 10, 2017. This project is associated with Origins project number Y704114-01.

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

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

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

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

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

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



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

Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville - 63N66W 19SWSW

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01-4/10/17	Y704114-01	Water	April 10, 2017 10:50	04/10/2017 17:00
BH02-4/10/17	Y704114-02	Water	April 10, 2017 10:25	04/10/2017 17:00
BH03-4/10/17	Y704114-03	Water	April 10, 2017 10:30	04/10/2017 17:00
BH04-4/10/17	Y704114-04	Water	April 10, 2017 10:37	04/10/2017 17:00
BH05-4/10/17	Y704114-05	Water	April 10, 2017 10:00	04/10/2017 17:00
BH07-4/10/17	Y704114-06	Water	April 10, 2017 10:35	04/10/2017 17:00
BH08-4/10/17	Y704114-07	Water	April 10, 2017 10:10	04/10/2017 17:00
BH09R-4/10/17	Y704114-08	Water	April 10, 2017 10:50	04/10/2017 17:00

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

www.originslaboratory.com

701114

page 1 of 1

**ORIGINS**  
LABORATORY, INC

Client: Anadarko / Tasman Geosciences  
Address: 6899 Pecos St, Unit C  
Denver, CO 80221  
Telephone Number:  
Email Address: rcornez@tasman-geo.com

Project Manager: Bob Cornez  
Project Name: Platteville 63N66W/19SWSW  
Project Number: 88838013  
Samples Collected By: Mitch Weller, Max Garza, Derek C

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix		Analysis	Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil		
BH 01 - 4/10/17	4-10-17	1050	3	X				X		BTEX	1
BH 03 - 4/10/17		1035									2
BH 03 - 4/10/17		1030									3
BH 04 - 4/10/17		1037									4
BH 05 - 4/10/17		1000									5
BH 07 - 4/10/17		1035									6
BH 08 - 4/10/17		1010									7
BH 09 - 4/10/17		1050									8
											9
											10

Relinquished By: *Mitch Weller* Date: 4-10-17 Time: 1700  
Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Turnaround Time: Same Day ☐ 24 Hr ☐ 48 Hr ☐ 72 Hr ☒ Standard

Received By: \_\_\_\_\_ Date: 4/10/17 Time: 1700

Temp Received: 4.9 Date Results Needed: \_\_\_\_\_

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

Origins Laboratory, Inc.

*Jefe Pellegrini*

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: 4704114

Client: Tasman

Client Project ID: KMG-Platteville - 63N66W / 19SWSW

Checklist Completed by: Dan Lu

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

Date/time completed: 4-10-12 1826

Airbill #: N/A

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

Cooler Number/Temperature: 1 4.9 °C 1 °C 1 °C 1 °C

Thermometer ID: 203

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

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

Reviewed by: JAP (Project Manager)

Date/Time Reviewed: 4/11/12

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: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH01-4/10/17

4/10/2017 10:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y704114-01 (Water)

**BTEX by EPA 8260C**

Benzene	3410	50.0	ug/L	50	B7D1306	04/13/2017	04/13/2017	
Toluene	ND	50.0	"	"	"	"	"	U
Ethylbenzene	686	50.0	"	"	"	"	"	
Xylenes, total	6420	50.0	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	93.9 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	118 %	84-114			"	"	"	S-04

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH02-4/10/17

4/10/2017 10:25:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y704114-02 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7D1306	04/13/2017	04/13/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	108 %	84-121			"	"	"	
Surrogate: Toluene-d8	68.9 %	85-115			"	"	"	S-04
Surrogate: 4-Bromofluorobenzene	171 %	84-114			"	"	"	S-04

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH03-4/10/17

4/10/2017 10:30:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y704114-03 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7D1306	04/13/2017	04/13/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	10.2	1.00	"	"	"	"	"	
Xylenes, total	4.52	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	46.3 %	85-115			"	"	"	S-04
Surrogate: 4-Bromofluorobenzene	199 %	84-114			"	"	"	S-04

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH04-4/10/17

4/10/2017 10:37:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y704114-04 (Water)

**BTEX by EPA 8260C**

Benzene	322	20.0	ug/L	20	B7D1306	04/13/2017	04/13/2017
Toluene	49.2	20.0	"	"	"	"	"
Ethylbenzene	227	20.0	"	"	"	"	"
Xylenes, total	3000	20.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	102 %	84-121			"	"	"
Surrogate: Toluene-d8	104 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH05-4/10/17

4/10/2017 10:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y704114-05 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7D1306	04/13/2017	04/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	84-121			"	"	"	
Surrogate: Toluene-d8	105 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	132 %	84-114			"	"	" S-07	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH07-4/10/17

4/10/2017 10:35:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y704114-06 (Water)

**BTEX by EPA 8260C**

Benzene	443	20.0	ug/L	20	B7D1306	04/13/2017	04/15/2017	
Toluene	ND	1.00	"	1	"	"	04/14/2017	U
Ethylbenzene	3.46	1.00	"	"	"	"	"	
Xylenes, total	8.34	1.00	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	95.7 %	84-121			"	"	"	
Surrogate: Toluene-d8	104 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH08-4/10/17

4/10/2017 10:10:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y704114-07 (Water)

**BTEX by EPA 8260C**

Benzene	2.85	1.00	ug/L	1	B7D1306	04/13/2017	04/14/2017	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U
Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	96.2 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	168 %	84-114			"	"	" S-04	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

BH09R-4/10/17

4/10/2017 10:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y704114-08 (Water)

**BTEX by EPA 8260C**

Benzene	506	4.00	ug/L	4	B7D1306	04/13/2017	04/14/2017	
Toluene	ND	4.00	"	"	"	"	"	U
Ethylbenzene	133	4.00	"	"	"	"	"	
Xylenes, total	1850	4.00	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	93.8 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	120 %	84-114			"	"	"	S-04

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B7D1306 - EPA 5030B (Water)</b>										
<b>Blank (B7D1306-BLK1)</b>					Prepared: 04/13/2017 Analyzed: 04/13/2017					
Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		100	84-121			
Surrogate: Toluene-d8	62		"	62.5		98.7	85-115			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.6	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B7D1306 - EPA 5030B (Water)**

**Blank (B7D1306-BLK2)**

Prepared: 04/13/2017 Analyzed: 04/13/2017

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5	102		84-121			
Surrogate: Toluene-d8	61		"	62.5	97.8		85-115			
Surrogate: 4-Bromofluorobenzene	60		"	62.5	96.7		84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B7D1306 - EPA 5030B (Water)**

**LCS (B7D1306-BS1)**

Prepared: 04/13/2017 Analyzed: 04/13/2017

Benzene	48.2	1.00	ug/L	50.0		96.5	73.3-129
Toluene	50.7	1.00	"	50.0		101	76.2-123
Ethylbenzene	52.1	1.00	"	50.0		104	73.6-130
m,p-Xylene	107	2.00	"	100		107	76.1-126
o-Xylene	51.7	1.00	"	50.0		103	76.6-124
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		95.9	84-121
Surrogate: Toluene-d8	62		"	62.5		99.3	85-115
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.4	84-114

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B7D1306 - EPA 5030B (Water)**

**LCS (B7D1306-BS2)**

Prepared: 04/13/2017 Analyzed: 04/13/2017

Benzene	52.4	1.00	ug/L	50.0		105	73.3-129			
Toluene	53.7	1.00	"	50.0		107	76.2-123			
Ethylbenzene	56.0	1.00	"	50.0		112	73.6-130			
m,p-Xylene	112	2.00	"	100		112	76.1-126			
o-Xylene	55.2	1.00	"	50.0		110	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		93.0	84-121			
Surrogate: Toluene-d8	61		"	62.5		97.4	85-115			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.5	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B7D1306 - EPA 5030B (Water)**

Matrix Spike (B7D1306-MS1)		Source: Y704109-03			Prepared: 04/13/2017 Analyzed: 04/13/2017					
Benzene	51.9	1.00	ug/L	50.0	ND	104	74-130			
Toluene	55.5	1.00	"	50.0	ND	111	73-131			
Ethylbenzene	59.8	1.00	"	50.0	ND	120	76-132			
m,p-Xylene	120	2.00	"	100	ND	120	69-139			
o-Xylene	56.4	1.00	"	50.0	ND	113	74-131			
Surrogate: 1,2-Dichloroethane-d4	54		"	62.5		86.1	84-121			
Surrogate: Toluene-d8	63		"	62.5		100	85-115			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.9	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B7D1306 - EPA 5030B (Water)**

Matrix Spike (B7D1306-MS2)		Source: Y704109-05			Prepared: 04/13/2017 Analyzed: 04/13/2017					
Benzene	51.7	1.00	ug/L	50.0	ND	103	74-130			
Toluene	54.1	1.00	"	50.0	ND	108	73-131			
Ethylbenzene	59.6	1.00	"	50.0	ND	119	76-132			
m,p-Xylene	114	2.00	"	100	ND	114	69-139			
o-Xylene	54.8	1.00	"	50.0	ND	110	74-131			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.9	84-121			
Surrogate: Toluene-d8	61		"	62.5		97.4	85-115			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.2	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B7D1306 - EPA 5030B (Water)**

Matrix Spike Dup (B7D1306-MSD1)		Source: Y704109-03			Prepared: 04/13/2017 Analyzed: 04/13/2017					
Benzene	52.6	1.00	ug/L	50.0	ND	105	74-130	1.30	20	
Toluene	54.6	1.00	"	50.0	ND	109	73-131	1.67	20	
Ethylbenzene	57.1	1.00	"	50.0	ND	114	76-132	4.57	20	
m,p-Xylene	115	2.00	"	100	ND	115	69-139	3.51	20	
o-Xylene	55.4	1.00	"	50.0	ND	111	74-131	1.90	20	
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5		93.0	84-121			
Surrogate: Toluene-d8	61		"	62.5		98.1	85-115			
Surrogate: 4-Bromofluorobenzene	59		"	62.5		94.0	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville - 63N66W 19SWSW

**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 B7D1306 - EPA 5030B (Water)**

Matrix Spike Dup (B7D1306-MSD2)		Source: Y704109-05			Prepared: 04/13/2017 Analyzed: 04/13/2017					
Benzene	50.8	1.00	ug/L	50.0	ND	102	74-130	1.68	20	
Toluene	54.0	1.00	"	50.0	ND	108	73-131	0.185	20	
Ethylbenzene	58.2	1.00	"	50.0	ND	116	76-132	2.26	20	
m,p-Xylene	112	2.00	"	100	ND	112	69-139	2.19	20	
o-Xylene	53.7	1.00	"	50.0	ND	107	74-131	2.05	20	
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.1	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.0	85-115			
Surrogate: 4-Bromofluorobenzene	58		"	62.5		93.3	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville - 63N66W 19SWSW

### Notes and Definitions

U Sample is Non-Detect.

S-07 High surrogate in sample, however sample is non-detect. High surrogate indicates result values are biased high.

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

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



July 18, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Platteville 1-19**

**Project Number - 88838013**

Attached are your analytical results for KMG - Platteville 1-19 received by Origins Laboratory, Inc. July 11, 2017. This project is associated with Origins project number Y707109-01.

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

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

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

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

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

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



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

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

### CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01-7/11/17	Y707109-01	Water	July 11, 2017 12:55	07/11/2017 14:25
BH02-7/11/17	Y707109-02	Water	July 11, 2017 12:50	07/11/2017 14:25
BH03-7/11/17	Y707109-03	Water	July 11, 2017 12:30	07/11/2017 14:25
BH04-7/11/17	Y707109-04	Water	July 11, 2017 12:40	07/11/2017 14:25
BH05-7/11/17	Y707109-05	Water	July 11, 2017 13:05	07/11/2017 14:25
BH07-7/11/17	Y707109-06	Water	July 11, 2017 12:40	07/11/2017 14:25
BH08-7/11/17	Y707109-07	Water	July 11, 2017 12:45	07/11/2017 14:25
BH10-7/11/17	Y707109-08	Water	July 11, 2017 11:40	07/11/2017 14:25
BH11-7/11/17	Y707109-09	Water	July 11, 2017 11:50	07/11/2017 14:25
BH12-7/11/17	Y707109-10	Water	July 11, 2017 11:55	07/11/2017 14:25
BH13-7/11/17	Y707109-11	Water	July 11, 2017 12:10	07/11/2017 14:25
BH14-7/11/17	Y707109-12	Water	July 11, 2017 12:15	07/11/2017 14:25
BH15-7/11/17	Y707109-13	Water	July 11, 2017 12:30	07/11/2017 14:25
BH16-7/11/17	Y707109-14	Water	July 11, 2017 12:21	07/11/2017 14:25

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.*

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Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville 1-19

---

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**ORIGINS**  
LABORATORY, INC

www.originslaboratory.com

1707109

page 1 of 2

Client: Tasman Geosciences for APC  
Address: 6899 Pecos St, Unit C  
Denver, CO 80221  
Telephone Number: \_\_\_\_\_  
Email Address: ccornez@tasman-geo.com  
Project Manager: Bob Cornez  
Project Name: Platteville 1-19  
Project Number: 88838013  
Samples Collected By: Mitch Weller, Max Gurea

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis		Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	As Summa Container #	Other		
BH 01 - 7/11/17	7-11-17	1255	3	X				X					1
BH 02 - 7/11/17		1250											2
BH 03 - 7/11/17		1230											3
BH 04 - 7/11/17		1240											4
BH 05 - 7/11/17		1305											5
BH 07 - 7/11/17		1240											6
BH 08 - 7/11/17		1245											7
BH 10 - 7/11/17		1140											8
BH 11 - 7/11/17		1150											9
BH 12 - 7/11/17	7-11-17	1155	V	V									10
Relinquished By: <u>Mitch Weller</u>	Date: 7-11-17	Time: 1425	Received By: <u>[Signature]</u>	Date: 7-11-17	Time: 1425	Turnaround Time: Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input checked="" type="checkbox"/> Standard							

Date Results Needed

Temp Received- 20.6°C

Origins Laboratory, Inc.

*Jefe Pellegrini*

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

www.originslaboratory.com

page 2 of 2

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

**ORIGINS** LABORATORY, INC

Client: Tasman Geosciences for APC  
Address: 6899 Pecos St, Unit C  
Denver, CO 80211

Project Manager: Bob Cornez  
Project Name: Platteville 1-19  
Project Number: 88838013

Telephone Number: \_\_\_\_\_  
Email Address: Cornez@tasman-geo.com

Samples Collected By: Mitch Weller, Max Garza

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions	
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa #			Other
BH 13 - 7/11/17	7-11-17	1216	3	X				X					1
BH 14 - 7/11/17		1215											2
BH 15 - 7/11/17		1230											3
BH 16 - 7/11/17		1221											4
													5
													6
													7
													8
													9
													10

Relinquished By: Mitch Weller Date: 7-11-17 Time: 1425  
Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received By: [Signature] Date: 7-11-17 Time: 1425  
Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Turnaround Time: Same Day ☐ 24 Hr ☐ 48 Hr ☐ 72 Hr ☒ Standard

Temp Received: 26°C Date Results Needed: \_\_\_\_\_

Origins Laboratory, Inc.

*Jefe Pellegrini*

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: 4701109

Client: Tasman

Client Project ID: KMG - Platteville 1-19

Checklist Completed by: DPH

Shipped Via: HD

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

Date/time completed: 7-11-12 MSI

Airbill #: NA

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

Cooler Number/Temperature: 1 20.6 °C 1 °C 1 °C (Describe) 1 °C

Thermometer ID: 7001

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"/>		
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) JP

Date/Time Reviewed 7/12/12

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: 88838013  
Project: KMG - Platteville 1-19

BH01-7/11/17

7/11/2017 12:55:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-01 (Water)

**BTEX by EPA 8260C**

Benzene	7210	50.0	ug/L	50	B7G1303	07/13/2017	07/14/2017	
Toluene	ND	4.00	"	4	"	"	07/14/2017	U
Ethylbenzene	231	4.00	"	"	"	"	"	
Xylenes, total	10500	50.0	"	50	"	"	07/14/2017	

Surrogate: 1,2-Dichloroethane-d4	107 %	84-121			"	"	07/14/2017	
Surrogate: Toluene-d8	100 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	98.1 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH02-7/11/17

7/11/2017 12:50:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-02 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	2.51	1.00	"	"	"	"	"	
Xylenes, total	4.71	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	115 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH03-7/11/17

7/11/2017 12:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-03 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	7.07	1.00	"	"	"	"	"	
Xylenes, total	5.69	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	104 %	84-121			"	"	"	
Surrogate: Toluene-d8	113 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	106 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH04-7/11/17

7/11/2017 12:40:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-04 (Water)

**BTEX by EPA 8260C**

Benzene	352	100	ug/L	100	B7G1303	07/13/2017	07/14/2017	
Toluene	ND	100	"	"	"	"	"	U
Ethylbenzene	175	100	"	"	"	"	"	
Xylenes, total	2470	100	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4	99.9 %	84-121			"	"	"	
Surrogate: Toluene-d8	98.9 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.5 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH05-7/11/17

7/11/2017 1:05:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-05 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	103 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.0 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.7 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH07-7/11/17

7/11/2017 12:40:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-06 (Water)

**BTEX by EPA 8260C**

Benzene	4170	50.0	ug/L	50	B7G1303	07/13/2017	07/14/2017	
Toluene	ND	1.00	"	1	"	"	07/14/2017	U
Ethylbenzene	8.46	1.00	"	"	"	"	"	
Xylenes, total	1.61	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	106 %	84-121			"	"	"	
Surrogate: Toluene-d8	98.8 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.7 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH08-7/11/17

7/11/2017 12:45:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-07 (Water)

**BTEX by EPA 8260C**

Benzene	1.02	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

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

102 %  
98.3 %  
100 %

84-121  
85-115  
84-114

"  
"  
"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH10-7/11/17

7/11/2017 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y707109-08 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"
Surrogate: Toluene-d8	102 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH11-7/11/17

7/11/2017 11:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-09 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	1.02	1.00	"	"	"	"	"	
Xylenes, total	1.27	1.00	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	101 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.8 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH12-7/11/17

7/11/2017 11:55:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-10 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	97.0 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH13-7/11/17

7/11/2017 12:10:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-11 (Water)

**BTEX by EPA 8260C**

Benzene	4.96	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"
Surrogate: Toluene-d8	102 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH14-7/11/17

7/11/2017 12:15:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-12 (Water)

**BTEX by EPA 8260C**

Benzene	2.28	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

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

101 % 84-121  
98.6 % 85-115  
102 % 84-114

" "  
" "  
" "

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH15-7/11/17

7/11/2017 12:30:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-13 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	"	
Surrogate: Toluene-d8	99.4 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	99.9 %	84-114			"	"	"	

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

BH16-7/11/17

7/11/2017 12:21:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y707109-14 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7G1303	07/13/2017	07/14/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	102 %	84-121			"	"	"	
Surrogate: Toluene-d8	98.6 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B7G1303 - EPA 5030B (Water)**

**Blank (B7G1303-BLK1)**

Prepared: 07/13/2017 Analyzed: 07/13/2017

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5	102		84-121			
Surrogate: Toluene-d8	60		"	62.5	96.2		85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5	97.8		84-114			

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B7G1303 - EPA 5030B (Water)**

**Blank (B7G1303-BLK2)**

Prepared: 07/13/2017 Analyzed: 07/13/2017

Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5	102		84-121			
Surrogate: Toluene-d8	60		"	62.5	95.7		85-115			
Surrogate: 4-Bromofluorobenzene	60		"	62.5	96.4		84-114			

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B7G1303 - EPA 5030B (Water)**

**LCS (B7G1303-BS1)**

Prepared: 07/13/2017 Analyzed: 07/13/2017

Benzene	51.8	1.00	ug/L	50.0		104	73.3-129			
Toluene	49.1	1.00	"	50.0		98.2	76.2-123			
Ethylbenzene	50.4	1.00	"	50.0		101	73.6-130			
m,p-Xylene	97.9	2.00	"	100		97.9	76.1-126			
o-Xylene	50.0	1.00	"	50.0		100	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5		96.8	84-121			
Surrogate: Toluene-d8	61		"	62.5		98.3	85-115			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		100	84-114			

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B7G1303 - EPA 5030B (Water)

**LCS (B7G1303-BS2)**

Prepared: 07/13/2017 Analyzed: 07/13/2017

Benzene	51.6	1.00	ug/L	50.0		103	73.3-129			
Toluene	49.2	1.00	"	50.0		98.3	76.2-123			
Ethylbenzene	48.4	1.00	"	50.0		96.9	73.6-130			
m,p-Xylene	95.8	2.00	"	100		95.8	76.1-126			
o-Xylene	48.6	1.00	"	50.0		97.1	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5		97.4	84-121			
Surrogate: Toluene-d8	61		"	62.5		97.0	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.7	84-114			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B7G1303 - EPA 5030B (Water)**

Matrix Spike (B7G1303-MS1)		Source: Y707138-01			Prepared: 07/13/2017 Analyzed: 07/13/2017					
Benzene	52.1	1.00	ug/L	50.0	ND	104	74-130			
Toluene	49.4	1.00	"	50.0	ND	98.9	73-131			
Ethylbenzene	51.6	1.00	"	50.0	ND	103	76-132			
m,p-Xylene	98.8	2.00	"	100	ND	98.8	69-139			
o-Xylene	49.9	1.00	"	50.0	ND	99.9	74-131			
Surrogate: 1,2-Dichloroethane-d4	61		"	62.5		97.4	84-121			
Surrogate: Toluene-d8	61		"	62.5		97.8	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.9	84-114			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B7G1303 - EPA 5030B (Water)**

Matrix Spike (B7G1303-MS2)		Source: Y707138-02			Prepared: 07/13/2017 Analyzed: 07/13/2017					
Benzene	52.8	1.00	ug/L	50.0	ND	106	74-130			
Toluene	47.9	1.00	"	50.0	ND	95.7	73-131			
Ethylbenzene	48.8	1.00	"	50.0	ND	97.7	76-132			
m,p-Xylene	95.4	2.00	"	100	ND	95.4	69-139			
o-Xylene	49.3	1.00	"	50.0	ND	98.6	74-131			
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		101	84-121			
Surrogate: Toluene-d8	60		"	62.5		96.3	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		100	84-114			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B7G1303 - EPA 5030B (Water)**

Matrix Spike Dup (B7G1303-MSD1)		Source: Y707138-01			Prepared: 07/13/2017 Analyzed: 07/13/2017					
Benzene	52.0	1.00	ug/L	50.0	ND	104	74-130	0.288	20	
Toluene	49.4	1.00	"	50.0	ND	98.7	73-131	0.202	20	
Ethylbenzene	49.0	1.00	"	50.0	ND	98.0	76-132	5.11	20	
m,p-Xylene	97.2	2.00	"	100	ND	97.2	69-139	1.64	20	
o-Xylene	49.0	1.00	"	50.0	ND	98.0	74-131	1.88	20	
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		103	84-121			
Surrogate: Toluene-d8	61		"	62.5		97.2	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.6	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 88838013  
Project: KMG - Platteville 1-19

**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 B7G1303 - EPA 5030B (Water)**

Matrix Spike Dup (B7G1303-MSD2)		Source: Y707138-02			Prepared: 07/13/2017 Analyzed: 07/13/2017					
Benzene	51.6	1.00	ug/L	50.0	ND	103	74-130	2.15	20	
Toluene	48.1	1.00	"	50.0	ND	96.3	73-131	0.583	20	
Ethylbenzene	48.6	1.00	"	50.0	ND	97.2	76-132	0.431	20	
m,p-Xylene	95.4	2.00	"	100	ND	95.4	69-139	0.0943	20	
o-Xylene	48.6	1.00	"	50.0	ND	97.2	74-131	1.49	20	
Surrogate: 1,2-Dichloroethane-d4	63		"	62.5		100	84-121			
Surrogate: Toluene-d8	59		"	62.5		94.5	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.8	84-114			

Origins Laboratory, Inc.



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Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Bob Cornez

Project Number: 88838013

Project: KMG - Platteville 1-19

### Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Jen Pellegrini For Noelle Doyle Mathis, President





October 13, 2017

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Platteville 1-19**

**Project Number - 888838013**

Attached are your analytical results for KMG - Platteville 1-19 received by Origins Laboratory, Inc. October 06, 2017. This project is associated with Origins project number Y710118-01.

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

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

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

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

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

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



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

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

### CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01-10/6/2017	Y710118-01	Water	October 6, 2017 10:08	10/06/2017 16:15
BH02-10/6/2017	Y710118-02	Water	October 6, 2017 10:18	10/06/2017 16:15
BH03-10/6/2017	Y710118-03	Water	October 6, 2017 10:28	10/06/2017 16:15
BH04-10/6/2017	Y710118-04	Water	October 6, 2017 10:40	10/06/2017 16:15
BH05-10/6/2017	Y710118-05	Water	October 6, 2017 10:52	10/06/2017 16:15
BH06-10/6/2017	Y710118-06	Water	October 6, 2017 11:06	10/06/2017 16:15
BH07-10/6/2017	Y710118-07	Water	October 6, 2017 10:45	10/06/2017 16:15
BH08-10/6/2017	Y710118-08	Water	October 6, 2017 10:35	10/06/2017 16:15
BH09R-10/6/2017	Y710118-09	Water	October 6, 2017 11:20	10/06/2017 16:15
BH10-10/6/2017	Y710118-10	Water	October 6, 2017 10:00	10/06/2017 16:15
BH11-10/6/2017	Y710118-11	Water	October 6, 2017 10:10	10/06/2017 16:15
BH12-10/6/2017	Y710118-12	Water	October 6, 2017 10:25	10/06/2017 16:15
BH13-10/6/2017	Y710118-13	Water	October 6, 2017 10:50	10/06/2017 16:15
BH14-10/6/2017	Y710118-14	Water	October 6, 2017 11:00	10/06/2017 16:15

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: 888838013

Project: KMG - Platteville 1-19

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH15-10/6/2017	Y710118-15	Water	October 6, 2017 11:10	10/06/2017 16:15
BH16-10/6/2017	Y710118-16	Water	October 6, 2017 11:18	10/06/2017 16:15

Origins Laboratory, Inc.



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Jen Pellegrini For Noelle Doyle Mathis, President

Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

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page 1 of 2

**ORIGINS**  
LABORATORY, INC

1710119

Client: Anadako/Tasman  
Address: 6899 Pecos St  
Telephone Number: 979-255-4235  
Email Address: Max Garza, Derek Cavinder

Project Manager: Bob Cornez  
Project Name: Platteville 1-19  
Project Number: 888838013  
Samples Collected By: Max Garza, Derek Cavinder

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions	
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summ. #			Other
BH01-10/6/2017	10/6/2017	10:08	3	X				X				1	
BH02-10/6/2017		10:18										2	
BH03-10/6/2017		10:28										3	
BH04-10/6/2017		10:40										4	
BH05-10/6/2017		10:52										5	
BH06-10/6/2017		11:06										6	
BH07-10/6/2017		10:45										7	
BH08-10/6/2017		10:35										8	
BH09R-10/6/2017		11:20										9	
BH10-10/6/2017		10:00										10	

  

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Turnaround Time:
Max Garza	10/6/17	10:15				Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/>
				10/6/17	10:15	

Date Results Needed

5.4

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: 888838013  
Project: KMG - Platteville 1-19

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page 2 of 2

1710116

Client: Anadako/Tasman

Address: 6899 Pecos St

Telephone Number: 979-255-4235

Email Address: Max Garza, Derek Cavinder

Project Manager: Bob Cornez

Project Name: Platteville 1-19

Project Number: 888838013

Samples Collected By: Max Garza, Derek Cavinder

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summa #		
BH11-10/6/2017	10/6/2017	10:10	3	X				X				1
BH12-10/6/2017		10:25										2
BH13-10/6/2017		10:50										3
BH14-10/6/2017		11:00										4
BH15-10/6/2017		11:10										5
BH16-10/6/2017		11:18										6
												7
												8
												9
												10

Relinquished By: *Max*

Date: 10/6/17

Received By: *[Signature]*

Date: 10/6/17

Relinquished By: *Max*

Date: 10/6/17

Received By: *[Signature]*

Date: 10/6/17

Turnaround Time: Same Day ☐ 24 Hr ☐ 48 Hr ☐ 72 Hr ☐ Standard ☒

Date Results Needed: 5.4

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: 888838013  
Project: KMG - Platteville 1-19

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: Y716118

Client: Tasman

Client Project ID: mg. Platteville 1-19

Checklist Completed by: DK

Shipped Via: Pick-up

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

Date/time completed: 10-6-12 1655

Airbill #: \_\_\_\_\_

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

Cooler Number/Temperature: 1 5.4 °C 1 °C 1 °C (Describe) \_\_\_\_\_ °C

Thermometer ID: 7003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 5°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present <sup>(1)</sup> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation and was it checked <sup>(1)</sup> ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO <sub>3</sub> , HCL, H <sub>2</sub> SO <sub>4</sub> ) / (pH >10 for samples preserved with NaAsO <sub>2</sub> +NaOH, 2NaAc+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) AP

Date/Time Reviewed 10/9/12

Origins Laboratory, Inc.

*Jefe Pellegrini*

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH01-10/6/2017

10/6/2017 10:08:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-01 (Water)

**BTEX by EPA 8260C**

Benzene	1440	50.0	ug/L	50	B7J1108	10/11/2017	10/13/2017	
Toluene	ND	4.00	"	4	"	"	10/12/2017	U
Ethylbenzene	408	4.00	"	"	"	"	"	
Xylenes, total	3490	50.0	"	50	"	"	10/13/2017	

Surrogate: 1,2-Dichloroethane-d4	106 %	84-121			"	"	10/12/2017	
Surrogate: Toluene-d8	105 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	84-114			"	"	"	

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH02-10/6/2017

10/6/2017 10:18:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-02 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	<b>1.26</b>	1.00	"	"	"	"	"	
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	84-121			"	"	"
Surrogate: Toluene-d8	106 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH03-10/6/2017

10/6/2017 10:28:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-03 (Water)

**BTEX by EPA 8260C**

Benzene	ND	4.00	ug/L	4	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	4.00	"	"	"	"	"	U
Ethylbenzene	<b>4.28</b>	4.00	"	"	"	"	"	
Xylenes, total	ND	4.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	113 %	84-121			"	"	"
Surrogate: Toluene-d8	106 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	105 %	84-114			"	"	"

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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH04-10/6/2017

10/6/2017 10:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-04 (Water)

**BTEX by EPA 8260C**

Benzene	190	4.00	ug/L	4	B7J1108	10/11/2017	10/12/2017	
Toluene	ND	4.00	"	"	"	"	"	U
Ethylbenzene	270	4.00	"	"	"	"	"	
Xylenes, total	15300	50.0	"	50	"	"	10/13/2017	

Surrogate: 1,2-Dichloroethane-d4	110 %	84-121			"	"	10/12/2017	
Surrogate: Toluene-d8	104 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"	

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Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH05-10/6/2017

10/6/2017 10:52:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-05 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	84-114			"	"	"	

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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH06-10/6/2017

10/6/2017 11:06:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-06 (Water)

**BTEX by EPA 8260C**

Benzene	869	100	ug/L	100	B7J1108	10/11/2017	10/12/2017	
Toluene	ND	100	"	"	"	"	"	U
Ethylbenzene	ND	100	"	"	"	"	"	U
Xylenes, total	3320	100	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	112 %	84-121			"	"	"	
Surrogate: Toluene-d8	105 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	84-114			"	"	"	

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Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH07-10/6/2017

10/6/2017 10:45:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-07 (Water)

**BTEX by EPA 8260C**

Benzene	163	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	111 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	105 %	84-114			"	"	"	

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Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH08-10/6/2017

10/6/2017 10:35:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-08 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	107 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Project: KMG - Platteville 1-19

BH09R-10/6/2017  
10/6/2017 11:20:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-09 (Water)

**BTEX by EPA 8260C**

Benzene	181	4.00	ug/L	4	B7J1108	10/11/2017	10/12/2017	
Toluene	ND	4.00	"	"	"	"	"	U
Ethylbenzene	59.2	4.00	"	"	"	"	"	
Xylenes, total	1900	50.0	"	50	"	"	10/13/2017	

Surrogate: 1,2-Dichloroethane-d4	111 %	84-121			"	"	10/12/2017	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	84-114			"	"	"	

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH10-10/6/2017

10/6/2017 10:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y710118-10 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	84-121			"	"	"	
Surrogate: Toluene-d8	107 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH11-10/6/2017

10/6/2017 10:10:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-11 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	84-121			"	"	"	
Surrogate: Toluene-d8	104 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	84-114			"	"	"	

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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH12-10/6/2017

10/6/2017 10:25:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-12 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	113 %	84-121			"	"	"	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	84-114			"	"	"	

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH13-10/6/2017

10/6/2017 10:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-13 (Water)

**BTEX by EPA 8260C**

Benzene	2.03	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	111 %	84-121			"	"	"	
Surrogate: Toluene-d8	103 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH14-10/6/2017

10/6/2017 11:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-14 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	110 %	84-121			"	"	"	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	104 %	84-114			"	"	"	

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH15-10/6/2017

10/6/2017 11:10:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
Y710118-15 (Water)

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	111 %	84-121			"	"	"	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	106 %	84-114			"	"	"	

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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

BH16-10/6/2017

10/6/2017 11:18:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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**Origins Laboratory, Inc.**  
**Y710118-16 (Water)**

**BTEX by EPA 8260C**

Benzene	ND	1.00	ug/L	1	B7J1108	10/11/2017	10/12/2017	U
Toluene	ND	1.00	"	"	"	"	"	U
Ethylbenzene	ND	1.00	"	"	"	"	"	U
Xylenes, total	ND	1.00	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	114 %	84-121			"	"	"	
Surrogate: Toluene-d8	102 %	85-115			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	84-114			"	"	"	

Origins Laboratory, Inc.



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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

**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 B7J1108 - EPA 5030B (Water)</b>										
<b>Blank (B7J1108-BLK1)</b>					Prepared: 10/11/2017 Analyzed: 10/12/2017					
Benzene	ND	1.00	ug/L							U
Toluene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	72		"	62.5	115		84-121			
Surrogate: Toluene-d8	63		"	62.5	101		85-115			
Surrogate: 4-Bromofluorobenzene	67		"	62.5	107		84-114			

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6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

**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 B7J1108 - EPA 5030B (Water)**

**LCS (B7J1108-BS1)**

Prepared: 10/11/2017 Analyzed: 10/12/2017

Benzene	48.9	1.00	ug/L	50.0		97.8	73.3-129			
Toluene	51.1	1.00	"	50.0		102	76.2-123			
Ethylbenzene	53.6	1.00	"	50.0		107	73.6-130			
m,p-Xylene	113	2.00	"	100		113	76.1-126			
o-Xylene	51.6	1.00	"	50.0		103	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		102	84-121			
Surrogate: Toluene-d8	65		"	62.5		104	85-115			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		106	84-114			

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

**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 B7J1108 - EPA 5030B (Water)**

Matrix Spike (B7J1108-MS1)		Source: Y710118-02			Prepared: 10/11/2017 Analyzed: 10/12/2017					
Benzene	49.6	1.00	ug/L	50.0	0.130	99.0	74-130			
Toluene	50.9	1.00	"	50.0	ND	102	73-131			
Ethylbenzene	54.6	1.00	"	50.0	1.26	107	76-132			
m,p-Xylene	109	2.00	"	100	ND	109	69-139			
o-Xylene	49.3	1.00	"	50.0	0.360	97.8	74-131			
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		102	84-121			
Surrogate: Toluene-d8	66		"	62.5		106	85-115			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	84-114			

Origins Laboratory, Inc.



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Denver CO 80211

Bob Cornez  
Project Number: 888838013  
Project: KMG - Platteville 1-19

**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 B7J1108 - EPA 5030B (Water)**

Matrix Spike Dup (B7J1108-MSD1)		Source: Y710118-02			Prepared: 10/11/2017 Analyzed: 10/12/2017					
Benzene	49.4	1.00	ug/L	50.0	0.130	98.5	74-130	0.545	20	
Toluene	51.8	1.00	"	50.0	ND	104	73-131	1.77	20	
Ethylbenzene	57.2	1.00	"	50.0	1.26	112	76-132	4.67	20	
m,p-Xylene	115	2.00	"	100	ND	115	69-139	5.27	20	
o-Xylene	51.9	1.00	"	50.0	0.360	103	74-131	5.26	20	
Surrogate: 1,2-Dichloroethane-d4	71		"	62.5		114	84-121			
Surrogate: Toluene-d8	65		"	62.5		105	85-115			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		103	84-114			

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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: 888838013

Project: KMG - Platteville 1-19

### Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

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