

ANALYTICAL TABLES

TABLE 1
PIPELINE 16-0000-6069-6"
SOIL SAMPLE RESULTS SUMMARY TABLE
KERR-McGEE GATHERING, LLC

Sample ID	Date Sampled	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TVPH - GRO (mg/kg)	TEPH - DRO + ORO (mg/kg)
COGCC standards for soil (mg/kg) ⁽¹⁾			0.17	85	100	175	500	
N01 @ 12'	7/20/2015	12	<0.002	<0.002	<0.002	<0.002	<0.200	<200
N02 @ 12'	7/20/2015	12	<0.002	<0.002	<0.002	<0.002	<0.200	<200
N03 @ 12'	7/20/2015	12	0.013	<0.002	<0.002	0.023	<0.200	<200
N04 @ 12'	7/20/2015	12	<0.002	<0.002	<0.002	<0.002	<0.200	<200
N05 @ 12'	7/20/2015	12	<0.002	<0.002	<0.002	<0.002	<0.200	<200
W01 @ 12'	7/20/2015	12	0.072	0.058	<0.002	0.020	0.229	<200
E01 @ 12'	7/20/2015	12	<0.002	<0.002	<0.002	<0.002	<0.200	<200
S01 @ 12'	7/20/2015	12	<0.002	<0.002	<0.002	<0.002	<0.200	<200
S02 @ 12'	7/20/2015	12	0.002	0.002	<0.002	<0.002	<0.200	<200
S03 @ 12'	7/20/2015	12	<0.002	<0.002	<0.002	<0.002	<0.200	<200
S04 @ 12'	7/20/2015	12	<0.002	<0.002	<0.002	<0.002	<0.200	<200
S05 @ 12'	7/20/2015	12	<0.002	<0.002	<0.002	<0.002	<0.200	<200
B01 @ 13'	7/20/2015	13	<0.002	<0.002	<0.002	<0.002	<0.200	<200
B02 @ 13'	7/20/2015	13	<0.002	<0.002	<0.002	<0.002	<0.200	<200
B03 @ 13'	7/20/2015	13	<0.002	<0.002	<0.002	<0.002	<0.200	<200
B04 @ 13'	7/20/2015	13	0.011	<0.002	<0.002	<0.002	<0.200	<200
B05 @ 13'	7/20/2015	13	<0.002	<0.002	<0.002	<0.002	<0.200	<200

Notes:

1. Standards for soil are taken from 2 CCR 404-1, Table 910-1, effective February 1, 2014.

COGCC = Colorado Oil and Gas Conservation Commission

(<) = Analytical result is less than the indicated laboratory reporting limit.

TVPH - GRO = Total volatile petroleum hydrocarbons - gasoline range organics

TEPH - DRO = Total extractable petroleum hydrocarbons - diesel range organics

TEPH - ORO = Total extractable petroleum hydrocarbons - oil range organics

mg/kg = Milligrams per kilogram.

bgs = Below ground surface.

BOLD = Analytical result is in exceedance of COGCC Table 910-1 soil standards.

TABLE 2
PIPELINE 16-0000-6069-6"
GROUNDWATER SAMPLE RESULTS SUMMARY TABLE
KERR-McGEE GATHERING, LLC

Sample ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)
COGCC Table 910-1 Groundwater Standard (µg/L) ⁽¹⁾		5	560	700	1,400
GW01	7/20/2015	227	186	<4.0	100
GW02	7/22/2015	150	206	3.1	92.1

Notes:

1. Groundwater standards referenced from 2 CCR 404-1, Table 910-1, effective February 1, 2014.

COGCC = Colorado Oil and Gas Conservation Commission

µg/L = Micrograms per liter

(<) = Analytical result is less than the indicated laboratory reporting limit.

BOLD= Analytical result is in exceedance of COGCC groundwater standards.

LABORATORY ANALYTICAL REPORTS



July 21, 2015

Tasman Geosciences

Christine Wasko

6899 Pecos Street, Unit C

Denver

CO 80211

Project Name - KMG - Pipeline 16-0000-6069-6

Project Number - [none]

Attached are your analytical results for KMG - Pipeline 16-0000-6069-6 received by Origins Laboratory, Inc. July 20, 2015. This project is associated with Origins project number X507279-01.

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N01@12	X507279-01	Soil	July 20, 2015 11:40	07/20/2015 17:00
N02@12	X507279-02	Soil	July 20, 2015 11:42	07/20/2015 17:00
N03@12	X507279-03	Soil	July 20, 2015 11:44	07/20/2015 17:00
N04@12	X507279-04	Soil	July 20, 2015 11:46	07/20/2015 17:00
N05@12	X507279-05	Soil	July 20, 2015 11:48	07/20/2015 17:00
W01@12	X507279-06	Soil	July 20, 2015 11:50	07/20/2015 17:00
E01@12	X507279-07	Soil	July 20, 2015 11:52	07/20/2015 17:00
S01@12	X507279-08	Soil	July 20, 2015 11:54	07/20/2015 17:00
S02@12	X507279-09	Soil	July 20, 2015 11:56	07/20/2015 17:00
S03@12	X507279-10	Soil	July 20, 2015 11:58	07/20/2015 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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S04@12	X507279-11	Soil	July 20, 2015 12:00	07/20/2015 17:00
S05@12	X507279-12	Soil	July 20, 2015 12:02	07/20/2015 17:00
B01@13	X507279-13	Soil	July 20, 2015 12:04	07/20/2015 17:00
B02@13	X507279-14	Soil	July 20, 2015 12:06	07/20/2015 17:00
B03@13	X507279-15	Soil	July 20, 2015 12:08	07/20/2015 17:00
B04@13	X507279-16	Soil	July 20, 2015 12:10	07/20/2015 17:00
B05@13	X507279-17	Soil	July 20, 2015 12:12	07/20/2015 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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

ORIGINS

X507279

page 1 of 2

Client: APC - midstream / Tasman
Address: [blank]
Telephone Number: 720 409 8791
Email Address: cwasko@tasman-geo.com

Project Manager: C Wasko
Project Name: Pipeline 16-0000-6069-6
Project Number: [blank]
Samples Collected by: Eliot Diller-Henry

Sample ID Description	Date Sampled	Time Sampled	Preservative				# of Containers	Analysis				All Samples labeled Quincy and Watershed please refer to project Sample instructions KMG Pipeline 16-0000-6069-6	
			Unpreserved	HCl	HNO ₃	Other		Groundwater	Soil	Air	Other		
N#1 @12	07/20/15	1140					1						
N#2 @12		1142					1						
N#3 @12		1144					1						
N#4 @12		1146					1						
N#5 @12		1148					1						
W#1 @12		1150					1						
E#1 @12		1152					1						
S#1 @12		1154					1						
S#2 @12		1156					1						
S#3 @12		1158					1						
Relinquished By: [Signature]	Date: 07/20/15	Time: 11:00	Received By: Kasko	Date: 7.20.15	Time: 1700	Turnaround Time: Same Day <input checked="" type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/>							
Relinquished By: [Signature]	Date: [blank]	Time: [blank]	Received By: [blank]	Date: [blank]	Time: [blank]								

Sample times confirmed

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

ORIGINS

X50729

page 2 of 2

Client: APC-midstream/Tasman
Address:
Telephone Number: 720 409 879
Email Address: cwasko@tasman-geo.com

Project Name: Pipeline 16-0000-6069-6
Project Unit: Elliot Diller-Karzan
Project Location: Pipeline 16-0000-6069-6

1725 Ell Place | Denver CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Pres. v. v				Air Sum. #	Other	Analysis	All Samples Labeled
				Unpreserved	HCl	HNO ₃	Oil				
504@12	07/24/15	1200	1	X						TPH GC/MS 8015	During and between please refer to project sample instructions as pipeline 16-0000-6069
505@12		1202									
B01@13		1204									
B02@13		1206									
B03@13		1208									
B04@13		1210									
B05@13		1212									
<div> <div> Disinquired By: [Signature] Date: 07/20/15 Time: 17:00 </div> <div> Received By: [Signature] Date: 7.20.15 Time: 17:00 </div> <div> Turnaround Time: Same Day <input checked="" type="checkbox"/> 2 Hr 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input checked="" type="checkbox"/> </div> </div>											

11 | Date Result Requested

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 1507279

Client: Tasman Geosciences

Client Project ID: KMG-Pipeline 16-0000-6069-6

Checklist Completed by: Joe Henderson

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

Date/time completed: 7/20/15 1814

Airbill #: _____

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

Cooler Number/Temperature: 1 / 4.1 °C _____ / _____ °C _____ / _____ °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<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 ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<u>SH 7/20/15</u>
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<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 ⁽¹⁾ ? (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 ₃ , HCL, H ₂ SO ₄) / (pH > 10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)			<input checked="" type="checkbox"/>	
Additional Comments (if any): <u>No sample times present on COC. Contacted Sampler (Elliot Dillon) to confirm times via phone call on 7/20/15 at 1740</u>				

⁽¹⁾ 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)

7/21/15
Date/Time Reviewed

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

N01@12

7/20/2015 11:40:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-01 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	102 %	59-131			"	"	"
------------------------	-------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	94.4 %	70-130			"	"	"
Surrogate: Toluene-d8	96.2 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	99.5 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

N02@12

7/20/2015 11:42:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-02 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	98.9 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	94.5 %	70-130			"	"	"
Surrogate: Toluene-d8	97.4 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

N03@12

7/20/2015 11:44:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-03 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	109 %	59-131			"	"	"
------------------------	-------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	0.013	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	0.023	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	95.9 %	70-130			"	"	"
Surrogate: Toluene-d8	97.8 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

N04@12

7/20/2015 11:46:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-04 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	96.2 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	96.4 %	70-130			"	"	"
Surrogate: Toluene-d8	96.0 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	99.5 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

N05@12

7/20/2015 11:48:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-05 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	92.2 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	97.0 %	70-130			"	"	"
Surrogate: Toluene-d8	97.4 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

W01@12

7/20/2015 11:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-06 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl 103 % 59-131 " " "

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	0.229	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	0.072	0.002	"	"	"	"	"
Toluene	0.058	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	0.020	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4 92.3 % 70-130 " " "

Surrogate: Toluene-d8 97.5 % 70-130 " " "

Surrogate: 4-Bromofluorobenzene 99.7 % 70-130 " " "

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

E01@12

7/20/2015 11:52:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-07 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	84.9 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	94.2 %	70-130			"	"	"
Surrogate: Toluene-d8	97.1 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

S01@12

7/20/2015 11:54:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-08 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	99.6 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	95.6 %	70-130			"	"	"
Surrogate: Toluene-d8	95.7 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	99.6 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

S02@12

7/20/2015 11:56:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-09 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	95.0 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	0.002	0.002	"	"	"	"	"
Toluene	0.002	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	94.8 %	70-130			"	"	"
Surrogate: Toluene-d8	96.3 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

S03@12

7/20/2015 11:58:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-10 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	92.3 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	95.7 %	70-130			"	"	"
Surrogate: Toluene-d8	96.6 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

S04@12

7/20/2015 12:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-11 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/20/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	88.4 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	5.00	mg/kg	25	5G20013	07/20/2015	07/20/2015
Benzene	ND	0.050	"	"	"	"	"
Toluene	ND	0.050	"	"	"	"	"
Ethylbenzene	ND	0.050	"	"	"	"	"
Xylenes, total	ND	0.050	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	88.5 %	70-130			"	"	"
Surrogate: Toluene-d8	99.4 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	99.1 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

S05@12

7/20/2015 12:02:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-12 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/21/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	97.7 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/20/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	96.1 %	70-130			"	"	"
Surrogate: Toluene-d8	96.8 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

B01@13

7/20/2015 12:04:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-13 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/21/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	97.9 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/21/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	92.6 %	70-130			"	"	"
Surrogate: Toluene-d8	97.4 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

B02@13

7/20/2015 12:06:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-14 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/21/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	94.6 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/21/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	95.0 %	70-130			"	"	"
Surrogate: Toluene-d8	96.6 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

B03@13

7/20/2015 12:08:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-15 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/21/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	89.9 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/21/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	93.6 %	70-130			"	"	"
Surrogate: Toluene-d8	96.8 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

B04@13

7/20/2015 12:10:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-16 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/21/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	99.8 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/21/2015
Benzene	0.011	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	95.2 %	70-130			"	"	"
Surrogate: Toluene-d8	96.9 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	100 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

B05@13

7/20/2015 12:12:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507279-17 (Soil)

DRO/RRO by EPA8015C

Diesel (C10-C28)	ND	50	mg/kg	1	5G20012	07/20/2015	07/21/2015
Residual Range Organics (C28-C36)	ND	200	"	"	"	"	"

Surrogate: o-Terphenyl	83.7 %	59-131			"	"	"
------------------------	--------	--------	--	--	---	---	---

GBTEX by EPA 8260C

Gasoline Range Hydrocarbons	ND	0.200	mg/kg	1	5G20013	07/20/2015	07/21/2015
Benzene	ND	0.002	"	"	"	"	"
Toluene	ND	0.002	"	"	"	"	"
Ethylbenzene	ND	0.002	"	"	"	"	"
Xylenes, total	ND	0.002	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	102 %	70-130			"	"	"
Surrogate: Toluene-d8	95.3 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	99.2 %	70-130			"	"	"

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

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

Batch 5G20013 - EPA 5030 (soil)

Blank (5G20013-BLK1)

Prepared: 07/20/2015 Analyzed: 07/20/2015

Gasoline Range Hydrocarbons	ND	0.200	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Surrogate: 1,2-Dichloroethane-d4	59.7		ug/kg	62.5		95.6	70-130			
Surrogate: Toluene-d8	60.1		"	62.5		96.2	70-130			
Surrogate: 4-Bromofluorobenzene	63.5		"	62.5		102	70-130			

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5G20013 - EPA 5030 (soil)										
Blank (5G20013-BLK2)					Prepared: 07/20/2015 Analyzed: 07/20/2015					
Gasoline Range Hydrocarbons	ND	0.200	mg/kg							
Benzene	ND	0.002	"							
Toluene	ND	0.002	"							
Ethylbenzene	ND	0.002	"							
Xylenes, total	ND	0.002	"							
Surrogate: 1,2-Dichloroethane-d4	68.1		ug/kg	62.5		109	70-130			
Surrogate: Toluene-d8	62.5		"	62.5		100	70-130			
Surrogate: 4-Bromofluorobenzene	63.2		"	62.5		101	70-130			

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5G20013 - EPA 5030 (soil)										
LCS (5G20013-BS1)					Prepared: 07/20/2015 Analyzed: 07/20/2015					
Benzene	0.087	0.002	mg/kg	0.100		87.3	77.1-124			
Toluene	0.085	0.002	"	0.100		85.5	74.5-128			
Ethylbenzene	0.083	0.002	"	0.100		83.5	66.4-127			
m,p-Xylene	0.167	0.004	"	0.200		83.4	76.6-124			
o-Xylene	0.087	0.002	"	0.100		87.1	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	55.4		ug/kg	62.5		88.7	70-130			
Surrogate: Toluene-d8	61.3		"	62.5		98.0	70-130			
Surrogate: 4-Bromofluorobenzene	62.2		"	62.5		99.5	70-130			

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

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

Batch 5G20013 - EPA 5030 (soil)

LCS (5G20013-BS2)

Prepared: 07/20/2015 Analyzed: 07/20/2015

Benzene	0.099	0.002	mg/kg	0.100		99.0	77.1-124			
Toluene	0.101	0.002	"	0.100		101	74.5-128			
Ethylbenzene	0.100	0.002	"	0.100		100	66.4-127			
m,p-Xylene	0.202	0.004	"	0.200		101	76.6-124			
o-Xylene	0.102	0.002	"	0.100		102	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	67.7		ug/kg	62.5		108	70-130			
Surrogate: Toluene-d8	64.0		"	62.5		102	70-130			
Surrogate: 4-Bromofluorobenzene	61.9		"	62.5		99.0	70-130			

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

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

Batch 5G20013 - EPA 5030 (soil)

Matrix Spike (5G20013-MS1)		Source: X507279-01			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Benzene	0.089	0.002	mg/kg	0.100	ND	88.8	71.8-126			
Toluene	0.088	0.002	"	0.100	ND	87.5	65.1-130			
Ethylbenzene	0.089	0.002	"	0.100	ND	88.7	62.2-130			
m,p-Xylene	0.176	0.004	"	0.200	ND	88.0	46.5-137			
o-Xylene	0.091	0.002	"	0.100	ND	91.4	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	53.9		ug/kg	62.5		86.3	70-130			
Surrogate: Toluene-d8	61.6		"	62.5		98.5	70-130			
Surrogate: 4-Bromofluorobenzene	62.6		"	62.5		100	70-130			

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

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

Batch 5G20013 - EPA 5030 (soil)

Matrix Spike (5G20013-MS2)		Source: X507279-02			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Benzene	0.085	0.002	mg/kg	0.100	ND	84.8	71.8-126			
Toluene	0.084	0.002	"	0.100	ND	84.2	65.1-130			
Ethylbenzene	0.086	0.002	"	0.100	ND	86.4	62.2-130			
m,p-Xylene	0.170	0.004	"	0.200	ND	85.2	46.5-137			
o-Xylene	0.090	0.002	"	0.100	ND	89.9	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	54.4		ug/kg	62.5		87.0	70-130			
Surrogate: Toluene-d8	61.8		"	62.5		98.9	70-130			
Surrogate: 4-Bromofluorobenzene	63.5		"	62.5		102	70-130			

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5G20013 - EPA 5030 (soil)										
Matrix Spike Dup (5G20013-MSD1)		Source: X507279-01			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Benzene	0.088	0.002	mg/kg	0.100	ND	87.6	71.8-126	1.34	11.3	
Toluene	0.087	0.002	"	0.100	ND	86.9	65.1-130	0.757	15.4	
Ethylbenzene	0.085	0.002	"	0.100	ND	84.8	62.2-130	4.57	19.6	
m,p-Xylene	0.171	0.004	"	0.200	ND	85.3	46.5-137	3.13	19.2	
o-Xylene	0.088	0.002	"	0.100	ND	88.3	54.2-134	3.45	17.9	
Surrogate: 1,2-Dichloroethane-d4	54.5		ug/kg	62.5		87.2	70-130			
Surrogate: Toluene-d8	61.9		"	62.5		99.1	70-130			
Surrogate: 4-Bromofluorobenzene	61.8		"	62.5		98.9	70-130			

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5G20013 - EPA 5030 (soil)										
Matrix Spike Dup (5G20013-MSD2)		Source: X507279-02			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Benzene	0.085	0.002	mg/kg	0.100	ND	84.8	71.8-126	0.00	11.3	
Toluene	0.082	0.002	"	0.100	ND	81.8	65.1-130	2.87	15.4	
Ethylbenzene	0.083	0.002	"	0.100	ND	82.7	62.2-130	4.47	19.6	
m,p-Xylene	0.162	0.004	"	0.200	ND	80.8	46.5-137	5.23	19.2	
o-Xylene	0.086	0.002	"	0.100	ND	86.3	54.2-134	4.06	17.9	
Surrogate: 1,2-Dichloroethane-d4	55.0		ug/kg	62.5		87.9	70-130			
Surrogate: Toluene-d8	60.9		"	62.5		97.5	70-130			
Surrogate: 4-Bromofluorobenzene	61.4		"	62.5		98.3	70-130			

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

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

Extractable Petroleum Hydrocarbons by 8015C - Quality Control

Origins Laboratory, Inc.

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

Batch 5G20012 - EPA 3580

Blank (5G20012-BLK1)

Prepared: 07/20/2015 Analyzed: 07/20/2015

Diesel (C10-C28)	ND	50	mg/kg							
Residual Range Organics (C28-C36)	ND	200	"							
Surrogate: o-Terphenyl	50		"	50.0		101	59-131			

Blank (5G20012-BLK2)

Prepared: 07/20/2015 Analyzed: 07/20/2015

Diesel (C10-C28)	ND	50	mg/kg							
Residual Range Organics (C28-C36)	ND	200	"							
Surrogate: o-Terphenyl	49		"	50.0		97.8	59-131			

LCS (5G20012-BS1)

Prepared: 07/20/2015 Analyzed: 07/20/2015

Diesel (C10-C28)	980	50	mg/kg	1000		97.6	64-121			
Residual Range Organics (C28-C36)	1000	200	"	1000		104	58-124			
Surrogate: o-Terphenyl	48		"	50.0		96.8	59-131			

LCS (5G20012-BS2)

Prepared: 07/20/2015 Analyzed: 07/20/2015

Diesel (C10-C28)	930	50	mg/kg	1000		92.6	64-121			
Residual Range Organics (C28-C36)	1000	200	"	1000		101	58-124			
Surrogate: o-Terphenyl	47		"	50.0		93.2	59-131			

Matrix Spike (5G20012-MS1)

Source: X507279-01

Prepared: 07/20/2015 Analyzed: 07/20/2015

Diesel (C10-C28)	950	50	mg/kg	1000	ND	94.9	53-125			
Residual Range Organics (C28-C36)	940	200	"	1000	ND	93.9	47-133			

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5G20012 - EPA 3580										
Matrix Spike (5G20012-MS1)		Source: X507279-01			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Surrogate: o-Terphenyl	47		mg/kg	50.0		93.7	59-131			
Matrix Spike (5G20012-MS2)		Source: X507279-02			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Diesel (C10-C28)	1000	50	mg/kg	1000	ND	102	53-125			
Residual Range Organics (C28-C36)	920	200	"	1000	ND	92.1	47-133			
Surrogate: o-Terphenyl	49		"	50.0		97.9	59-131			
Matrix Spike Dup (5G20012-MSD1)		Source: X507279-01			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Diesel (C10-C28)	1000	50	mg/kg	1000	ND	102	53-125	7.28	20	
Residual Range Organics (C28-C36)	960	200	"	1000	ND	95.9	47-133	2.15	20	
Surrogate: o-Terphenyl	51		"	50.0		101	59-131			
Matrix Spike Dup (5G20012-MSD2)		Source: X507279-02			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Diesel (C10-C28)	1000	50	mg/kg	1000	ND	103	53-125	0.987	20	
Residual Range Organics (C28-C36)	920	200	"	1000	ND	92.3	47-133	0.242	20	
Surrogate: o-Terphenyl	50		"	50.0		100	59-131			

Origins Laboratory, Inc.



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

Tasman Geosciences

6899 Pecos Street, Unit C

Denver CO 80211

Christine Wasko

Project Number: [none]

Project: KMG - Pipeline 16-0000-6069-6

Notes and Definitions

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



July 21, 2015

Tasman Geosciences

Christine Wasko

6899 Pecos Street, Unit C

Denver

CO 80211

Project Name - KMG - Pipeline 16-0000-6069-6

Project Number - [none]

Attached are your analytical results for KMG - Pipeline 16-0000-6069-6 received by Origins Laboratory, Inc. July 20, 2015. This project is associated with Origins project number X507280-01.

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

Christine Wasko

Project Number: [none]

Project: KMG - Pipeline 16-0000-6069-6

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW01	X507280-01	Water	July 20, 2015 13:00	07/20/2015 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.

Jen Pellegrini For Noelle Doyle Mathis, President

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

ORIGINS

X507280

page 1 of 1

Client: ALC Industries / Tamar
Address:

Project Manager: Cwasko

Project Name: Pipeline 16-0000-6069-6

Project Number:

Telephone Number: 720 409 874
Email Address: Cwasko

Samples Collected by: EDH

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis	Sample Instructions
				Unpreserved	HCl	HNO ₃	Other	Groundwater	Air Suspended	Other		
Cwasko	07/20/17	13:00	43	P				P			BTEX 8260	1
												2
												3
												4
												5
												6
												7
												8
												9
												10
Relinquished By: [Signature]	Date: 07/20/17	Time: 17:00		Received By: [Signature]	Date: 7.20.15	Time: 1700	Turnaround Time: Same Day X	48 Hr	72 Hr			

Origins Laboratory, Inc.

Jeff Pellipini

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 1567280

Client: Tasman Geosciences

Client Project ID: Pipeline 16-0000-6069-6

Checklist Completed by: Joe Henderson

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

Date/time completed: 7/20/15 1816

Airbill #: _____

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

Cooler Number/Temperature: 1 / 4.1 °C _____ / _____ °C _____ / _____ °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<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 ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<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 ⁽¹⁾ ? (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 ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>			HC1
Additional Comments (if any):				

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

Reviewed by (Project Manager) [Signature]

7/21/15
Date/Time Reviewed

Origins Laboratory, Inc.

Joe 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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

GW01

7/20/2015 1:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507280-01 (Water)

BTEX by EPA 8260C

Benzene	227	4.0	ug/L	4	5G20007	07/20/2015	07/20/2015
Toluene	186	4.0	"	"	"	"	"
Ethylbenzene	ND	4.0	"	"	"	"	"
Xylenes, total	100	4.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	100 %	87.3-113			"	"	"
Surrogate: Toluene-d8	98.4 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	100 %	88.6-111			"	"	"

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

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

Batch 5G20007 - EPA 5030B (Water)

Blank (5G20007-BLK1)

Prepared: 07/20/2015 Analyzed: 07/20/2015

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	62		"	62.5	99.5	87.3-113				
Surrogate: Toluene-d8	61		"	62.5	97.5	90.9-108				
Surrogate: 4-Bromofluorobenzene	62		"	62.5	99.2	88.6-111				

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

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

Batch 5G20007 - EPA 5030B (Water)

LCS (5G20007-BS1)

Prepared: 07/20/2015 Analyzed: 07/20/2015

Benzene	51.0	1.0	ug/L	50.0	102	75-126
Toluene	51.7	1.0	"	50.0	103	78.7-126
Ethylbenzene	53.5	1.0	"	50.0	107	80-130
m,p-Xylene	106	2.0	"	100	106	77.2-133
o-Xylene	52.6	1.0	"	50.0	105	77.9-126
Surrogate: 1,2-Dichloroethane-d4	58		"	62.5	93.4	87.3-113
Surrogate: Toluene-d8	62		"	62.5	99.6	90.9-108
Surrogate: 4-Bromofluorobenzene	62		"	62.5	99.1	88.6-111

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

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

Batch 5G20007 - EPA 5030B (Water)

Matrix Spike (5G20007-MS1)		Source: X507226-02			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Benzene	53.7	1.0	ug/L	50.0	ND	107	74-130			
Toluene	53.4	1.0	"	50.0	ND	107	73-131			
Ethylbenzene	55.5	1.0	"	50.0	ND	111	76-132			
m,p-Xylene	110	2.0	"	100	ND	110	69-139			
o-Xylene	53.8	1.0	"	50.0	ND	108	74-131			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.2	87.3-113			
Surrogate: Toluene-d8	63		"	62.5		101	90.9-108			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.1	88.6-111			

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-0000-6069-6

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

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

Batch 5G20007 - EPA 5030B (Water)

Matrix Spike Dup (5G20007-MSD1)		Source: X507226-02			Prepared: 07/20/2015 Analyzed: 07/20/2015					
Benzene	55.5	1.0	ug/L	50.0	ND	111	74-130	3.28	20	
Toluene	55.0	1.0	"	50.0	ND	110	73-131	2.92	20	
Ethylbenzene	56.2	1.0	"	50.0	ND	112	76-132	1.20	20	
m,p-Xylene	111	2.0	"	100	ND	111	69-139	0.843	20	
o-Xylene	54.8	1.0	"	50.0	ND	110	74-131	1.80	20	
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		95.1	87.3-113			
Surrogate: Toluene-d8	62		"	62.5		98.9	90.9-108			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.6	88.6-111			

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

Christine Wasko

Project Number: [none]

Project: KMG - Pipeline 16-0000-6069-6

Notes and Definitions

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



July 23, 2015

Tasman Geosciences

Christine Wasko

6899 Pecos Street, Unit C

Denver

CO 80211

Project Name - KMG - Pipeline 16-000-6069-6

Project Number - [none]

Attached are your analytical results for KMG - Pipeline 16-000-6069-6 received by Origins Laboratory, Inc. July 22, 2015. This project is associated with Origins project number X507312-01.

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

Christine Wasko

Project Number: [none]

Project: KMG - Pipeline 16-000-6069-6

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW02	X507312-01	Water	July 22, 2015 10:50	07/22/2015 17:45

Origins Laboratory, Inc.



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

Tasman Geosciences
6899 Pecos Street, Unit C
Denver CO 80211

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-000-6069-6

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: XS07312

Client: Tasman

Client Project ID: Pipeline 16-000-6069-6

Checklist Completed by: Jeff Smith

Shipped Via: H/D

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

Date/time completed: 7/22/15

Airbill #: NA

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

Cooler Number/Temperature: 1 / 4.6 °C 1 / 1 °C 1 / 1 °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<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 ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<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 ⁽¹⁾ ? (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 ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾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)

7/22/15
Date/Time Reviewed

Origins Laboratory, Inc.

Jeff 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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-000-6069-6

GW02

7/22/2015 10:50:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
X507312-01 (Water)

BTEX by EPA 8260C

Benzene	150	1.0	ug/L	1	5G22011	07/22/2015	07/22/2015
Toluene	206	10.0	"	10	"	"	07/22/2015
Ethylbenzene	3.1	1.0	"	1	"	"	07/22/2015
Xylenes, total	92.1	1.0	"	"	"	"	"

Surrogate: 1,2-Dichloroethane-d4	97.8 %	87.3-113			"	"	"
Surrogate: Toluene-d8	102 %	90.9-108			"	"	"
Surrogate: 4-Bromofluorobenzene	100 %	88.6-111			"	"	"

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-000-6069-6

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

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

Batch 5G22011 - EPA 5030B (Water)

Blank (5G22011-BLK1)

Prepared: 07/22/2015 Analyzed: 07/22/2015

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	60		"	62.5	96.5		87.3-113			
Surrogate: Toluene-d8	61		"	62.5	97.7		90.9-108			
Surrogate: 4-Bromofluorobenzene	61		"	62.5	97.4		88.6-111			

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-000-6069-6

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

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

Batch 5G22011 - EPA 5030B (Water)

LCS (5G22011-BS1)

Prepared: 07/22/2015 Analyzed: 07/22/2015

Benzene	51.9	1.0	ug/L	50.0		104	75-126			
Toluene	50.7	1.0	"	50.0		101	78.7-126			
Ethylbenzene	51.5	1.0	"	50.0		103	80-130			
m,p-Xylene	102	2.0	"	100		102	77.2-133			
o-Xylene	52.6	1.0	"	50.0		105	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	56		"	62.5		89.9	87.3-113			
Surrogate: Toluene-d8	61		"	62.5		98.2	90.9-108			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.0	88.6-111			

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-000-6069-6

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

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

Batch 5G22011 - EPA 5030B (Water)

Matrix Spike (5G22011-MS1)		Source: X507301-01			Prepared: 07/22/2015 Analyzed: 07/22/2015					
Benzene	48.8	1.0	ug/L	50.0	ND	97.6	74-130			
Toluene	46.2	1.0	"	50.0	ND	92.5	73-131			
Ethylbenzene	46.5	1.0	"	50.0	ND	92.9	76-132			
m,p-Xylene	93.4	2.0	"	100	ND	93.4	69-139			
o-Xylene	46.7	1.0	"	50.0	ND	93.3	74-131			
Surrogate: 1,2-Dichloroethane-d4	59		"	62.5		94.0	87.3-113			
Surrogate: Toluene-d8	61		"	62.5		97.9	90.9-108			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.6	88.6-111			

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

Christine Wasko
Project Number: [none]
Project: KMG - Pipeline 16-000-6069-6

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

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

Batch 5G22011 - EPA 5030B (Water)

Matrix Spike Dup (5G22011-MSD1)		Source: X507301-01			Prepared: 07/22/2015 Analyzed: 07/22/2015					
Benzene	53.6	1.0	ug/L	50.0	ND	107	74-130	9.45	20	
Toluene	53.6	1.0	"	50.0	ND	107	73-131	14.8	20	
Ethylbenzene	55.3	1.0	"	50.0	ND	111	76-132	17.3	20	
m,p-Xylene	108	2.0	"	100	ND	108	69-139	14.7	20	
o-Xylene	53.9	1.0	"	50.0	ND	108	74-131	14.5	20	
Surrogate: 1,2-Dichloroethane-d4	57		"	62.5		91.8	87.3-113			
Surrogate: Toluene-d8	62		"	62.5		99.8	90.9-108			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	88.6-111			

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

Christine Wasko

Project Number: [none]

Project: KMG - Pipeline 16-000-6069-6

Notes and Definitions

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