

# State of Colorado Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400913854

Date Received:

## SPILL/RELEASE REPORT (INITIAL)

This form is to be submitted by the party responsible for the oil and gas spill or release. Any spill or release which may impact waters of the State must be reported as soon as practicable; any spill over 20 bbls must be reported within 24 hours and all spills over five bbls must be reported within ten days. Submit a Site Investigation and Remediation Workplan (Form 27) when requested by the Director.

Spill report taken by:

Spill/Release Point ID:

### OPERATOR INFORMATION

Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP	Operator No: 47120	<b>Phone Numbers</b>
Address: P O BOX 173779		Phone: (970) 336-3500
City: DENVER State: CO Zip: 80217-3779		Mobile: (970) 515-1238
Contact Person: Sam LaRue		Email: Sam.LaRue@anadarko.com

### INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 400913854

Initial Report Date: 10/08/2015 Date of Discovery: 10/08/2015 Spill Type: Historical Release

#### Spill/Release Point Location:

Location of Spill/Release: QTRQTR NWSW SEC 21 TWP 2N RNG 68W MERIDIAN 6

Latitude: 40.121803 Longitude: -105.016516

Municipality (if within municipal boundaries): County: WELD

#### Reference Location:

Facility Type: PIPELINE ☒ Facility/Location ID No 323299  
☐ No Existing Facility or Location ID No.  
☐ Well API No. (Only if the reference facility is well) 05- -

#### Fluid(s) Spilled/Released (please answer Yes/No):

Was one (1) barrel or more spilled outside of berms or secondary containment? Yes

*Secondary containment, including walls & floor regardless of construction material, must be sufficiently impervious to contain any discharge from primary containment until cleanup occurs.*

Were Five (5) barrels or more spilled? No

Estimated Total Spill Volume: use same ranges as others for values

Estimated Oil Spill Volume(bbl): 0 Estimated Condensate Spill Volume(bbl): Unknown

Estimated Flow Back Fluid Spill Volume(bbl): 0 Estimated Produced Water Spill Volume(bbl): 0

Estimated Other E&P Waste Spill Volume(bbl): 0 Estimated Drilling Fluid Spill Volume(bbl): 0

Specify:

#### Land Use:

Current Land Use: NON-CROP LAND Other(Specify):

Weather Condition: 70's, Sunny.

Surface Owner: FEE Other(Specify):

#### Check if impacted or threatened by spill/Release (please answer Yes/No to all that apply):

Waters of the State ☒ Residence/Occupied Structure ☐ Livestock ☐ Public Byway ☐ Surface Water Supply Area ☐

As defined in COGCC 100-Series Rules

Describe what is known about the spill/release event (what happened -- including how it was stopped, contained, and recovered):

While investigating a gas sales line tying into a third party metering house associated with the Arthur Stromquist-62N68W/21SWNW facility, shallow groundwater impacts were discovered. Following hydro-excavation activities while exposing the line, groundwater was encountered approximately 3.5 feet below ground surface (bgs). A groundwater sample (GW01) was collected from the excavation on October 7, 2015, and submitted to Origins Laboratory in Denver, Colorado for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by USEPA Method 8260C. Analytical results received on October 8, 2015, indicated that the benzene concentration in groundwater sample GW01 was above the applicable COGCC Table 910-1 groundwater standard. Groundwater analytical results are summarized in Table 1. Site assessment activities are on-going at this location.

**List Agencies and Other Parties Notified:**

**OTHER NOTIFICATIONS**

<u>Date</u>	<u>Agency/Party</u>	<u>Contact</u>	<u>Phone</u>	<u>Response</u>
10/8/2015	County	Troy Swain	--Email	
10/8/2015	County	Roy Rudisill	--Email	
10/8/2015	Land Owner	Private	--Phone	
10/8/2015	County	Tom Parko	--Email	
10/8/2015	County	J Simmons	--Email	

**OPERATOR COMMENTS:**

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I hereby certify all statements made in this form are to the best of my knowledge true, correct, and complete.

Signed: \_\_\_\_\_ Print Name: Sam LaRue

Title: Senior HSE Representative Date: \_\_\_\_\_ Email: Sam.LaRue@anadarko.com

**Attachment Check List**

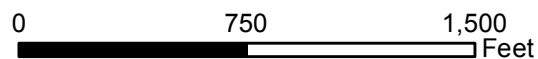
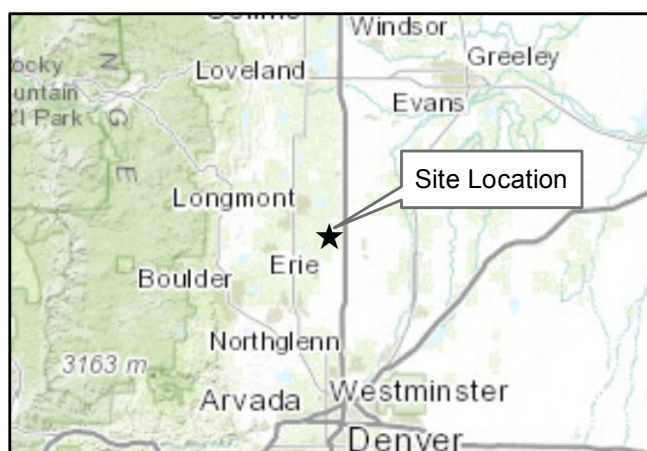
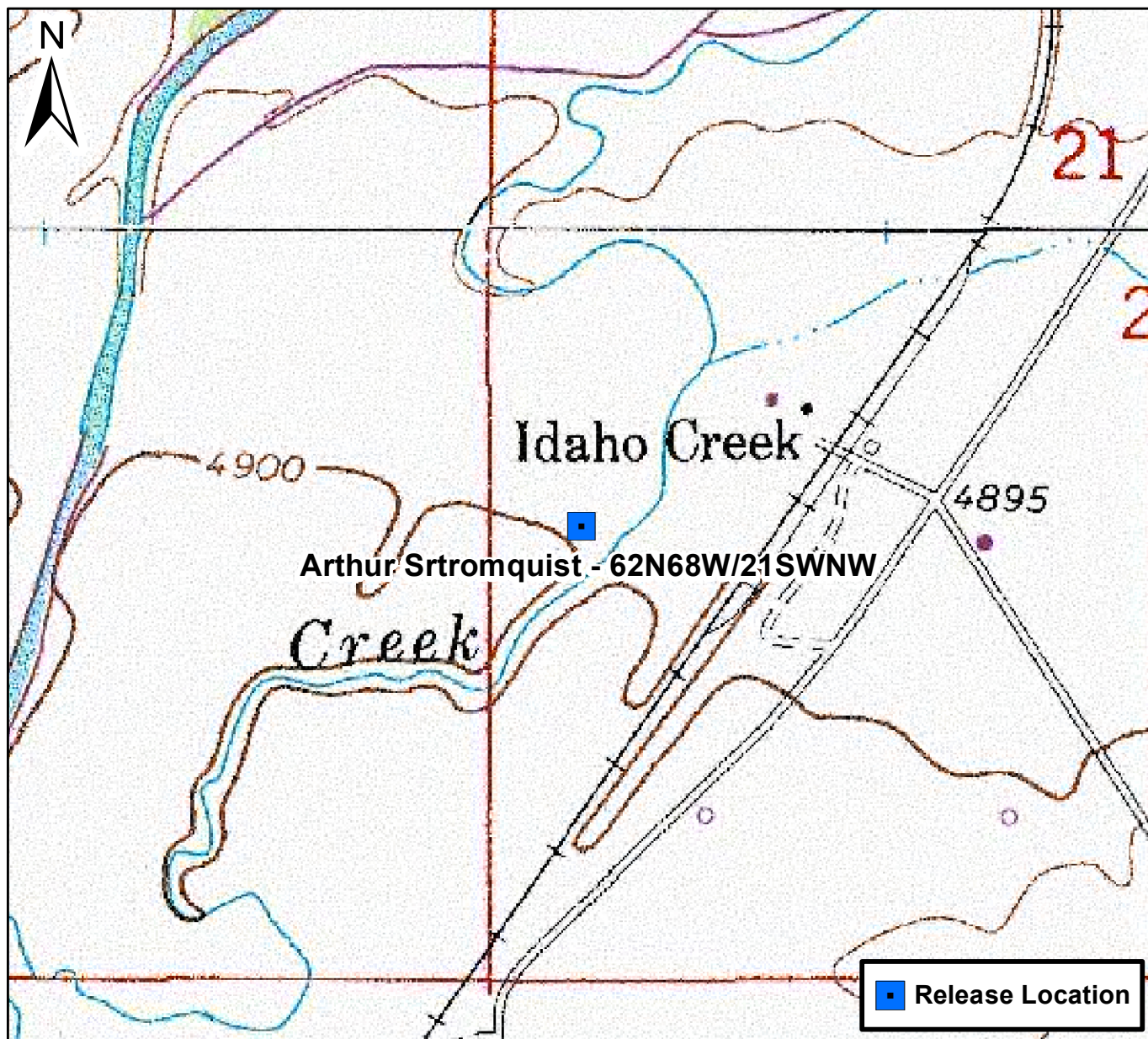
<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
400914537	ANALYTICAL RESULTS
400914539	FORM 19 SUBMITTED
400914540	TOPOGRAPHIC MAP

Total Attach: 3 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>

Total: 0 comment(s)



## Figure 1

Site Location Map  
 Arthur Srtromquist - 62N68W/21SWNW  
 NWSW S21 T2N R68W  
 Weld County, Colorado



## **ANALYTICAL TABLE**

**TABLE 1**  
**ARTHUR STROMQUIST-62N68W/21SWNW**  
**GROUNDWATER RESULTS SUMMARY TABLE**  
**KERR-McGEE OIL AND GAS ONSHORE LP**

Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Depth To Water (ft. bgs)
<b>COGCC Standards for groundwater (µg/L) <sup>(1)</sup></b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>	
GW01	10/07/15	<b>130</b>	465	75.5	560	~3.5

**Notes:**

1. Standards for groundwater 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.

µg/L = Micrograms per liter.

ft. bgs = Feet below ground surface.

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

# **LABORATORY ANALYTICAL REPORT**



October 08, 2015

Tasman Geosciences

Bob Cornez

6899 Pecos Street, Unit C

Denver

CO 80211

**Project Name - KMG - Western 3-21A**

**Project Number - [none]**

Attached are your analytical results for KMG - Western 3-21A received by Origins Laboratory, Inc. October 07, 2015. This project is associated with Origins project number X510075-01.

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 - Western 3-21A

## CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW01	X510075-01	Water	October 7, 2015 16:10	10/07/2015 18:00

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: [none]  
Project: KMG - Western 3-21A

www.originslaboratory.com

page 1 of 1

**ORIGINS** LABORATORY, INC

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

Address: \_\_\_\_\_ Email Address: rcornez@tasman-geo.com

Telephone Number: \_\_\_\_\_ Project Name/Number: Western 3-21A

Samples Collected By: M.H.P.

Sample ID Description	Date Sampled	Time Sampled	# of Containers	Preservative				Matrix			Analysis/Method	Sample Instructions
				Unpreserved	HCl	HNO <sub>3</sub>	Other	Groundwater	Soil	Air Summons		
6w01	10/7/15	16:10	3	X				X			Other (GEX) (822)	1
												2
												3
												4
												5
												6
												7
												8
												9
												10
Relinquished By: <u>[Signature]</u>	Date: <u>10/7/15</u>	Time: <u>12:00</u>		Received By: <u>[Signature]</u>				Date: <u>10/7/15</u>			Time: <u>1800</u>	Turnaround Time: <input checked="" type="checkbox"/> Same Day <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input type="checkbox"/> 72 Hr <input type="checkbox"/> Standard <input type="checkbox"/> 36
Relinquished By: _____	Date: _____	Time: _____		Received By: _____				Date: _____			Time: _____	

Date Results Needed:

Comments:

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 - Western 3-21A

Origins Laboratory

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

## Sample Receipt Checklist

Origins Work Order: XS10075

Client: Tasman

Client Project ID: Western 3-21A

Checklist Completed by: Jeff Smith

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

Date/time completed: 10/17/13

Airbill #: NA

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

Cooler Number/Temperature: 1 13.6 °C 1 °C 1 °C 1 °C (Describe)

Thermometer ID: T003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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.

Jeff Smith  
Reviewed by (Project Manager)

10/17/13  
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: [none]  
Project: KMG - Western 3-21A

GW01  
10/7/2015 4:10:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.  
X510075-01 (Water)

**BTEX by EPA 8260C**

Benzene	130	1.0	ug/L	1	5J07009	10/07/2015	10/07/2015
Toluene	465	10.0	"	10	"	"	10/08/2015
Ethylbenzene	75.5	1.0	"	1	"	"	10/07/2015
Xylenes, total	560	10.0	"	10	"	"	10/08/2015

Surrogate: 1,2-Dichloroethane-d4	101 %	84-121			"	"	10/07/2015
Surrogate: Toluene-d8	105 %	85-115			"	"	"
Surrogate: 4-Bromofluorobenzene	99.0 %	84-114			"	"	"

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Western 3-21A

**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 5J07009 - EPA 5030B (Water)**

**Blank (5J07009-BLK1)**

Prepared: 10/07/2015 Analyzed: 10/07/2015

Benzene	ND	1.0	ug/L							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	68		"	62.5	109		84-121			
Surrogate: Toluene-d8	63		"	62.5	101		85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5	99.0		84-114			

Origins Laboratory, Inc.



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Tasman Geosciences  
6899 Pecos Street, Unit C  
Denver CO 80211

Bob Cornez  
Project Number: [none]  
Project: KMG - Western 3-21A

**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 5J07009 - EPA 5030B (Water)**

**LCS (5J07009-BS1)**

Prepared: 10/07/2015 Analyzed: 10/07/2015

Benzene	51.8	1.0	ug/L	50.0		104	75-126			
Toluene	50.9	1.0	"	50.0		102	78.7-126			
Ethylbenzene	54.1	1.0	"	50.0		108	80-130			
m,p-Xylene	109	2.0	"	100		109	77.2-133			
o-Xylene	51.0	1.0	"	50.0		102	77.9-126			
Surrogate: 1,2-Dichloroethane-d4	64		"	62.5		102	84-121			
Surrogate: Toluene-d8	62		"	62.5		99.9	85-115			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.9	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 - Western 3-21A

**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 5J07009 - EPA 5030B (Water)**

Matrix Spike (5J07009-MS1)		Source: X510065-01			Prepared: 10/07/2015 Analyzed: 10/07/2015					
Benzene	45.2	1.0	ug/L	50.0	ND	90.5	74-130			
Toluene	44.6	1.0	"	50.0	ND	89.3	73-131			
Ethylbenzene	46.9	1.0	"	50.0	ND	93.8	76-132			
m,p-Xylene	94.9	2.0	"	100	ND	94.9	69-139			
o-Xylene	44.2	1.0	"	50.0	0.2	88.2	74-131			
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		106	84-121			
Surrogate: Toluene-d8	64		"	62.5		103	85-115			
Surrogate: 4-Bromofluorobenzene	61		"	62.5		97.9	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 - Western 3-21A

**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 5J07009 - EPA 5030B (Water)**

Matrix Spike Dup (5J07009-MSD1)		Source: X510065-01			Prepared: 10/07/2015 Analyzed: 10/07/2015					
Benzene	55.0	1.0	ug/L	50.0	ND	110	74-130	19.5	20	
Toluene	54.0	1.0	"	50.0	ND	108	73-131	19.1	20	
Ethylbenzene	56.9	1.0	"	50.0	ND	114	76-132	19.4	20	
m,p-Xylene	113	2.0	"	100	ND	113	69-139	17.7	20	
o-Xylene	54.5	1.0	"	50.0	0.2	109	74-131	20.8	20	QM-07
Surrogate: 1,2-Dichloroethane-d4	65		"	62.5		105	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: [none]

Project: KMG - Western 3-21A

### Notes and Definitions

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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Jen Pellegrini For Noelle Doyle Mathis, President