

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office to  
accordance with 19.15.29 NMAC.

### Release Notification and Corrective Action

#### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company	Burlington Resources Oil & Gas Co.	Contact	Bobby Spearman
Address	3401 East 30 <sup>th</sup> St, Farmington, NM	Telephone No.	(505)-320-3045
Facility Name	Grambling C 2R	Facility Type	Gas well
Surface Owner	BLM	Mineral Owner	FED
		API No.	3004528625

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	14	30N	10W	1425	South	1725	West	San Juan

Latitude 36.80727 Longitude -107.856603

#### NATURE OF RELEASE

Type of Release	Natural gas	Volume of Release	750 MCF	Volume Recovered	0/0
Source of Release;		Date and Hour of Occurrence		Date and Hour of Discovery	
Flow line from well head to separator		4-9-16 8:52 A		4-27-16 10:00A	
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?			
By Whom?		Date and Hour			
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.\*

OIL CONS. DIV DIST. 3

AUG 31 2016

Describe Cause of Problem and Remedial Action Taken.\*  
Underground flow line leaked due to corrosion.

Describe Area Affected and Cleanup Action Taken.\*

Excavation and confirmation sampling occurred and app 9 yards of material was transported to a third party landfarm. Field results for TPH were below the regulatory standards set forth in the NMOCD Guidelines for Remediation of Leaks, Spills and Release; therefore no further action is required. The results are attached for review.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>R. Spearman</i>	OIL CONSERVATION DIVISION	
Printed Name: Bobby Spearman	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Field Environmental Specialist	Approval Date: 9/21/2016	Expiration Date:
E-mail Address: Robert.E.Spearman@conocophillips.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 8-29-16	Phone: (505) 320-3045	NES1613226199

\* Attach Additional Sheets If Necessary



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 26, 2016

Heather Woods  
Rule Engineering LLC  
501 Airport Dr., Ste 205  
Farmington, NM 87401  
TEL: (505) 325-1055  
FAX

RE: Grambling C # 2R

OrderNo.: 1608C33

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/20/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 1608C33

Date Reported: 8/26/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SC-1

Project: Grambling C # 2R

Collection Date: 8/19/2016 11:30:00 AM

Lab ID: 1608C33-001

Matrix: SOIL

Received Date: 8/20/2016 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	8/25/2016 12:52:21 PM	27168
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/24/2016 12:54:15 PM	27096
Surr: DNOP	94.8	70-130		%Rec	1	8/24/2016 12:54:15 PM	27096
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/24/2016 9:42:50 PM	27122
Surr: BFB	81.3	68.3-144		%Rec	1	8/24/2016 9:42:50 PM	27122
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	8/24/2016 9:42:50 PM	27122
Toluene	ND	0.047		mg/Kg	1	8/24/2016 9:42:50 PM	27122
Ethylbenzene	ND	0.047		mg/Kg	1	8/24/2016 9:42:50 PM	27122
Xylenes, Total	ND	0.094		mg/Kg	1	8/24/2016 9:42:50 PM	27122
Surr: 4-Bromofluorobenzene	94.4	80-120		%Rec	1	8/24/2016 9:42:50 PM	27122

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

## Analytical Report

Lab Order 1608C33

Date Reported: 8/26/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SC-2

Project: Grambling C # 2R

Collection Date: 8/19/2016 11:33:00 AM

Lab ID: 1608C33-002

Matrix: SOIL

Received Date: 8/20/2016 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	8/25/2016 1:29:33 PM	27168
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/24/2016 1:22:04 PM	27096
Surr: DNOP	96.0	70-130		%Rec	1	8/24/2016 1:22:04 PM	27096
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/24/2016 10:06:19 PM	27122
Surr: BFB	81.6	68.3-144		%Rec	1	8/24/2016 10:06:19 PM	27122
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	8/24/2016 10:06:19 PM	27122
Toluene	ND	0.047		mg/Kg	1	8/24/2016 10:06:19 PM	27122
Ethylbenzene	ND	0.047		mg/Kg	1	8/24/2016 10:06:19 PM	27122
Xylenes, Total	ND	0.094		mg/Kg	1	8/24/2016 10:06:19 PM	27122
Surr: 4-Bromofluorobenzene	94.2	80-120		%Rec	1	8/24/2016 10:06:19 PM	27122

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

## Analytical Report

Lab Order 1608C33

Date Reported: 8/26/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SC-3

Project: Grambling C # 2R

Collection Date: 8/19/2016 11:40:00 AM

Lab ID: 1608C33-003

Matrix: SOIL

Received Date: 8/20/2016 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	8/25/2016 1:41:58 PM	27168
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/24/2016 1:49:52 PM	27096
Surr: DNOP	93.0	70-130		%Rec	1	8/24/2016 1:49:52 PM	27096
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/24/2016 10:29:43 PM	27122
Surr: BFB	81.8	68.3-144		%Rec	1	8/24/2016 10:29:43 PM	27122
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	8/24/2016 10:29:43 PM	27122
Toluene	ND	0.048		mg/Kg	1	8/24/2016 10:29:43 PM	27122
Ethylbenzene	ND	0.048		mg/Kg	1	8/24/2016 10:29:43 PM	27122
Xylenes, Total	ND	0.096		mg/Kg	1	8/24/2016 10:29:43 PM	27122
Surr: 4-Bromofluorobenzene	95.5	80-120		%Rec	1	8/24/2016 10:29:43 PM	27122

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified



# Analytical Report

Lab Order 1608C33

Date Reported: 8/26/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SC-4

Project: Grambling C # 2R

Collection Date: 8/19/2016 11:45:00 AM

Lab ID: 1608C33-004

Matrix: SOIL

Received Date: 8/20/2016 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	8/25/2016 1:54:23 PM	27168
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/24/2016 2:17:56 PM	27096
Surr: DNOP	95.6	70-130		%Rec	1	8/24/2016 2:17:56 PM	27096
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/24/2016 10:53:04 PM	27122
Surr: BFB	81.6	68.3-144		%Rec	1	8/24/2016 10:53:04 PM	27122
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	8/24/2016 10:53:04 PM	27122
Toluene	ND	0.046		mg/Kg	1	8/24/2016 10:53:04 PM	27122
Ethylbenzene	ND	0.046		mg/Kg	1	8/24/2016 10:53:04 PM	27122
Xylenes, Total	ND	0.092		mg/Kg	1	8/24/2016 10:53:04 PM	27122
Surr: 4-Bromofluorobenzene	95.3	80-120		%Rec	1	8/24/2016 10:53:04 PM	27122

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1608C33

Date Reported: 8/26/2016

CLIENT: Rule Engineering LLC

Client Sample ID: SC-5

Project: Grambling C # 2R

Collection Date: 8/19/2016 11:48:00 AM

Lab ID: 1608C33-005

Matrix: SOIL

Received Date: 8/20/2016 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	30		mg/Kg	20	8/25/2016 2:31:36 PM	27168
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	24	10		mg/Kg	1	8/24/2016 2:45:40 PM	27096
Surr: DNOP	91.8	70-130		%Rec	1	8/24/2016 2:45:40 PM	27096
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/24/2016 11:16:25 PM	27122
Surr: BFB	88.1	68.3-144		%Rec	1	8/24/2016 11:16:25 PM	27122
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	8/24/2016 11:16:25 PM	27122
Toluene	ND	0.048		mg/Kg	1	8/24/2016 11:16:25 PM	27122
Ethylbenzene	ND	0.048		mg/Kg	1	8/24/2016 11:16:25 PM	27122
Xylenes, Total	ND	0.096		mg/Kg	1	8/24/2016 11:16:25 PM	27122
Surr: 4-Bromofluorobenzene	95.6	80-120		%Rec	1	8/24/2016 11:16:25 PM	27122

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608C33

26-Aug-16

Client: Rule Engineering LLC

Project: Grambling C # 2R

Sample ID	MB-27168	SampType:	mblk	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	27168	RunNo:	36775					
Prep Date:	8/25/2016	Analysis Date:	8/25/2016	SeqNo:	1139951	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-27168	SampType:	lcs	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	27168	RunNo:	36775					
Prep Date:	8/25/2016	Analysis Date:	8/25/2016	SeqNo:	1139952	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.5	90	110			

## Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |



# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608C33

26-Aug-16

Client: Rule Engineering LLC

Project: Grambling C # 2R

Sample ID	LCS-27096		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	27096		RunNo:	36709				
Prep Date:	8/22/2016		Analysis Date:	8/24/2016		SeqNo:	1137693		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	56	10	50.00	0	112	62.6	124				
Surr: DNOP	4.9		5.000		98.6	70	130				

Sample ID	MB-27096		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	PBS		Batch ID:	27096		RunNo:	36709				
Prep Date:	8/22/2016		Analysis Date:	8/24/2016		SeqNo:	1137694		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Surr: DNOP	9.0		10.00		89.5	70	130				

## Qualifiers:

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| R RPD outside accepted recovery limits                  | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608C33

26-Aug-16

Client: Rule Engineering LLC

Project: Grambling C # 2R

Sample ID	MB-27122	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	27122	RunNo:	36718					
Prep Date:	8/23/2016	Analysis Date:	8/24/2016	SeqNo:	1138315	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	760		1000		76.0	68.3	144			

Sample ID	LCS-27122	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	27122	RunNo:	36718					
Prep Date:	8/23/2016	Analysis Date:	8/24/2016	SeqNo:	1138316	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.6	80	120			
Surr: BFB	850		1000		84.7	68.3	144			

## Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
R RPD outside accepted recovery limits  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1608C33

26-Aug-16

Client: Rule Engineering LLC

Project: Grambling C # 2R

Sample ID	MB-27122		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	27122		RunNo:	36718			
Prep Date:	8/23/2016		Analysis Date:	8/24/2016		SeqNo:	1138341		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		88.5	80	120			

Sample ID	LCS-27122		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	27122		RunNo:	36718			
Prep Date:	8/23/2016		Analysis Date:	8/24/2016		SeqNo:	1138342		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	87.1	75.3	123			
Toluene	0.92	0.050	1.000	0	92.0	80	124			
Ethylbenzene	0.97	0.050	1.000	0	96.6	82.8	121			
Xylenes, Total	2.9	0.10	3.000	0	97.5	83.9	122			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

## Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
R RPD outside accepted recovery limits	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87105  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: RULE ENGINEERING LL

Work Order Number: 1608C33

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

08/20/16  
8/20/2016 9:15:00 AM

Completed By: Lindsay Mangin

8/22/2016 12:33:17 PM

Reviewed By:

jc 08/22/16

### Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

### Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐
- # of preserved bottles checked for pH:   
Adjusted?   
Checked by:
- ( $<2$  or  $>12$  unless noted)

### Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

### 18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975      Fax 505-345-4107

## Analysis Request


EDD (Type)

Sample Temperature: 3.8

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
						1608033

19/10	1130	Soil	SC-1	4oz Glass	Cold	-001
9/10	1133	Soil	SC-2	4oz Glass	Cold	-002
9/10	1140	Soil	SC-3	4oz Glass	Cold	-003
9/10	1145	Soil	SC-4	4oz Glass	Cold	-004
19/10	1148	Soil	<del>SC</del> SC-5	4oz Glass	Cold	-005

	X	X	X	X	X	BTEX + <del>METBE</del> + TAPERS (8021)
						BTEX + MTBE + TPH (Gas only)
	X	X	X	X	X	TPH 8015B (GRO / DRO / <del>VOC</del> )
						TPH (Method 418.1)
						EDB (Method 504.1)
						PAH's (8310 or 8270 SIMS)
						RCRA 8 Metals
	X	X	X	X	X	Anions ( <del>PIC/NON-DETECTABLE</del> )
						8081 Pesticides / 8082 PCB's
						8260B (VOA)
						8270 (Semi-VOA)
						Air Bubbles (Y or N)

Received by:	Date	Time
	08/20/16	09:15

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.