State of New Mexico **Energy Minerals and Natural Resources** 

> **Oil Conservation Division** 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

## **Release Notification and Corrective Action**

	OPERATOR	Initial Report	Final Report
Name of Company: Southern Union Gas Services	Contact: Rose Slade		
Address: 1507 W. 15 <sup>th</sup> Monahans, Texas 79756	Telephone No.: 432-943-110	0 ext. 1116	
Facility Name: Monahans Field Office	Facility Type: Natural Gas G	athering / Rhodes 16" pipe	eline

Surface Owner: D. K. Boyd

Lease No.

## LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
К	21	26	37					Lea

Latitude\_N32'01.485\_\_\_\_\_ \_\_ Longitude:103'10.294\_

Mineral Owner

### NATURE OF RELEASE

Type of Release: Crude oil, Poduced water, and Natural Gas	Volume of Release: 75 barrels	Volume Recovered: 20 barrels					
Source of Release: Pipeline	Date and Hour of Occurrence: not known	Date and Hour of Discovery: 9/4/09 at 8:00 am					
Was Immediate Notice Given?	If YES, To Whom?						
🛛 Yes 🗌 No 🗌 Not Required	Geoffrey Leking at the NMOCD of	fice Hobbs, NM					
By Whom? Rose Slade	Date and Hour: 9/4/09 at 9:15 am						
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	ercourse.					
If a Watercourse was Impacted, Describe Fully.*							
n a watercourse was impacted, Describe Funy.							
		WATER ON 1201					
Describe Cause of Problem and Remedial Action Taken.* The 16" natural gas gathering line operating at approximately 37 p.s.i. developed a leak. Repair crews arrived at the leak site with a vacuum truck and started recovering the fluid of mostly water and crude oil. The leak area was excavated and the 16" natural gas line was replaced with 120 feet of pipe. The landowner was immediately notified and an environmental consultant was hired to clean and remediate the contaminated site.							
Describe Area Affected and Cleanup Action Taken.*							
The final dimensions of the excavation were approximately 200' in length and ran	ged from 30 to 65 feet in width and ranging	from approximately 6 to 10 feet in depth.					
Several soil samples were taken thoughout the remediation process (please refer to Southern Union Land farm. Approximately 168 cy of topsoil ws purchased from t	the site closure plan). Basin transported app be landowner and transported to the site. The	proximately 476 cy of impacted soil to the					
contoured to fit the sourrouding topography. The site will be reseeded with vegeta	tion acceptable by the landowner.	ic excavation was backrined with harve son and					
I handler and for that the information of the shore is the set of							
I hereby certify that the information given above is true and complete to t regulations all operators are required to report and/or file certain release n	otifications and perform corrective acti	id that pursuant to NMOCD rules and					
public health or the environment. The acceptance of a C-141 report by th	e NMOCD marked as "Final Report" d	loes not relieve the operator of liability					
should their operations have failed to adequately investigate and remediat	e contamination that pose a threat to gr	cound water, surface water, human health					
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of responsi	bility for compliance with any other					
federal, state, or local laws and/or regulations.							
	<u>OIL CONSERV</u>	ATION DIVISION					
Signature:							
	ENV ENGINEER'	D) (					
Printed Name: Rose L. Slade	Approved by District Supervisor:	settren Lehma					
		00 0					
Title: EHS Compliance Specialist	Approval Date: 03/18/10 1	Expiration Date: —					
E mail Address: rose slade@sug.com	Conditions of Anna1						
E-mail Address: rose.slade@sug.com	Conditions of Approval:	Attached					
Date: 1/7/10 Phone: 432-940-5147		189-09-10-2309					

\* Attach Additional Sheets If Necessary

Basin Environmental Service Technology LLC

2800 Plains Highway P. O. Box 301 Lovington, New Mexico 88260 Office: (575) 396-2378 Fax: (575) 396-1429



# **REMEDIATION SUMMARY**

## AND

# SITE CLOSURE REQUEST

Southern Union Gas Services Rhodes 16-Inch Lea County, New Mexico UNIT K (NE/SW), Section 21, Township 26 South, Range 37 East Latitude 32 ° 01.485' North, Longitude 103 ° 10.294' West NMOCD Reference # 1RP-2309

Prepared For:

Southern Union Gas Services 1507 West 15<sup>th</sup> Street Monahans, Texas 79756

Prepared By: Basin Environmental Service Technology, LLC

November 2009

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## **FIGURES**

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### TABLES

Table 1 - Concentrations of BTEX, TPH and Chlorides in Soil

### **APPENDICES**

Appendix A – Laboratory Analytical Reports Appendix B – Release Notification and Corrective Action (Form C-141)

### **1.0 INTRODUCTION**

Basin Environmental Service Technology, LLC (Basin), on behalf of Southern Union Gas Services (Southern Union), has prepared this Remediation Summary and Site Closure Request for the release site known as Rhodes-16 Inch. The site is located in Unit Letter K (NE ¼ SW ¼), Section 21, Township 26 South, Range 37 East, in Lea County, New Mexico. The property is owned by Mr. D. K. Boyd. The site latitude is 32° 01.485' North, and the longitude is 103° 10.294' West. The Site Location and Site and Sample Location Map are provided as Figure 1 and Figure 2, respectively. The Release Notification and Corrective Action (NMOCD Form C-141) indicated approximately seventy-five (75) barrels of crude oil, produced water and natural gas was released from the Southern Union pipeline and twenty (20) barrels were recovered during the initial response activities. The Release Notification and Corrective Action is provided as Appendix B.

A previous contractor excavated and stockpiled the impacted soil on-site pending final disposition. The excavated area measured approximately two hundred (200) feet in length and ranged from thirty (30) to sixty (60) feet in width. The depth of the excavation ranged from approximately six (6) to seven (7) feet below ground surface (bgs).

On September 10, 2009, five (5) soil samples (SP#1-6' Bottom, SP#2-6' Bottom, SP#3-6' Bottom, SP#4-6' Bottom and SP#5-Original Release) were collected from the floor of the excavation and submitted to the laboratory for analysis. The soil samples were analyzed for concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) using method EPA 8021b, concentrations of total petroleum hydrocarbons (TPH) using method SW-8015 modified and chloride concentration using method 4500 Cl. A summary of the analytical results are included in Table 1, Concentrations of BTEX, TPH and Chlorides in Soil. Laboratory reports are provided as Appendix A and soil sample locations are depicted on Figure 2, Site and Sample Location Map.

The laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the laboratory method detection limit (MDL) in all of the submitted soil samples. Laboratory analytical results indicated chloride concentrations ranged from 16 mg/Kg in soil sample SP#3-6' Bottom to 4,320 mg/Kg in soil sample SP#5-Original Release.

On September 10, 2009, eight (8) sidewall soil samples (SP#6-Wall Surface, SP#7-Wall Surface, SP#8-Wall Surface, SP#9-Wall Surface, SP#10-N. Wall Surface, SP#11-W. Wall Surface, SP#12-Origin W. Wall and SP#13-Origin E. Wall) were collected from the excavation and submitted to the laboratory for analysis. The laboratory analytical results indicated benzene and BTEX concentrations were less than the laboratory MDL in all of the submitted soil samples. Laboratory analytical results indicated TPH concentrations ranged from less than the laboratory MDL in soil samples SP#6-Wall Surface, SP#8-Wall Surface, SP#9-Wall Surface, SP#10-N. Wall Surface, SP#11-W. Wall Surface, SP#10-N. Wall Surface, SP#11-W. Wall Surface, SP#12-Origin W. Wall and SP#13-Origin E. Wall to 37.6 mg/Kg in soil sample SP#7-Wall Surface. Analytical results indicate chloride concentrations ranged from less than the laboratory MDL for soil samples SP#6-Wall Surface, SP#8-Wall Surface, SP#8-Wall Surface, SP#8-Wall Surface, SP#8-Wall Surface, SP#8-Wall Surface, SP#12-Origin W. Wall and SP#13-Origin E. Wall to 37.6 mg/Kg in soil sample SP#7-Wall Surface. Analytical results indicate chloride concentrations ranged from less than the laboratory MDL for soil samples SP#6-Wall Surface, SP#8-Wall Surface, SP#8-Wa

On September 10, 2009, a "baseline" stockpile soil sample (Soil Piles) was collected from the on-site stockpile and submitted to the laboratory for analysis. The analytical results indicated the benzene concentration was 0.085 mg/Kg, the BTEX concentration was 0.761 mg/Kg, the TPH concentration was 270.4 mg/Kg and the chloride concentration was 1,120 mg/Kg.

On October 21, 2009, Southern Union requested Basin assume remediation activities at the site.

### 2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) database indicated depth to groundwater information was unavailable for Section 21, Township 26S, Range 37E. A depth to groundwater reference map utilized by the NMOCD indicates groundwater should be encountered at approximately one hundred twenty (120) feet bgs. The depth to groundwater in this area results in a score of zero (0) points being assigned to the site based on the NMOCD depth to groundwater criteria.

The water well database, maintained by the NMOSE, indicated there are no water wells less than 1,000 feet from the site, resulting in zero (0) points being assigned to the site as a result of this criteria.

There are no surface water bodies located within 1,000 feet of the site. Based on the NMOCD ranking system zero (0) points will be assigned to the site as a result of the criteria.

The NMOCD guidelines indicate the Rhodes 16-Inch release site has a ranking score of zero (0). Based on this score, the soil remediation levels for a site with a ranking score of zero (0) points are as follows:

- Benzene 10 mg/Kg (ppm)
- BTEX 50 mg/Kg (ppm)
- TPH 5,000 mg/Kg (ppm)

The NMOCD chloride remediation goals are site specific.

### 3.0 SUMMARY OF FIELD ACTIVITIES

On October 27, 2009, additional excavation activities were conducted at the release site. The area represented by and including soil samples SP#11-W. Wall Surface, SP#5-Original Release, SP#12-Origin W. Wall and SP#13-Orgin E. Wall was excavated. Approximately 476 cubic yards (cy) of impacted soil was stockpiled adjacent to the excavation, pending final disposition. The final dimensions of the excavation were approximately two hundred (200) feet in length and ranged from thirty (30) to sixty-five (65) feet in width and ranging from approximately six (6) to ten (10) feet in depth.

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On October 27, 2009, two (2) sidewall soil samples (SP12 Side Wall West and SP13 Side Wall East) were collected from the excavation and submitted to the laboratory for analysis.

The laboratory analytical results indicated benzene and BTEX concentrations were less than the laboratory MDL in both soil samples. TPH concentrations ranged from less than the laboratory MDL in soil sample SP12 Side Wall West to 10.8 mg/Kg in soil sample SP13 Side Wall East. Chloride concentrations were 32 mg/Kg in both soil samples.

On October 27, 2009, an excavation floor sample (SP5 10' Bottom Hole) was collected at the release point and submitted to the laboratory for analysis. The analytical results indicated benzene and BTEX concentrations were less than the laboratory MDL. TPH and chloride concentrations were 10.8 mg/Kg and 112 mg/Kg, respectively.

On October 27, 2009, a stockpile soil sample was collected from the on-site stockpile and submitted to the laboratory for analysis. The analytical results indicated the benzene concentration was 0.056 mg/Kg, the BTEX concentration was 4.363 mg/Kg, the TPH concentration was 1,734 mg/Kg and the chloride concentration was 800 mg/Kg.

From October 30 through November 5, 2009, Basin transported approximately 476 cy of impacted soil to the Southern Union Landfarm. Approximately 168 cy of topsoil was purchased from the landowner and transported to the site. The excavation was backfilled with native soil and contoured to fit the surrounding topography. The site will be reseeded with vegetation acceptable to the landowner.

### 4.0 SITE CLOSURE REQUEST

Based on the analytical results of the confirmation soil samples, Basin recommends Southern Union provide the NMOCD Hobbs District Office a copy of this Remediation Summary and Site Closure Request and request the NMOCD grant site closure to the Rhodes-16 Inch release site.

### 5.0 LIMITATIONS

Basin Environmental Service Technology, LLC has prepared this Remediation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

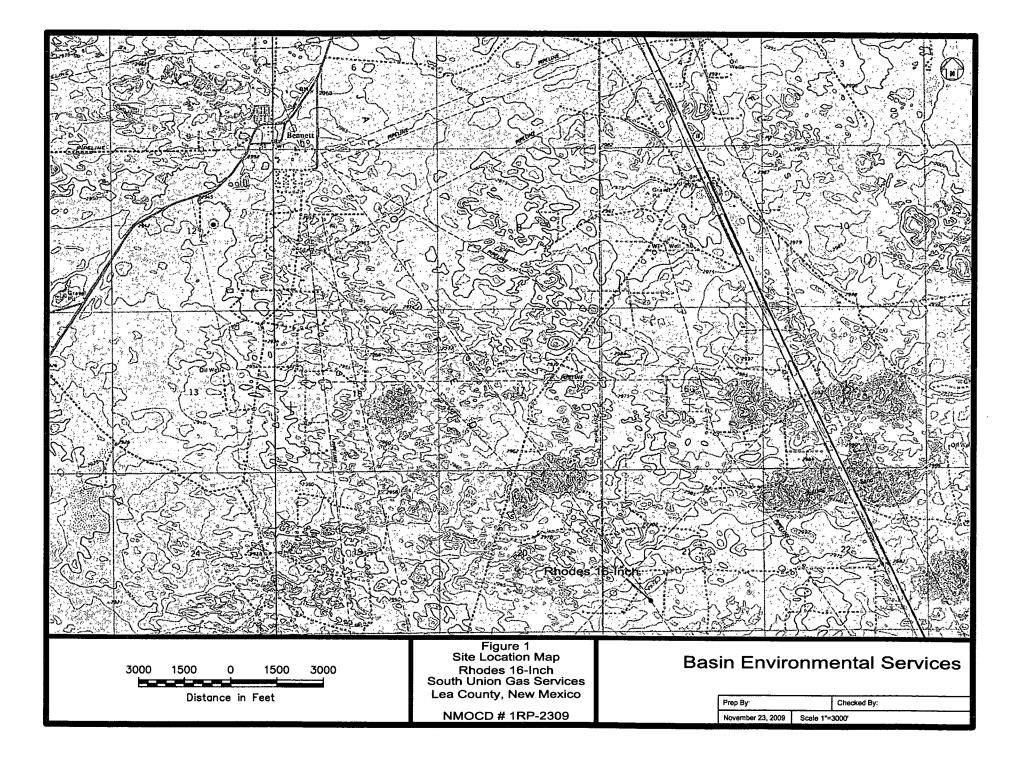
Basin Environmental Service Technology, LLC has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. Basin Environmental Service Technology, LLC has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Basin Environmental Service Technology, LLC has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Basin Environmental Service Technology, LLC also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

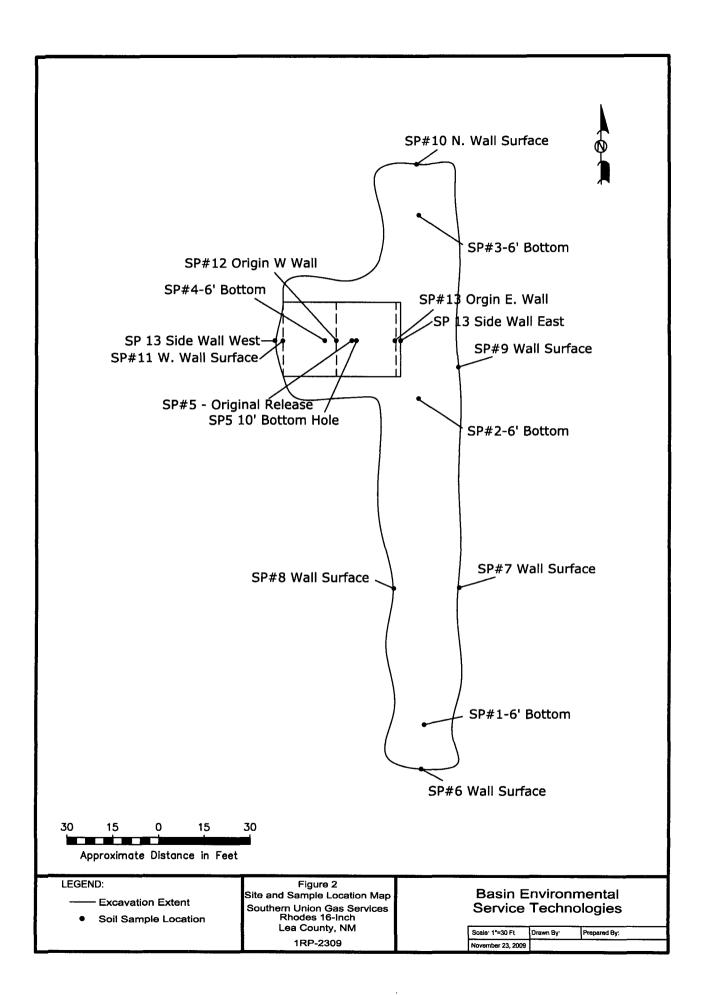
This report has been prepared for the benefit of Southern Union Gas Services. The information contained in this report, including all exhibits and attachments, may not be used by any other

party without the express consent of Basin Environmental Service Technology, LLC and/or Southern Union Gas Services.

### 6.0 **DISTRIBUTION:**

- Copy 1: Geoffrey Leking New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division (District 1) 1625 French Drive Hobbs, New Mexico 88240
- Copy 2: Rose Slade Southern Union Gas Services 1507 West 15<sup>th</sup> Monahans, Texas 79756
- Copy 3: Basin Environmental Service Technology, LLC P.O. Box 301 Lovington, New Mexico 88260





#### TABLE 1

#### CONCENTRATIONS OF BTEX, TPH AND CHLORIDES IN SOIL

#### SOUTHERN UNION GAS SERVICES RHODES 16 INCH LEA COUNTY, NEW MEXICO NMOCD REFERENCE # 1RP-2309

			METHOD: EPA SW 846-8021B, 5030 SW 848-8015M					4500 CI				
SAMPLE LOCATION	SAMPLE DATE	SOIL STATUS	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C <sub>6-</sub> C <sub>10</sub> (mg/Kg)	DRO C <sub>10</sub> -C <sub>28</sub> (mg/Kg)	DRO Ext. C <sub>28</sub> -C <sub>35</sub> (mg/Kg)	TOTAL TPH (mg/Kg)	CHLORIDE (mg/Kg)
SP#1-6' Bottom	09/10/09	In-Situ	<0.050	<0.050	<0.050	< 0.300	<0.300	<10.0	<10.0	-	<10.0	80
SP#2-6' Bottom	09/10/09	In-Situ	<0.050	<0.050	<0.050	< 0.300	<0.300	<10.0	<10.0	-	<10.0	176
SP#3-6' Bottom	09/10/09	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	-	<10.0	16
SP#4-6' Bottom	09/10/09	In-Situ	<0.050	<0.050	<0.050	< 0.300	<0.300	<10.0	<10.0	-	<10.0	112
SP#5-Original Release	09/10/09	Excavated	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	-	<10.0	4,320
SP#6-Wall Surface	09/10/09	In-Situ	<0.050	<0.050	< 0.050	<0.300	<0.300	<10.0	<10.0	-	<10.0	<16
SP#7-Wall Surface	09/10/09	In-Situ	<0.050	<0.050	< 0.050	< 0.300	<0.300	<10.0	38	-	37.6	96
SP#8-Wall Surface	09/10/09	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	-	<10.0	<16
SP#9-Wall Surface	09/10/09	In-Situ	<0.050	<0.050	<0.050	< 0.300	<0.300	<10.0	<10.0	-	<10.0	<16
SP#10-N. Wall Surface	09/10/09	In-Situ	<0.050	<0.050	<0.050	< 0.300	<0.300	<10.0	<10.0	-	<10.0	<16
SP#11-W. Wall Surface	09/10/09	Excavated	<0.050	<0.050	<0.050	< 0.300	<0.300	<10.0	<10.0	-	<10.0	512
SP#12-Origin W. Wall	09/10/09	Excavated	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	-	<10.0	2,600
SP#13-Origin E. Wall	09/10/09	Excavated	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	-	<10.0	1,660
Soil Piles	09/10/09	N/A	0.085	0.088	<0.050	0.588	0.761	24.4	246	-	270.4	1,120
影响到最快在间门上的副		""小小大学》。			""""""""""	9 mg - 2	心心發展的				学習時間で	Product and a second
SP5 10' Bottom Hole	10/27/09	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	10.8	<10.0	10.8	112
SP12 Side Wall West	10/27/09	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	<10.0	<10.0	<10.0	32
SP13 Side Wall East	10/27/09	In-Situ	<0.050	<0.050	<0.050	<0.300	<0.300	<10.0	10.8	<10.0	10.8	32
Stockpile	10/27/09	N/A	0.056	0.462	0.675	3.17	4.363	484	1,250	<10.0	1,734	800
和公司和新闻的问题。		"你都然她的"	國際部署等	CHINE TE	P MP FI	Alter at a star			1. A.	a San Ang	法资料管理	。範疇的形式行



ANALYTICAL RESULTS FOR SOUTHERN UNION GAS SERVICES ATTN: ROSE SLADE 1507 W. 15TH STREET MONAHANS, TX 79756

Receiving Date: 09/10/09 Reporting Date: 09/15/09 Project Number; 2009-047 Project Name: RHODES 16" Project Location, SOUTH OF JAL Sampling Date: 09/10/09 Sample Type: SOIL Sample Condition: COOL& INTACT @ 5<sup>6</sup>C Sample Received By: ML Analyzed By: A8/2L/HM

		ĢRO	DRO			ETHYL	ŤQŢAL	
LAŖ NO.	SAMPLE ID	(C <sub>6</sub> -C <sub>10</sub> )	(>C <sub>10</sub> -C <sub>28</sub> )	BENZENE	TOLUENE	BENZENE	XYLENES	CP.
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg <u>)</u>	(mg/kg)

ANALYSIS DATE:	09/11/09	09/11/09	09/11/091	09/11/09	09/11/09	09/11/09	09/14/03
H18219-1 SP#1-6'BOTTOM	<10.01	<10.0	<0:050	<0.050	<0.050	<0.300	80
H18219-2 SP#2-6' BOTTOM	<10.0	<10:0	<0.050	<0.050	<0.050	<0.300	178
H18219-3 SP#3-6 BOTTOM	<10.0	<10.0	<0.050	<0,050	<0.050	<0.300	16
H18219-4 SP#4-6' BOTTOM	<10.9	<10:0	< 0.050	<0.050	<0.050	<0/300	112
H18219-5 SP#5-ORIGINAL RELEASE	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300	4,320
H18219-6 SP#6-WALL SURFACE	<10,0	<10.0	<0.0501	<0.050	<0:050	<0.300	<16
H18219-7 SP#7-WALL SURFACE	<10.0	37.6	<0.050	<0.050	<0.050	<0:300	95
H18219-8 SP#8-WALL SURFACE	<10.0	<10.0	<0.050	<0,050	<0.0501	<0:300	<1.6
H18219-9 SP#9-WALL SURFACE	<10.0	<10.0	<0.050	<0.050	<0.050	<0:300	<16
H18219-10 SP#10-N. WALL SURFACE	10.0	<10:0	<0.050	<0.050	<0.050	<0.300	<16
H13219-11 SP#11-W. WALL SURFACE	<10.0	<10:0	<0.050]	<0.050	<0.050	<0.300	512
H18219-12 SP#12-ORIGIN W. WALL	<10.0	<10.0	<0.050	<0.050	<0.050	<0.300)	2,600
H18219-13 SP#13-ORIGINE. WALL	<10.01	<10.0	<0.050	<0.050	<0.050	<0.300	1,660
H18219-14 SOIL PILES	24.41	246	0,085	0.088	<0.050	0.588	1,120
Quality Control	542	489(	0.054	0.056	0.049	0.148	500
True Value CIC	500	500]	0.050)	0.050	0.050	0.150	500
% Recovery	108	97.8	108	112	98.0	98.7	100
Relative Percent Difference	1.5	1.8	6.9	6.6	4.9	6.5	<0.1

METHODS. TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B; CH: Std. Methods 4500-CI-B \*Analyses performed on 1:4 wiv aqueous extracts. Reported on wet weight.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Not accredited for GRO/DRO and Chloride.

Lab Director Hiszig TBCL SUGS

9/16/04

PLEASE NOTE. Liability and Damages. Cardinal's/kability and chent's exclusive remedy for any claim arbing, whether based in centract or tort, shall be limited to the emount paid by clent for analyses All claims, including (noto for nogligence and any other cause whetherworks shall be deemed wated, unloss made in writing and received by Cardinal within thirty (30) days after competion of the approxitie service in no event shall cardinal be liable for incidental or consequential demages, including, whether liable includings, loss of use, or less of profits incurred by cleim, we subcliance afficiates or successore and any other cause whether and and and and an event shall be limited to the approxite relate only to the somether of the reformation of the reformation of the approximation of the subcliance relate only to the somether of under the reformation of composition of company approximation of the a



ANALYTICAL RESULTS FOR SOUTHERN UNION GAS SERVICES ATTN: ROSE SLADE 1507 WEST 15TH STREET MONAHANS, TX 79756

Receiving Date: 09/10/09 Reporting Date: 09/15/09 Project Number: 2009-047 Project Name: RHODES 16" Project Location: SOUTH OF JAL Analysis Date: 09/14/09 Sampling Date: 09/10/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 5°C Sample Received By: ML Analyzed By: CK

2009-047

 PAINT

 LAB'NO.
 SAMPLE ID

 FILTER

 TEST

 H18219-14 SOIL PILES

 PASSED

 Quality Control

 True Value QC

 % Recovery

 NA

 Relative Percent Difference

METHODS: SW 846-9095B NOTE: Compliance with 40 CFR 264.314 and 265.314.

SALGA Date

#### H18219 PF 5,0G

PLEASE MOTE: Liability and Damagas. Cardinal's lubility and client's exclusive remedy for any claim arising, whether onved in contractor tort, shall be limited to the amount paid by client for analyses. All claims, including incose for negligence and any other cause at also every shall be deemed valved unless made in writing and received by Cardinal within thidy (20) days after completion of the epolicable, service, in no event shall Cardinal be liable for incidential of consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incorred by Elent, its subtidiaries, affiliates or successors arising out of related to the performance of services hereunder by Cardinal, be real cardinal effective to related reasons or otherwise. Results and to be not here and in the service services hereunder by Cardinal, regendess or whether such caim is based upon any of the above stated reasons or otherwise. Results arise only to the samples identified above this report shall not be reproduced except in full with written approval of Cardinal-Laboratories.

ARDINAL LABORATORIES						
101 East Marland, Hobbs, NM 88240 (575) 393-2326 Fax (575) 393-2476				Page	1 . 2	
Company Name: Southern Union Gris Suurices?	BILL TO	[	ANALY	SIS REQU	EST	
Project Manager: Rosa Slade	P.O. #: Blanket			·		T
Address: 1507 W. 1544	Company: Southen Union bus					
city: Monchan's state: TX Zip: 79757	Attn: Rose Slade	0				
Phone #: (432) 940-5147 Fax #: 432-943-1101	Address: 157 W. 154					
Project #: 2007-047 Project Owner: 5065	City: Morahuns	N CO Y	· · ·			
Project Name: Khorlus 16"	State: 7X Zip: 7175C	100				
Project Location: Sowh of Sal	Phone #: 432-940-5147.	28				
Sampler Name: Proc Structure MATRIX	Fax #: 43 3-943-110					1 `
		1212				, ·
EL TRUS CONTRACTOR		500	v."	·		
		びこう				·
	OTHER OTHER	Son				
the state of the s				· · · ·		<u> </u>
H18219-1 SP#1-6 Bottom 3	V R-10-59-10:50m		·····			
-2 SP# 2 + Botton G /	9-10-09 10:57 m					
-4 5P#4-6" Bertom				······································		
-5 SPH 5 - Originat Release G	9-10-09 10:55A'n	1/1/1				
-6 59= 6 - Walt sufface G	1-10-09-10-57Am	112				
-7 947 - Wallsurface G	1-10-05 10-58 Am	111				
-8 SP#8-wollsuffice G	1 9-10-09 10 StiAn	////				
-9 SPH 9-Wallsuckice G	1. 440-09 1500An			· · ·		-
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PLEASE NOTE: Listelity and Damages, Cardinal's Listely and client's exclusive remarks for any claim arising whether based in contra analyses. All claims including those for negligence and any other cause whatoever shall be cleaned walved unloss made in wheng t				- · · · ·		· . ,
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ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

101 East Marland, Hobbs, NM 88240 (575) 393-2326 Fax (575) 393-2476			Page 2 of 2
Compary Name: Shithern Units Gas Survices	BILL TO	ANAL	YSIS REQUEST
Project Manager: Kang Shada	P.O. #: Blanket		
Address: 1577, ), 15th	Company: 50G-S		
City: Monshans State: Ty Zip: 74754			
Phone #: 432-943-1116 Fax #: 432-94/3-110/	Alter: Ross Stude Address: 1507 W. 15th		
Project #: 2009-047 Project Owner: SUGS	city: Merichans		
Project Name: Phodes 16'	State: 77 Zip: 75754	main	
Project Location: South of Jal	Phone #: 433-940-5147.	St SO	
Sampler Name: Roy Stock	Fax #: 432-943-1101	1000/ 2002/ 2002/ 2002/	
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PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

October 29, 2009

Rose Slade Southern Union Gas Services 1507 West 15<sup>th</sup> Street Monahans, TX 79756

Re: Rhodes 16"

Enclosed are the results of analyses for sample number H18588, received by the laboratory on 10/28/09 at 8:31 am.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021 Method SW-846 8260 Method TX 1005 Benzene, Toluene, Ethyl Benzene, and Total Xylenes Benzene, Toluene, Ethyl Benzene, and Total Xylenes Total Petroleum Hydrocarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accredited though the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2 Method EPA 524.2 Method EPA 524.2 Haloacetic Acids (HAA-5) Total Trihalomethanes (TTHM) Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

Total Number of Pages of Report: 4 (includes Chain of Custody)

Sincerel

Celey D. Keene Laboratory Director

This report conforms with NELAP requirements



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ANALYTICAL RESULTS FOR SOUTHERN UNION GAS SERVICES ATTN: ROSE SLADE 1507 WEST 15TH STREET MONAHANS, TX 79756

Receiving Date: 10/28/09 Reporting Date: 10/29/09 Project Number: 2009-047 Project Name: RHODES 16" Project Location: LEA COUNTY, NM Sampling Date: 10/27/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 6.0<sup>0</sup>C Sample Received By: ML Analyzed By: ZL/HM

LAB NO.	SAMPLE ID		TOLUENE (mg/kg)		XYLENES	Cl <sup>**</sup> (mg/kg)	
	ATC.	10/28/00	E .		10/28/09	· • • •	-
	Ω. ( )····	+ 10/2×/04	i invornui	10//X/004	10/28/004	10/28/00	J

ANALYSIS I	DATE:	10/28/09	10/28/09	10/28/09	10/28/09	10/28/09
H18588-1	SP5 10' BOTTOM HOLE	<0.050	<0.050	<0.050	<0.300	112
H18588-2	SP12 SIDE WALL WEST	<0.050	<0.050	<0.050	<0.300	32
H18588-3	SP13 SIDE WALL EAST	<0.050	<0.050	<0.050	<0.300	32
H18588-4	STOCK PILE	0.056	0.462	0.675	3.17	800
			1.		·····	
	****		1		-	
Quality Con	trol	0.051	0.056	0.056	0.163	510
True Value (	QC	0.050	0.050	0.050	0.150	500
% Recovery		102	112	112	109	102
<b>Relative</b> Per	cent Difference	6.6	8.2	6.1	7.7	2.0

METHODS: BTEX - EPA SW-846-8021; CI- - Std. Methods 4500-CI-B \*Analyses performed on 1:4 aqueous extracts. Not accredited for Chloride.

TEXAS NELAP ACCREDITATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES. Reported on wet weight.

Lab Director

Date

PLEASE NOTE: Upplity and Damages, Cardinal's liability and client's exclusive remedy for any daim artsing, whether based in contract or tort, shall be limited to the amount paid by client for analyses All claune links and philed to Acute of the phile of the demonstration of the applicable cardee. In no event shall Cardinal within thirty (30) days after competition of the applicable affinites or successors ensing out of or related to the performance of cervices herounder by Cardinal, regardless of whether such claim is based up on any of the above stated reasons or otherwise. Result relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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ANALYTICAL RESULTS FOR SOUTHERN UNION GAS SERVICES ATTN: ROSE SLADE 1507 WEST 15TH STREET MONAHANS, TX 79756

Receiving Date: 10/28/09 Reporting Date: 10/29/09 Project Number: 2009-047 Project Name: RHODES 16" Project Location: LEA COUNTY, NM Sampling Date: 10/27/09 Sample Type: SOIL Sample Condition: COOL & INTACT @ 6.0<sup>0</sup>C Sample Received By: ML Analyzed By: AB

GRO DRO DRO ext. (C<sub>6</sub>-C<sub>10</sub>) (>C<sub>10</sub>-C<sub>28</sub>) (>C<sub>28</sub>-C<sub>35</sub>) (mg/kg) (mg/kg) (mg/kg)

LAB NUMBER SAMPLE ID

ANALYSIS D	ATE	10/28/09	10/28/09	10/28/09
H18588-1	SP5 10' BOTTOM HOLE	<10.0	10.8	<10.0
H18588-2*	SP12 SIDE WALL WEST	<10.0	<10.0	<10.0
H18588-3	SP13 SIDE WALL EAST	<10.0	10.8	<10.0
H18588-4	STOCK PILE	484	1,250	<10.0
		i		2 
Quality Contr	ol	435	452	
True Value O	IC	500	500	-
% Recovery		87.0	90.4	-
<b>Relative Perc</b>	cent Difference	5.3	4.7	

METHODS: TPH GRO & DRO: EPA SW-846 8015 M extended Reported on wet weight. Not accredited for GRO/DRO/DRO Ext. \*Second surrogate outside historical limits due to matrix interference.

(0|29|09Date

H18588 8015EXT SUGS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatspever shall be deemed waived unless made in writing and received by Cardinal within (http://do.) days after completion of the applicable services. In no event shall Cardinal within thirty (30) days after completion of the applicable affiliates or successors ansing out of or related to the performance of services hersunder by Cardinal, regardless of whother such claim is based upon any of the above-stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in hull with written approval of Cardinal Laboratories.

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		Project Manager:	FOSE SLADE			PAGE / O	F /									Pro	ject N	lame	د: ســـــ	RH	OPE	<u>s</u>	1	<u>"</u>	برهجور محدا ويهور				-
		Company Name	SOUTHERN ON	ion	Cr45	~ •	٩.										Proj	ect f	#:	200	09	- 0	<u>4</u> -	<u>}</u>					_
		Company Address: 500													Project Loc: LEA COUNTY										-				
· · .	City/State/Zip: JAC NM 8825					252						P0 #:									-								
	47	Telephone No: 432 - 973-7701 940			940-5147 Fax No;			432 943-1101						Report Format: X Standard TRRP NPDES									DES	3					
1 10,00 ×	Sampler Signature: EL Jui						e-mail;	ESTAYIOF Q LASING						,															
	(lab use only) ORDER #:														-			Analyze For: TCLP:				T				r i			
<u></u>				, , , , , , , , , , , , , , , , , , , ,				*	Preservation & J of Containers				Ma	rix .	eg I		TOTAL:						4500		48, 72 hrs				
	Di LAB # (ub use only) Di LAB # (ub use only) Di LAB # (ub use only)		D CODE	Beginning Depth	Ending Depth	Date Sampled		Field Screened [Total #. of Containers		HNO <sub>1</sub>	H,SO,	NaOH	Name	Other ( Specify)	DW = Drinking Water SL = Siudg	Non-Pocoble 5	TPH: 418.1 801	CHILL IN 1005 15 1000	Cations (Cd. Mg. Na. N) Anions (Cl. SO4, Abalinity)	SAR / ESP / CEC	Metals: As Ag Ba Co Cr Pb Hg Se	Votatiles	Semivolatiles BTEX 80218 5030 or BTEX 8260	RCI		× Chiaridas EAP 30070 4	· · · · · · · · · · · · · · · · · · ·	RUSH TAT (Pre-Schodule) 24, Standard TAT	
HN	588-1		BOTTOM HOLE	╂		10/57/09	10:00	+	Ě		╋	++	╋	+	<u> </u>	•	쉬	+		╋		┝─╋	+	<u>-</u>	┝┥	Ĥ	+	┢┼╴	+
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1625 N. French Dr. District II				Energy M	inerals	and Natura	d Resources		-							
1301 W. Grand Ave District III			2	Oil	Conse	rvation Div	vision	HOR	RZO	Submit 2	Copies	to appropri				
1000 Rio Brazos Re District IV				-		h St. Franc	is Dr.	HOBBSOCD District Office in accorda with Rule 116 on h								
1220 S. SL Francis	Dr., Santa	Fe, NM 8750	5	S	anta F	e, NM 875	505			,		side of fo				
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Was Immediate	Notice G		Yes 🔲	No 🗋 Not R	equired	If YES, To	Whom? king at the NMC	DCD offi		NM		<u></u>				
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Was a Watercour							lume Impacting		rcourse.							
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If a Watercourse	e was Imp	acted, Descri	ibe Fully.*	,												
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Describe Cause of																
The 16" natural gas fluid of mostly wai	s gathering	Hine operating	g at approxi	mately 37 p.s.i. dev	reloped a	leak. Repair or	ews arrived at the f	eak site w	th a vacuu	m truck and i	started re	covering the				
and of Mosel and								eer or hihr			muculan	ry normen.				
Describe Area A	finated of	d Classes A	ation Tak					<del>,</del>								
Approximately 10	,500 sq.ft.	of pasture lan	d was affect	ted by the leak. Fit												
landowners specific	cations to a	101 remediate (	he contamin	aated soil on site ar	nd to heal	the contannin	ated soil to the SUC	3 landfarm	according	to the permit	requirer	avats.				
							`}									
I hereby certify the regulations all op																
public health or th	he enviro	nment. The	acceptance	e of a C-141 repo	nt by the	NMOCD ma	rked as "Final Re	cport" do	es not reli	eve the ope	rator of	liability				
should their open or the environment federal, state, or l	ni. In ad	lition, NMO	CD accept													
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Signature:	ידי ערו	(Vi.o	k	,		1		,								
Printed Name: Ro	ose L. Sla	de				Approved by	ENIV ENGIN District Supervise		Sterf	foresto	later	W.C				
l'itle: EHS Comp	liance Sp	ecialist				Approval Date			xpiration I	Date: 111	1910	9				
E-mail Address: 1	rose slade	(clsug.com				Conditions of	Approval: CLEY + 1, SUBMA	IN LA	NE &	Attached	<b>[</b> ]					
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