District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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 in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Southern Union Gas Services	Contact: Rachel Johnson
Address: P.O. Box 1226 Jal, New Mexico 88252	Telephone No.: 325.514.2636
Facility Name A-14 8-Inch Mainline	Facility Type: Natural Gas Pipeline

Surface Owner: State of New Mexico	Mineral Owner	API No. 30-025-28822

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	5	24S	35E					Lea

Latitude 32 14.776' **Longitude** 103 23.768'

NATURE OF RELEASE

Type of Release: Crude Oil and Natural Gas	Volume of Release: 330 mcf's natural gas, 28 barrels of crude oil	Volume Recovered: None
Source of Release: 8-inch steel pipeline	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery August 25, 2006 @ 3:46 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD on call rep. Gary Wink	
By Whom? Tony Savoie	Date and Hour August 25, 2006 @ 4:49 pm	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

HOBBS OCD

AUG 23 2013

Describe Cause of Problem and Remedial Action Taken.* The 8-inch steel gathering pipeline, operating at 25 psi developed a leak, the line was excavated and the affected area was clamped at 4:49 pm. All of the oil released soaked into the ground. Clean soil was added to the impacted area to eliminate the risk to livestock and wildlife. Normal operating pressure on the line is 20 psi to 30 psi.

RECEIVED

Describe Area Affected and Cleanup Action Taken.* The area was excavated, soil samples were collected from the excavated areas and stockpiled soil. The soil samples were submitted to the laboratory for benzene, BTEX, TPH and chloride analysis. Laboratory analytical results indicated benzene, BTEX, TPH and chloride concentrations were less than NMOCD regulatory guidelines. The excavated areas were backfilled and the site was restored to original conditions. Please reference NOVA Safety and Environmental Soil Investigation Summary and Site Closure Request dated July 2013, for further details.

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: Rachel Johnson	OIL CONSERVATION DIVISION	
Printed Name: Rachel Johnson	Approved by Environmental Specialist: Geoffrey Leking Environmental Specialist	
Title: Environmental Specialist	Approval Date: 8/30/13	Expiration Date: —
E-mail Address: Rachel.johnson@regencygas.com	Conditions of Approval: —	Attached ☐ 1RP-1021
Date:8/2/2013 Phone: 325.514.2636		

* Attach Additional Sheets If Necessary

SEP 03 2013

SOIL INVESTIGATION SUMMARY

AND SITE

CLOSURE REQUEST

Southern Union Gas Services
A-14 8-Inch Mainline Historical Release Site
Lea County, New Mexico
UNIT LTR "L" (NW ¼ /SW ¼), Section 5, Township 24 South, Range 35 East
Latitude 32° 14.776' North, Longitude 103° 23.768' West
NMOCD Reference # 1RP-1021

NOVA
safety and environmental

Prepared For:

Southern Union Gas Services
801 South Loop 464
Monahans, Texas 79756

Prepared By:

NOVA Safety & Environmental
2057 Commerce
Midland, Texas 79703

HOBBS OCD

AUG 2 3 2013

RECEIVED

July 2013

Camille J. Bryant
Project Manager

Brittan K. Byerly, P.G.
President

TABLE OF CONTENTS

1.0 INTRODUCTION

Nova Safety & Environmental (NOVA), on behalf of Southern Union Gas Services (SUGS), has prepared this Soil Investigation Summary and Site Closure Request for A-14 8-Inch Mainline Historical Release Site. The legal description of the release site is Unit Letter "L" (NW ¼ SW ¼), Section 5, Township 24 South, Range 35 East, in Lea County, New Mexico. The property affected by the release is owned by the State of New Mexico and administered by the New Mexico State Land Office (NMSLO). A Right-of-Entry permit (ROE-2282) was granted by the NMSLO, Santa Fe Office. The release site GPS coordinates are 32° 14.776' North and 103° 23.768' West. Please reference Figure 1 for a Site Location Map and Figure 2 for a Site Details and Confirmation Soil Sample Locations Map. The Release Notification and Corrective Action (Form C-141) is provided as Appendix C.

On August 25, 2006, SUGS discovered a release of crude oil and natural gas had occurred from an eight (8) inch low pressure steel pipeline. The cause of the release was attributed to failure of a segment of the steel pipeline. The line was excavated and a temporary pipeline clamp was installed on the pipeline until permanent repairs could be conducted. SUGS submitted the Release Notification and Corrective Action (Form C-141) to the New Mexico Oil Conservation Division (NMOCD) Hobbs District Office on August 28, 2006. The C-141 indicated approximately twenty-eight (28) barrels of crude oil and 330 mcf's of natural gas were released from the pipeline, with no recovery. General photographs of the site are provided as Appendix B.

SUGS has researched and identified various historical release sites located in New Mexico. At the request of SUGS, NOVA has reviewed the historical data for these sites and conducted the necessary activities to ensure the sites meet the criteria for closure in accordance with NMOCD regulatory guidelines.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Office of the State Engineer (NMOSE) database did not identify the average depth to groundwater information for Section 5, Township 24 South, Range 35 East. A reference map utilized by the NMOCD indicated depth to groundwater at the release site should be encountered at approximately two hundred (200) feet below ground surface (bgs). The depth to groundwater at the A-14 8-Inch Mainline Historical Release Site 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 release, resulting in zero (0) points being assigned to this 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 A-14 8-Inch Mainline Historical Release Site has 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 cleanup level concentrations are site specific and will be determined by the NMOCD Hobbs District Office.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

On May 16, 2013, NOVA commenced soil investigation activities at the A-14 8-Inch Mainline Historical Release Site. Based on historical documentation and vegetation indicators, two (2) trenches were excavated in the vicinity of the inferred release point. The trenches were completed to a total depth of approximately eight (8) feet bgs. The depth of the trenches was determined on review of historical data and by field observations conducted during excavation activities. The first trench was excavated along SUGS's pipeline in an east-west direction. The east-west trench measured approximately twenty (20) feet in length and was approximately six (6) feet in width. The second trench was excavated in a north-south direction and intersected the east-west trench. The north-south trench measured approximately twenty (20) feet in length and was approximately six (6) feet in width. In addition, four (4) test holes were installed to the north, south, east and west of the trenched area. The additional test holes were installed to a total depth of approximately two (2) feet bgs. The excavated soil was stockpiled to the east of the trenched area. Please reference Figure 2 for site details.

On May 17, 2013, three (3) soil samples (RP @ 8', West S/W @ 8', and South S/W @ 8') were collected from the trenched area submitted to the laboratory for determination of concentrations of benzene, toluene, ethyl-benzene, and xylene (BTEX), total petroleum hydrocarbons (TPH), and chlorides using EPA SW-846 8021b, 8015M, and E 300, respectively. The laboratory analytical results indicated benzene, BTEX and TPH concentrations were less than the appropriate laboratory method detection limits (MDL) for all submitted soil samples. Chloride concentrations ranged from 3.58 mg/Kg for soil sample South S/W @ 8' to 16.3 mg/Kg for soil sample RP @ 8'. A review of analytical results indicated benzene, BTEX, TPH, and chloride concentrations were less than NMOCD regulatory guidelines. Table 1 summarizes the Concentrations of Benzene, BTEX, TPH, and Chlorides in Soil. Laboratory analytical reports are provided as Appendix A

On May 20, 2013, two (2) soil samples (North S/W @ 7' and East S/W @ 8') were collected from the trenched area and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene, BTEX, and TPH concentrations were less than the appropriate laboratory MDL. Chloride concentrations ranged from 4.60 mg/Kg for soil sample East S/W @ 8' to 11.3 mg/Kg for soil sample North S/W @ 7'. A review of analytical results indicated benzene, BTEX, TPH, and chloride concentrations were less than NMOCD regulatory guidelines. Please reference Figure 2 for soil sample locations.

In addition, one (1) composite soil sample (SP-1) was collected from the excavated stockpiled soil and submitted to the laboratory for analysis. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL. The soil sample exhibited a TPH concentration of 34.3 mg/Kg and a chloride concentration of 13.7 mg/Kg. A

review of analytical results indicated benzene, BTEX, TPH and chloride concentrations were less than NMOCD regulatory guidelines (Table 1).

On May 30, 2013, four (4) soil samples (South TH @ 2', East TH @ 2', West TH @ 2', and North TH @ 2') were collected from the test holes and submitted to the laboratory. On completion of soil sampling activities the test holes were backfilled. Laboratory analytical results indicated benzene and BTEX concentrations were less than the appropriate laboratory MDL. TPH concentrations ranged from less than the appropriate laboratory MDL for soil samples South TH @ 2' and North TH @ 2' to 80 mg/Kg for soil sample East TH @ 2'. Chloride concentrations ranged from 5.33 mg/Kg for soil sample South TH @ 2' to 119 mg/Kg for soil sample East TH @ 2'. A review of analytical results indicated benzene, BTEX, TPH and chloride concentrations were less than NMOCD regulatory guidelines. Please reference Figure 2 for soil sample locations.

On June 19, 2013, NOVA representatives met with a NMOCD Hobbs District Office representative to present the results of the soil investigation, and request closure approval for the site. The NMOCD Hobbs District Office representative granted verbal approval to close the site.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil Samples were delivered to Xenco Laboratories of Odessa, Texas for BTEX and/or TPH and/or chloride analyses using the methods described below. Soil samples were analyzed for BTEX and/or TPH and/or chloride concentrations within fourteen (14) days following the sampling event.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8021B, 5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO
- Chloride concentration in accordance with Method E 300.

4.2 Decontamination of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody (COC) form. These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

5.0 SITE CLOSURE REQUEST

Based on the analytical results of confirmation soil samples, NOVA recommends SUGS provide the NMOCD a copy of this Soil Investigation Summary and Site Closure Request and request the NMOCD grant final closure to the A-14 8-Inch Mainline Historical Release Site.

6.0 LIMITATIONS

NOVA Safety and Environmental has prepared this Soil Investigation Summary and Site Closure Request to the best of its ability. No other warranty, expressed or implied, is made or intended.

NOVA Safety and Environmental has examined and relied upon documents referenced in the report and has relied on oral statements made by certain individuals. NOVA Safety and Environmental 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. NOVA Safety and Environmental has prepared this report, in a professional manner, using the degree of skill and care exercised by similar environmental consultants. NOVA Safety and Environmental 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 NOVA Safety and Environmental and/or Southern Union Gas Services.

7.0 DISTRIBUTION:

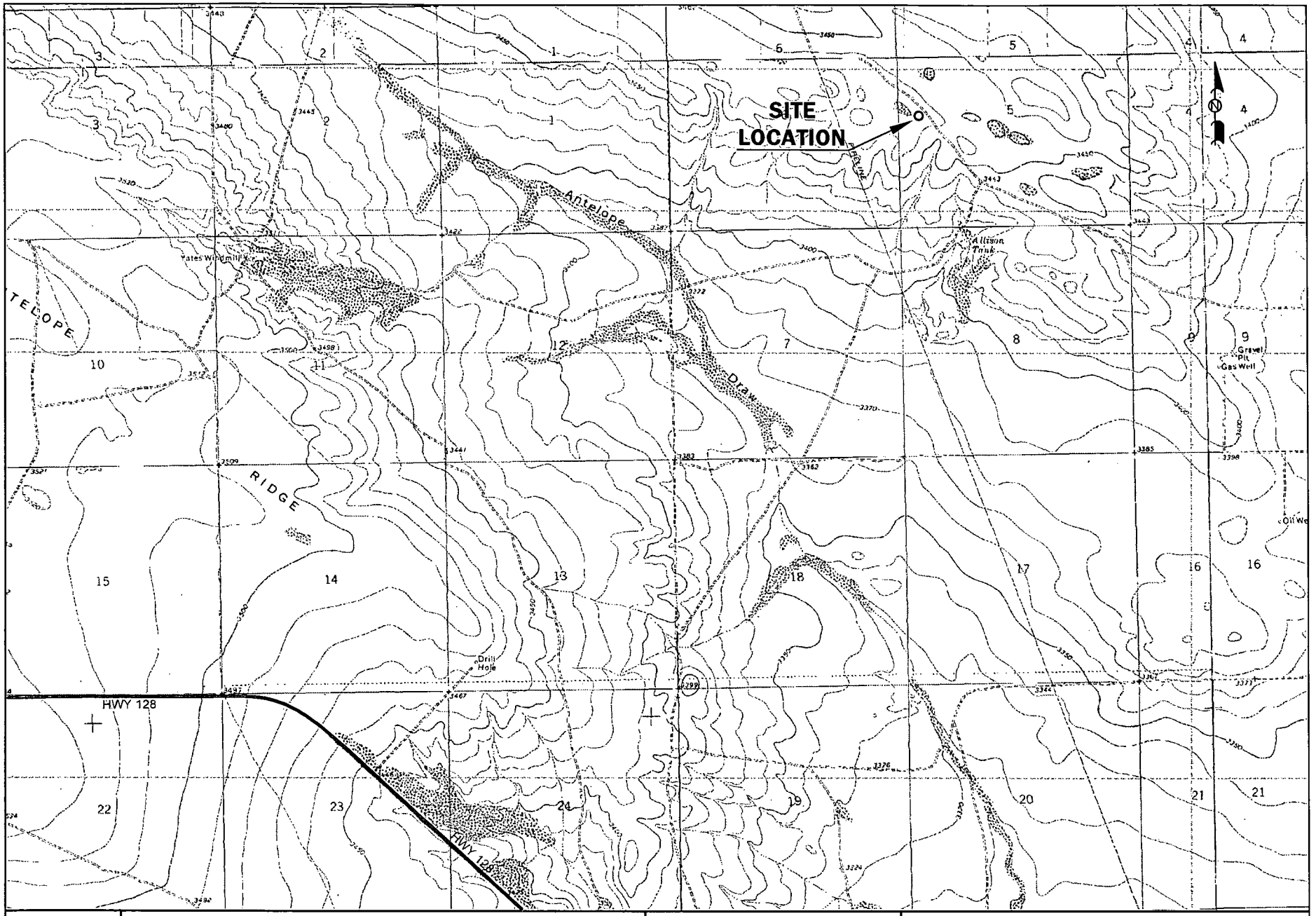
Copy 1: Geoffrey Leking
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 1)
1625 French Drive
Hobbs, New Mexico 88240

Copy 2: Jake Krautsch
Southern Union Gas Services
301 Commerce Street, Suite 700
Fort Worth, Texas 76102

Copy 3: Anthony Vigil
New Mexico State Land Office
P.O. Box 1148
Santa Fe, New Mexico 87504-1148

Copy 4: NOVA Safety and Environmental
2057 Commerce
Midland, Texas 79703

Figures



Legend:

Mapped edited and Published by the Geological Survey Control by USGS & USC & GS

Map Re-edited by Nova Safety and Environmental for the purpose of Site Location Maps.

Fine red dashed lines indicate selected fence lines.

This map Complies with National Map Accuracy Standards

3000 1500 0 1500 3000

Distance in Feet

Figure 1
Site Location Map
Southern Union Gas Service
1RP-1021
A-14 8" Mainline
Lea County, NM

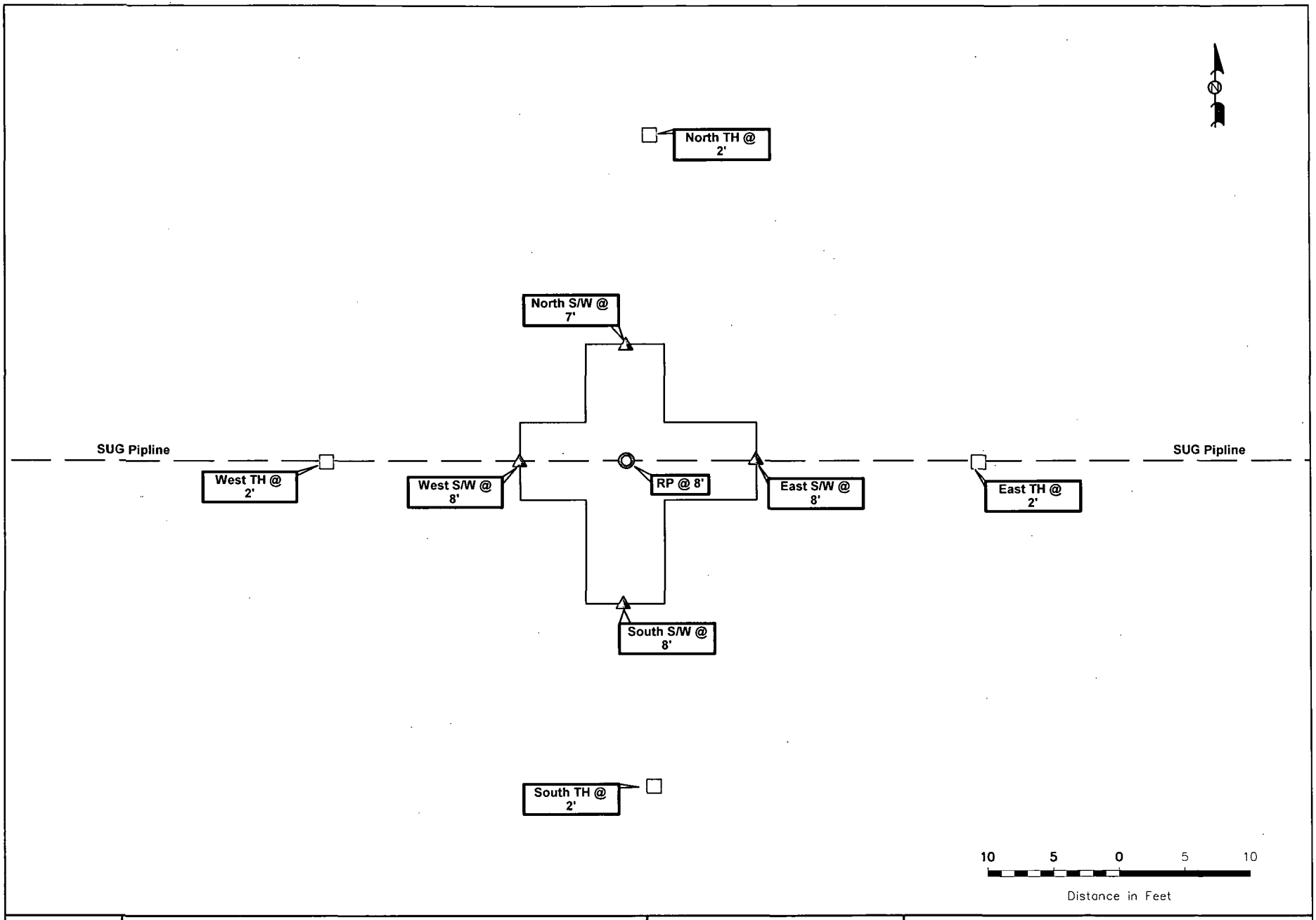
NOVA safety and environmental

2057 Commerce Drive
Midland, Texas 79703
432.520.7720

www.novasafetyandenvironmental.com

July 26, 2013	Scale: 1" - 10'	CAD By: CAS	Checked By:

Lat. N 32° 14' 46.48" Long. W 103° 23' 46.09"



Legend:

- Sidewall Soil Sample Location
- Floor Soil Sample Location
- Release Point
- Pipeline

Figure 2
Site Details and Confirmation
Soil Sample Location Map
Southern Union Gas Service
1RP-1021
A-14 8" Mainline
Lea County, NM

NOVA safety and environmental
2057 Commerce Drive
Midland, Texas 79703
432.520.7720
www.novasafetyandenvironmental.com

June 18, 2013	Scale: 1" - 10'	CAD By: CAS	Checked By:

Lat. N 32° 14' 46.48" Long. W 103° 23' 46.09"

Tables

TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES
A-14 8 INCH MAINLINE HISTORICAL RELEASE
LEA COUNTY, NEW MEXICO
NMOCD 1RP-1021

All concentrations are reported in mg/Kg

SAMPLE LOCATION	SAMPLE DATE	METHODS: SW 846-8021b						METHOD: SW 8015M				E 300.1
		BENZENE	TOLUENE	ETHYL-BENZENE	m, p - XYLENES	o - XYLENE	TOTAL BTEX	TPH GRO C_6-C_{12}	TPH DRO C_{12}-C_{28}	TPH ORO C_{28}-C_{35}	TOTAL TPH C_6-C_{35}	CHLORIDE
NMOCD Regulatory Limit		**10**	**-**	**-**	**-**	**-**	**50**	**-**	**-**	**-**	**5,000**	**-**
RP @ 8'	05/17/13	<0.000990	<0.00198	<0.000990	<0.00198	<0.000990	<0.00198	<15.5	<15.5	<15.5	<15.5	16.3
West S/W @ 8'	05/17/13	<0.000990	<0.00198	<0.000990	<0.00198	<0.000990	<0.00198	<15.7	<15.7	<15.7	<15.7	15.5
South S/W @ 8'	05/17/13	<0.00101	<0.00202	<0.00101	<0.00202	<0.00101	<0.00202	<15.3	<15.3	<15.3	<15.3	3.58
North S/W @ 7'	05/20/13	<0.000994	<0.00199	<0.000994	<0.00199	<0.000994	<0.00199	<15.7	<15.7	<15.7	<15.7	11.3
East S/W @ 8'	05/20/13	<0.00103	<0.00206	<0.00103	<0.00206	<0.00103	<0.00206	<15.4	<15.4	<15.4	<15.4	4.60
SP-1	05/20/13	<0.000998	<0.00200	<0.000998	<0.00200	<0.000998	<0.00200	<15.3	34.3	<15.3	34.3	13.7
South TH @ 2'	05/30/13	<0.000994	<0.00199	<0.000994	<0.00199	<0.000994	<0.00199	<15.9	<15.9	<15.9	<15.9	5.33
East TH @ 2'	05/30/13	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<15.4	80	<15.4	80	119
West TH @ 2'	05/30/13	<0.00100	<0.00201	<0.00100	<0.00201	<0.00100	<0.00201	<15.4	44.9	<15.4	44.9	74.7
North TH @ 2'	05/30/13	<0.000996	<0.00199	<0.000996	<0.00199	<0.000996	<0.00199	<15.4	<15.4	<15.4	<15.4	7.18

Appendices

Appendix A

Analytical Report 463480

for

Southern Union Gas Services- Monahans

Project Manager: Camille Bryant

SUGS Historical A-14 8 Inch Mainline 1RP-1021

30-MAY-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

30-MAY-13

Project Manager: **Camille Bryant**
Southern Union Gas Services- Monahans
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No(s): **463480**
SUGS Historical A-14 8 Inch Mainline 1RP-1021
Project Address: Lea County, New Mexico

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 463480. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 463480 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Sample Cross Reference 463480

Southern Union Gas Services- Monahans, Monahans, TX

SUGS Historical A-14 8 Inch Mainline 1RP-1021

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
RP@8'	S	05-17-13 11:00		463480-001
West S/W @ 8'	S	05-17-13 11:23		463480-002
South S/W @ 8'	S	05-17-13 13:03		463480-003
North S/W @ 7'	S	05-20-13 10:47		463480-004
East S/W @ 8'	S	05-20-13 11:00		463480-005
SP-1	S	05-20-13 13:00		463480-006

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Project ID:
Work Order Number(s): *463480*

Report Date: *30-MAY-13*
Date Received: *05/21/2013*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:
Batch: LBA-914918 Inorganic Anions by EPA 300/300.1
E300

Batch 914918, Chloride recovered above QC limits in the Matrix Spike.
Samples affected are: 463480-004, -001, -003, -005, -006, -002.
The Laboratory Control Sample for Chloride is within laboratory Control Limits

Certificate of Analysis Summary 463480

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Project Id:

Contact: Camille Bryant

Project Location: Lea County, New Mexico

Date Received in Lab: Tue May-21-13 10:01 am

Report Date: 30-MAY-13

Project Manager: Kelsey Brooks

Analysis Requested	*Lab Id:*	463480-001		463480-002		463480-003		463480-004		463480-005		463480-006	
	Field Id:	RP@8'		West S/W @ 8'		South S/W @ 8'		North S/W @ 7'		East S/W @ 8'		SP-1	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-17-13 11:00		May-17-13 11:23		May-17-13 13:03		May-20-13 10:47		May-20-13 11:00		May-20-13 13:00	
BTEX by EPA 8021B	*Extracted:*	May-21-13 10:30		May-21-13 10:30		May-21-13 10:30		May-21-13 10:30		May-24-13 12:00		May-21-13 10:30	
	Analyzed:	May-22-13 10:53		May-22-13 11:10		May-21-13 15:46		May-21-13 14:24		May-24-13 18:21		May-21-13 15:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.000990	ND	0.000990	ND	0.00101	ND	0.000994	ND	0.00103	ND	0.000998
Toluene		ND	0.00198	ND	0.00198	ND	0.00202	ND	0.00199	ND	0.00206	ND	0.00200
Ethylbenzene		ND	0.000990	ND	0.000990	ND	0.00101	ND	0.000994	ND	0.00103	ND	0.000998
m_p-Xylenes		ND	0.00198	ND	0.00198	ND	0.00202	ND	0.00199	ND	0.00206	ND	0.00200
o-Xylene		ND	0.000990	ND	0.000990	ND	0.00101	ND	0.000994	ND	0.00103	ND	0.000998
Total Xylenes		ND	0.000990	ND	0.000990	ND	0.00101	ND	0.000994	ND	0.00103	ND	0.000998
Total BTEX		ND	0.000990	ND	0.000990	ND	0.00101	ND	0.000994	ND	0.00103	ND	0.000998
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-29-13 10:00		May-29-13 10:00		May-29-13 10:00		May-29-13 10:00		May-29-13 10:00		May-29-13 10:00	
	Analyzed:	May-29-13 19:26		May-29-13 19:48		May-29-13 20:09		May-29-13 21:14		May-29-13 21:36		May-29-13 22:41	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		16.3	3.00	15.5	4.00	3.58	2.66	11.3	3.00	4.60	3.00	13.7	3.00
Percent Moisture	*Extracted:*												
	Analyzed:	May-23-13 13:45		May-23-13 13:45		May-23-13 13:45		May-23-13 13:45		May-23-13 14:05		May-23-13 14:05	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.41	1.00	4.21	1.00	2.62	1.00	4.27	1.00	2.73	1.00	2.08	1.00
TPH By SW8015 Mod	*Extracted:*	May-23-13 15:00		May-23-13 15:00		May-23-13 15:00		May-23-13 15:00		May-23-13 15:00		May-23-13 15:00	
	Analyzed:	May-24-13 06:29		May-24-13 15:15		May-24-13 07:19		May-24-13 07:45		May-24-13 08:37		May-24-13 09:54	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	15.5	ND	15.7	ND	15.3	ND	15.7	ND	15.4	ND	15.3
C12-C28 Diesel Range Hydrocarbons		ND	15.5	ND	15.7	ND	15.3	ND	15.7	ND	15.4	34.3	15.3
C28-C35 Oil Range Hydrocarbons		ND	15.5	ND	15.7	ND	15.3	ND	15.7	ND	15.4	ND	15.3
Total TPH		ND	15.5	ND	15.7	ND	15.3	ND	15.7	ND	15.4	34.3	15.3

Kelsey Brooks
Project Manager

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 463480,

Project ID:

Lab Batch #: 914305 **Sample:** 463480-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/21/13 14:24

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0332	0.0300	111	80-120	

Lab Batch #: 914305 **Sample:** 463480-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/21/13 15:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0323	0.0300	108	80-120	

Lab Batch #: 914305 **Sample:** 463480-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/21/13 15:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 914305 **Sample:** 463480-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/22/13 10:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0351	0.0300	117	80-120	

Lab Batch #: 914305 **Sample:** 463480-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/22/13 11:10

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0259	0.0300	86	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 463480,

Project ID:

Lab Batch #: 914521 **Sample:** 463480-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 06:29

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.8	99.9	91	70-135	
o-Terphenyl	48.4	50.0	97	70-135	

Lab Batch #: 914521 **Sample:** 463480-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 07:19

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.6	99.5	96	70-135	
o-Terphenyl	50.7	49.8	102	70-135	

Lab Batch #: 914521 **Sample:** 463480-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 07:45

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.7	100	97	70-135	
o-Terphenyl	51.4	50.1	103	70-135	

Lab Batch #: 914521 **Sample:** 463480-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 08:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.3	99.7	99	70-135	
o-Terphenyl	51.6	49.9	103	70-135	

Lab Batch #: 914521 **Sample:** 463480-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 09:54

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.9	99.7	97	70-135	
o-Terphenyl	51.1	49.9	102	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 463480,

Project ID:

Lab Batch #: 914521 **Sample:** 463480-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 15:15

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.1	100	98	70-135	
o-Terphenyl	52.6	50.2	105	70-135	

Lab Batch #: 914657 **Sample:** 463480-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 18:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 914305 **Sample:** 638467-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/21/13 09:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0243	0.0300	81	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

Lab Batch #: 914521 **Sample:** 638605-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/24/13 03:25

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.9	101	70-135	
o-Terphenyl	54.5	50.0	109	70-135	

Lab Batch #: 914657 **Sample:** 638699-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/24/13 14:15

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0258	0.0300	86	80-120	
4-Bromofluorobenzene	0.0265	0.0300	88	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 463480, **Project ID:**

Lab Batch #: 914305 **Sample:** 638467-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/21/13 09:13

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0271	0.0300	90	80-120	
4-Bromofluorobenzene	0.0266	0.0300	89	80-120	

Lab Batch #: 914521 **Sample:** 638605-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/24/13 02:30

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	60.1	50.2	120	70-135	

Lab Batch #: 914657 **Sample:** 638699-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/24/13 13:42

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 914305 **Sample:** 638467-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/21/13 09:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 914521 **Sample:** 638605-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/24/13 02:57

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	58.8	50.0	118	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 463480,

Project ID:

Lab Batch #: 914657 **Sample:** 638699-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/24/13 13:59

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0347	0.0300	116	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 914305 **Sample:** 463480-004 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/21/13 14:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0290	0.0300	97	80-120	
4-Bromofluorobenzene	0.0357	0.0300	119	80-120	

Lab Batch #: 914521 **Sample:** 463480-005 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 09:03

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-135	
o-Terphenyl	61.3	50.2	122	70-135	

Lab Batch #: 914657 **Sample:** 463480-005 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 18:37

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0278	0.0300	93	80-120	

Lab Batch #: 914305 **Sample:** 463480-004 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/21/13 15:13

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0323	0.0300	108	80-120	
4-Bromofluorobenzene	0.0333	0.0300	111	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 463480,

Project ID:

Lab Batch #: 914521 **Sample:** 463480-005 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 09:28

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.9	108	70-135	
o-Terphenyl	61.1	50.0	122	70-135	

Lab Batch #: 914657 **Sample:** 463480-005 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/24/13 18:53

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Order #: 463480 **Project ID:**

Analyst: DYV **Date Prepared:** 05/21/2013 **Date Analyzed:** 05/21/2013

Lab Batch ID: 914305 **Sample:** 638467-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000994	0.0994	0.0818	82	0.0990	0.0945	95	14	70-130	35	
Toluene	<0.00199	0.0994	0.0824	83	0.0990	0.101	102	20	70-130	35	
Ethylbenzene	<0.000994	0.0994	0.0901	91	0.0990	0.108	109	18	71-129	35	
m_p-Xylenes	<0.00199	0.199	0.169	85	0.198	0.199	101	16	70-135	35	
o-Xylene	<0.000994	0.0994	0.0819	82	0.0990	0.102	103	22	71-133	35	

Analyst: DYV **Date Prepared:** 05/24/2013 **Date Analyzed:** 05/24/2013

Lab Batch ID: 914657 **Sample:** 638699-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000998	0.0998	0.0916	92	0.0998	0.0930	93	2	70-130	35	
Toluene	<0.00200	0.0998	0.0986	99	0.0998	0.0947	95	4	70-130	35	
Ethylbenzene	<0.000998	0.0998	0.101	101	0.0998	0.103	103	2	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.184	92	0.200	0.190	95	3	70-135	35	
o-Xylene	<0.000998	0.0998	0.0934	94	0.0998	0.0978	98	5	71-133	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Order #: 463480 **Project ID:**

Analyst: AMB **Date Prepared:** 05/29/2013 **Date Analyzed:** 05/29/2013

Lab Batch ID: 914918 **Sample:** 638880-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	48.2	96	50.0	48.3	97	0	80-120	20	

Analyst: DYV **Date Prepared:** 05/23/2013 **Date Analyzed:** 05/24/2013

Lab Batch ID: 914521 **Sample:** 638605-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.1	1000	1030	103	1000	1030	103	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.1	1000	1050	105	1000	1070	107	2	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-102

Work Order #: 463480
Lab Batch #: 914918
Project ID:
Date Analyzed: 05/29/2013
Date Prepared: 05/29/2013
Analyst: AMB
QC- Sample ID: 463418-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	3210	1170	4700	127	80-120	X

Lab Batch #: 914918
Date Analyzed: 05/29/2013
Date Prepared: 05/29/2013
Analyst: AMB
QC- Sample ID: 463480-006 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	13.7	75.0	91.7	104	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Order # : 463480 **Project ID:**

Lab Batch ID: 914305 **QC- Sample ID:** 463480-004 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/21/2013 **Date Prepared:** 05/21/2013 **Analyst:** DYV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000994	0.0994	0.0834	84	0.0990	0.0843	85	1	70-130	35	
Toluene	<0.00199	0.0994	0.0824	83	0.0990	0.0888	90	7	70-130	35	
Ethylbenzene	<0.000994	0.0994	0.0905	91	0.0990	0.0899	91	1	71-129	35	
m_p-Xylenes	<0.00199	0.199	0.166	83	0.198	0.164	83	1	70-135	35	
o-Xylene	<0.000994	0.0994	0.0832	84	0.0990	0.0807	82	3	71-133	35	

Lab Batch ID: 914657 **QC- Sample ID:** 463480-005 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/24/2013 **Date Prepared:** 05/24/2013 **Analyst:** DYV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00102	0.102	0.0880	86	0.103	0.0902	88	2	70-130	35	
Toluene	<0.00204	0.102	0.0847	83	0.103	0.0918	89	8	70-130	35	
Ethylbenzene	<0.00102	0.102	0.0942	92	0.103	0.0956	93	1	71-129	35	
m_p-Xylenes	<0.00204	0.204	0.170	83	0.205	0.170	83	0	70-135	35	
o-Xylene	<0.00102	0.102	0.0896	88	0.103	0.0917	89	2	71-133	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative. EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Form 3 - MS / MSD Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Order # : 463480 **Project ID:**

Lab Batch ID: 914521 **QC- Sample ID:** 463480-005 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/24/2013 **Date Prepared:** 05/23/2013 **Analyst:** DYV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.5	1030	1010	98	1030	991	96	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.5	1030	1080	105	1030	1070	104	1	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable

N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Order #: 463480

Lab Batch #: 914516 **Project ID:**

Date Analyzed: 05/23/2013 13:45 **Date Prepared:** 05/23/2013 **Analyst:** WRU

QC- Sample ID: 463549-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	2.43	2.48	2	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Xenco Laboratories

The Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Bryant

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Company Name: Nova Safety and Environmental

Project #:

Company Address: 2057 Commerce

Project Loc: Lea County, New Mexico

City/State/Zip: Midland, TX 79703

PO #:

Telephone No: 432.520.7720 Fax No: 432.520.7701

Report Format: [X] Standard [ ] TRRP [ ] NPI

Sampler Signature: Camille Bryant e-mail: cbryant@novatraining.cc

Final 1.000

(lab use only) ORDER #: 463480

Analyze For:

TCLP:

TOTAL:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge; GW=Groundwater S=Soil/Solid; NP=Non-Potable Specify Other)	TPH: 418.1 / 8015M / 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Chloride 4500			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
01	RP @ 8'			5/17/2013	11:00		1	X								Soil	X								X			X				X
02	West S/W @ 8'			5/17/2013	11:23		1	X								Soil	X								X			X				X
03	South S/W @ 8'			5/17/2013	13:03		1	X								Soil	X								X			X				X
04	North S/W @ 7'			5/20/2013	10:47		1	X								Soil	X								X			X				X
05	East S/W @ 8'			5/20/2013	11:00		1	X								Soil	X								X			X				X
06	SP-1			5/20/2013	13:00		1	X								Soil	X								X			X				X

Page 19 of 20

Special Instructions:

Laboratory Comments:

Sample Containers Intact? (Y) N

VOCs Free of Headspace? Y N NA

Labels on container(s) (Y) N

Custody seals on container(s) Y N (NA)

Custody seals on cooler(s) Y N (NA)

Sample Hand Delivered by Sampler/Client Rep. ? (Y) N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 3.5 °C

Relinquished by:	Date	Time	Received by:	Date	Time
Camille Bryant	5/21/13	9:15	Mike Green	5/21	915
Relinquished by:	Date	Time	Received by:	Date	Time
Mike Green	5/21	1001			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Shawn Smith	5/21/13	10:01

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Southern Union Gas Services- Monahan

Date/ Time Received: 05/21/2013 10:01:00 AM

Work Order #: 463480

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/21/2013

Checklist reviewed by: Kelsey Brooks Date: 05/21/2013

Appendix B

Analytical Report 464242

for

Southern Union Gas Services- Monahans

Project Manager: Camille Bryant

SUGS Historical A-14 8 Inch Mainline 1RP-1021

07-JUN-13

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102), DoD (L11-54)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Lakeland: Florida (E84098)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

07-JUN-13

Project Manager: **Camille Bryant**
Southern Union Gas Services- Monahans
801 South Loop 464
Monahans, TX 79756

Reference: XENCO Report No(s): **464242**
SUGS Historical A-14 8 Inch Mainline 1RP-1021
Project Address: Lea County, New Mexico

Camille Bryant:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 464242. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 464242 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 464242

Southern Union Gas Services- Monahans, Monahans, TX

SUGS Historical A-14 8 Inch Mainline 1RP-1021

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
South TH @ 2'	S	05-30-13 10:30		464242-001
East TH @ 2'	S	05-30-13 11:00		464242-002
West TH @ 2'	S	05-30-13 11:30		464242-003
North TH @ 2'	S	05-30-13 12:00		464242-004

CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans
Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Project ID:
Work Order Number(s): *464242*

Report Date: *07-JUN-13*
Date Received: *05/31/2013*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 464242

Southern Union Gas Services- Monahans, Monahans, TX

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Project Id:

Contact: Camille Bryant

Project Location: Lea County, New Mexico

Date Received in Lab: Fri May-31-13 04:43 pm

Report Date: 07-JUN-13

Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	464242-001		464242-002		464242-003		464242-004					
	Field Id:	South TH @ 2'		East TH @ 2'		West TH @ 2'		North TH @ 2'					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	May-30-13 10:30		May-30-13 11:00		May-30-13 11:30		May-30-13 12:00					
BTEX by EPA 8021B	***Extracted:***	Jun-03-13 17:30		Jun-03-13 17:30		Jun-03-13 17:30		Jun-03-13 17:30					
	Analyzed:	Jun-04-13 01:57		Jun-04-13 02:13		Jun-04-13 02:30		Jun-04-13 02:46					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.000994	ND	0.00100	ND	0.00100	ND	0.000996				
Toluene		ND	0.00199	ND	0.00200	ND	0.00201	ND	0.00199				
Ethylbenzene		ND	0.000994	ND	0.00100	ND	0.00100	ND	0.000996				
m,p-Xylenes		ND	0.00199	ND	0.00200	ND	0.00201	ND	0.00199				
o-Xylene		ND	0.000994	ND	0.00100	ND	0.00100	ND	0.000996				
Total Xylenes		ND	0.000994	ND	0.00100	ND	0.00100	ND	0.000996				
Total BTEX		ND	0.000994	ND	0.00100	ND	0.00100	ND	0.000996				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Jun-05-13 10:00		Jun-05-13 10:00		Jun-05-13 10:00		Jun-05-13 10:00					
	Analyzed:	Jun-06-13 21:19		Jun-06-13 21:41		Jun-06-13 22:02		Jun-06-13 22:24					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		5.33	2.00	119	4.00	74.7	4.00	7.18	2.00				
Percent Moisture	***Extracted:***												
	Analyzed:	Jun-05-13 14:15		Jun-05-13 14:15		Jun-05-13 14:15		Jun-05-13 14:35					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		5.05	1.00	2.42	1.00	2.49	1.00	2.98	1.00				
TPH By SW8015 Mod	***Extracted:***	Jun-05-13 13:00		Jun-05-13 13:00		Jun-05-13 13:00		Jun-05-13 13:00					
	Analyzed:	Jun-06-13 22:18		Jun-06-13 22:43		Jun-07-13 17:27		Jun-06-13 23:34					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	15.9	ND	15.4	ND	15.4	ND	15.4				
C12-C28 Diesel Range Hydrocarbons		ND	15.9	80.0	15.4	44.9	15.4	ND	15.4				
C28-C35 Oil Range Hydrocarbons		ND	15.9	ND	15.4	ND	15.4	ND	15.4				
Total TPH		ND	15.9	80.0	15.4	44.9	15.4	ND	15.4				

Kelsey Brooks
Project Manager

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

\+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 464242, **Project ID:**

Lab Batch #: 915344 **Sample:** 464242-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/04/13 01:57

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0344	0.0300	115	80-120	
4-Bromofluorobenzene	0.0344	0.0300	115	80-120	

Lab Batch #: 915344 **Sample:** 464242-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/04/13 02:13

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0287	0.0300	96	80-120	

Lab Batch #: 915344 **Sample:** 464242-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/04/13 02:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0269	0.0300	90	80-120	
4-Bromofluorobenzene	0.0260	0.0300	87	80-120	

Lab Batch #: 915344 **Sample:** 464242-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/04/13 02:46

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0262	0.0300	87	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 915600 **Sample:** 464242-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/06/13 22:18

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.7	101	97	70-135	
o-Terphenyl	51.8	50.3	103	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 464242,

Project ID:

Lab Batch #: 915600 **Sample:** 464242-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/06/13 22:43

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.8	100	98	70-135	
o-Terphenyl	51.9	50.1	104	70-135	

Lab Batch #: 915600 **Sample:** 464242-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/06/13 23:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.6	99.5	92	70-135	
o-Terphenyl	48.1	49.8	97	70-135	

Lab Batch #: 915600 **Sample:** 464242-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/07/13 17:27

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.2	99.9	92	70-135	
o-Terphenyl	48.4	50.0	97	70-135	

Lab Batch #: 915344 **Sample:** 639111-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/03/13 22:41

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0244	0.0300	81	80-120	
4-Bromofluorobenzene	0.0251	0.0300	84	80-120	

Lab Batch #: 915600 **Sample:** 639242-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/06/13 14:36

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.1	99.5	100	70-135	
o-Terphenyl	53.6	49.8	108	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 464242, **Project ID:**

Lab Batch #: 915344 **Sample:** 639111-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/03/13 22:08

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0330	0.0300	110	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 915600 **Sample:** 639242-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/06/13 13:44

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.3	100	98	70-135	
o-Terphenyl	60.3	50.0	121	70-135	

Lab Batch #: 915344 **Sample:** 639111-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/03/13 22:25

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0356	0.0300	119	80-120	
4-Bromofluorobenzene	0.0306	0.0300	102	80-120	

Lab Batch #: 915600 **Sample:** 639242-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 06/06/13 14:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	100	107	70-135	
o-Terphenyl	63.0	50.2	125	70-135	

Lab Batch #: 915344 **Sample:** 464243-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/04/13 04:40

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0292	0.0300	97	80-120	
4-Bromofluorobenzene	0.0338	0.0300	113	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Orders : 464242, **Project ID:**

Lab Batch #: 915600 **Sample:** 464097-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/06/13 15:29

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	99.8	100	70-135	
o-Terphenyl	59.2	49.9	119	70-135	

Lab Batch #: 915344 **Sample:** 464243-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/04/13 04:56

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0328	0.0300	109	80-120	
4-Bromofluorobenzene	0.0328	0.0300	109	80-120	

Lab Batch #: 915600 **Sample:** 464097-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 06/06/13 15:55

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.6	102	70-135	
o-Terphenyl	57.1	49.8	115	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Order #: 464242 **Project ID:**

Analyst: DYV **Date Prepared:** 06/03/2013 **Date Analyzed:** 06/03/2013

Lab Batch ID: 915344 **Sample:** 639111-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.000998	0.0998	0.109	109	0.100	0.101	101	8	70-130	35	
Toluene	<0.00200	0.0998	0.115	115	0.100	0.101	101	13	70-130	35	
Ethylbenzene	<0.000998	0.0998	0.118	118	0.100	0.109	109	8	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.232	116	0.201	0.208	103	11	70-135	35	
o-Xylene	<0.000998	0.0998	0.112	112	0.100	0.0987	99	13	71-133	35	

Analyst: AMB **Date Prepared:** 06/05/2013 **Date Analyzed:** 06/06/2013

Lab Batch ID: 915636 **Sample:** 639282-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	46.9	94	50.0	46.8	94	0	80-120	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

BS / BSD Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Order #: 464242 **Project ID:**

Analyst: DYV **Date Prepared:** 06/05/2013 **Date Analyzed:** 06/06/2013

Lab Batch ID: 915600 **Sample:** 639242-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	1120	112	1000	1140	114	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1150	115	1000	1200	120	4	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

Form 3 - MS Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-102

Work Order #: 464242

Lab Batch #: 915636 **Project ID:**

Date Analyzed: 06/06/2013 **Date Prepared:** 06/05/2013 **Analyst:** AMB

QC- Sample ID: 464024-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	36.2	100	134	98	80-120	

Lab Batch #: 915636

Date Analyzed: 06/07/2013 **Date Prepared:** 06/05/2013 **Analyst:** AMB

QC- Sample ID: 464243-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	62.7	100	159	96	80-120	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Order # : 464242 **Project ID:**

Lab Batch ID: 915344 **QC- Sample ID:** 464243-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/04/2013 **Date Prepared:** 06/03/2013 **Analyst:** DYV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.109	109	0.0994	0.0976	98	11	70-130	35	
Toluene	<0.00200	0.100	0.107	107	0.0994	0.101	102	6	70-130	35	
Ethylbenzene	<0.00100	0.100	0.113	113	0.0994	0.110	111	3	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.210	105	0.199	0.203	102	3	70-135	35	
o-Xylene	<0.00100	0.100	0.110	110	0.0994	0.103	104	7	71-133	35	

Lab Batch ID: 915600 **QC- Sample ID:** 464097-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 06/06/2013 **Date Prepared:** 06/05/2013 **Analyst:** DYV

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.1	1070	1150	107	1070	1160	108	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<16.1	1070	1200	112	1070	1210	113	1	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit, NC = Non Calculable - Sample amount is > 4 times the amount spiked.

Sample Duplicate Recovery

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Work Order #: 464242

Lab Batch #: 915514 **Project ID:**

Date Analyzed: 06/05/2013 14:15 **Date Prepared:** 06/05/2013 **Analyst:** WRU

QC- Sample ID: 464118-004 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	<1.00	<1.00	0	20	U

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |

All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Xenco Laboratories

The Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Camille Bryant

Company Name: Nova Safety and Environmental

Company Address: 2057 Commerce

City/State/Zip: Midland, TX 79703

Telephone No: 432.520.7720

Fax No: 432.520.7701

Sampler Signature: [signature]

e-mail: cbryant@novatraining.cc

Project Name: SUGS Historical A-14 8 Inch Mainline 1RP-1021

Project #:

Project Loc: Lea County, New Mexico

PO #:

Report Format: ☒ Standard ☐ TRRP ☐ NPI

(lab use only)
ORDER #: 464242

Analyze For: TCLP: / TOTAL:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix (DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other)	TPH: 418.1 8015M 8015B	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.	Cl E 300			RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
	South TH @ 2'			5/30/2013	10:30		1	X								Soil	X								X			X				X
	East TH @ 2'			5/30/2013	11:00		1	X								Soil	X								X			X				X
	West TH @ 2'			5/30/2013	11:30		1	X								Soil	X								X			X				X
	North TH @ 2'			5/30/2013	12:00		1	X								Soil	X								X			X				X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	5/31/13	11:00	[signature]	5/31/13	11:00
Relinquished by: [signature]	5/31/13	16:43	Received by:		
Relinquished by:			Received by ELOT: [signature]	5/31/13	16:43

Laboratory Comments:

Sample Containers Intact?	Y	N
VOCs Free of Headspace?	Y	N
Labels on container(s)	Y	N
Custody seals on container(s)	Y	N
Custody seals on cooler(s)	Y	N
Sample Hand Delivered	Y	N
by Sampler/Client Rep. ?	Y	N
by Courier? UPS DHL FedEx Lone Star		

Temperature Upon Receipt: -2 °C

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Southern Union Gas Services- Monahan

Date/ Time Received: 05/31/2013 04:43:00 PM

Work Order #: 464242

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Sample instructions complete on Chain of Custody?	Yes
#9 Any missing/extra samples?	No
#10 Chain of Custody signed when relinquished/ received?	Yes
#11 Chain of Custody agrees with sample label(s)?	Yes
#12 Container label(s) legible and intact?	Yes
#13 Sample matrix/ properties agree with Chain of Custody?	Yes
#14 Samples in proper container/ bottle?	Yes
#15 Samples properly preserved?	Yes
#16 Sample container(s) intact?	Yes
#17 Sufficient sample amount for indicated test(s)?	Yes
#18 All samples received within hold time?	Yes
#19 Subcontract of sample(s)?	Yes
#20 VOC samples have zero headspace (less than 1/4 inch bubble)?	Yes
#21 <2 for all samples preserved with HNO3,HCL, H2SO4?	Yes
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	Yes

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:	PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 06/03/2013

Checklist reviewed by: Kelsey Brooks Date: 06/03/2013

Appendix C

NOVA
safety and environmental

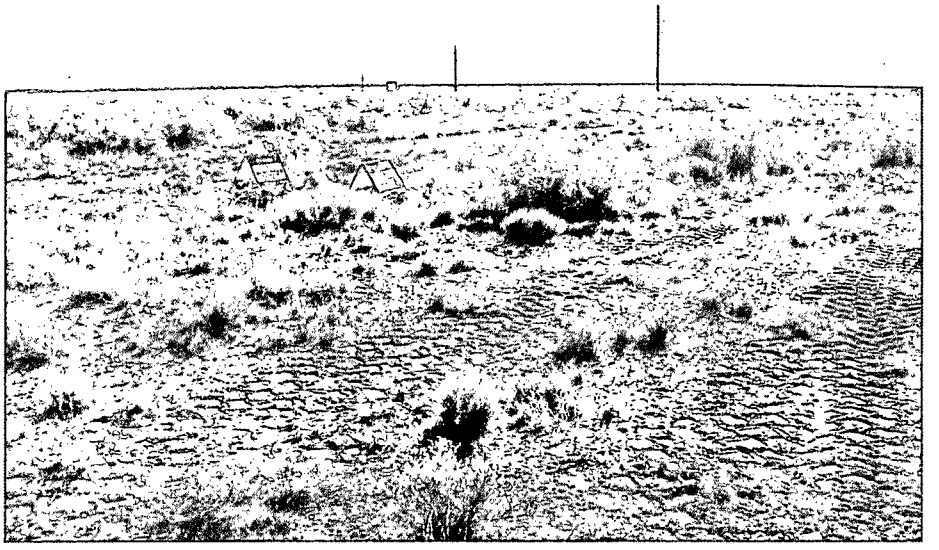
Photographic Documentation

Client: Southern Union Gas Services
Project Name: A-14 8-Inch Mainline

Prepared by: NOVA
Location: Lea County, New Mexico

Photograph No. 1

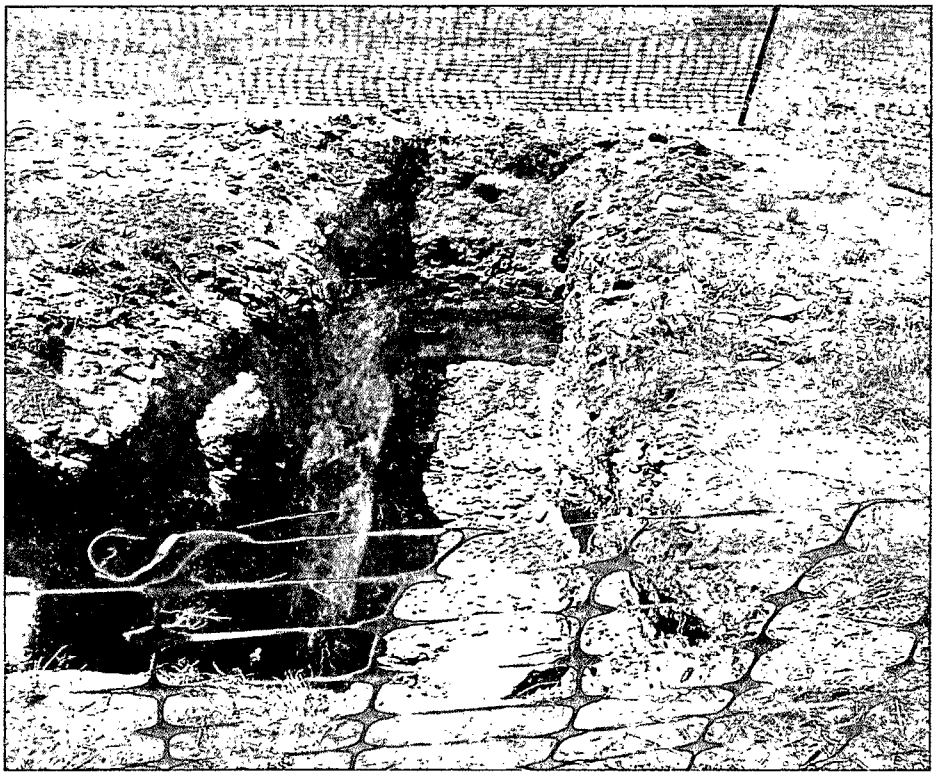
Direction:
Facing Southwest



Description:
View of the initial release area.

Photograph No. 2

Direction:
Facing Northwest



Description:
View of trenching activities.

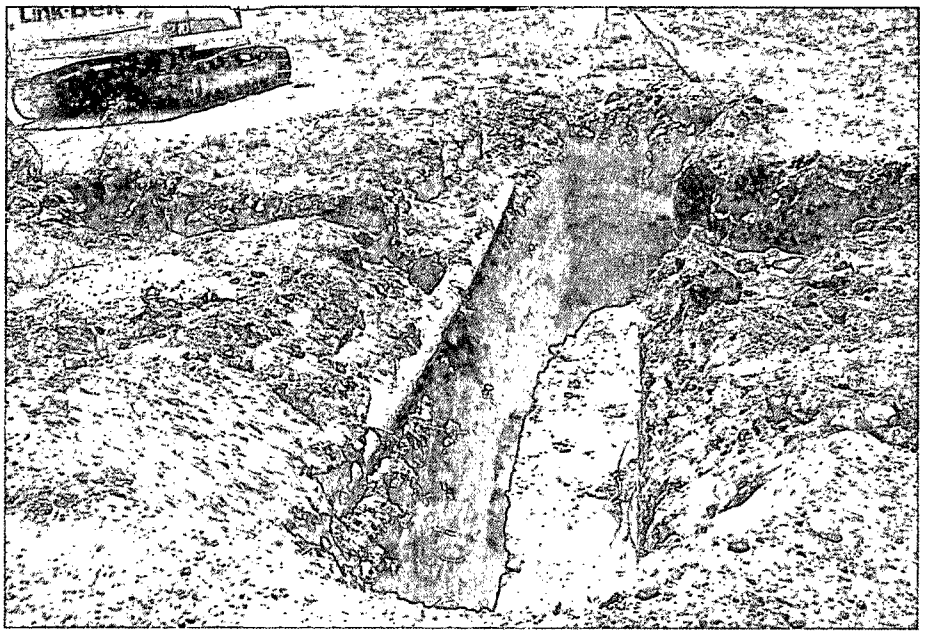
NOVA
safety and environmental

Photographic Documentation

Client: Southern Union Gas Services
Project Name: A-14 8-Inch Mainline

Prepared by: NOVA
Location: Lea County, New Mexico

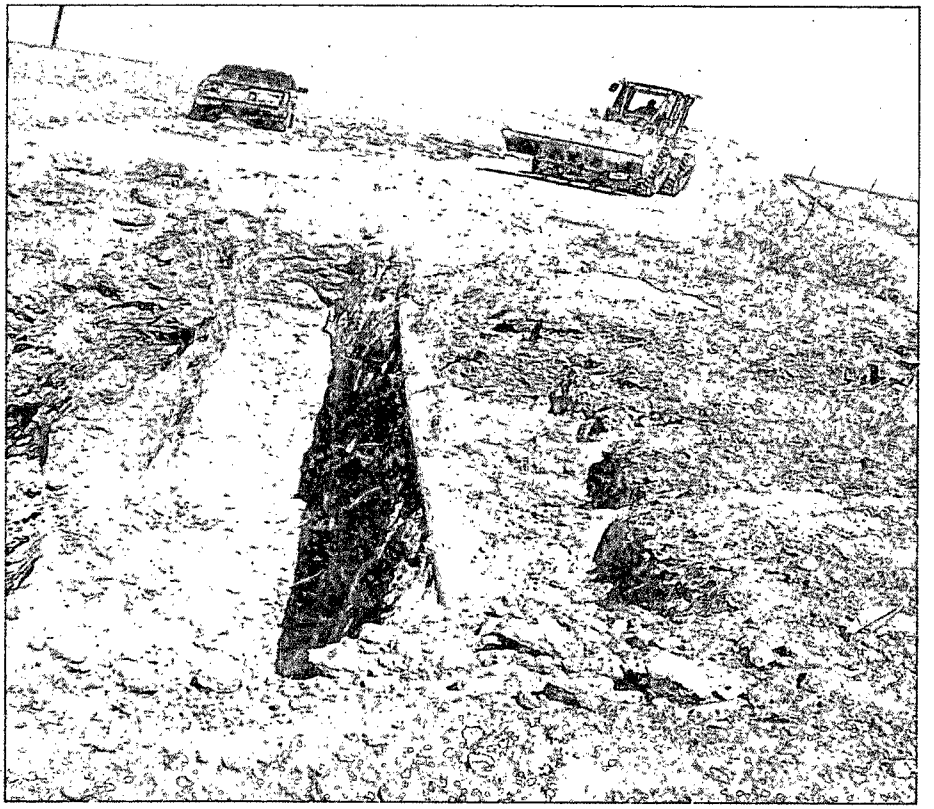
Photograph No. 3



Direction:
Facing West

Description:
View of trenching activities.

Photograph No. 4



Direction:
Facing West

Description:
View of backfilling activities.

NOVA
safety and environmental

Photographic Documentation

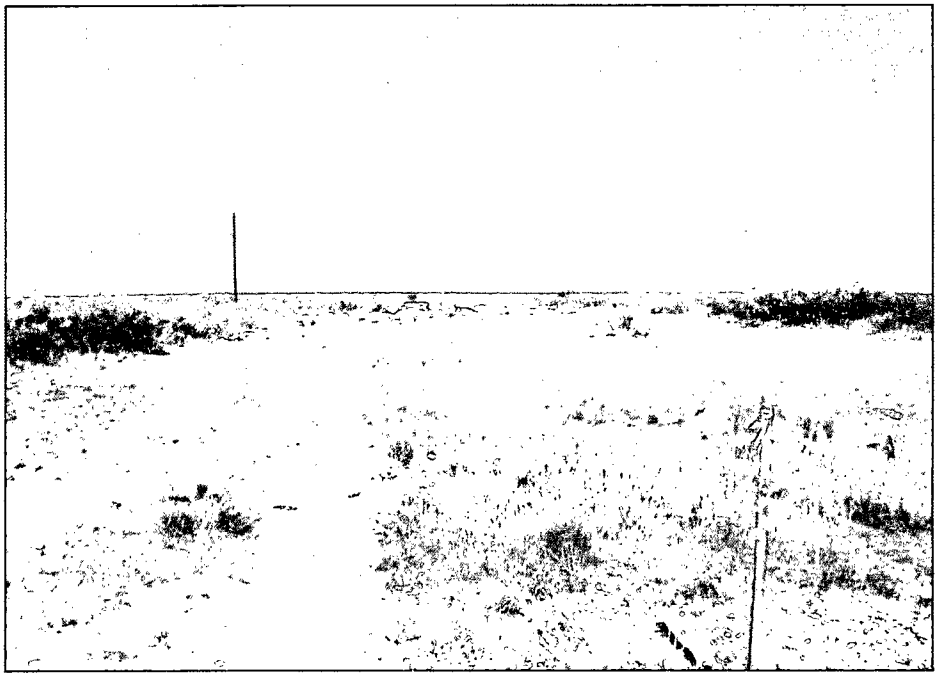
Client: Southern Union Gas Services
Project Name: A-14 8-Inch Mainline

Prepared by: NOVA
Location: Lea County, New Mexico

Photograph No. 5

Direction:
Facing West

Description:
View of restored site.



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 October 10, 2003

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, Ltd.	Contact	Tony Savoie
Address	P.O. Box 1226 Jal, N.M. 88252	Telephone No.	505-395-2116
Facility Name	Lea County Field Dept.	Facility Type	Natural Gas Gathering

Surface Owner: Federal	Mineral Owner: Federal	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	5	24S	35E					Lea

Latitude N32 14.776 Longitude W103 23.768

NATURE OF RELEASE

Type of Release : Crude oil and natural gas	Volume of Release: 330 mcf gas, 28 bbls oil	Volume Recovered 0 bbls
Source of Release Pipeline	Date and Hour of Occurrence Unknown	Date and Hour of Discovery 8/2506 Time: 3:46 p.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? NMOCD on call Rep. Gary Wink	
By Whom? Tony Savoie, Southern Union Gas Services	Date and Hour: 8/25/06 4:49 p.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The 8" steel gathering pipeline, operating at 25 psi developed a leak, the line was excavated and the affected area was clamped at 4:49 p.m. on 8/21/06. All of the oil released soaked into the ground. Clean soil was added to the impacted area to eliminate the risk to livestock and wildlife. Normal operating pressure on the line is 20 psi to 30 psi, with a potential H2S content of 4000 ppm.

Describe Area Affected and Cleanup Action Taken. The affected area is pasture. An area covering approximately 4482 sq. ft. was affected by the release and response activities. Remediation activities will start after a section of the pipeline has been replaced. All remediation activities will follow the NMOCD Recommended Guidelines For The Remediation of Leaks and Spills.

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: *Tony Savoie*	OIL CONSERVATION DIVISION		
Printed Name: John A. Savoie	Approved by District Supervisor:		
Title: EH&S Comp. Coord.	Approval Date:	Expiration Date:	
E-mail Address: tony.savoie@sugs.com	Conditions of Approval:	Attached ☐	
Date: 8/2806 Phone: 505-395-2116			

* Attach Additional Sheets If Necessary