Administrative/Environmental Order



AE Order Number Banner

Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



App Number: pGRL0914238906

1RP - 2186

SOUTHERN UNION GAS COMPANY

2/12/2016

District 1 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

1.

Form C-141 Revised October 10, 2003

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

			Rel	ease Notific	atio	n and Co	orrective A	ctior	1	-	
						OPERA'	FOR		Initi	al Report	Final Repor
Name of Co	mpany	South	ern Unio	n Gas Services, 1	Ltd.	Contact		5			Tony Savoie
Facility Na	ne	P.(Lea	County Field D	ept.	Facility Typ	NO.			Natu	ral Gas Gathering
Surface Ou	ner Charl	in Battic		Mineral	in an	Fee			Lanca	Jo	
Surface Ow	ner. Charr	le Deuis		Intilicial O	whet.	ree			Lease	10.	
Linit Letter	Section	Townshin	Range	LOCA	North	N OF RE	East from the	Fact/	West I ine	County	
L	14	218	37E	Teet nom die	North	South Line	reet nom the	Lasu	West Line	County	Lea
				Latitude N32	28.522 URE	2 Longitud	e W103 8.529)	WTR	2 50'	
Type of Rele	ase : Crude	Oil, Produced	l water, an	d Natural Gas	UILL	Volume of Fluid and 8	Release: 200 Bb BI MCF Nat. Gas	ls	Volume F	Recovered	130 Bbls
Source of Re	lease : 10"]	Natural Gas P	ipeline			Date and H	lour of Occurrence	e	Date and	Hour of Disc	covery 8/22/07
Was Immedia	ate Notice (Given?				If YES, To	Whom?		11110. 210	0 p.m.	
D. 114 - 0.7	0		Yes	No Not Re	quired	Gary Wink	On-call NMOCI)		2930	31-1-5
Was a Water	course Read	ched?				If YES, Vo	lour: 8/22/07 2:50	p.m. the Wate	ercourse	A.	
			Yes 🛛	No					12	10.96	NT. 66
If a Watercou	irse was Im	pacted, Descri	be Fully.4)					2	AUG	Ned
									22	Reco	bbs 7
									212	0	NOU TIT
Describe Ca	use of Pro	blem and Re	medial A	ction Taken.*	. 20	a f. davialaria	de leste Densis			6181119	Narw.
truck and sta	arted picki	ng up fluid "	mostly ra	ain and produced	water	"." The leak a	area was excava	ted and	d the 10" n	atural gas l	ine was
temporarily	repaired w	vith a leak cla	amp. The	landowner was	notifie	d and questi	oned about live	stock i	n the area.		
Describe Are	a Affected a	and Cleanup A	ction Tak	en. Approximately	26,25	0 sq.ft. of pas	ture land was affe	cted by	the leak an	d temporary	repair. Final
water picked	up was rain	water with a :	ecomments slight oily	sheen. Approximation	Icaks a ately 13	nd spills. Due 10 Bbls of flui	to recent heavy i d was removed fi	rains in rom the	the area it v depression	in order to r	d that most of the emove all of the
oily sheen.	fir that the i	-formation al	un abaux	is two and comple	ato to th	hard of	In a state and w	densie	• • • • • • • • • • • • • • •		
regulations al	l operators	are required to	report an	d/or file certain re	lease no	otifications an	id perform correc	tive acti	ions for rele	ases which i	may endanger
public health	or the envir	onment. The	acceptanc	e of a C-141 report investigate and report	t by the	NMOCD ma	arked as "Final Ro	cport" d	oes not reli	eve the open	ator of liability
or the environ	ment. In a	ddition, NMO	CD accept	tance of a C-141 r	eport de	oes not relieve	e the operator of r	esponsi	bility for co	mpliance w	ith any other
federal, state,	or local lav	vs and/or regu	lations.	0			OIL CONS	SERV	ATION	DIVISIO	N
Circum C		5	2	5			<u>OID COIN</u>	JLIC C	5-10	244-30	
Signature:	- / 6	my 2	XAMM			Approved by	District Superviso		1		0.0.0
Printed Name	: John A	A. Savoie			- 1'	Approved by	District Supervise	ENVI	RONME	NIAL EN	GINEEH
Title: Remed	liation Supe	ervisor			- 1	Approval Date	······································	7	Expiration I	Date: 10.	1.07
E-mail Addre	ss: tony.sav	voic@sug.com	1		_ (Conditions of	Approval:			Attached	
Date: 8/28/07			Phone:	505-395-2116		SUBM	1-1+4.	De	NENTIE	c,	
Attach Addit	ional Shee	ts If Necessa	ry			w Cu	SURE C	• 14	ſ	0.07	1540
										KT	

District 1 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

. Form C-141 Revised October 10, 2003

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 2009-010 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

- 2

			Rel	ease Notific	cation	and Co	orrective A	ction			
Name of Co	maani	South	ann I Inio	n Gas Semicas	Itd	OPERA.	IUR		Initia	al Report	Kepo
Address	mpany	P.C). Box 12	26 Jal. N.M. 8	8252	Telephone M	No.			505-395-	2116
Facility Na	ne		Lea	County Field I	Dept.	Facility Typ	e			Natural Gas Gath	ering
Surface Ow	ner: Charl	ie Bettis	_	Mineral C)wner:	Fee			Lease	10.	
Durinee on	non. Onun	io Dottis					MARCE	APACH	ENE DRU	THINKED WALK	
NT- to Y - then		The state	2	LOCA	TIO	N OF REI	LEASE API	# 30	0250	1916.00.00	
L L	14	21S	37E	Feet from the	North	South Line	Feet from the	East/v	Vest Line	Lea	
_				Latitude N32	28.522	2 Longitud	e W103 8.529				
Type of Rele	ase : Crude	Oil, Produced	l water, ar	nd Natural Gas	URE	Volume of	Release: 200 Bb	ols	Volume F	Recovered ' 130 Bbls	
Source of Re	lease : 10"	Natural Gas P	ipeline			Date and H not known	lour of Occurrence	æ	Date and Time: 2:0	Hour of Discovery 8/22/0 0 p.m.	17
Was Immedi	ate Notice (Jiven?	Yes [No Not R	equired	If YES, To Gary Wink	Whom? On-call NMOCI	D			
By Whom? 1	ony Savoie					Date and H	lour: 8/22/07 2:56	6 p.m.			
Was a Water	course Read	hed?	Yes 🛛	No		If YES, Vo	dume Impacting t	the Wate	ercourse.		
If a Watercon	irse was Im	pacted, Descri	ibe Fully.	+		·				····	
Describe Ca A 10" Nature truck and st temporarily	ause of Pro ral Gas gat arted picki repaired v	blem and Re hering line on ng up fluid " with a leak cl	emedial Apperating mostly reamp. The	Action Taken.* at approximatel ain and produce a landowner was	y 30 p. d water notifie	s.i. develope "The leak d and quest	ed a leak. Repair area was excava ioned about live	r crews ated and stock in	arrived at the 10" r the area.	the leak site with a vacu natural gas line was	ıum
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J hereby certi regulations a public health should their o or the enviro federal, state	ify that the i ll operators or the envir operations h nment. In a , or local law	information gi are required to ronment. The ave failed to a ddition, NMC ws and/or regu	ven above o report an acceptant adequately OCD accept alations.	e is true and comp nd/or file certain r ce of a C-141 report v investigate and r otance of a C-141	lete to the elease n ort by the emediat report d	he best of my otifications as e NMOCD m e contaminatioes not reliev	knowledge and u nd perform correc arked as "Final R on that pose a thr e the operator of	inderstar ctive active eport" d reat to gr responsi	nd that purs ions for rele oes not reli ound water bility for c	to NMOCD rules and eases which may endanger eve the operator of liability , surface water, human hea ompliance with any other	y ulth
							OIL CON	SERV	ATION	DIVISION	
Signature:	1	ou	Bun	9 U		Approved by	District Supervis	S	John-		
Printed Name	: John	A. Savoic					ENVIR	ONME		NGINEER	
Title: Reme	diation Sup	ervisor				Approval Dat	e: 3.24.0	9	Expiration	Date: 5.24.09	
E-mail Addre	ess: tony.sa	voie@sug.cor	n			Conditions of	Approval:			Attached	
Date: 8/28/01	/		Phone:	505-395-2116						1RP#09. 5.218	6
Attach Addi	tional She	ets If Necess	ary								
FGRL	09142	37975	5								

Basin Environmental Service Technologies, LLC

3100 Plains Highway
P. O. Box 301
Lovington, New Mexico 88260
jwlowry@basinenv.com
Office: (575) 396-2378 Fax: (575) 396-1429



Jim Griswold New Mexico Energy, Minerals and Natural Resources Department New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505 HOBBS OCD FEB 0 6 2013

RECEIVED

 Re: Groundwater Investigation Results & Request to Install Additional Monitor Wells A-7 Bettis (NMOCD Reference # 1RP-09-5-2186) Unit Letter L, Section 14, Township 21 South, Range 37 East Lea County, New Mexico

Mr. Griswold:

This letter has been prepared in regard to Southern Union Gas Service's A-7 Bettis (NMOCD Ref# 1RP-09-5-2186) Environmental Remediation Site. The legal description of the release site is Unit Letter "L" (NW/SW), Section 14, Township 21 South, Range 37 East, NMPM, in Lea County, New Mexico. The property affected by the release is owned by Mr. Charlie Bettis of Eunice, New Mexico. The release site GPS coordinates are 32° 28.522' North and 103° 08.529' West. The depth to groundwater at the release site is approximately fifty feet (50') bgs. A "Site Location Map" has been provided as Figure 1.

On August 22, 2007, Southern Union discovered a release had occurred on the A-7 pipeline. Failure of the ten-inch (10") low pressure natural gas pipeline resulted in a release of a mixture of crude oil, produced water and natural gas. The release was reported to the New Mexico Oil Conservation Division (NMOCD) on August 22, 2007. The previously submitted "Release Notification and Corrective Action" (Form C-141), dated March 24, 2009, indicated approximately two hundred (200) barrels of fluid was released, and approximately one hundred thirty (130) barrels of fluid were recovered. The release affected approximately 26,250 square feet of pasture land. During initial response activities a temporary pipeline clamp was employed to mitigate the release. The affected segment of pipeline is currently scheduled to be replaced.

On March 12, 2009, excavation of the affected soil commenced, whereby, impacted soil was stockpiled on-site, pending final disposition. On March 13, 2009, a composite soil sample (Chlorides Soil Pile) was collected from the stockpile and analyzed for concentrations of chloride. The analytical results indicated the chloride concentration was less than the laboratory MDL of 16 mg/Kg.

On March 17, 2009, two composite soil samples (Soil Pile #1 South and Soil Pile #2 North) were collected to evaluate the hydrocarbon impact within the stockpile. Analytical results indicated the TPH concentrations in Soil Pile #1 South and Soil Pile #2 North were 2,140 mg/Kg and 1,705 mg/Kg, respectively. In addition, four (4) soil samples (Bottom Start, RP 13', RP 16' and RP 18') were collected from the floor of the excavation and submitted to the laboratory for TPH analysis. The analytical results indicated TPH concentrations ranged from 8,770 mg/Kg in soil sample RP 16' to 16,000 mg/Kg in soil sample Bottom Start.

On March 18, 2009, two (2) sidewall soil samples (#1 Sample and #1 Sample West Bank) were collected from the excavation and submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Analytical results indicated the benzene and BTEX concentration were less than the laboratory MDL of 0.050 mg/Kg and 0.300 mg/Kg, respectively, for each of the samples submitted. The TPH concentration was 25.3 mg/Kg for each of the submitted soil samples, and the chloride concentration for soil samples #1 Sample and #1 Sample West Bank were 144 mg/Kg and 176 mg/Kg, respectively.

On March 19, 2009, one soil sample (Bottom Hole 28') was collected from the floor of the excavation and analyzed for concentrations of BTEX and TPH. The analytical results indicated the benzene concentration was 1.52 mg/Kg, the BTEX concentration was 77.22 mg/Kg and the TPH concentration was 6,250 mg/Kg.

On March 24, 2009, two (2) soil samples (Bottom Hole 37' and Bottom Hole 39') were collected from the floor of the excavation and submitted to the laboratory for analysis. Soil sample Bottom Hole 37' was analyzed for concentrations of TPH. The analytical results indicated the TPH concentration was 6,120 mg/Kg. Soil sample Bottom Hole 39' was analyzed for concentrations of TPH and BTEX. Analytical results indicated the TPH concentration was 5,630 mg/Kg, the benzene concentration was 1.04 mg/Kg and the BTEX concentration was 113.34 mg/Kg.

On March 31, 2009, one (1) excavation floor soil sample (Bottom) and four (4) sidewall soil samples (West Bank N, West Bank S, East Bank S and North Bank) were collected and analyzed for concentrations of BTEX and TPH. Analytical results indicated benzene concentrations ranged from 0.25 mg/Kg in soil sample West Bank S to 39.6 mg/Kg in soil sample East Bank S. BTEX concentrations ranged from 20.26 mg/Kg in soil sample West Bank S to 77.321 mg/Kg in soil sample North Bank. TPH concentrations ranged from 2,872 mg/Kg in soil sample West Bank S to 5,930 mg/Kg in soil sample North Bank.

On July 9, 2009, one (1) excavation floor soil sample (Bottom Hole #4 40 ft.) was collected and submitted to the laboratory and analyzed for concentrations of BTEX and TPH. Analytical results indicated the benzene concentration was 0.453 mg/Kg, the BTEX concentration was 29.22 mg/Kg and the TPH concentration was 5,930 mg/Kg.

On July 10, 2009, one (1) excavation floor soil sample (Last Sample 44 ft.) was collected and submitted to the laboratory and analyzed for concentrations of BTEX and TPH. The analytical results indicated the benzene concentration was 0.814 mg/Kg, the BTEX concentration was 46.59 mg/Kg and the TPH concentration was 5,100 mg/Kg.

Between March 16, and July 10, 2009, approximately two thousand, five hundred and fifty cubic yards (2,550 cy) of impacted soil was excavated from the release site and transported to the Southern Union Landfarm (Permit # NM-02-0019) for treatment. The final excavation measured approximately sixty feet (60') east-west, fifty feet (50') north-south, and forty-four feet (44') in depth near the center. Further excavation was determined to be unsafe and impracticable given the risks associated with the depth of the excavation and the proximity of the floor of the excavation to groundwater. Please reference the *Remediation Summary and Proposed Soil and Groundwater Investigation Strategy* dated July 2012, for background information and details of previous remediation activities. In addition, Table 1 "Previous Investigation Concentrations of BTEX, TPH and Chloride in Soil" is also included for reference regarding the previous remediation activities.

On October 21, 2010, representatives of Southern Union Gas Services and a representative of the NMOCD – Hobbs District Office met to discuss a path forward for closure of the release site. The NMOCD representative requested a minimum of five (5) soil borings be advanced around the perimeter of the excavation to demonstrate vertical and horizontal delineation at the release site. Based on the inferred depth to groundwater (less than 50 feet bgs) and the depth of impact (greater than 44 feet bgs), select soil borings were converted to groundwater monitor wells.

On October 10, 2012, five (5) soil borings (SB-1 through SB-5) were advanced around the perimeter of the excavation. During the advancement of the soil borings, soil samples were collected at five foot (5') drilling intervals and field-screened for chloride and TPH concentrations using a chloride field test kit and Photo-ionization detector. Select soil samples were submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Please reference Table 2, "Concentrations of BTEX, TPH and Chloride in Soil" for laboratory analytical results from the soil sampling events.

Soil Borings SB-1, SB-4 and SB-5 were converted into two-inch (2") monitor wells MW-1, MW-2 and MW-3, respectively, to investigate the status of the groundwater. Monitor well MW-1 was installed approximately fifty feet (50') down-gradient from the release point. Monitor well MW-2 was installed approximately ninety feet (90') up-gradient from the release point. Monitor well MW-3 was installed approximately ninety feet (90') cross-gradient from the release point. Please reference the attached "Soil Boring/Monitor Well Logs" for soil descriptions and completion details.

On October 29, 2012, the monitor wells were gauged and sampled using EPA Standard Methods. Groundwater samples were submitted to Xenco Laboratories, Inc., of Odessa, Texas, for analysis of BTEX, total dissolved solids (TDS) and chloride concentrations. Laboratory analytical results indicated BTEX concentrations were less than the laboratory MDL for each of the submitted groundwater samples with the exception of the sample collected from MW-1, which had a concentration of 0.504 mg/L. TDS concentrations ranged from 777 mg/L for the sample collected from MW-3 to 2,620 mg/L for the sample collected from MW-1. Chloride concentrations ranged from 103 mg/L for the sample collected from MW-3 to 1,060 mg/L for the sample collected from MW-1. Please reference Figure 2, "Groundwater Gradient Map" and Table 3, "Concentrations of BTEX and Chloride in Groundwater" for the results of gauging and groundwater sampling activities.

On November 7, 2012, the excavation was partially backfilled with locally purchased non-impacted soil. Excavation backfill was water-packed and compacted in lifts. A 20-millimeter polyurethane liner was installed at approximately fifteen feet (15') bgs. This engineering control was designed to inhibit the vertical migration of contaminants left insitu. Upon installing the NMOCD-approved 20-millimeter polyurethane liner, the excavation was backfilled to three feet (3') bgs, pending the replacement of the affected segment of pipeline.

Based on the outcome of the recent groundwater investigation activities, Southern Union proposes to install additional groundwater monitoring wells to provide adequate delineation of the affected groundwater. In addition, a Remediation/Abatement Plan will be prepared, as necessary, to address the necessary future activities for this site. The proposed monitoring well locations are shown on Figure 3, "Proposed Monitoring Well Location Map".

Respectfully,

Sool loups

Joel W. Lowry Basin Environmental Service Technologies, LLC

Attachments:

Attachment #1: Site Location Map

Attachment #2: Groundwater Gradient Map

Attachment #3: Proposed Monitor Well Location Map

Attachment #4: Soil Boring & Monitor Well Logs

Attachment #5: Previously Investigated Concentrations of Benzene, BTEX, TPH and Chloride in Soil

Attachment #6: Concentrations of Benzene, BTEX, TPH and Chloride in Soil

Attachment #7: Concentrations of Benzene, BTEX and Chloride in Groundwater







Soil Boring/Monitor Well Log MW-1

Depth Below Ground Soil Surface Column Ē E 10 E-16 -landa

ŧ V

Chloride

Field

Test

80

80

80

80

80

PID

Reading

0.6

2.7

1.0

2.0

2.1



69' - 70' Red silty clay

Thickness of Bentonite Seal 39' Depth of Exploratory Boring 70' bgs Depth to Groundwater 56.34' bgs Ground Water Elevation 3354.26' Indicates the PSH level measured on <u>NA</u>
 Indicates the groundwater level measured on <u>Catabar 28. 2012</u> Indicates samples selected for Laboratory Analysis.
PID Head-space reading in ppm obtain with a photo-ionization detector. Grout Surface Seal **Bentonite Pellet Seal** Sand Pack Screen

October 10, 2012

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Completion Notes

Monitor well was advanced on date using air rotary drilling techniques. Monitor well was constructed with 2" ID, 0.10-inch factory slotted, threaded joint, Schedule 40 PVC pipe. Well is protected with a locked stick-up steel cover and compression cap.

- Lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Depths indicated are referenced from ground surface.

Soil Boring/ **Monitor Well Log MW-1**

Southern Union Gas Services A-7 Bettis Lea County, New Mexico NMOCD Reference #: 1RP-2186 Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260 Prep By: JWL Checked By: BRB November 1, 2012

Soil Boring/Monitor Well Log MW-2



Soil Boring/Monitor Well Log MW-3



Monitor Well Log MW-3

Lea County, New Mexico NMOCD Reference #: 1RP-2186

November 1, 2012



Soil Boring SB-2

Soil Description

0' - 3' - Brown fine sand

3' - 11' - Tan fine sand, cement sandstone, caliche

11' - 20' - Tan v. fine sand, sandstone

Boring SB-1

Date Drilled October 10, 2012
Thickness of Bentonite Seal 18 Ft
Depth of Exploratory Boring 20 Ft bgs Depth to Groundwater _____N/A Ground Water Elevation _____N/A

Indicates the PSH level measured on <u>NA</u>
 Indicates the groundwater level measured on <u>NA</u>
 Indicates samples selected for Laboratory Analysis.

Completion Notes

The soil boring was advanced on dete using air rotary drilling techniques.
 The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.

Basin Environmental Service Technologies, LLC 3100 Plains Hwy. Lovington, NM 88260

Soil Boring SB-2

Southern Union Gas Services A-7 Bettis Lea County, New Mexico NMOCD Reference #: 1RP-2186 Prep By: JWL Checked By: BJA November 1, 2012



TABLE 1

PREVIOUS INVESTIGATION CONCENTRATIONS OF BENZENE, BTEX, TPH AND CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES A-7 BETTIS (1RP-2186) LEA COUNTY, NEW MEXICO

METHOD: 4500-CI-B	L Conservent	a (mg/Kg)	81	007	16	2,120	208	32	64	32	<18 <18	672	336	「「「「「「「」」」」」」」」」」」」」」」」」」」」」」」」」」」」」」	<16		- 0	- 9	の時になるのであるというです。	. 0	- 0	- 0	- 0		144	176	「「「「「「「「「」」」」」」」」」」」」」」」」」」」」」」」」」」」」			「「「「「」」」	-	- 0		State of the state	-	- 0		-	- 0			Statement of the statem	
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THOD: 801	DRO	C ₁₀ -C ₂₈ (mg/Kg)	007	0.01>	<10.0	<10.0	<10.0	51.4	10.8	<10.0	100	11,000	<10.0			のないのです	2,140	1,490	でのないないです。	12,100	9,360	6,500	7,670		25.3	25.3	No. of Street, or other	4,460	*3.19		4,450	3,840	*3.98	「日本のない」の日	3,450	2,980	2,110	3,450	4,250		4,250	Contraction of the local division of the loc	
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		(mg/Kg)											<0.050	Constanting of the local division of the loc		State of the state									<0.050	<0.050	Constanting of	1.52		State and a state	•	1.04		No. of Concession, Name	0.962	0.585	0.25	39.6	0.421	日本の日本語の	0.453	Contraction of the local distance of the loc	
	SAMPLE	DATE	000000	60/92/20	02/26/09	02/26/09	02/26/09	02/26/09	02/26/09	02/26/09	DU/BC/CU	02/26/09	02/26/09	I CANNEL MARKED	03/13/09	Contraction of the second	03/17/09	03/17/09	No. of the second second	03/17/09	03/17/09	03/17/09	03/17/09	The second second	03/18/09	03/18/09	ないたので	03/19/09	03/19/09	Contraction of the second	03/24/09	03/24/09	03/24/09	というのないで	03/31/09	03/31/09	03/31/09	03/31/09	03/31/09	「市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市	07/09/10	The second secon	
	SAMPLE	(BGS)												STREET, STREET		Contraction of the local distance			Contraction of the second		13'	16'	18'				Section 1 and a section of the	28'	28'	アモージョン	37'	39'	39'	and a state						「「「「「「「」」」	40'	Contraction of the local division of the loc	
	SAMPLE	LOCATION		A1	18	2A	2B	3A	38	44	4D	54	58	の日本の日本のないのである	Chlorides Soil Pile	の一方の一方の一方の一方の一方の一方の一方の一方の一方の一方の一方の一方の一方の	Soil Pile #1 South	Soil Pile #2 North	の一般になっていたのであるという	Bottom Start	RP 13'	RP 16'	RP 18'	のないのであるので、	#1 Sample	#1 Sample West Bank	の一般ないないのであるという	Bottom Hole @ 28'	Bottom Hole @ 28'	の一般のないのないのであるという	Bottom Hole 37 ft	Bottom Hole 39 ft	Bottom Hole 39 ft	「「「「「「「」」」」	Bottom	West Bank N	West Bank S	East Bank S	North Bank	A CONTRACT OF A	Bottom Hole #4 40 ft	NAMES OF TAXABLE PARTY AND DESCRIPTION OF TAXABLE PARTY.	

* indicates TCLP analysis

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TABLE 2

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES A-7 BETTIS HISTORICAL (1RP-2186) LEA COUNTY, NEW MEXICO

	T IGHT O				ME	THOD: EP/	A SW 846-8	021B, 503(MET	THOD: 801	15M	TOTAL	E 300
SAMPLE LOCATION	DEPTH	SAMPLE	SOIL	BENZENE	TOLUENE	ETHYL-	M.P	0	TOTAL	TOTAL	GRO	DRO	ORO	HdT	CHLORIDE
	(BGS)	DAIE	SIAIUS	(mg/Kg)	(mg/Kg)	BENZENE (mg/Kg)	XYLENES (mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	C ₆ -C ₁₂ (mg/Kg)	C12 ^{-C28} (mg/Kg)	C28-C36 (mg/Kg)	C ₆ -C ₃₆ (mg/Kg)	(mg/Kg)
MW-1 (SB-1 @ 1')	1.	10/10/2012	In-situ	<0.00104	<0.00208	<0.00104	<0.00208	<0.00104	<0.00208	<0.00208	<52.3	<52.3	<52.3	<52.3	3.02
MW-1 (SB-1 @ 10')	10'	10/10/2012	In-situ	<0.00113	<0.00227	<0.00113	<0.00227	<0.00113	<0.00227	<0.00227	<56.6	<56.6	<56.6	<56.6	1.66
MW-1 (SB-1 @ 20')	20'	10/10/2012	In-situ	<0.00111	<0.00222	<0.00111	<0.00222	<0.00111	<0.00222	<0.00222	<55.5	<55.5	<55.5	<55.5	6.48
MW-1 (SB-1 @ 30')	30'	10/10/2012	In-situ	<0.00105	<0.00209	<0.00105	<0.00209	<0.00105	<0.00209	<0.00209	<52.3	<52.3	<52.3	<52.3	19.7
MW-1 (SB-1 @ 40')	40'	10/10/2012	In-situ	<0.00107	<0.00214	<0.00107	<0.00214	<0.00107	<0.00214	<0.00214	<53.5	<53.5	<53.5	<53.5	26.4
MW-1 (SB-1 @ 50')-core	50'	10/10/2012	In-situ	<0.00107	<0.00213	<0.00107	<0.00213	<0.00107	<0.00213	<0.00213	<53.6	<53.6	<53.6	<53.6	12.2
MW-1 (SB-1 @ 60')	60'	10/10/2012	In-situ	<0.00108	<0.00216	<0.00108	<0.00216	<0.00108	<0.00216	<0.00216	<54.2	<54.2	<54.2	<54.2	62.5
			AND ADDREES	Sector Sector	and	「日本」の		and a state	の一般の日本の	C. C		Contraction of the local distance of the loc	Contraction of the local distance of the loc	Section of the sectio	And a state of the
MW-2 (SB-4 @ 1')	1.	10/10/2012	In-situ	<0.00107	<0.00214	<0.00107	<0.00214	<0.00107	<0.00214	<0.00214	<53.8	<53.8	<53.8	<53.8	4.37
MW-2 (SB-4 @ 10')	10'	10/10/2012	In-situ	<0.00108	<0.00217	<0.00108	<0.00217	<0.00108	<0.00217	<0.00217	<54.4	<54.4	<54.4	<54.4	<1.15
MW-2 (SB-4 @ 20')	20'	10/10/2012	In-situ	<0.00108	<0.00215	<0.00108	<0.00215	<0.00108	<0.00215	<0.00215	<53.9	<53.9	<53.9	<53.9	<1.08
MW-2 (SB-4 @ 30')	30'	10/10/2012	In-situ	<0.00105	<0.00211	<0.00105	<0.00211	<0.00105	<0.00211	<0.00211	<53.0	<53.0	<53.0	<53.0	1.04
MW-2 (SB-4 @ 40')	40	10/10/2012	In-situ	<0.00106	<0.00212	<0.00106	<0.00212	<0.00106	<0.00212	<0.00212	<52.7	<52.7	<52.7	<52.7	<1.12
MW-2 (SB-4 @ 48')-core	48'	10/10/2012	In-situ	<0.00107	<0.00215	<0.00107	<0.00215	<0.00107	<0.00215	<0.00215	<53.8	<53.8	<53.8	<53.8	<1.19
MW-2 (SB-4 @ 55')	55'	10/10/2012	In-situ	<0.00112	<0.00224	<0.00112	<0.00224	<0.00112	<0.00224	<0.00224	<56.1	<56.1	<56.1	<56.1	10.8
and the second	Non-State State		No. of Street,			and the second second	Sold Party of	And Antiber	The second	State of the second			The second s		State of the second second
MW-3 (SB-5 @ 1')	1.	10/10/2012	In-situ	<0.00108	<0.00217	<0.00108	<0.00217	<0.00108	<0.00217	<0.00217	<54.2	<54.2	<54.2	<54.2	<1.09
MW-3 (SB-5 @ 10')	10'	10/10/2012	In-situ	<0.00107	<0.00213	<0.00107	<0.00213	<0.00107	<0.00213	<0.00213	<53.3	<53.3	<53.3	<53.3	<1.03
MW-3 (SB-5 @ 20')	20'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<55.2	<55.2	<55.2	<55.2	<1.09
MW-3 (SB-5 @ 30')	30'	10/10/2012	In-situ	<0.00994	<0.00199	<0.00994	<0.00199	<0.00994	<0.00199	<0.00199	<52.1	<52.1	<52.1	<52.1	<1.01
MW-3 (SB-5 @ 40')	40'	10/10/2012	In-situ	<0.00996	<0.00199	<0.00996	<0.00199	<0.00996	<0.00199	<0.00199	<53.0	<53.0	<53.0	<53.0	<1.05
MW-3 (SB-5 @ 50')-core	50'	10/10/2012	In-situ	<0.00994	<0.00199	<0.00994	<0.00199	<0.00994	<0.00199	<0.00199	<54.0	<54.0	<54.0	<54.0	1.42
MW-3 (SB-5 @ 60')	60'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<56.6	<56.6	<56.6	<56.6	3.48
「「「「「「「「」」」」」」」」」」」」」」」」」」」」」」」」」」」」」」	Non-State	「「「「「「「」」」	ALC: CARLER	「「「「ない」」				Street Children			「二十二日」		のないないです	のないであると	の記念はないたのと
SB-2 (1')	1.	10/10/2012	In-situ	<0.00996	<0.00199	<0.00996	<0.00199	<0.00996	<0.00199	<0.00199	<53.2	<53.2	<53.2	<53.2	21.6
SB-2 (5')	Q,	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<54.1	<54.1	<54.1	<54.1	1.38
SB-2 (10')	10'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<52.8	<52.8	<52.8	<52.8	119
SB-2 (15')	15'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<55.3	<55.3	<55.3	<55.3	17.8
SB-2 (20')	20'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<54.9	<54.9	<54.9	<54.9	11.4
ちかんにいか たんになるになる	and the state of	A STATE OF	Survey of the	States of the		R. S. S. S. S. S.	South States			生活の言語	のようなの	二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十	And the second	Ser Maria	「日本のない」
SB-3 (1')	1.	10/10/2012	In-situ	<0.00994	<0.00199	<0.00994	<0.00199	<0.00994	<0.00199	<0.00199	<54.1	<54.1	<54.1	<54.1	<1.00
SB-3 (5')	2	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<51.2	<51.2	<51.2	<51.2	13.3
SB-3 (10')	10'	10/10/2012	In-situ	<0.00996	<0.00199	<0.00996	<0.00199	<0.00996	<0.00199	<0.00199	<53.6	<53.6	<53.6	<53.6	<1.20
SB-3 (15')	15'	10/10/2012	In-situ	<0.00100	<0.00201	<0.00100	<0.00201	<0.00100	<0.00201	<0.00201	<54.7	<54.7	<54.7	<54.7	<1.12
SB-3 (20')	20'	10/10/2012	In-situ	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	<52.7	<52.7	<52.7	<52.7	<1.16
「「「「「「「」」」		The second second			State of the state	State of the state	Contraction of the	and the second second		ALL STREET		STATISTICS.	No. of the second		and the second
MM	OCD Stand	ard		10						50				100	250

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TABLE 3

CONCENTRATIONS OF BENZENE, BTEX & CHLORIDE IN GROUNDWATER

SOUTHERN UNION GAS SERVICES A-7 BETTIS (1RP 09-5-2186) LEA COUNTY, NEW MEXICO

				METHC	DS: EPA SI	W 846-8021B			SM2540C	E 300
SAMPLE	SAMPLE	BENZENE		ETHYL- Benzene	M,P- XYLENES	O-XYLENES	TOTAL	TOTAL BTEX	TOTAL DISSOLVED SOILDS	CHLORIDE
		(IIIAIL)	(IIII)	(mg/L)	(mg/L)	וווארו	(mg/L)	(mg/L)	(mg/L)	ווושירן
MW-1	11/6/2012	0.413	<0.0100	0.0532	0.0274	0.0103	0.0377	0.504	2,620	1,060
MW-2	11/6/2012	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	958	138
MW-3	11/6/2012	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200	<0.00200	777	103
							A total and a second			
NMOCD Sta	Indard	0.01	0.75	0.75	Total X	ylenes	0.62			250

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Photograph of the initial excavation at the A-7 Bettis Historical Release Site.



Photograph of the initial excavation at the A-7 Bettis Historical Release Site.



Photograph of backfilling activities at the A-7 Bettis Historical Release Site.



Photograph of backfilling activities at the A-7 Bettis Historical Release Site.



Photograph of the liner installation at the A-7 Bettis Historical Release Site.



Photograph of the liner installation at the A-7 Bettis Historical Release Site.



Photograph of backfilling activities at the A-7 Bettis Historical Release Site.



Photograph of backfilling activities at the A-7 Bettis Historical Release Site.