RECEIVED District 1 1625 N. French Dr., Hobbs, NM 88240 State of New Mexico SEP 1 4 2010 Form C-141 Revised October 10, 2003 **Energy Minerals and Natural Resources** District II HOBBS OF Copies to appropriate District Office in accordance with Rule 116 on back 1301 W. Grand Avenue, Artesia, NM 88210 District III Oil Conservation Division 1RP-2585 1000 Rio Brazos Road, Aztec, NM 87410 1220 South St. Francis Dr. District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 side of form Santa Fe, NM 87505 **Release Notification and Corrective Action OPERATOR** Initial Report \boxtimes Final/Report Name of Company Southern Union Gas Services Contact Rose Slade P.O. Box 1226 Jal, New Mexico 88252 Telephone No. 432-940-5147 Address Facility Name Lateral A-9 Facility Type Natural Gas Pipeline

Surface Owner Kelly Meyers	Mineral Owner	Lease No. 30-025-38822

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County				
"M"	7	248	37E					Lea				

Latitude N 32.22723 degrees Longitude W 103.20821 degrees

NATURE OF RELEASE

Type of Release Natural Gas, Crude Oil and Produced Water	Volume of Release 7 BBLS	Volume Recovered 0 BBLS
Source of Release 4-Inch Steel Pipeline	Date and Hour of Occurrence	Date and Hour of Discovery
·	*June 19, 2010, approx. 1030 hrs	*June 19, 2010, 1030 hrs
Was Immediate Notice Given?	If YES, To Whom?	-
🗌 Yes 🛛 No 🗌 Not Required		
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the Wat	tercourse.
🗌 Yes 🛛 No		
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.*		
*This release was initially deemed a non-reportable release of three (3) ba	rrels. Following delineation activities	, Southern Union has opted to re-classify
this release a reportable release of (7) barrels.	č	
The release was caused by internal corrosion of the 4-inch steel pipeline.	A temporary pipeline clamp was utili	zed to mitigate the release during the initial
release response. Following initial response activities, a segment of the pip	peline has been replaced. No H2S has	s been detected
	N N N	
Describe Area Affected and Cleanup Action Taken.*		
The affected area measures approximately 2,500 square feet. The release	was remediated per NMOCD regulate	ory guidelines. Please reference a Closure
Report prepared by Elke Environmental, Inc. on behalf of Southern Union	Gas Services and dated August 26, 2	
The sector of the state is the state of the		
I nereby certify that the information given above is true and complete to the	te best of my knowledge and understa	and that pursuant to NMOCD rules and
regulations an operators are required to report and/or the certain release no public health or the anyiron most C_{141} report by the	NMOCD marked as "Eight Dar art"	tions for releases which may endanger
bould their operations have failed to adequately investigate and remediate	e NMOCD marked as Final Report	does not relieve the operator of hability
or the environment. In addition, NMOCD acceptance of a C 141 report do	e contamination that pose a tilleat to g	gibility for compliance with one other
federal state or local laws and/or regulations	ses not reneve the operator of respons	sionity for compliance with any other
rederal, state and an laws and/or regulations.	OH CONSERV	
	<u>UIL CONSERV</u>	VATION DIVISION
Signature Dob of KUCal	· Scattor to co	
		00
Printed Name: Rose L. Slade	Approved by District Supervisor:	upprey Letem
		- 10 9
Title: EHS Compliance Specialist	Annroval Date: 09/111/10	Expiration Date:
E-mail Address: rose.slade@sug.com	Conditions of Approval:	
		Attached
Date: 9/10/2010 Phone: 432-940-5147	· ••••	1RP-10-7-2585

* Attach Additional Sheets If Necessary

IRP-2585



Closure Report

Prepared for Southern Union Gas

> LAT A-9 Lea Co., NM

RECEIVED

SEP 1 4 2010 HOBBSOCD

Prepared by *Elke Environmental, Inc.*

P.O. Box 14167 Odessa, TX 79768 Phone (432) 366-0043 Fax (432) 366-0884



Elke Environmental, Inc.

P.O. Box 14167 Odessa, TX 79768 Phone (432) 366-0043 Fax (432) 366-0884

August 26, 2010

Southern Union Gas Ms. Rose Slade 1507 W 15th Street Monahans TX, 79756

Re: Lateral A-9 (1RP-2585)

Ms. Rose Slade,

On July 31, 2010, Elke Environmental, Inc (Elke), on behalf of Southern Union Gas Services (SUG) completed the delineation and remediation of a pipeline release attributed to internal corrosion of a six (6) inch steel lateral pipeline. The release was located in Unit letter "M", Section 7, Township 24 South and Range 37 East in rural Lea County, New Mexico. The release GPS Coordinates were 32° 13.624' N, 103° 12.505' W. The property is owned by Mr. Kelly Meyers of Jal, New Mexico. The release was confined to a caliche lease road, with some airborne "overspray" on vegetation to the northwest of the release point. The release occurred on June 19, 2010 and the volume was initially estimated to be approximately three (3) barrels (non-reportable) of a mixture of natural gas, crude oil and produced water, with no recovery. On further investigation, SUG opted to reclassify the release as a reportable release of approximately seven (7) barrels, with no recovery. An initial C-141 was prepared and submitted to the New Mexico Oil Conservation Division (NMOCD) on July 15, 2010.

A search of the state water well database maintained by the New Mexico Office of the State Engineer indicated no water wells were registered in the above reference section. Groundwater was encountered at eighty-one (81) feet below ground surface (bgs) in a water well located in Section 8 of the above referenced Township. Again, no registered water wells were located in Section 7 and no water bodies are located within 1,000 feet of the release site. Based on the NMOCD ranking classification, the release site score is ten (10). A release site with a ranking score of ten (10) requires the following cleanup levels:

Benzene: 10 mg/Kg BTEX : 50 mg/Kg TPH: 1,000 mg/Kg Chloride: 250 mg/Kg

On July 14, 2010, initial excavation of the release began; impacted soil was stockpiled adjacent to the release on plastic. The initial depth of excavation was approximately twenty-four (24) to twenty-seven (27) inches bgs. Following initial excavation activities, five (5) soil samples (TP 1

(a) 24", TP 2 (a) 24", TP 3 (a) 27", TP 4 (a) 24" and TP 5 (a) 24") were collected. A site map is attached and depicts the locations of the soil samples. The soil samples were field screened using a Photo-Ionization Detector (PID), a TPH analyzer (Method 418.1) and a chloride field test kit (EPA 4500 Cl-), prior to submission to the laboratory for confirmation analysis. The soil samples were analyzed for concentration of benzene, toluene, ethyl benzene and xylene using EPA Method 8021b, total petroleum hydrocarbons using EPA Method SW-846 8015M and chloride using EPA 300.1. The analytical results indicated chloride concentrations exceeded the NMOCD cleanup standards in areas represented by soil samples TP 1 (a) 24" and TP 5 (a) 24".

On July 14, 2010, a stockpile soil sample was collected to evaluate the status of the stockpile material and the potential use of the material as backfill. The analytical results indicated benzene, BTEX and chloride concentration were less than the NMOCD clean-up standards and the stockpile soil TPH concentration was 1,088 mg/Kg. Based on analytical results the stockpiled soil would require blending prior to backfilling the excavation with the material.

On July 30, 2010, a ten (10) foot in width by ten (10) in length excavation was completed in the two (2) areas identified by the previous sampling event. The excavation was centered on the sample point (TP 1 and TP 5) and excavated to a depth of thirty-six (36) inches bgs.

Following the excavation activities, two (2) soil samples (TP 1 @ 36" and TP 5 @ 36") were collected and submitted to the laboratory for benzene, BTEX, TPH and chloride analysis. The analytical results indicated the concentrations of the constituents were less than the NMOCD clean-up levels.

An additional soil sample was collected from the blended stockpile and submitted for analysis. The analytical results indicated the concentrations of the constituents were less than the NMOCD clean-up levels and the blended stockpile soil was placed in the excavation.

The area of overspray was scraped to approximately two (2) inches bgs and placed in the impacted soil stockpile for blending. Approximately sixty-six (65) cubic yards (cy) of impacted soil was excavated, blended and used as backfill material.

Elke Environmental, Inc, on behalf of Southern Union Gas Services, requests NMOCD Site Closure site for the Lateral A-9 release. Attached to this report are: field screen data, photographs, laboratory analytical reports, a site map and the Initial C-141.

Respectfully submitted,

Bobby Steadham Elke Environmental, Inc.



New Mexico Office of the State Engineer Water Column/Average Depth to Water

		(quarte	rs a	re '	1=1	IW 2=	=NE 3=	=SW 4	l=SE)				
and an and a start of the		(quarte	rs a	ire s	sma	allest	to larg	est)	(NAD83 UTM	1 in meters)	10-11-11-11-11-11-11-11-11-11-11-11-11-1	(In feet)	
POD Number	Sub basin Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth I Well V	Depth W WaterCo	ater lumn
CP 00037 SRW2	POL	LE		2	1	05	24S	37E	670782	3569793*	177	106	71
CP 00297 A	POL	ŁΕ		2	1	12	24S	37E	677245	3568291*	32	18	14
CP 00443	STK	LE	3	4	1	08	24S	37E	670718	3567680*	125	90	35
CP 00501	SAN	LE	4	1	4	28	24S	37E	673019	3562484*	110	70	40
CP 00540	STK	, LE				23	24S	37E	675913	3564435*	110	94	16
CP 00652 EXPL	DOM	LE			2	25	24S	37E	677940	3563270*	180	90	90
CP 00663	DOM	LE	1	1	3	24	24S	37E	676812	3564362*	112	100	12
CP 00886	POL	LE		3	4	35	24S	37E	676172	3560628*	73		
CP 00912	STK	LE	1	1	1	11	24S	37E	675130	3568357*	95		
									Avera	age Depth to	o Water:	. 81 fee	et
										Minimun	n Depth:	18 fee	et
										Maximun	n Depth:	106 fee	et
المراجعة ال المراجعة المراجعة الم			arayan Mikud	a	van wan		, nang agan gang	1996 ANN - 1996			Noter Bacan Julius Nations		*** **** ****

Record Count: 9

PLSS Search:

Township: 24S

Range: 37E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

Southern Union Gas Services

Line # Lat A-9 Leak



Elke Environmental, Inc. P.O. Box 14167 Odessa, TX 79768

Field Analytical Report Form

ClientSouthern Union Gas			·····	Analyst _	BobbySteadham				
Site6" Lat Lea	1			-					
Sample ID	Date	Depth	418.1 TPH / PPM	Cl / PPM	PID / PPM	GPS			
Test Point 1	7/14/10	24"	17	267	16.6	32° 13.624' N 103° 12.505' W			
Test Point 1	7/31/10	36"	12	113		32° 13.624' N 103° 12.505' W			
Test Point 2	7/14/10	24"	15	108	6.0	32° 13.625' N 103° 12.501' W			
Test Point 3	7/14/10	18"	79	121	10.8	32° 13.612' N 103° 12.503' W			
Test Point 4	7/14/10	24"	23	113	1.4	32° 13.624' N 103° 12.487' W			
Test Point 5	7/14/10	24"	21	97	6.7	32° 13.624' N 103° 12.471' W			
Test Point 5	7/31/10	36"	15	101		32° 13.624' N 103° 12.471' W			
Pile	7/15	N/A	972	76		<u></u>			
Pile	7/31/10	N/A	1013	97					
North Wall	7/15	12"	24	101		32° 13.630' N 103° 12.499' W			
East Wall	7/15	12"	6	111		32° 13.625' N 103° 12.465' W			
South Wall	7/15	6"	19	121		32° 13.616' N 103° 12.499' W			
West Wall	7/15	12"	12	116		32° 13.624' N 103° 12.516' W			

Analyst Notes

Southern Union Gas – Lat A-9



Test Point One

Test Point 5

Southern Union Gas – Lat A - 9



Backfill of excavation looking North/West

Test Point 1 after backfill

Analytical Report 382203

for

Elke Environmental, Inc.

Project Manager: Bobby Steadham

Southern Union Gas

23-JUL-10





12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-TX), Arizona (AZ0738), 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)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AAL11), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370) Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)



23-JUL-10



Project Manager: **Bobby Steadham Elke Environmental, Inc.** P.O. Box 14167 Odessa, TX 79768

Reference: XENCO Report No: **382203 Southern Union Gas** Project Address: Lat A-9

Bobby Steadham:

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 382203. 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. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. 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. 382203 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,

Brent Barron, II Odessa Laboratory 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 - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America





Sample Cross Reference 382203



Elke Environmental, Inc., Odessa, TX

Southern Union Gas

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
TP 1 @ 24"	S	Jul-14-10 10:15	24 In	382203-001
TP 2 @ 24"	S	Jul-14-10 16:30	24 In	382203-002
TP 3 @ 27"	S	Jul-14-10 11:30	27 In	382203-003
TP 4 @ 24"	S	Jul-14-10 13:30	24 In	382203-004
TP 5 @ 24"	S	Jul-14-10 14:45	24 In	382203-005
Pile	S	Jul-15-10 17:30		382203-006





Client Name: Elke Environmental, Inc. Project Name: Southern Union Gas



Project ID: Work Order Number: 382203 Report Date: 23-JUL-10 Date Received: 07/19/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-815417 Percent Moisture None

Batch: LBA-815421 TPH By SW8015 Mod None

Batch: LBA-815460 Anions by E300 None

Batch: LBA-815660 BTEX by EPA 8021B SW8021BM

Batch 815660, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 382345-003 D. 4-Bromofluorobenzene recovered above QC limits . Matrix interferences is suspected; data confirmed by re-analysis Samples affected are: 382345-003 D.

SW8021BM Batch 815660, Benzene, Toluene, Ethylbenzene, m,p-Xylenes, o-Xylene RPD is outside the QC limit. This is most likely due to sample non-homogeneity. Samples affected are: 382203-006, -001, -002, -003, -005, -004.





Certificate of Analysic ummary 382203

Elke Environmental, Inc., Odessa, TX

Project Name: Southern Union Gas



Project Id: Contact: Bobby Steadham Project Location: Lat A-9

Date Received in Lab: Mon Jul-19-10 04:00 pm Report Date: 23-JUL-10

								_Project Mai	nager:	Brent Barron,	II		
	Lab Id:	382203-0	001	382203-0	02	382203-0	003	382203-0	04	382203-0	005	382203-0	006
Anglasia Demonstrad	Field Id:	TP 1 @ 2	24"	TP 2 @ 2	4"	TP 3 @ 2	27"	TP 4 @ 2	4"	TP 5 @ 2	24"	Pile	
Analysis Kequesiea	Depth:	24 In		24 In		27 In		24 In		24 In			
	Matrix:	SOIL		SOIL		SOIL	,	SOIL		SOIL		SOIL	
	Sampled:	Jul-14-10	10:15	Jul-14-10 1	6:30	Jul-14-10	11:30	Jul-14-10 1	3:30	Jul-14-10 1	4:45	Jul-15-10	17:30
Anions by E300	Extracted:												
	Analyzed:	Jul-20-10	17:21	Jul-20-10 1	7:21	Jul-20-10	17:21	Jul-20-10 1	7:21	Jul-20-10 1	7:21	Jul-20-10	17:21
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		395	18.3	7.20	4.35	ND	4.35	4.93	4.35	626	86.9	83.1	8.63
BTEX by EPA 8021B	Extracted:	Jul-22-10	07:00	Jul-22-10 0	7:00	Jul-22-10 (07:00	Jul-22-10 0	7:00	Jul-22-10 (07:00	Jul-22-10 (07:00
	Analyzed:	Jul-22-10	18:13	Jul-22-10 1	8:36	Jul-22-10	18:58	Jul-22-10 1	9:21	Jul-22-10 2	20:29	Jul-22-10 2	21:58
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0022	ND	0.0021	ND	0.0021	ND	0.0021	ND	0.0020	ND	0.0020
Ethylbenzene		ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
m,p-Xylenes		ND	0.0022	ND	0.0021	ND	0.0021	ND	0.0021	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total Xylenes		ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total BTEX		ND	0.0011	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Percent Moisture	Extracted:												
	Analyzed:	Jul-21-10	08:30	Jul-21-10 0	8:30	Jul-21-10	08:30	Jul-21-10 0	8:30	Jul-21-10 (08:30	Jul-21-10 (08:30
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture	~	8.24	1.00	3.47	1.00	3.53	1.00	3.41	1.00	3.35	1.00	2.66	1.00
TPH By SW8015 Mod	Extracted:	Jul-20-10	11:00	Jul-20-10 1	1:00	Jul-20-10	11:00	Jul-20-10 1	1:00	Jul-20-10 1	1:00	Jul-20-10	11:00
	Analyzed:	Jul-20-10	22:16	Jul-20-10 2	2:46	Jul-20-10 2	23:44	Jul-21-10 0	0:13	Jul-21-100	00:42	Jul-21-10 (01:10
	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	16.4	ND	15.5	ND	15.5	ND	15.6	ND	15.5	30.4	15.4
C12-C28 Diesel Range Hydrocarbons		ND	16.4	ND	15.5	ND	15.5	ND	15.6	41.3	15.5	935	15.4
C28-C35 Oil Range Hydrocarbons		ND	16.4	ND	15.5	ND	15.5	ND	15.6	ND	15.5	123	15.4
Total TPH		ND	16.4	ND	15.5	ND	15.5	ND	15.6	41.3	15.5	1088	15.4

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brent Barron, II

Odessa Laboratory 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 effect the recovery of the spike concentration. This condition could also effect 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 MQL and above the SQL.
- 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.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

PQL Practical Quantitation Limit

* Outside XENCO's scope of NELAC Accreditation.

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 - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

	Phone	Fax
4143 Greenbriar Dr, Stafford, Tx 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116

	8	rγ ⁻	- Liver	9		<
	(3	1.'	(<	ų.	۲	
	4	<u>L</u>	緰	2		
LT:	L.C.	K.	5	4	9	18

Project Name: Southern Union Gas

ork Orders : 382203	\$,		Project II):		
Lab Batch #: 815660	Sample: 568680-1-BKS / BK	IS Batel	h: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 07/22/10 07:20	SUI	RROGATE RF	ECOVERY S	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes		'	[0]		I
1,4-Difluorobenzene		0.0287	0.0300	96	80-120	
4-Bromofluorobenzene		0.0273	0.0300	91	80-120	
Lab Batch #: 815660	Sample: 568680-1-BSD / BS	,D Batel	h: 1 Matrix:	: Solid		
Units: mg/kg	Date Analyzed: 07/22/10 07:42	SU	RROGATE RF	ECOVERY S	STUDY	
BTEX	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0295	0.0300	98	80-120	
4-Bromofluorobenzene		0.0291	0.0300	97	80-120	
Lah Batch #: 815660	Sample: 568680-1-BLK / BI	LK Batc'	h: 1 Matrix	Solid	<u> </u>	
Units: mg/kg	Date Analyzed: 07/22/10 08:50	SU:	RROGATE RF	COVERY	STUDY	
BTE	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes	2.2055				ļ
4-Difluorobenzene		0.0255	0.0300	85	80-120	ļ
4-Bromofluorobenzene		0.0291	0.0300	97	80-120	L
Lab Batch #: 815660	Sample: 382345-003 D / MD) Batch	h: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 07/22/10 09:34	SUJ	RROGATE RE	COVERY S	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0176	0.0300	59	80-120	**
4-Bromofluorobenzene		0.0398	0.0300	133	80-120	**
Lah Batch #: 815660	Sample: 382203-001 / SMP	Batcl	h: 1 Matrix:	: Soil	·	
Units: mg/kg	Date Analyzed: 07/22/10 18:13	SU!	RROGATE RF	COVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0249	0.0300	83	80-120	1
4-Bromofluorobenzene		0.0315	0.0300	105	80-120	i

* 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

results are based on MDL and validated for QC purposes.

	\sim	\sim	$\overline{\gamma}$	<u>~</u>		Ç,
	đ		1		۲	Y
	<u> </u>	J			~	l
1.			27.		0	
831 ¥	11	Y.1	2.1		1 CA	- 18

Project Name: Southern Union Gas

ork Orders : 382203	',		Project II):		
Lab Batch #: 815660	Sample: 382203-002 / SMP	Batch	n: 1 Matrix:	Soil	OTHER W	
Units: mg/kg	Date Analyzed: 07/22/10 18:36	501	RROGATE KE	COVERY :	STUDY	
BTE	K by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]	/ STUDY Control Limits %R 80-120 80-120 80-120 (STUDY Control Limits %R 80-120 80-120 80-120 STUDY Control Limits %R 80-120 80-120 STUDY Control Limits %R 80-120	
1,4-Difluorobenzene		0.0249	0.0300	83	80-120	
4-Bromofluorobenzene		0.0306	0.0300	102	80-120	
Lab Batch #: 815660	Sample: 382203-003 / SMP	Batch	h: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 07/22/10 18:58	SUI	RROGATE RE	COVERY S	STUDY	
BTE	X by EPA 8021B Analytes	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		0.0311	0.0300	104	80-120	
Lab Batch #: 815660	Sample: 382203-004 / SMP	Batcl	h: 1 Matrix:	: Soil	<u>I</u> ,	
Units: mg/kg	Date Analyzed: 07/22/10 19:21	SU	RROGATE RE	COVERY S	STUDY	
BTEX	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			[D]		
1,4-Difluorobenzene		0.0250	0.0300	83	80-120	
4-Bromofluorobenzene		0.0313	0.0300	104	80-120	
Lab Batch #: 815660	Sample: 382203-005 / SMP	Batch	h: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 07/22/10 20:29	SU	RROGATE RE	COVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0252	0.0300	84	80-120	-
4-Bromofluorobenzene		0.0303	0.0300	101	80-120	
Lab Batch #: 815660	Sample: 382203-006 / SMP	Batch	h: 1 Matrix:	Soil	•	
Units: mg/kg	Date Analyzed: 07/22/10 21:58	SUI	RROGATE RE	COVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0251	0.0300	84	80-120	
4-Bromofluorobenzene		0.0307	0.0300	102	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

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

	-	γ	÷.	-12	T.	~	٩.
	đ,	1	1		đ	۲	
	¥?	- ^j		¢		<u>A</u>	
Ľ	Ŀ	O	K.	К	1	6	O

Project Name: Southern Union Gas

ork Orders : 382203), Samula, 568555-1-BKS / B ¹	VC Dotal	Project II): Solid		
Lab Batch #: 013421	Date Analyzed: 07/20/10 16:48	S Daten	RROGATE RF	COVERY	STUDY	
TPH]	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes		<u>⊢ </u>		ļ!	
1-Chlorooctane	_	96.7	99.9	97	70-135	
o-Terphenyl		42.7	50.0	85	70-135	<u> </u>
Lab Batch #: 815421	Sample: 568555-1-BSD / BS	SD Batch	a: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 07/20/10 17:19	SUI	RROGATE RF	COVERY S	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		91.9	99.9	92	70-135	
o-Terphenyl		40.1	50.0	80	70-135	[
Lab Batch #: 815421	Sample: 568555-1-BLK / B [*]	LK Batcł	n: 1 Matrix	: Solid	<u>/</u> /	
Units: mg/kg	Date Analyzed: 07/20/10 17:50	SUI	RROGATE RF	COVERY {	STUDY	
TPH 3	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
L-Chlorooctane		80.4	100	89	70-135	<u> </u>
o-Terphenyl		44.3	50.0	89	70-135	(
Lah Batah #1 815421	Sample: 382203-001 / SMP	Batel	h. 1 Matrix	• Soil		J <u> </u>
Lad Batch #: 019421	Data Analyzadi 07/20/10 22:16		RROGATE RI	COVERY	STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1 Chlorooctane		87.8	100	88	70-135	<u>h</u>
o-Ternhenvl	_	43.2	50.1	86	70-135	<u> </u>
· · · · · · · · · · · · · · · · · · ·	l	Batal	1 Motrix	 ©~11	10-100	
	Sample: 302203-002 / 0111	Dattin SU	PROGATE RF	COVERY	STUDY	
Units: mg/kg	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		87.3	99.5	88	70-135	
o-Terphenyl		42.5	49.8	85	70-135	1

* 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 I results are based on MDL and validated for QC purposes.

iγ	$\overline{\gamma}$	استر	-	
	`	(E
\mathbb{P}^{4}	\sim	<u>}-</u>	\geq	
11	7.1	CΓ	ात	12

Project Name: Southern Union Gas

ork Orders : 382203	samala: 382203-003 / SMP	Bate	Project II): Soil		
Lab Datch #: 010721	Date Analyzed: 07/20/10 23:44	SU	RROGATE RE	COVERY !	STUDY	
TPH]	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes			լոյ		
1-Chlorooctane		86.7	99.7	87	70-135	
o-Terphenyl		42.1	49.9	84	70-135	
Lab Batch #: 815421	Sample: 382203-004 / SMP	Bate	h: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 07/21/10 00:13	SU	RROGATE RE	COVERY S	STUDY	
ТРН І	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		93.3	100	93	70-135	
o-Terphenyl		45.7	50.2	91	70-135	
Lab Batch #: 815421	Sample: 382203-005 / SMP	Batc	h: 1 Matrix:	Soil	<u></u>	
Units: mg/kg	Date Analyzed: 07/21/10 00:42	SU	RROGATE RE	COVERY S	STUDY	
TPH	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
l-Chlorooctane		119	99.7	119	70-135	
o-Terphenyl		58.6	49.9	117	70-135	
Lab Batch #: 815421	Sample: 382203-006 / SMP	Bate	h: 1 Matrix:	Soil		
Units: mg/kg	Date Analyzed: 07/21/10 01:10	SU	RROGATE RE	COVERY	STUDY	
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R ID1	Control Limits %R	Flags
1 Chlorocotano	Analytes	01.3	00.8	01	70.125	
o-Ternhenvl		45.8	49.0	91	70-135	
Lab Batab #: 815421	 Sample: 382202-002 S / MS	Bata	L. 1 Matrix	Soil	/0-135	<u> </u>
Lao Daten #: 015421	Date Analyzed: 07/21/10 03:37	SU	RROGATE RE	ECOVERY (STUDY	
TPH 3	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane		116	100	116	70-135	
o-Terphenyl		52.0	50.1	104	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

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



Project Name: Southern Union Gas

ork Orders : 382203	',	Project ID:												
Lab Batch #: 815421	Sample: 382202-002 SD / 1	D/MSD Batch: 1 Matrix: Soil												
Units: mg/kg	Date Analyzed: 07/21/10 04:06	6 SURROGATE RECOVERY STUDY												
TPH	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags								
	Analytes			נען										
1-Chlorooctane		102	100	102	70-135									
o-Terphenyl		45.4	50.1	91	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
- I results are based on MDL and validated for QC purposes.





Project Name: Southern Union Gas

Work Order #: 382203					Project ID:										
Analyst: ASA	D	ate Prepar	ed: 07/22/201	0			Date A	nalyzed: (07/22/2010						
Lab Batch ID: 815660 Sample: 568680-1-	BKS	Bate	h #: 1					Matrix: S	Solid						
Units: mg/kg		BLAN	K /BLANK S	SPIKE / E	BLANK S	PIKE DUPI	PLICATE RECOVERY STUDY								
BTEX by EPA 8021B	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	ND	0.1000	0 1023	102	01	0.1101	110	7	70,130	35					
Toluene	ND	0.1000	0.0956	96	0.1	0.1023	102	7	70-130	35					
Ethylbenzene	ND	0.1000	0.0985	99	0.1	0.1071	107	8	71-129	35					
m,p-Xylenes	ND	0.2000	0.2012	101	0.2	0.2180	109	8	70-135	35					
o-Xylene	ND	0.1000	0.0975	98	0.1	0.1061	106	8	71-133	35					
Analyst: LATCOR	D	ate Prepar	ed: 07/20/201	0	<u>.</u>	Date Analyzed: 07/20/2010									
Lab Batch ID: 815460 Sample: 815460-1-	BKS	Bate	h#: 1					Matrix: S	Solid						
Units: mg/kg		BLAN	K /BLANK S	SPIKE / E	BLANK S	SPIKE DUPI	LICATE	RECOVI	ERY STUD	γ					
Anions by E300 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	ND	10.0	10.4	104	10	9.43	94	10	75-125	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





Project Name: Southern Union Gas

Work Order #: 382203 Analyst: BEV	I	Date Prepar	ed: 07/20/202	10			Pro Date A	ject ID: nalyzed: 0	7/20/2010		
Lab Batch ID: 815421	Sample: 568555-1-BKS		h #:]	DIVE / I		DIVENIDI	ICATE	Matrix: S	ona DV STUD	V	
Units: ^{IIIg/kg}		DLAN	K/DLANK			FIKE DUFL				1	
TPH By SW801	5 Mod Blank Sample Result [A]	Spike t Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes		[B]	[C]	[D]	[E]	Result [F]	[G]				
C6-C12 Gasoline Range Hydrocar	rbons ND	999	953	95	999	917	92	4	70-135	35	
C12-C28 Diesel Range Hydrocart	pons ND	999	800	80	999	866	87	8	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: Southern Union Gas

Crder #: 382203 Lab Batch #: 815460 Date Analyzed: 07/20/2010	Date Prepared: 07/20/2010	Pro	oject ID: .nalyst: L	ATCOR	
QC- Sample ID: 382202-001 S Reporting Units: mg/kg	Batch #: 1 MATRIX / MA	ATRIX SPIKE	Matrix: So RECO	oil VERY STU	DY
Inorganic Anions by EPA 300	Parent Sample Spike	Spiked Sample Result	%R	Control Limits	Flag
Analytes	[A] [B]	[C]	[D]	%R	
Chloride	148 112	279	117	75-125	

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





Form 3 - MSSMSD Recoveries



Project Name: Southern Union Gas

Work Order #: 382203						Project II) :				
Lab Batch ID: 815421	QC- Sample ID:	382202	-002 S	Ba	tch #:	1 Matri	x: Soil				
Date Analyzed: 07/21/2010	Date Prepared:	07/20/2	010	An	alyst:	BEV					
Reporting Units: mg/kg		N	IATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY	STUDY		
TPH By SW8015 Mod	Parent Sample	Spike	Spiked Sample Result	Spiked Sample	Spike	Duplicate Spiked Sample	Spiked Dup.	RPD	Control Limits	Control Limits	Flag
Analytes	[A]	Added [B]	[C]	%R [D]	Added [E]	Result [F]	%R [G]	%	%R	%RPD	
C6-C12 Gasoline Range Hydrocarbons	ND	1160	1370	118	1160	1180	102	15	70-135	35	
C12-C28 Diesel Range Hydrocarbons	ND	1160	1110	96	1160	962	83	14	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/BRelative 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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Final 1.000



Sample Duplicate Recovery



Project Name: Southern Union Gas

Work Order #: 382203					
Lab Batch #: 815460			Project I	D:	
Date Analyzed: 07/20/2010 Date Prepa	red: 07/20/2010) Ana	lyst:LATC	COR	
QC- Sample ID: 382202-001 D Bate	h #: 1	Mat	rix: Soil		
Reporting Units: mg/kg	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Anions by E300 Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	148	140	6	20	
Lab Batch #: 815660					
Date Analyzed: 07/22/2010 Date Prepa	red: 07/22/2010) Ana	lyst:ASA		
QC- Sample ID: 382345-003 D Bate	h #: 1	Mat	rix: Soil		
Reporting Units: mg/kg	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
BTEX by EPA 8021B	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		[B]			
Benzene	11.95	28.04	80	35	F
Toluene	89.28	436.5	132	35	F
Ethylbenzene	52.16	157.4	100	35	F
m,p-Xylenes	369.2	1043	95	35	F
o-Xylene	81.77	224.0	93	35	F
a,a,a-Trifluorotoluene	168	168	0	35	
Lab Batch #: 815417					
Date Analyzed: 07/21/2010 Date Prepa	r ed: 07/21/2010) Ana	lyst: JLG		
QC- Sample ID: 382200-001 D Batc	h#: 1	Mat	rix: Soil		
Reporting Units: %	SAMPLE	SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	6.67	6.12	9	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

Env A Xence	Conment o Laboratories Compa	t <mark>al Lab</mark> o	of Tex	as)	12 Oc	600 Jess	We a, 1	CHA st I-20 Fexas	AIN 0 Ea 797	OF Ist 765	CU	STC	DDY	RE	COI	RD .	AN	D AI	N <i>Al</i> Ph Fi	. YS one ax:	IS F : 43 43	₹EG 2-5 2-5) <i>UE</i> : 63-1 63-1	ST 800 713				
	Project Manager:	Bobby Stead	ham														P	roj	ect l	Nam	e: _		Sou	the	<u>m U</u>	Inio	<u>n G</u>	as				
	Company Name	Elke Environ	mental	_ _	·									_		_			Proj	ject	# :		• • • • • • •									
	Company Address	: <u>P O Box 141</u>	67															Pn	ojec	t Lo	c:_				La	<u>t A-</u> §	<u>, </u>					
	City/State/Zip:	Odessa, TX	79768											_		_				РО	# :											
	Telephone No:	432-366-004	3			_ Fax No:		<u>43</u>	32-3	366	5-0	884		-			Repo	ort f	om	nat:	1	s	land	ard			TR	RP		•	IPDE	s
	Sampler Signature	TSA		· · · · · · · · · · · · · · · · · · ·		e-mail;		bs	<u>s e</u>	lke	en	<u>v@y</u>	ah	00.	con	<u>n</u>																
(lab use	onivi		7	_		_												F	_			TCL		Analy T	ze f	for:					┥	
OPDE	- 3827	03						ſ	r	Drace		ion f #	dC	otein	0.00	-	Matrix		<u></u>		1	OTA		-	F	F	1				4 Z 4	
ORDE			<u> </u>	1	1	T			┢──	Fies			T			┿			80151	8		ĺ	Pa Se	,		8260					7	
AB # (leb use only)	FIE			Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	8	HNO ₃	HCI	H ₂ SO4	NaCH No S O	Mone None	Other (Specify)	DW*Drinking Water SL=Sludge	GW = Groundwater S=Soli/Soli	NP=Non-Polable Spearly Othe	1PH: 418.1 (0015)	Communications 1X 10	Valueris (UB), Mg, NB, KJ	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb	Votatiles	Semivolatiles	BTEK 80218,030 or BTEX	ŝ	N.O.R.M.			RUSH TAT (Pre-Schedule)	Standard TAT
01	TP	1@24" 15	3	24"	7/14/2010	10:15 AM		1	x	T							s		x		1,	<			Γ	×	П		T	T	T	X
02	ТР	2@24"		24"	7/14/2010	4:30 PM		1	X								S	ŀ	x)	<				x			\Box	Τ	Γ	X
03	ТР	3 @ 27" <u>C</u>	-	27"	7/14/2010	11:30 AM		1	х								s		x)	<				X						X
04	ТР	4@24"74		24"	7/14/2010	1:30 PM		1	X								S		x)	<				X						X
05	ТР	5 @ 24"		24"	7/14/2010	2:45 PM		1	x						L		S		x)	<u> </u>			L	X			\bot		L	X
00		Pile		n/a	7/15/2010	5:30 PM		1	X					_	┶		S	Ŀ	×		\downarrow	4			L	x		\square	\perp	\perp	\bot	X
						*								\perp	1				1			+-	_			\square	Ьľ	-+	\perp	\perp	\bot	L
												\vdash	+-	_	╀	┞		╇	+	╇	+	╞				\square	┝╌┨	\downarrow	_	+	╇	<u> </u>
					<u></u>		$\left - \right $					┢╌┝		┿	+			4	╇	+-	+	+		-		$\left - \right $	⊢┦	-+	_	╇	┢	\vdash
Special	Instructions:												<u> </u>							S C	iboi DCa	rator Fré	y Co	omm Head	enti							
Relinguis Relinguis	hed by	- 7	Pate GID 4 Date	Time COO Time	Received by: Received by:										D	ate ate		Ti Ti	me	80.0	usio amp by	dy si le Ha San	als ind (pier/	on c Deliv Clier	onta erec vt Re	iner Iner Iner I	8) 0		K.C.			
Relinquis	hed by:		Date	Time	Received by ELS	a fa	201	,		•				-	D - }4	ato J. 1	ຣັ່ງ	Ti (me. 0()	Te	emp P	- Cou - Cou enatu		y la pon	Rec	s selpt:		2.	. \		ne St °C	¥T ∙

5.900 MAR



XENCO Laboratories Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Phoenix, San Antonio, Tampa Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: E/Ye	Env.	
Date/Time: 7 ·	19.10	16:00
Lab ID # :	BRI	-03
Initials:	-A2	_

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	_
2. Shipping container in good condition?	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	N/A	
4. Chain of Custody present?	Tes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	Yes	NO		
7. Chain of custody signed when relinquished / received?	Tes	No		
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yes	No		
10, Sample matrix / properties agree with chain of custody?	Yes	No		
11. Samples in proper container / bottle?	Yes	No		_
12. Samples properly preserved?	(Yes)	No	N/A	
13, Sample container intact?	(Yes)	No		
14, Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	No	(N/A)	
17. VOC sample have zero head space?	Yes	No	N/A	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No	.	Cooler 5 No.	
lbs 2.1 °c lbs °c lbs °	C Ibs	°C	; Ibs	°C

Nonconformance Documentation

Contact:	Contacted by:	Date/Time:	
Regarding:			
Corrective Action 1	aken:		
			······································
		· · · · · · · · · · · · · · · · · · ·	
Check all that apply	y: Cooling process has begun shortly after sa condition acceptable by NELAC 5.5.8	mpling event and out of temperature 3.1.a.1.	

□ Initial and Backup Temperature confirm out of temperature conditions □ Client understands and would like to proceed with analysis

Analytical Report 384215

for

Elke Environmental, Inc.

Project Manager: Curtis Elam

Southern Union Gas

10-AUG-10



Celebrating 20 Years of commitment to excellence in Environmental Testing Services



12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122): Texas (T104704215-TX), Arizona (AZ0738), 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)

Xenco-Atlanta (EPA Lab Code: GA00046): Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85) Louisiana (04176), USDA (P330-07-00105)

> Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330) Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900) Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX) Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX) Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370) Xenco-Boca Raton (EPA Lab Code: FL00449): Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917) North Carolina(444), Texas(T104704468-TX), Illinois(002295), Florida(E86349)



10-AUG-10



Project Manager: **Curtis Elam Elke Environmental, Inc.** P.O. Box 14167 Odessa, TX 79768

Reference: XENCO Report No: **384215 Southern Union Gas** Project Address: Lat A-9

Curtis Elam:

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 384215. 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. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. 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. 384215 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,

Brent Barron, II Odessa Laboratory 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





Sample Cross Reference 384215



Elke Environmental, Inc., Odessa, TX

Southern Union Gas

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
Pile	S	Jul-30-10 11:00		384215-001
TP 1 @ 36"	S	Jul-30-10 09:00	36 In	384215-002
TP 5 @ 36"	S	Jul-30-10 09:45	36 In	384215-003



CASE NARRATIVE

Client Name: Elke Environmental, Inc. Project Name: Southern Union Gas



Project ID: Work Order Number: 384215 Report Date: 10-AUG-10 Date Received: 08/04/2010

Sample receipt non conformances and Comments: None

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-817540 Percent Moisture None

Batch: LBA-817553 TPH By SW8015 Mod None

Batch: LBA-817714 Anions by E300 None

Batch: LBA-817943 BTEX by EPA 8021B SW8021BM

Batch 817943, Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Samples affected are: 384215-003, -001, -002. The Laboratory Control Sample for Toluene, m,p-Xylenes, Benzene, Ethylbenzene, o-Xylene is within laboratory Control Limits

SW8021BM

Batch 817943, m,p-Xylenes RPD was outside QC limits. Samples affected are: 384215-003, -001, -002





Project Id:

Project Location: Lat A-9

Contact: Curtis Elam

Certificate of Analysi ummary 384215

Elke Environmental, Inc., Odessa, TX

Project Name: Southern Union Gas



Date Received in Lab: Wed Aug-04-10 07:15 am

Report Date: 10-AUG-10 Project Manager: Brent Barron, II

	Lab Id:	384215-0	001	384215-0	02	384215-	003			
Analysis Paguastad	Field Id:	Pile		TP 1 @ 3	36"	TP 5 @	36"			
Analysis Kequesieu	Depth:			36 In		36 In				
	Matrix:	SOIL		SOIL		SOIL				
	Sampled:	Jul-30-10 1	11:00	Jul-30-10 0	9:00	Jul-30-10	09:45			
Anions by E300	Extracted:							 		
	Analyzed:	Aug-05-10	08:43	Aug-05-10	08:43	Aug-05-10	08:43		-	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
Chloride		50.6	4.45	98.9	4.38	ND	4.54			
BTEX by EPA 8021B	Extracted:	Aug-06-10	10:15	Aug-06-10	10:15	Aug-06-10	10:15			
	Analyzed:	Aug-07-10	18:35	Aug-07-10	20:08	Aug-07-10	20:32			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL		 	
Benzene		ND	0.0011	ND	0.0010	ND	0.0011			
Toluene		ND	0.0021	ND	0.0021	ND	0.0022			
Ethylbenzene		ND	0.0011	ND	0.0010	ND	0.0011			
m,p-Xylenes		ND	0.0021	ND	0.0021	ND	0.0022			
o-Xylene		ND	0.0011	ND	0.0010	ND	0.0011			
Total Xylenes		ND	0.0011	ND	0.0010	ND	0.0011			
Total BTEX		ND	0.0011	ND	0.0010	ND	0.0011	 		
Percent Moisture	Extracted:				1					
	Analyzed:	Aug-05-10	08:53	Aug-05-10	08:53	Aug-05-10	08:53			
	Units/RL:	%	RL	%	RL	%	RL			
Percent Moisture		5.72	1.00	4.01	1.00	7.55	1.00			
TPH By SW8015 Mod	Extracted:	Aug-04-10	12:54	Aug-04-10	12:54	Aug-04-10	12:54			
	Analyzed:	Aug-04-10	17:21	Aug-04-10	17:41	Aug-04-10	18:00			
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL			
C6-C12 Gasoline Range Hydrocarbons		ND	15.9	ND	15.6	ND	16.2			
C12-C28 Diesel Range Hydrocarbons		752	15.9	ND	15.6	ND	16.2			
C28-C35 Oil Range Hydrocarbons		136	15.9	ND	15.6	ND	16.2			
Total TPH		888	15.9	ND	15.6	ND	16.2			

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - San Antonio - Atlanta - Tampa - Boca Raton - Latin America - Odessa - Corpus Christi

Brent Barron, II

Odessa Laboratory Manager



XENCO Labóratories **CHRONOLOGY OF HOLDING TIMES**



Analytical Method : Percent Moisture

Client : Elke Environmental, Inc.

Work Order #: <u>384215</u>

Project ID:

Field Sample ID	Date Collected	Date Received	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
TP 1 @ 36"	Jul. 30, 2010	Aug. 4, 2010				Aug.5, 2010	45	6	Р
Pile	Jul. 30, 2010	Aug. 4, 2010				Aug.5, 2010	45	6	Р
TP 5 @ 36"	Jul. 30, 2010	Aug. 4, 2010				Aug.5, 2010	45	6	Р



XENCO Laboratories CHRONOLOGY OF HOLDING TIMES



Analytical Method : Anions by E300

Client : Elke Environmental, Inc.

Work Order #: <u>384215</u>

Project ID:

Field Sample ID	Date Collected	Date Received	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
TP 5 @ 36"	Jul. 30, 2010	Aug. 4, 2010				Aug.5, 2010	28	6	Р
TP 1 @ 36"	Jul. 30, 2010	Aug. 4, 2010				Aug.5, 2010	28	6	P
Pile	Jul. 30, 2010	Aug. 4, 2010				Aug.5, 2010	28	6	Р



XENCO Laboratories CHRONOLOGY OF HOLDING TIMES



Analytical Method : TPH By SW8015 Mod

Client : Elke Environmental, Inc.

Work Order #: <u>384215</u>

Project ID:

Field Sample ID	Date Collected	Date Received	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
Pile	Jul. 30, 2010	Aug. 4, 2010	Aug. 4, 2010	14	5	Aug.4, 2010	14	0	Р
TP 5 @ 36"	Jul. 30, 2010	Aug. 4, 2010	Aug. 4, 2010	14	5	Aug.4, 2010	14	0	Р
TP 1 @ 36"	Jul. 30, 2010	Aug. 4, 2010	Aug. 4, 2010	14	5	Aug.4, 2010	14	0	Р



XENCO Laboratories CHRONOLOGY OF HOLDING TIMES



Analytical Method : <u>BTEX by EPA 8021B</u>

Client : Elke H

Elke Environmental, Inc.

Work Order #: <u>384215</u>

Project ID:

Field Sample ID	Date Collected	Date Received	Date Extracted	Max Holding Time Extracted (Days)	Time Held Extracted (Days)	Date Analyzed	Max Holding Time Analyzed (Days)	Time Held Analyzed (Days)	Q
TP 5 @ 36"	Jul. 30, 2010	Aug. 4, 2010				Aug.7, 2010	14	8	Р
TP 1 @ 36"	Jul. 30, 2010	Aug. 4, 2010				Aug.7, 2010	14	8	Р
Pile	Jul. 30, 2010	Aug. 4, 2010		1		Aug.7, 2010	14	8	Р

F = These samples were analyzed outside the recommended holding time.

P = Samples analyzed within the recommended holding time.

XENCO Laboratories

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 effect the recovery of the spike concentration. This condition could also effect 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 MQL and above the SQL.
- 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.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit

- PQL Practical Quantitation Limit
- * Outside XENCO's scope of NELAC Accreditation.

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 - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

	Phone	Fax
4143 Greenbriar Dr, Stafford, Tx 77477	(281) 240-4200	(281) 240-4280
9701 Harry Hines Blvd, Dallas, TX 75220	(214) 902 0300	(214) 351-9139
5332 Blackberry Drive, San Antonio TX 78238	(210) 509-3334	(210) 509-3335
2505 North Falkenburg Rd, Tampa, FL 33619	(813) 620-2000	(813) 620-2033
5757 NW 158th St, Miami Lakes, FL 33014	(305) 823-8500	(305) 823-8555
12600 West I-20 East, Odessa, TX 79765	(432) 563-1800	(432) 563-1713
842 Cantwell Lane, Corpus Christi, TX 78408	(361) 884-0371	(361) 884-9116

	47		Ť	1	- 1 7	يشتر	QQ.
	ď	1		ľ	ď	۲	X
	æ	Ⴙ	A	◬	z)	۲	
$\square r$	17	3	2.1	χ.	Te	13	4

Project Name: Southern Union Gas

ork Orders : 384215	, , 5700(2.1.DKS/D		Project II):		
Lab Batch #: 01/945	Sample: 3/0002-1-BNS/ Dr Data Analyzad: 08/07/10 16:37	S Baten	RROGATE RI	Solid COVERY	STUDY	
Units: mg/kg BTE?	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
	Analytes	1		[D]	[]	I
1,4-Difluorobenzene		0.0313	0.0300	104	80-120	
4-Bromofluorobenzene		0.0330	0.0300	110	80-120	
Lab Batch #: 817943	Sample: 570062-1-BSD / BS	SD Batch	a: 1 Matrix:	Solid		
Units: mg/kg	Date Analyzed: 08/07/10 17:01	SUI	RROGATE RF	COVERY	STUDY	
BTE	X by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene		0.0302	0.0300	101	80-120	l
4-Bromofluorobenzene		0.0322	0.0300	107	80-120	[
Lab Batch #: 817943	Sample: 570062-1-BLK / B'	LK Batcl	h: 1 Matrix:	Solid	<u></u> .	
Units: mg/kg	Date Analyzed: 08/07/10 18:12	SUI	RROGATE RF	COVERY ?	STUDY	<u></u>
втеу	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
4 Diffuorohenzene	Analytes	0.0240	0.0200	02	20.120	I
4-Bromofluorobenzene		0.0245	0.0300	98	80-120	l
4. <u>817943</u>		Batel	1 Matrix	0-il	00 120	<u> </u>
	Sample: 300/07/10 10.25	SU SU	DDOCATE RI	Son COVERY	STUDY	
Units: IIIg/Ng BTEZ	X by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags
1	Analytes		1	[D]		1
1,4-Difluorobenzene		0.0253	0.0300	84	80-120	l
4-Bromofluorobenzene		0.0310	0.0300	103	80-120	i
Lab Batch #: 817943	Sample: 384215-001 S / MS	, Batch	a: 1 Matrix:	Soil	<u>.</u>	
Units: mg/kg	Date Analyzed: 08/07/10 18:58	SUI	RROGATE RF	COVERY S	STUDY	
втеу	K by EPA 8021B Analytes	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		0.0297	0.0300	99	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

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

11		<u> </u>					1
1	d	-	۱į	6	X.	ລີ	¥8
Γ.	A.	-	۱.	. «	۴.	w,	٨ä
			24		18		1
	10	$\overline{\mathbf{n}}$	6	\odot		4	
	100		1000			1.00	

Project Name: Southern Union Gas

ork Orders : 384215	,	ACD Batal	Project II):			
Lab Batch #: 01/243	Date Analyzed: 08/07/10 19:21	ISD Baler	RROGATE RE	ECOVERY S	STUDY		
BTE?	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Difluorobenzene		0.0291	0.0300	97	80-120		
4-Bromofluorobenzene		0.0287	0.0300	96	80-120		
Lab Batch #: 817943	Sample: 384215-002 / SMP	Batel	h: ¹ Matrix:	Soil	<u></u>		
Units: mg/kg	Date Analyzed: 08/07/10 20:08	SU.	RROGATE RE	COVERY S	STUDY		
BTE	K by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1,4-Difluorobenzene		0.0256	0.0300	85	80-120		
4-Bromofluorobenzene		0.0316	0.0300	105	80-120		
Lab Batch #: 817943	Sample: 384215-003 / SMP	Bate	h: 1 Matrix:	Soil	<u> </u>		
Units: mg/kg	Date Analyzed: 08/07/10 20:32	SU	RROGATE RF	COVERY S	STUDY		
BTEX	K by EPA 8021B Analvtes	AmountTrueControlFoundAmountRecoveryLimits[A][B]%R%R[D][D][D]					
l,4-Difluorobenzene		0.0255	0.0300	85	80-120		
4-Bromofluorobenzene		0.0302	0.0300	101	80-120		
Lab Batch #: 817553	Sample: 569791-1-BKS / B	KS Bate	h: ¹ Matrix:	Solid	.		
Units: mg/kg	Date Analyzed: 08/04/10 15:02	SU	RROGATE RE	COVERY S	STUDY		
TPH 3	By SW8015 Mod	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane		114	100	114	70-135		
o-Terphenyl		51.8	50.0	104	70-135		
Lab Batch #: 817553	Sample: 569791-1-BSD / B	SD Batcl	h: ¹ Matrix:	Solid	<u> </u>		
Units: mg/kg	Date Analyzed: 08/04/10 15:22	SU	RROGATE RE	COVERY S	STUDY		
ТРН Ј	By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags	
1-Chlorooctane		114	100	114	70-135	<u></u>	
o-Terphenyl		57.5	50.0	115	70-135	<u> </u>	

* 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

results are based on MDL and validated for QC purposes.

						,	
5	ľ	-	٩	Υ.	ď	43	Y
P	.٩	-1	k.	Υ.	٩L		
		بالمتحر			\mathbb{T}_{t}		
	<u>.</u>	Ŀ)	(\cdot)	Į.	14	Ŀž	1
							7.000

Project Name: Southern Union Gas

0.1752 $ 5(07011) DIV$ $ 1$	
Lab Batch #: 817553 Sample: 569791-1-BLK / BLK Batch: 1 Matrix: 5010	
Units: mg/kg Date Analyzed: 08/04/10 15:42 SURROGATE RECOVERTION TPH Rv SW8015 Mod Amount True Co	trol
Found Amount Recovery Li	nits Flags
Analytes [D]	ĸ
1-Chlorooctane 98.0 100 98 70	135
o-Terphenyl 50.1 50.0 100 70	135
Lab Batch #: 817553 Sample: 384215-001 / SMP Batch: Matrix: Soil	
Units: mg/kg Date Analyzed: 08/04/10 17:21 SURROGATE RECOVERY STU	Y
TPH By SW8015 Mod Amount Found True Amount [A] Co Recovery [B] Co %R	trol nits Flags bR
Analytes	
1-Chlorooctane 96.9 100 97 70 Tranhand 55.6 50.0 111 70	35
0-1erphenyl 33.0 50.0 111 /0	.35
Lab Batch #: 817553 Sample: 384215-002 / SMP Batch: 1 Matrix: Soil	
Units: mg/kg Date Analyzed: 08/04/10 17:41 SURROGAIE RECOVERY SIU	•Y
TPH By SW8015 Mod Amount True Co Found Amount Recovery Li [A] [B] %R G	trol nits Flags R
Analytes	
1-Chlorooctane 106 100 106 70	35
o-Terphenyl 54.6 50.0 109 70	35
Lab Batch #: 817553 Sample: 384215-003 / SMP Batch: 1 Matrix: Soil	
Units: mg/kg Date Analyzed: 08/04/10 18:00 SURROGATE RECOVERY STU	Y
TPH By SW8015 Mod Amount Found True Amount [A] Co [A] [B] %R Co	trol nits Flags oR
Analytes [U]	
1-Chlorooctane 99.9 100 100 70	35
o-Terphenyl 51.7 50.0 103 70	35
Lab Batch #: 817553 Sample: 384215-003 S / MS Batch: 1 Matrix: Soil	
Lab Batch #: 817553 Sample: 384215-003 S / MS Batch: 1 Matrix: Soil Units: mg/kg Date Analyzed: 08/04/10 21:19 SURROGATE RECOVERY STUD	•Y
Lab Batch #: 817553 Sample: 384215-003 S / MS Batch: 1 Matrix: Soil Units: mg/kg Date Analyzed: 08/04/10 21:19 SURROGATE RECOVERY STUI TPH By SW8015 Mod Amount [A] True [B] Co Analytes [B] %R [D]	Y trol hits Flags R
Lab Batch #: 817553 Sample: 384215-003 S / MS Batch: 1 Matrix: Soil Units: mg/kg Date Analyzed: 08/04/10 21:19 SURROGATE RECOVERY STUI TPH By SW8015 Mod Amount [A] True [B] Recovery %R [D] Co Analytes 112 100 112 700	Y trol its R 35

* 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

results are based on MDL and validated for QC purposes.



Project Name: Southern Union Gas

ork Orders : 384215	,	Project ID:											
Lab Batch #: 817553	Sample: 384215-003 SD / N	ASD Bate	h: 1 Matrix	c:Soil									
Units: mg/kg	Date Analyzed: 08/04/10 21:38	yzed: 08/04/10 21:38 SURROGATE RECOVERY STUDY											
TPH By SW8015 Mod		Amount Found [A]	True Amount [B]	Recovery %R	Control Limits %R	Flags							
	Analytes			[D]									
1-Chlorooctane		114	100	114	70-135								
o-Terphenyl		55.1	50.0	110	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 results are based on MDL and validated for QC purposes.





Project Name: Southern Union Gas

Work Order #: 384215	Project ID:													
Analyst: ASA	D	ate Prepar	ed: 08/06/20	10			Date A	nalyzed: (08/07/2010					
Lab Batch ID: 817943 Sample: 570062-1-	BKS	Batc	h #: 1	1 Matrix: Solid										
Units: mg/kg		BLAN	K /BLANK S	PIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY										
BTEX by EPA 8021B Analytes	BlankSpikeBlankBlankSample ResultAddedSpikeSpike[A]Result%R[B][C][D]		Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag					
Benzene	ND	0.1000	0.0911	91	0.1	0.0948	95	4	70-130	35				
Toluene	ND	0.1000	0.0838	84	0.1	0.0882	88	5	70-130	35				
Ethylbenzene	ND	0.1000	0.0874	87	0.1	0.0916	92	5	71-129	35				
m,p-Xylenes	ND	0.2000	0.1619	81	0.2	0.1709	85	5	70-135	35				
o-Xylene	ND	0.1000	0.0805	81	0.1	0.0853	85	6	71-133	35				
Analyst: LATCOR	D	ate Prepar	ed: 08/05/20	10			Date A	nalyzed: (08/05/2010					
Lab Batch ID: 817714 Sample: 817714-1-	BKS	Batc	h #: 1					Matrix: S	Solid					
Units: mg/kg		BLAN	K/BLANK S	SPIKE / I	BLANK S	PIKE DUP	LICATE	RECOVI	ERY STUD	ŶY				
Anions by E300 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	ND	10.0	9.39	94	10	9.82	98	4	75-125	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 Colorador (11 Martin Colorador)





Project Name: Southern Union Gas

Work Order #: 384215 Analyst: BEV		Date Prepared: 08/04/2010 Date Analyzed: 08/04/2010												
Lab Batch ID: 817553	Sample: 569791-1-BKS	91-1-BKS Batch #: 1 Matrix: Solid												
Units: mg/kg		BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY												
TPH By SW8015 Mod		Blank ample Result [A]	Spike Added	Blank Spike Result	Blank Spike %R	Spike Added	Blank Spike Duplicate	Blk. Spk Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag		
Analytes			[B]	[C]	[D]	[E]	Result [F]	[G]						
C6-C12 Gasoline Range Hydroca	arbons	ND	1000	1140	114	1000	1130	113	1	70-135	35			
C12-C28 Diesel Range Hydrocar	bons	ND	1000	867	87	1000	872	87	1	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 and the second sec



Form 3 - MS Recoveries



Project Name: Southern Union Gas

Work Order #: 384215										
Lab Batch #: 817714		Pro	oject ID:							
Date Analyzed: 08/05/2010	Date Prepared: 08/05/2010 Analyst: LATCOR									
QC- Sample ID: 383663-001 S	Batch #: 1 Matrix: Soil									
Reporting Units: mg/kg	MATRIX / MA	MATRIX / MATRIX SPIKE RECOVERY STUDY								
Inorganic Anions by EPA 300	Parent Sample Spike Result Added	Spiked Sample Result ICl	%R [D]	Control Limits %R	Flag					
Analytes	[A] [B]	101	1-1	,,,,,						
Chloride	18.5 104	132	109	75-125						

 $\label{eq:matrix_spike} \begin{array}{l} \mbox{Matrix Spike Percent Recovery } [D] = 100^{*}(C\text{-A})/B \\ \mbox{Relative Percent Difference } [E] = 200^{*}(C\text{-A})/(C\text{+B}) \\ \mbox{All Results are based on MDL and Validated for QC Purposes} \end{array}$





Form 3 - MSMSD Recoveries



Project Name: Southern Union Gas

Work Order #: 384215						Project II	D:							
Lab Batch ID: 817943 Q Date Analyzed: 08/07/2010 1	QC- Sample ID: 384215-001 S Batch #: 1 Matrix: Soil Date Prepared: 08/06/2010 Analyst: ASA													
Reporting Units: mg/kg		М	ATRIX SPIKI	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERY S	STUDY					
BTEX by EPA 8021B	Parent Sample Result	Spike Added	Spiked Sample Result [C]	Spiked Sample %R	Spike Added	Duplicate Spiked Sample Result [F]	Spiked Dup. %R	RPD %	Control Limits %R	Control Limits %RPD	Flag			
Anarytts		[8]		נען	[E]		្រ							
Benzene	ND	0.1061	0.0581	55	0.1061	0.0585	55	1	70-130	35	X			
Toluene	ND	0.1061	0.0384	36	0.1061	0.0438	41	13	70-130	35	x			
Ethylbenzene	ND	0.1061	0.0247	23	0.1061	0.0334	31	30	71-129	35	x			
m,p-Xylenes	ND	0.2121	0.0272	13	0.2121	0.0638	30	80	70-135	35	XF			
o-Xylene	ND	0.1061	0.0224	21	0.1061	0.0284	27	24	71-133	35	X			
Lab Batch ID: 817553 Q Date Analyzed: 08/04/2010 1	C- Sample ID: Date Prepared:	384215- 08/04/2	-003 S 010	Ba An:	tch #: alyst:	l Matri x BEV	x: Soil							
Reporting Units: mg/kg		М	ATRIX SPIK	E / MAT	RIX SPI	KE DUPLICA	TE REC	OVERYS	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	ND	1080	1200	111	1080	1200	111	0	70-135	35				
C12-C28 Diesel Range Hydrocarbons	ND	1080	991	92	1080	1020	94	3	70-135	35				

Matrix Spike Percent Recovery [D] = 100*(C-A)/BRelative 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 ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



Sample Duplicate Recovery



Project Name: Southern Union Gas

Work Order #: 384215					
Lab Batch #: 817714			Project I	D:	
Date Analyzed: 08/05/2010 Date Pre	ared: 08/05/201	0 Ana	lyst:LATC	COR	
QC- Sample ID: 383663-001 D Ba	tch #: 1	Mat	rix: Soil		
Reporting Units: mg/kg	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Anions by E300	Parent Sample Result [A]	Sample Duplicate Result	RPD	Control Limits %RPD	Flag
Analyte		[B]			
Chloride	18.5	16.8	10	20	
Lab Batch #: 817540					
Date Analyzed: 08/05/2010 Date Prep	ared: 08/05/201	0 Ana	lyst: JLG		
QC- Sample ID: 384149-001 D Ba	tch #: 1	Mat	rix: Soil		
Reporting Units: %	SAMPLE	/ SAMPLE	DUPLIC	ATE REC	OVERY
Percent Moisture Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	ND	ND	NC	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



Enveron A Xenco Laborat	ament Dries Compan	al Lal	b of T	exa	IS			an a) ,	1260(Odes	D We isa, '	<i>Ci</i> est I- Texa	1A// 20 1 15 71	N <i>Ol</i> East 9765	F Cl	JST	ΟDΥ	RĖ	20	RD	ANL) AI	VAL Pho Fa	YS/ one: ix:	S R 432 431	EQU :-563 :-563	/ES -18 -17	7 00 13	D			
Project	Manager:	Curtis El	lam															Proj	ect	Nam	e:	<u>Sou</u>	ther	m U	nion	Ga	5					
Compa	ny Name	Elke Env	vironment	al															Pro	oject	# :											
Compa	ny Address:	P O Box	14167			· 												Pı	roje	ct La	•c:			Lat	: A-9							
City/Sta	ate/Zip:	Odessa,	TX 7976	3								- <u></u>								PO	# :											
Telepho	оле No:	432-366	-0043				Fax No:		<u>432</u>	<u>2-36</u>	6-0	884	<u>ا</u>				Rep	ort	For	mat:	Į	i si	anda	and		ד 🛛	FRR I	Р		NPC	DES	,
Sample	r Signature:	Ade	-1				e-mail:		<u>ce</u>	elk	eer	1v@	ya	hoc).co	m																
(lab use only)							-					-										TCLF	<u> </u>	nalya	ze Fo	эг: 	T		Τ	\neg	Ę	
ORDER #:	384	215							ſ	Pre	serve	ation &	∉ of	Conte	iners	Т	Matr	ix	8	T	\overline{T}	T		$\overline{-}$	\square						48, 72	
C LAB # (leb use only)	FIEL	D CODE Pile		Beginning Depth	the Depth u/a	Date Sampled 7/30/2010	Time Sampled	Field Fittered	Total #. of Containers	X los HND.	HCI	H ₂ SO4	NaOH	Ne ₂ S ₂ O ₃	None	Other (Specify)	OV = Unital valer SL=Sludge	NP+Non-Poteble Specify Other	X TPH: 418.1 8015M 80	TPH: TX 1005 TX 1006	Cations (Ca, Mg, Na, K)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg	Volatites	Semivolatiles	X BTEX 80218/5030 or BTEX 82	RCI	N.O.R.M.			RUSH TAT (Pre-Schedule) 24	X Standard TAT
21	TP 1	l @ 36"			36"	7/30/2010	9:00 AM		1	শ	_	-		$\left - \right $		_	S	_	×	_		4	+	$\downarrow \downarrow$	\square	쓰		╇	+-	╞╌┨		
		→ @ 30 [°]			30		9.45 AM																									
									\square	\bot										_		Ļ	Ļ		Ц	⊥	\bot		, L		\square	Ĺ
special Instructio	ns:																				ADOI	Fre	y Co	Head	ents Spai	: 					N N	
Relinquistico by	1		Date		me , A	Received by:		_						Τ		Date		٦	'im e		usto		eals	on o	ontal	ner(a			Ð			鱖
Relinquished by	<u>}</u>	•	74/10 Fate	*/2/0 Ti	0 44	Received by:										Date		<u>-</u>	'ime		amp by by	ie Ha San Cou	and f pier/ ner?	Delivi Clien	ered it Rej UPS	p. ? D)HL	Fe	A C C C C C C C C C C C C C C C C C C C	Lone	N N B St	a.
Relinquished by:			Date		me	Received by ELC	el 70	(0	a	<u>ک</u>	Z	<u>)</u>		g.	Date	0	<u>7</u> :	ime [C	5	emp	o T Matu	/ 610 ne U	(-5-5 Іроп ————————————————————————————————————	Rea	alpt:	 	0.	5		•C	

1 125181



Stream booking and a stream of the

XENCO Laboratories

Atlanta, Boca Raton, Corpus Christi, Dallas Houston, Miami, Odessa, Philadelphia Document Title: Sample Receipt Checklist Document No.: SYS-SRC Revision/Date: No. 01, 5/27/2010 Effective Date: 6/1/2010 Page 1 of 1

Phoenix, San Antonio, Tampa

Prelogin / Nonconformance Report - Sample Log-In

Client: F	the Environmental
Date/Time:	7:16 d-4-10
Lab ID # :	384215
Initials:	. 9.0

Sample Receipt Checklist

1. Samples on ice?	Blue	Water	No	
2. Shipping container in good condition?	Yes	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	N/A	
4. Chain of Custody present?	Yes	No		
5. Sample instructions complete on chain of custody?	Yes	No		
6. Any missing / extra samples?	tes	No		
7. Chain of custody signed when relinquished / received?	Yes	NO	8-14-10	
8. Chain of custody agrees with sample label(s)?	Yes	No		
9. Container labels legible and intact?	Yes	No		
10. Sample matrix / properties agree with chain of custody?	Yes	No		
11. Samples in proper container / bottle?	Yes	No		
12. Samples properly preserved?	Yes	No	N/A	
13. Sample container intact?	Yes	No		
14. Sufficient sample amount for indicated test(s)?	Yes	No		
15. All samples received within sufficient hold time?	Yes	No		
16. Subcontract of sample(s)?	Yes	No	N/A	
17. VOC sample have zero head space?	Yes	No	N/A)	
18. Cooler 1 No. Cooler 2 No. Cooler 3 No.	Cooler 4 No).	Cooler 5 No.	
Ibs °C Ibs °C Ibs °	C lbs	°C	lbs	°C

Nonconformance Documentation

Contact:	Contacted by:	Date/Time:	
Regarding:			
Corrective Action Tal	ien:		
Check all that apply:	□ Cooling process has begun shortly after condition acceptable by NELAC 5.5 □ Initial and Backup Temperature confirm o	sampling event and out of temperature .8.3.1.a.1. ut of temperature conditions	

Client understands and would like to proceed with analysis

Property and the second second

and the second se

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

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

1220 S. St. Fran	cis Dr., Santa	a Fe, NM 8750	5	Sa	nta F	e, NM 875	05				side of for	
		·····	Rele	ease Notific	atio	n and Co	orrective A	ction	1	<u> </u>		
						OPERA'	FOR	C	🛛 Initia	al Report)	Final Rep	
Name of Co	ompany	Southern U	Union Ga	s Services	T	Contact Ro	se Slade					
Address		P.O. Box 12	26 Jal, N	lew Mexico 882	52	Telephone No. 432-940-5147						
Facility Nar	me	Lateral A-	.9			Facility Typ	e Natural Gas	Pipelir	ne			
Surface Owner Kelly Meyers Mineral Owner			wner				Lease N	ase No. 30-025-38823				
LOCATIO					TIO	ON OF RELEASE				38822		
Unit Letter "M"	Section 7	Township 24S	Range 37E	Feet from the	North	South Line	Feet from the	East/\	West Line	County Lea		
	• • • • • • • • • • • • • • • • • • •		Latitu	ide N 32.22723 NAT	degree URE	es Longitude OF REL	≥ W 103.20821 EASE	degree	s	WTR "	00'	
Type of Rele	ase Natura	l Gas, Crude	Oil and Pro	oduced Water		Volume of	Release 7 BB	LS	Volume F	Recovered (BBLS	
Source of Release 4-Inch Steel Pipeline						Date and Hour of Occurrence *June 19, 2010, approx. 1030 hrs			Date and Hour of Discovery *June 19, 2010, 1030 hrs			
Was Immedia	ate Notice (Given?	Yes 🛛	No 🗋 Not Re	quired	If YES, To	Whom?					
By Whom?					Date and H	lour						
Was a Watercourse Reached?					If YES, Volume Impacting the Watercourse.							
Describe Cau *This release this release a The release v release respo	use of Proble was initial reportable was caused l nse. Follow	em and Reme ly deemed a n release of (7) by internal con ring initial resp	dial Action on-reporta barrels. rrosion of ponse activ	n Taken.* able release of thre the 4-inch steel pi vities, a segment o	e (3) ba peline. f the pi	Arrels. Followi A temporary peline has been	ing delineation ac pipeline clamp war en replaced. No F	tivities, as utiliz {2S has	Southern U red to mitig been detec	Jnion has op ate the releas ted	led to re-classify te during the initia	
Describe Are The affected	a Affected area measu	and Cleanup A res approxima	Action Tak ttely 2,500	cen.* square feet. The	release	will be remea	liated per NMOC	D regul	atory guide	lines.		
I hereby certi regulations al public health should their co or the environ federal, state.	ify that the i II operators or the envir operations h nment. In a , or local law	information gi are required to ronment. The pave failed to a addition, NMC ws and/or regu	iven above o report an acceptance adequately OCD accep ilations.	is true and compl ad/or file certain re- ce of a C-141 repor- investigate and re- tance of a C-141 r	ete to t lease n nt by the mediat eport d	he best of my otifications ar e NMOCD m e contaminati oes not reliev	knowledge and us and perform correc arked as "Final Re on that pose a thre e the operator of r	nderstan tive acti eport" d eat to gr responsi	nd that purs ions for rele loes not reli round water ibility for c	want to NMG cases which eve the oper c, surface wa ompliance w	DCD rules and may endanger ator of liability ter, human health ith any other	
Signature Rox & Diade						OIL CONSERVATION DIVISION						
Printed Name: ROSG L. Slade						Approved by District Sind Ascon MENTAL ENGINEER						
Title: FH	1.5. Co	mpliance	<u>e Sp</u>	veialist		Approval Dat	e: 7.16.10		Expiration	Date: 9.1	5.10	
E-mail Address: 105C. Slade ESUg. Com						Conditions of Approval:						
//	r / 70/						A 4 -					

. `

(NC NLWJ 101973255 APP PLWJ 1019732573