



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: pTO1434944632

1RP - 2695

SOUTHERN UNION EXPLORATION CO

2/12/2016

Leking, Geoffrey R, EMNRD

From: Joel Lowry <jwlowry@basinenv.com>
Sent: Monday, November 19, 2012 8:42 AM
To: Leking, Geoffrey R, EMNRD
Cc: Rose Slade
Subject: Trunk "O" Line (Meyers) - Permission to Backfill
Attachments: Trunk_O_Meyers(2695)_Attachments.pdf

HOBBS OCD

NOV 19 2012

RECEIVED

Mr. Leking,

This email has been prepared in regards to Southern Union Gas's Trunk "O" Line (Meyers) (RP-2695) Historical release site. The release site is located on property owned by the Mr. Kelly Meyers; the depth to groundwater is approximately 130' bgs.

The release occurred on March 19, 2011 and was reported to the NMOCD March 23, 2011. The initial C-141 indicated approximately 10 bbls of fluid and 900 Mcf of natural gas was released, impacting an area measuring approximately 300' by 150'. A majority of the release was airborne, primarily impacting the surface.

On November 2, 2012, Basin Environmental responded to the release site and excavated the impacted medium. The top six inches (6") of soil was scraped up and stockpiled on-site pending final disposition. Chloride field tests were conducted on soil samples collected at two feet (2') below ground surface (bgs) from twenty-two (22) sample points evenly spaced within the excavated area. Chloride field test results indicated chloride concentrations were less than 120 mg/Kg for each of the field samples.

On November 5 and 6, 2012, Basin collected fifteen (15) confirmation soil samples from the excavated area and submitted them to the laboratory analysis of chloride concentrations. Chloride concentrations ranged from 9.24 mg/Kg for soil sample SP#17 @ 2' to 66.2 mg/Kg for soil sample SP#6 @ 2'. In addition nine (9) soil samples were also analyzed for concentrations of total petroleum hydrocarbons (TPH). TPH concentrations were less than the appropriate laboratory method detection limit for each of the submitted soil samples. One soil sample is currently being analyzed for benzene, toluene, ethylbenzene and xylene (BTEX) concentrations; the results of which will be provided to you upon receipt. Additional samples can be analyzed for BTEX concentrations on request.

On November 7 and 8, 2012, approximately one hundred forty-four cubic yards (144 cu. yds) of impacted material was hauled to Sundance Services, Inc (NMOCD Permit # NM-01003) for disposal.

With your permission, Southern Union would like to begin backfilling the excavation with non-impacted material purchased from the landowner. On completion, Southern Union will submit a "Remediation Summary & Site Closure Request" to the NMOCD and the landowner, documenting remediation activities and results from confirmation soil samples.

For your convenience, a site/sample location map, soil chemistry table and laboratory analytical results are attached.

Respectfully,

NOV 19 2012

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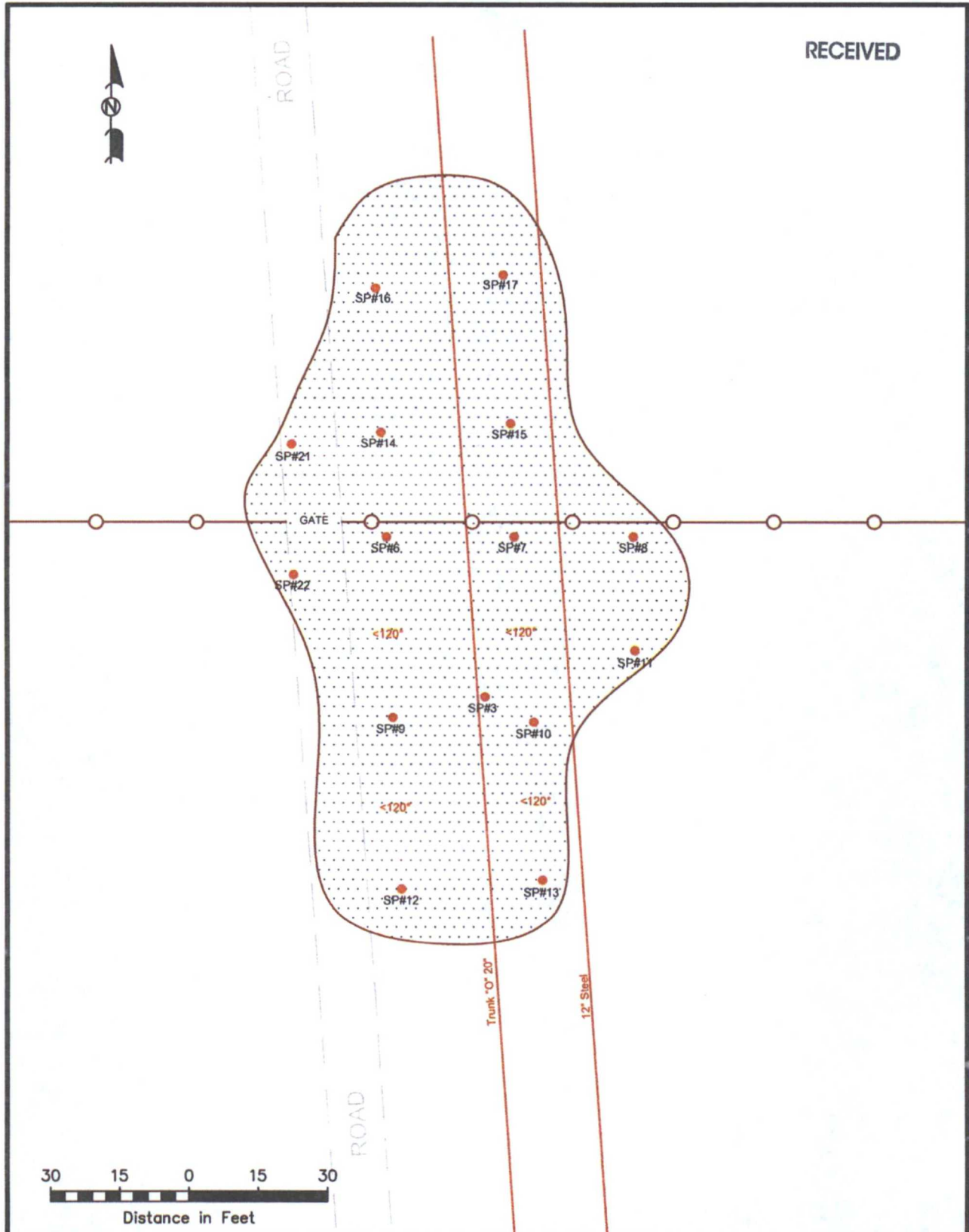


Figure 2

Site & Sample Location Map
Southern Union Gas Services
Trunk "O" Meyers (RP-2712)
Lea County, NM

Basin Environmental Services

Scale: 1" = 30'	Drawn By: JWL	Prepared By: BRB
November 8, 2012		

NOV 19 2012

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TABLE 1

CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL

SOUTHERN UNION GAS SERVICES

TRUNK "O" LINE (Meyers)

HISTORICAL RELEASE SITE

LEA COUNTY, NEW MEXICO

NMOCD REF# 1RP-2695

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M				TOTAL TPH C ₆ -C ₃₅ (mg/Kg)	METHOD: E300.0 CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL-BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₂ (mg/Kg)	DRO C ₁₂ -C ₂₈ (mg/Kg)	ORO C ₂₈ -C ₃₅ (mg/Kg)			
SP#3 @ Surface	Surface	11/5/2012	Excavated	-	-	-	-	-	<15.6	<15.6	<15.6	<15.6	-	
SP#6 @ 2'	2'	11/5/2012	In-Situ	-	-	-	-	-	-	-	-	-	66.2	
SP#7 @ 2'	2'	11/5/2012	In-Situ	-	-	-	-	-	-	-	-	-	9.89	
SP#8 @ 2'	2'	11/5/2012	In-Situ	-	-	-	-	-	<15.8	<15.8	<15.8	<15.8	21.5	
SP#9 @ 2'	2'	11/5/2012	In-Situ	-	-	-	-	-	-	-	-	-	16.7	
SP#10 @ 2'	2'	11/5/2012	In-Situ	-	-	-	-	-	-	-	-	-	14.1	
SP#11 @ 2'	2'	11/5/2012	In-Situ	-	-	-	-	-	-	-	-	-	28.9	
SP#12 @ 2'	2'	11/5/2012	In-Situ	-	-	-	-	-	<15.6	<15.6	<15.6	<15.6	18.3	
SP#13 @ 2'	2'	11/5/2012	In-Situ	-	-	-	-	-	<15.9	<15.9	<15.9	<15.9	23.3	
SP#14 @ 2'	2'	11/6/2012	In-Situ	-	-	-	-	-	<15.8	<15.8	<15.8	<15.8	30.3	
SP#15 @ 2'	2'	11/6/2012	In-Situ	-	-	-	-	-	<15.9	<15.9	<15.9	<15.9	58.8	
SP#15 @ 4'	4'	11/6/2012	In-Situ	-	-	-	-	-	-	-	-	-	11.7	
SP#16 @ 2'	2'	11/6/2012	In-Situ	-	-	-	-	-	<15.6	<15.6	<15.6	<15.6	14.7	
SP#17 @ 2'	2'	11/6/2012	In-Situ	-	-	-	-	-	<16.2	<16.2	<16.2	<16.2	9.24	
SP#21 @ 2'	2'	11/6/2012	In-Situ	-	-	-	-	-	<15.8	<15.8	<15.8	<15.8	9.47	
SP#22 @ 2'	2'	11/6/2012	In-Situ	-	-	-	-	-	-	-	-	-	11.4	
NMOCD Standard				10				50				5,000	1,000	

- = Not analyzed.

* Denotes results by EPA Method 325.3

Analytical Report 452203
for
Southern Union Gas Services- Monahans

Project Manager: Joel Lowry

Trunk "O" Myers

(RP-2695)

16-NOV-12

Collected By: Client

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NOV 19 2012

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12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

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

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Lakeland: Florida (E84098)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)

Xenco Tucson (EPA Lab code: AZ000989): Arizona (AZ0758)



16-NOV-12

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

Reference: XENCO Report No: **452203**
Trunk "O" Myers
Project Address: Lea County, NM

Joel Lowry:

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 452203. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

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

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 452203 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,

Nicholas Straccione

Project Manager

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Sample Cross Reference 452203



Southern Union Gas Services- Monahans, Monahans, TX

Trunk "O" Myers

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SP#3 @ Surface	S	11-05-12 10:00	In	452203-001
SP#6 @ 2'	S	11-05-12 11:30		452203-002
SP#7 @ 2'	S	11-05-12 12:00		452203-003
SP#8 @ 2'	S	11-05-12 12:30		452203-004
SP#9 @ 2'	S	11-05-12 13:00		452203-005
SP#10 @ 6'	S	11-05-12 13:30		452203-006
SP#11 @ 2'	S	11-05-12 14:00		452203-007
SP#12 @ 2'	S	11-05-12 14:30		452203-008
SP#13 @ 2'	S	11-05-12 15:00		452203-009
SP#14 @ 2'	S	11-06-12 09:00		452203-010
SP#15 @ 2'	S	11-06-12 09:30		452203-011
SP#15 @ 4'	S	11-06-12 09:45		452203-012
SP#16 @ 2'	S	11-06-12 10:00		452203-013
SP#17 @ 2'	S	11-06-12 10:30		452203-014
SP#21 @ 2'	S	11-06-12 12:30		452203-015
SP#22 @ 2'	S	11-06-12 13:00		452203-016



CASE NARRATIVE

Client Name: Southern Union Gas Services- Monahans

Project Name: Trunk "O" Myers



Project ID: (RP-2695)
Work Order Number: 452203

Report Date: 16-NOV-12
Date Received: 11/09/2012

Sample receipt non conformances and comments:
hold for BTEX

Sample receipt non conformances and comments per sample:

None



Certificate of Analysis Summary 452203

Southern Union Gas Services- Monahans, Monahans, TX



Project Id: (RP-2695)
Contact: Joel Lowry
Project Location: Lea County, NM

Date Received in Lab: Fri Nov-09-12 10:00 pm
Report Date: 16-NOV-12

Draft

Project Manager: Nicholas Straccione

Analysis Requested	Lab Id:	452203-001	452203-002	452203-003	452203-004	452203-005	452203-006
	Field Id:	SP#3 @ Surface	SP#6 @ 2'	SP#7 @ 2'	SP#8 @ 2'	SP#9 @ 2'	SP#10 @ 6'
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	Depth:						
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Nov-05-12 10:00	Nov-05-12 11:30	Nov-05-12 12:00	Nov-05-12 12:30	Nov-05-12 13:00	Nov-05-12 13:30
Chloride	Extracted:						
	Analyzed:						
	Units/RL:						
Percent Moisture	Extracted:						
	Analyzed:						
	Units/RL:						
TPH By SW8015 Mod	Extracted:						
	Analyzed:						
	Units/RL:						
C6-C12 Gasoline Range Hydrocarbons		Nov-15-12 08:30	Nov-16-12 13:00	Nov-16-12 13:00	Nov-12-12 15:40	Nov-16-12 13:00	Nov-16-12 13:00
C12-C28 Diesel Range Hydrocarbons		Nov-15-12 12:13					
C28-C35 Oil Range Hydrocarbons							
Total TPH							

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.

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Nicholas Straccione

Nicholas Straccione
Project Manager



Certificate of Analysis Summary 452203

Southern Union Gas Services- Monahans, Monahans, TX



Project Name: Trunk "O" Myers

Project Id: (RP-2695)

Contact: Joel Lowry

Project Location: Lea County, NM

Date Received in Lab: Fri Nov-09-12 10:00 pm

Report Date: 16-NOV-12

Draft

Project Manager: Nicholas Straccione

Analysis Requested		Lab Id:	452203-007	452203-008	452203-009	452203-010	452203-011	452203-012
		Field Id:	SP#11 @ 2'	SP#12 @ 2'	SP#13 @ 2'	SP#14 @ 2'	SP#15 @ 2'	SP#15 @ 4'
		Depth:						
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	Nov-05-12 14:00	Nov-05-12 14:30	Nov-05-12 15:00	Nov-06-12 09:00	Nov-06-12 09:30	Nov-06-12 09:45
Inorganic Anions by EPA 300/300.1 SUB: TX104704215	Extracted:	Nov-12-12 14:57	Nov-12-12 15:46	Nov-12-12 16:02	Nov-12-12 16:18	Nov-12-12 16:34	Nov-12-12 16:50	
	Analyzed:	Nov-12-12 14:57	Nov-12-12 15:46	Nov-12-12 16:02	Nov-12-12 16:18	Nov-12-12 16:34	Nov-12-12 16:50	
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		28.9 0.979	18.3 1.09	23.3 1.01	30.3 1.05	58.8 1.16	11.7 1.13	
Percent Moisture	Extracted:							
	Analyzed:	Nov-16-12 13:00	Nov-12-12 15:40	Nov-12-12 15:40	Nov-12-12 15:40	Nov-12-12 15:40	Nov-16-12 13:00	
	Units/RL:	% RL	% RL	% RL	% RL	% RL	% RL	
TPH By SW8015 Mod	Extracted:	5.46 1.00	4.13 1.00	5.52 1.00	5.21 1.00	5.56 1.00	3.54 1.00	
	Analyzed:	Nov-15-12 08:30	Nov-15-12 08:30	Nov-15-12 08:30	Nov-15-12 08:30	Nov-15-12 08:30		
	Units/RL:	Nov-15-12 13:16	Nov-15-12 13:16	Nov-15-12 13:51	Nov-15-12 14:20	Nov-15-12 14:53		
C6-C12 Gasoline Range Hydrocarbons		mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
C12-C28 Diesel Range Hydrocarbons		ND 15.6	ND 15.6	ND 15.9	ND 15.8	ND 15.9		
C28-C35 Oil Range Hydrocarbons		ND 15.6	ND 15.6	ND 15.9	ND 15.8	ND 15.9		
Total TPH		ND 15.6	ND 15.6	ND 15.9	ND 15.8	ND 15.9		

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Nicholas Straccione

Nicholas Straccione
Project Manager



Contact: Joel Lowry

Project Location: Lea County, NM

Date Received in Lab: Fri Nov-09-12 10:00 pm

Report Date: 16-NOV-12

Project Manager: Nicholas Straccione

Draft

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Nicholas Straccione
Project Manager

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Draft 1.000

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

* Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

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

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

DL Method Detection Limit

NC Non-Calculable

+ NELAC certification not offered for this compound.

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

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2505 North Falkenburg Rd, Tampa, FL 33619
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3725 E. Atlanta Ave, Phoenix, AZ 85040

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(813) 620-2000	(813) 620-2033
(432) 563-1800	(432) 563-1713
(770) 449-8800	(770) 449-5477
(602) 437-0330	

Form 2 - Surrogate Recoveries

Project Name: Trunk "O" Myers

Work Orders : 452203,

Project ID: (RP-2695)

Lab Batch #: 901022

Sample: 452203-001 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 12:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.2	100	88	70-135	
o-Terphenyl	43.3	50.0	87	70-135	

Lab Batch #: 901022

Sample: 452203-004 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 12:47

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	85.0	99.9	85	70-135	
o-Terphenyl	41.7	50.0	83	70-135	

Lab Batch #: 901022

Sample: 452203-008 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 13:16

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.5	100	88	70-135	
o-Terphenyl	43.7	50.0	87	70-135	

Lab Batch #: 901022

Sample: 452203-009 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 13:51

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.3	100	84	70-135	
o-Terphenyl	41.6	50.0	83	70-135	

Lab Batch #: 901022

Sample: 452203-010 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 14:20

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.7	100	90	70-135	
o-Terphenyl	44.2	50.1	88	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

 Surrogate Recovery [D] = $100 * A / B$

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

Form 2 - Surrogate Recoveries

Project Name: Trunk "O" Myers

Work Orders : 452203,

Project ID: (RP-2695)

Lab Batch #: 901022

Sample: 452203-011 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 14:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.4	99.9	83	70-135	
o-Terphenyl	41.3	50.0	83	70-135	

Lab Batch #: 901022

Sample: 452203-013 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 15:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.1	99.8	86	70-135	
o-Terphenyl	42.1	49.9	84	70-135	

Lab Batch #: 901022

Sample: 452203-014 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 15:52

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.5	99.7	90	70-135	
o-Terphenyl	44.9	49.9	90	70-135	

Lab Batch #: 901022

Sample: 452203-015 / SMP

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 16:25

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	78.0	99.8	78	70-135	
o-Terphenyl	38.5	49.9	77	70-135	

Lab Batch #: 901022

Sample: 630020-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/15/12 11:44

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.0	99.8	91	70-135	
o-Terphenyl	44.8	49.9	90	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Trunk "O" Myers

Work Orders : 452203,

Project ID: (RP-2695)

Lab Batch #: 901022

Sample: 630020-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/15/12 10:42

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.9	99.9	90	70-135	
o-Terphenyl	54.5	50.0	109	70-135	

Lab Batch #: 901022

Sample: 630020-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 11/15/12 11:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.0	99.8	93	70-135	
o-Terphenyl	56.0	49.9	112	70-135	

Lab Batch #: 901022

Sample: 452203-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 17:23

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	92.3	99.7	93	70-135	
o-Terphenyl	54.3	49.9	109	70-135	

Lab Batch #: 901022

Sample: 452203-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 11/15/12 17:53

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.4	99.9	91	70-135	
o-Terphenyl	54.2	50.0	108	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

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

Project Name: Trunk "O" Myers
Work Order #: 452203
Analyst: TTE
Lab Batch ID: 900714
Sample: 629851-1-BKS
Date Prepared: 11/12/2012
Batch #: 1
Project ID: (RP-2695)
Date Analyzed: 11/12/2012
Matrix: Solid
Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY											
	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
Inorganic Anions by EPA 300/300.1											
Analytes											
Chloride	<1.00	100	98.9	99	100	101	101	2	80-120	20	

Analyst: KEB
Lab Batch ID: 901022
Sample: 630020-1-BKS
Date Prepared: 11/15/2012
Batch #: 1
Date Analyzed: 11/15/2012
Matrix: Solid
Units: mg/kg

BLANK /BLANK SPIKE/ /BLANK SPIKE DUPLICATE RECOVERY STUDY													
Units: mg/kg	TPH By SW8015 Mod	Analytes	Blank	Spike	Blank	Blank	Spike	Blank	Blk. Spk	RPD	Control	Control	Flag
			Sample Result	Added	Spike Result	Spike %R	Added	Spike %R	Dup.	%	Limits	Limits	
			[A]	[B]	[C]	[D]	[E]	[F]	[G]		%R	%RPD	
	C6-C12 Gasoline Range Hydrocarbons		<15.0	999	935	94	998	946	95	1	70-135	35	
	C12-C28 Diesel Range Hydrocarbons		<15.0	999	908	91	998	940	94	3	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: Trunk "O" Myers

Work Order #: 452203

Lab Batch #: 900714

Date Analyzed: 11/12/2012

QC- Sample ID: 452203-002 S

Reporting Units: mg/kg

Project ID: (RP-2695)

Analyst: TTE

Date Prepared: 11/12/2012

Batch #: 1

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	66.2	115	172	92	80-120	

Lab Batch #: 900714

Date Analyzed: 11/12/2012

QC- Sample ID: 452203-012 S

Reporting Units: mg/kg

Date Prepared: 11/12/2012

Analyst: TTE

Batch #: 1

Matrix: Soil

MATRIX / MATRIX SPIKE RECOVERY STUDY						
Inorganic Anions by EPA 300	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Analytes						
Chloride	11.7	113	129	104	80-120	

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

BRL - Below Reporting Limit



Form 3 - MS / MSD Recoveries



Project Name: Trunk "O" Myers

Work Order #: 452203

Lab Batch ID: 901022

Date Analyzed: 11/15/2012

Reporting Units: mg/kg

Project ID: (RP-2695)

QC- Sample ID: 452203-001 S

Batch #: 1 Matrix: Soil

Date Prepared: 11/15/2012

Analyst: KEB

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Reporting Units: mg/kg	TPH By SW8015 Mod										
	Analytes										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	C6-C12 Gasoline Range Hydrocarbons	<15.5	1030	950	92	1040	976	94	3	70-135	35
	C12-C28 Diesel Range Hydrocarbons	<15.5	1030	954	93	1040	961	92	1	70-135	35

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

Relative Percent Difference $RPD = 200 \times (C-F)/(C+F)$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable
N = See Narrative, EQL = Estimated Quantitation Limit

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

Project Name: Trunk "O" Myers

Work Order #: 452203

Lab Batch #: 900713

Project ID: 00426950

Date Analyzed: 11/12/2012 12:40

Date Prepared: 11/12/2012

Analyst: 000

QC- Sample ID: 452250-001 0

Batch #: 1

Matrix: Soil

Reporting Units: 0

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
00000000 oi 000000	600B	6002	0	20	

Lab Batch #: 901092

Date Analyzed: 11/16/2012 13:00

Date Prepared: 11/16/2012

Analyst: 000

QC- Sample ID: 452203-002 0

Batch #: 1

Matrix: Soil

Reporting Units: 0

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
00000000 oi 000000	6001	6005	1	20	

Stk 00000000000000000000 200 00B-000B0000
 000 0000000000000000 000 00 00000000000000 000000000000
 B00- B000 000000g 0imi0



XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In



Client: P██████████

Date/ Time Received: 11/01/2010 10:00:00 P

Work Order #: 40000

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sample Receipt Checklist

Comments

01 The temperature of cooler	
02 The cooling container in good condition	Yes
03 The refrigeration of the	Yes
04 The to the seal of the cooling container	Yes
05 The to the seal of the bottle	Yes
06 The to the seal of the cap	Yes
07 The of the to the	Yes
08 The of the to the of the	Yes
09 The of the to the	No
10 The of the to the of the	Yes
11 The of the to the of the	Yes
12 The of the to the of the	Yes
13 The of the to the of the	Yes
14 The of the to the of the	Yes
15 The of the to the of the	Yes
16 The of the to the of the	Yes
17 The of the to the of the	Yes
18 The of the to the of the	Yes
19 The of the to the of the	Yes
20 The of the to the of the	Yes
21 The of the to the of the	Yes
22 The of the to the of the	Yes

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

01 The of the to the of the	02 The of the to the of the
-----------------------------	-----------------------------

Checklist completed by:

Date: _____

Checklist reviewed by:

Date: _____