CONESTOGA-ROVERS & ASSOCIATES

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Albuquerque, New Mexico 87110
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www.CRAworld.com

March 3, 2015

Reference No. 088210/08

Tomáš 'Doc' Oberding, PhD
Environmental Specialist – New Mexico Oil Conservation Division
Energy, Minerals and Natural Resources Department
1625 N. French Dr.
Hobbs, NM 88240

Dear Dr. Oberding:

Re: Summary of Soil Sampling
Red Hills North Unit 606
1RP-3314-0
Lea County, New Mexico

On behalf of EOG Resources, Inc. (EOG), Conestoga Rovers and Associates (CRA), performed subsurface assessments at the above referenced location on September 12, October (17th and 30th) and December 12, 2014. The Site is located at coordinates 32.153312 N, -103.505175 W and is west of Jal, New Mexico, in Lea County (see Figure 1). The case number is 1RP-3314-0. This report is being submitted on behalf of EOG.

The site is currently an active tank battery-water injection facility. The Site's topography is relatively flat, covered with windblown sand, sparse vegetation, and mesquite trees. Based on the C-141 form, a tank overflow shutoff failed and the tank overflowed. The release was contained to within the bermed area of the tank battery. According to the C-141 form, the release was estimated to be 200 barrels, with 150 barrels recovered. Contaminates of concern are chlorides, BTEX, and TPH.

Presented below are the Site Risk Ranking in accordance to state regulations and a summary of the August through October 2014 sampling events.

1.0 Site Risk Ranking

The New Mexico Oil Conservation Division (NMOCD) has a risk ranking system to establish the regulatory limits for petroleum hydrocarbons. The risk ranking system is based on the depth to groundwater, the presence of wellhead protection areas, and the distance of the site to surface water bodies.

According to Tomáš 'Doc' Oberding, PhD, with NMOCD, the depth to groundwater in the vicinity of the site is estimated to be greater than 100 feet (ft) below ground surface (bgs). There are no well head

protection areas in the vicinity of the site. According to the New Mexico Petroleum Recovery Research Center, there are surface water bodies (intermittent streams) within the 200-1000 ft range. Based on this, the NMOCD Risk Ranking score for the site is 10. The Recommended Remediation Action Levels (RRALs) for the site are 1000 parts per million (ppm) for TPH, 10 ppm for benzene, 50 ppm for total BTEX. The recommended concentration for chlorides is 500 ppm (see table below).

New Mexico Oil Conservation Division Spill Guidelines	
Ranking Criteria	Score
Depth to Ground Water (>100 ft)	0
Wellhead Protection Area	0
Distance to Surface Body Water	10
Ranking Criteria Total Score	10
*Because the ranking criteria total score is 10, NMOCD RRALs are 10 ppm for benzene, 50 ppm for BTEX, 1000 ppm for total TPH, and 500 ppm for chlorides.	

2.0 Sampling Activities

The sampling activities performed at the site consisted of hand-shovel digging, hand auguring, and backhoe/ track-hoe excavation to depths of 14 feet (ft) below ground surface (bgs). Below 14 ft bgs, an air rotary drill rig was used to collect soil samples to a depth of 60 ft bgs. Sampling tools were cleaned with an Alconox wash solution and clean water rinse prior to collecting each soil sample. Field screening was performed for chlorides using Hach Chloride Test strips and total petroleum hydrocarbons (TPH) using a Petroflag Hydocarbon analysis kit.

Following field screening, soil samples were collected for laboratory analysis of chlorides by EPA Method 300.0, TPH by EPA Method 8015, and benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method 8021. Soil samples were submitted under chain of custody documentation via overnight delivery to Xenco Laboratories of Odessa, Texas.

Initial soil sampling performed on September 12th, 2014, indicated that soil concentrations of chlorides, BTEX and TPH were below regulatory limits within the center of the release (see Figure 2). Further sampling was still needed to determine the horizontal extent of the release.

On October 13th and 17th sampling was conducted using a backhoe and a trackhoe. A soil sample that was collected at the east end of the release area was below regulatory limits (see Figure 2). However, the results of a soil sample obtained on the western extent of the release exceeded regulatory limits for chlorides at a depth of 14 ft bgs(but was below regulatory limits for TPH and BTEX). Due to this, additional assessment was performed.

On December 12, 2014, a drill rig was used to collect soil samples at depths greater than 14 ft bgs. Drilling was performed by White Drilling of Clyde, Texas. During drilling, soil samples were collected at 10 ft intervals, from 10 ft bgs to 60 ft bgs. Soils consisted of fill material from 0-10 ft bgs; reddish-tan, dry, poorly graded sand with secondary cementation (caliche) at 10-40 ft bgs; light brown, dry, poorly graded sand with caliche at 40-50 ft bgs; reddish-brown, dry, poorly graded sand with silt and caliche at 50-60 ft bgs; tan color soil, with the same characteristics as previous were observed around 60 ft bgs. A log of this soil boring can be found as (Appendix A).

The soil sample collected at a depth of 60 ft bgs was below the regulatory limit for chloride of 500 ppm (see Figure 2). Soil samples collected from this boring were below laboratory reporting limits for BTEX and TPH. Laboratory analytical reports for soil samples submitted to Xenco Laboratories are provided as Appendix B.

Based on the results of the laboratory analyses, CRA requests No Further Action be required for this site. If you have any questions or comments with regards to this request for closure, please do not hesitate to contact our Albuquerque office at (505) 884-0672.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Reviewed by:

Steven Perez
Staff Scientist

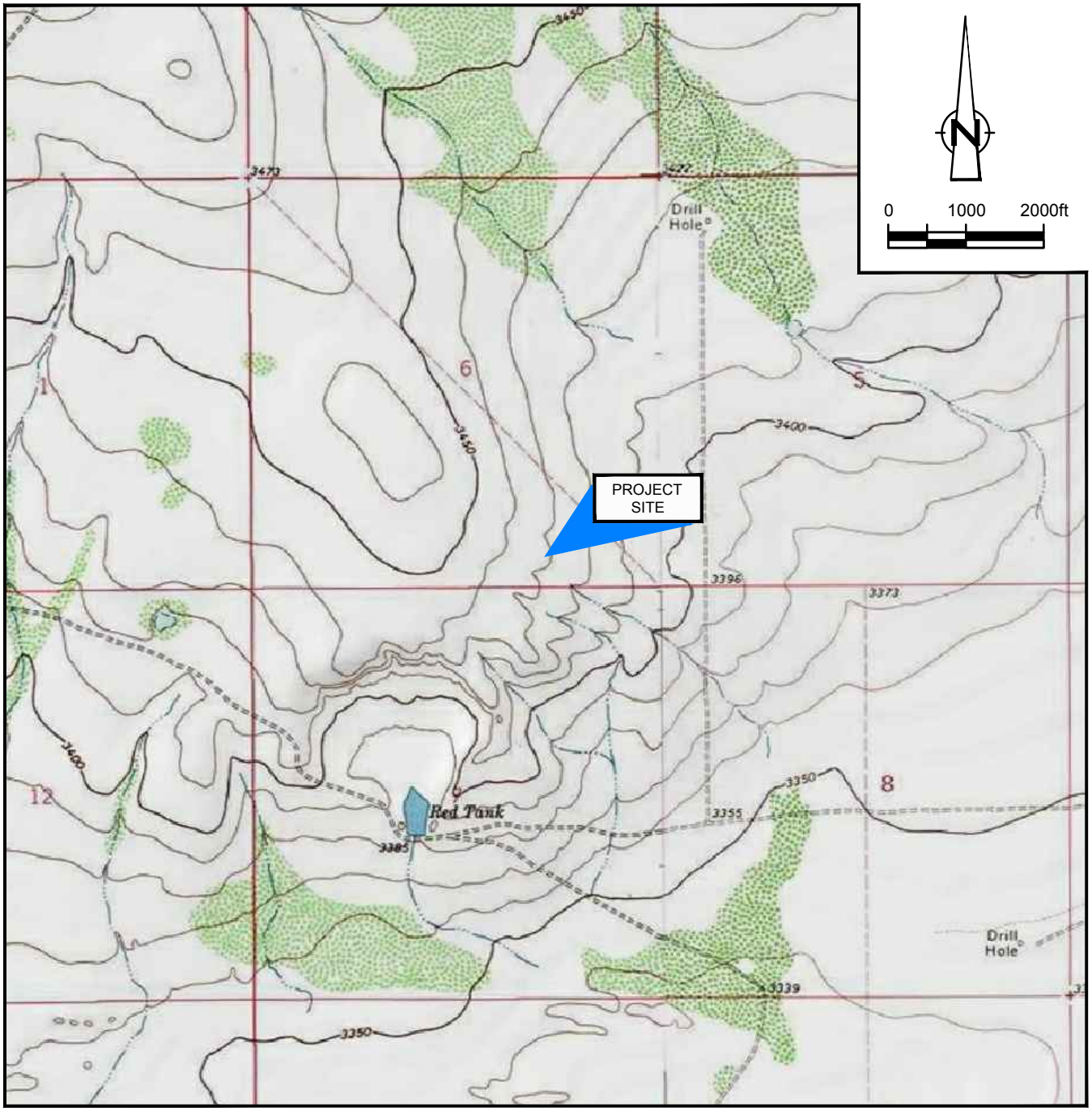
Bernard Bockisch, PMP
Senior Project Manager

BB/mc/1
Encl. (5)

Attachments:

Figure 1. Site Location Map
Figure 2. Site Detail Map
Appendix A. Soil Boring Log
Appendix B. Laboratory Analytical Results

FIGURES



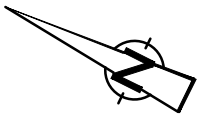
SOURCE: USGS 7.5 MINUTE QUAD
"BELL LAKE AND WOODLEY FLAT, NEW MEXICO"

LAT/LONG: 32.1533° NORTH, 103.5052° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

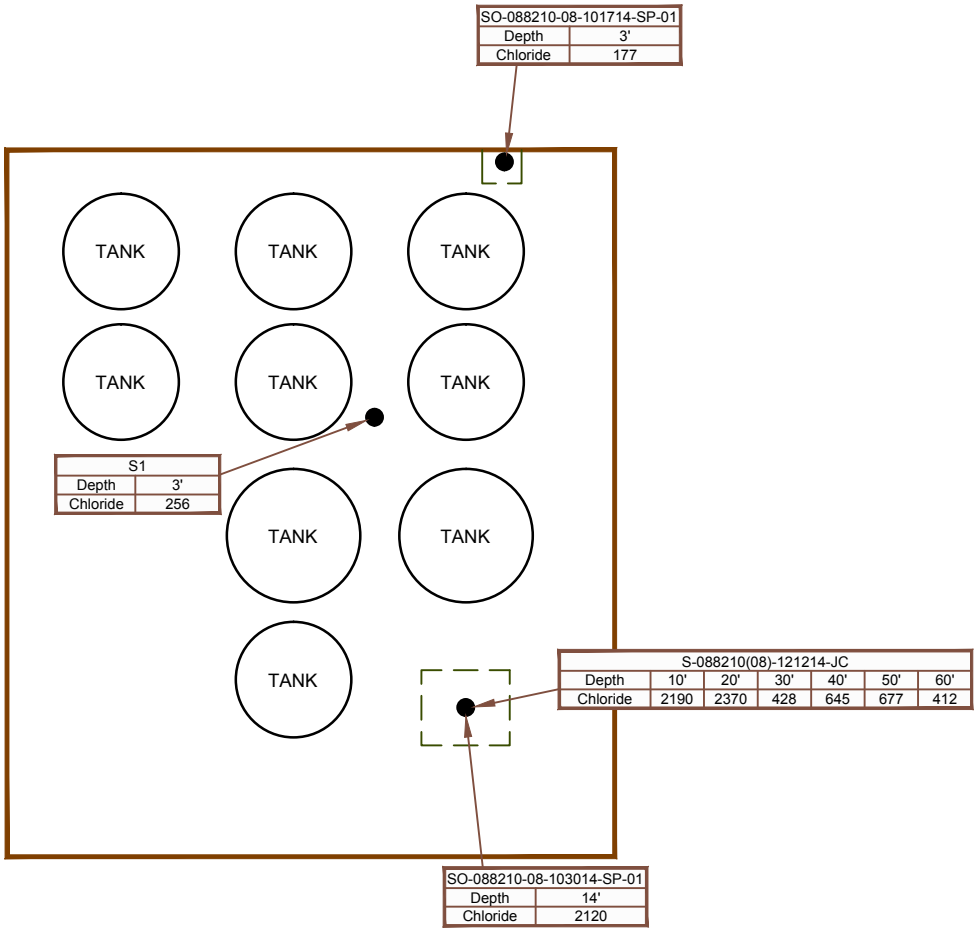
Figure 1

SITE LOCATION MAP
RED HILLS NORTH UNIT 606H
near Jal, New Mexico

088210-08(000)GN-DL001 NOV 13/2014



NOT TO SCALE



LEGEND	
●	Sample Location
— —	Excavation Boundary
▬	Caliche Berm

NOTES:

1. All results are in ppm.
2. TPH and BTEX were below regulatory limits for all samples.

Figure 2

SITE DETAIL MAP
RED HILLS NORTH UNIT 606H
near Jal, New Mexico

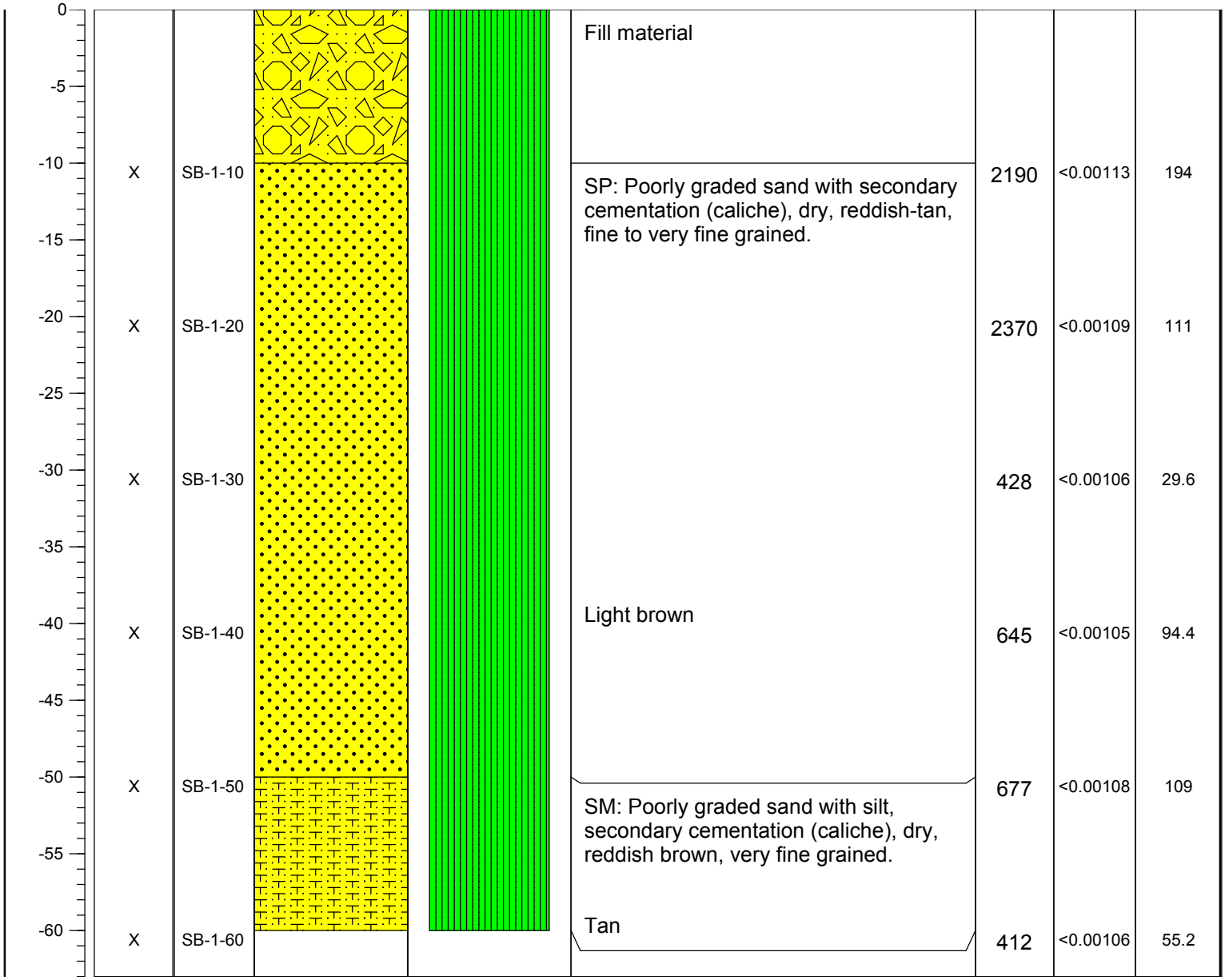
APPENDIX A

SOIL BORING LOG

PROJECT NAME: Red Hills North Unit 606
LOCATION: Lea County, New Mexico
FIELD LOGGED BY: John Schnable
SURFACE ELEVATION (msl): No Survey Available
GROUNDWATER ELEVATION (msl): N/A
REMARKS:
COORDINATES:

SOIL BORING NO: SB-1
DRILL TYPE: Air Rotary
BORE HOLE DIAMETER: 6"
DRILLED BY: White Drilling Company
DATE/TIME HOLE STARTED: 12/12/14
DATE/TIME HOLE COMPLETED: 12/12/14

DEPTH (bgs) - ft	SAMPLE TO LAB	SAMPLE ID	STRATAGRAPHIC SEQUENCE	COMPLETION INFORMATION	CLASSIFICATION AND DESCRIPTION	Chlorides (mg/kg)	Total BTEX (mg/kg)	Total TPH (mg/kg)
0					Fill material			
-10	X	SB-1-10			SP: Poorly graded sand with secondary cementation (caliche), dry, reddish-tan, fine to very fine grained.	2190	<0.00113	194
-20	X	SB-1-20				2370	<0.00109	111
-30	X	SB-1-30				428	<0.00106	29.6
-40	X	SB-1-40			Light brown	645	<0.00105	94.4
-50	X	SB-1-50			SM: Poorly graded sand with silt, secondary cementation (caliche), dry, reddish brown, very fine grained.	677	<0.00108	109
-60	X	SB-1-60			Tan	412	<0.00106	55.2



60 feet bgs

CONESTOGA-ROVERS & ASSOCIATES

BORING LOG AND WELL COMPLETION FORM

APPENDIX B

LABORATORY ANALYTICAL REPORTS

Analytical Report 495575

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch

RHNU-606

088210/08

24-OCT-14

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

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)

24-OCT-14

Project Manager: **Bernie Bockisch**
Conestoga-Rovers & Associates-Albuquerque, NM
6121 Indian School Rd. NE Suite 200

Albuquerque, NM 87110

Reference: XENCO Report No(s): **495575**
RHNU-606
Project Address:

Bernie Bockisch:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 495575. 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. 495575 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

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

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

Sample Cross Reference 495575

Conestoga-Rovers & Associates-Albuquerque, NM, Albuqu

RHNU-606

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SO-088210-08-101714-SP-01	S	10-20-14 12:40	- 3 ft	495575-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 495575

Conestoga-Rovers & Associates-Albuquerque, NM, Albuquerque, NM

Project Name: RHNU-606

Project Id: 088210/08
Contact: Bernie Bockisch
Project Location:

Date Received in Lab: Tue Oct-21-14 11:15 am
Report Date: 24-OCT-14
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	495575-001					
	Field Id:	SO-088210-08-101714-SP-0					
	Depth:	3 ft					
	Matrix:	SOIL					
	Sampled:	Oct-20-14 12:40					
BTEX by EPA 8021B	***Extracted:***	Oct-22-14 16:00					
	Analyzed:	Oct-23-14 03:52					
	Units/RL:	mg/kg	RL				
Benzene		ND	0.00117				
Toluene		ND	0.00233				
Ethylbenzene		ND	0.00117				
m,p-Xylenes		ND	0.00233				
o-Xylene		ND	0.00117				
Total Xylenes		ND	0.00117				
Total BTEX		ND	0.00117				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Oct-21-14 15:30					
	Analyzed:	Oct-22-14 14:56					
	Units/RL:	mg/kg	RL				
Chloride		177	11.7				
Percent Moisture	***Extracted:***						
	Analyzed:	Oct-21-14 17:00					
	Units/RL:	%	RL				
Percent Moisture		14.7	1.00				
TPH by Texas1005	***Extracted:***	Oct-22-14 16:00					
	Analyzed:	Oct-23-14 10:07					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	29.2				
C12-C28 Diesel Range Hydrocarbons		ND	29.2				
C28-C35 Oil Range Hydrocarbons		ND	29.2				
Total TPH 1005		ND	29.2				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: RHNU-606

Work Orders : 495575,

Project ID: 088210/08

Lab Batch #: 953640 **Sample:** 495575-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/23/14 03:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0324	0.0300	108	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 953671 **Sample:** 495575-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/23/14 10:07

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.8	103	70-135	
o-Terphenyl	54.8	49.9	110	70-130	

Lab Batch #: 953640 **Sample:** 663351-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/23/14 02:15

SURROGATE RECOVERY STUDY

BTEX 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	0.0262	0.0300	87	80-120	

Lab Batch #: 953671 **Sample:** 663375-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/23/14 08:53

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	63.4	50.0	127	70-130	

Lab Batch #: 953640 **Sample:** 663351-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/23/14 02:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0289	0.0300	96	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: RHNU-606

Work Orders : 495575,

Project ID: 088210/08

Lab Batch #: 953671 **Sample:** 663375-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/23/14 09:18

SURROGATE RECOVERY STUDY

TPH by Texas1005

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	61.2	50.0	122	70-130	

Lab Batch #: 953640 **Sample:** 663351-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/23/14 02:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0293	0.0300	98	80-120	

Lab Batch #: 953671 **Sample:** 663375-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/23/14 09:42

SURROGATE RECOVERY STUDY

TPH by Texas1005

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-135	
o-Terphenyl	64.6	50.0	129	70-130	

Lab Batch #: 953640 **Sample:** 495575-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/23/14 03:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 953671 **Sample:** 495575-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/23/14 10:32

SURROGATE RECOVERY STUDY

TPH by Texas1005

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.9	117	70-135	
o-Terphenyl	64.2	50.0	128	70-130	

* 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: RHNU-606

Work Orders : 495575, **Project ID:** 088210/08

Lab Batch #: 953671 **Sample:** 495575-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/23/14 10:56

SURROGATE RECOVERY STUDY

TPH by Texas1005 Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.8	117	70-135	
o-Terphenyl	64.8	49.9	130	70-130	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: RHNU-606

Work Order #: 495575 **Project ID:** 088210/08

Analyst: ARM **Date Prepared:** 10/22/2014 **Date Analyzed:** 10/23/2014

Lab Batch ID: 953640 **Sample:** 663351-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0853	85	0.100	0.0849	85	0	70-130	35	
Toluene	<0.00200	0.100	0.0883	88	0.100	0.0876	88	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0886	89	0.100	0.0877	88	1	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.181	91	0.200	0.179	90	1	70-135	35	
o-Xylene	<0.00100	0.100	0.0875	88	0.100	0.0861	86	2	71-133	35	

Analyst: JUM **Date Prepared:** 10/21/2014 **Date Analyzed:** 10/21/2014

Lab Batch ID: 953580 **Sample:** 663267-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	46.4	93	50.0	47.3	95	2	80-120	20	

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

BS / BSD Recoveries

Project Name: RHNU-606

Work Order #: 495575 **Project ID:** 088210/08

Analyst: ARM **Date Prepared:** 10/22/2014 **Date Analyzed:** 10/23/2014

Lab Batch ID: 953671 **Sample:** 663375-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH by Texas1005 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<25.0	1000	889	89	1000	888	89	0	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<25.0	1000	989	99	1000	998	100	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

Form 3 - MS Recoveries

Project Name: RHNU-606

Work Order #: 495575

Lab Batch #: 953640 **Project ID:** 088210/08

Date Analyzed: 10/23/2014 **Date Prepared:** 10/22/2014 **Analyst:** ARM

QC- Sample ID: 495575-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Benzene	<0.00117	0.117	0.0835	71	70-130	
Toluene	<0.00233	0.117	0.0848	72	70-130	
Ethylbenzene	<0.00117	0.117	0.0833	71	71-129	
m,p-Xylenes	<0.00233	0.233	0.170	73	70-135	
o-Xylene	<0.00117	0.117	0.0834	71	71-133	

Lab Batch #: 953580

Date Analyzed: 10/21/2014 **Date Prepared:** 10/21/2014 **Analyst:** JUM

QC- Sample ID: 495573-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	7.72	40.2	43.4	89	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: RHNU-606

Work Order # : 495575 **Project ID:** 088210/08

Lab Batch ID: 953671 **QC- Sample ID:** 495575-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/23/2014 **Date Prepared:** 10/22/2014 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH by Texas1005 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	<29.3	1170	1040	89	1170	1010	86	3	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<29.3	1170	1130	97	1170	1140	97	1	70-135	35	

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

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

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

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

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

Sample Duplicate Recovery

Project Name: RHNU-606

Work Order #: 495575

Lab Batch #: 953540 **Project ID:** 088210/08

Date Analyzed: 10/21/2014 17:00 **Date Prepared:** 10/21/2014 **Analyst:** WRU

QC- Sample ID: 495575-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	14.7	14.3	3	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

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

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Stafford,Texas (281-240-4200)

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Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

www.xenco.com

Xenco Quote #

Xenco Job # 495575

Client / Reporting Information

Company Name / Branch: Cornerstone Envrs & Assoc

Company Address: 6121 Indian School Rd NE, Albuquerque NM 87110

Email: bbocklisch@crawworld.com

Phone No: (505) 280-0572

Project Contact: Bernie Bocklisch

Samplers's Name: Steve Perez sperez@crawworld.com

Project Information

Project Name/Number: EOG Remediation sites 088210/08

Project Location: Vaca 30 SWD

Invoice To:

PO Number:

Analytical Information

Chloride 300.0

BTEX

TPH

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	SO-088210-08-101714-SP-01	3'	10/17/14	12:40	S	1								X	
2														X	
3															
4															
5															
6															
7															
8															
9															
10															

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Steven Perez	10/20/14 9:50	1	2	10/21/14 1115	2
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
			3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X
			5			Cooler Temp. Thermo. Corr. Factor 4

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negiotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 10/21/2014 11:15:00 AM

Work Order #: 495575

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

Temperature Measuring device used :

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 10/21/2014

Checklist reviewed by: Kelsey Brooks Date: 10/21/2014

Analytical Report 496357

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch

RHNU 606

088210-08

07-NOV-14

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

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

07-NOV-14

Project Manager: **Bernie Bockisch**
Conestoga-Rovers & Associates-Albuquerque, NM
6121 Indian School Rd. NE Suite 200

Albuquerque, NM 87110

Reference: XENCO Report No(s): **496357**
RHNU 606
Project Address:

Bernie Bockisch:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 496357. 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. 496357 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.
Certified and approved by numerous States and Agencies.
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Houston - Dallas - Odessa - San Antonio - Tampa - Lakeland - Atlanta - Phoenix - Oklahoma - Latin America

Sample Cross Reference 496357

Conestoga-Rovers & Associates-Albuquerque, NM, Albuqu

RHNU 606

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SO-088210-06-103014-SP-01	S	10-30-14 12:35	- 14 ft	496357-001

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 496357

Conestoga-Rovers & Associates-Albuquerque, NM, Albuquerque, NM

Project Name: RHNU 606

Project Id: 088210-08
Contact: Bernie Bockisch
Project Location:

Date Received in Lab: Fri Oct-31-14 10:45 am
Report Date: 07-NOV-14
Project Manager: Kelsey Brooks

Analysis Requested							
	Lab Id:	496357-001					
	Field Id:	SO-088210-06-103014-SP-0					
	Depth:	14 ft					
	Matrix:	SOIL					
	Sampled:	Oct-30-14 12:35					
BTEX by EPA 8021B	***Extracted:***	Nov-03-14 10:00					
	Analyzed:	Nov-03-14 12:56					
	Units/RL:	mg/kg	RL				
Benzene		ND	0.00112				
Toluene		ND	0.00225				
Ethylbenzene		ND	0.00112				
m,p-Xylenes		ND	0.00225				
o-Xylene		ND	0.00112				
Total Xylenes		ND	0.00112				
Total BTEX		ND	0.00112				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Nov-06-14 12:00					
	Analyzed:	Nov-06-14 17:50					
	Units/RL:	mg/kg	RL				
Chloride		2120	225				
Percent Moisture	***Extracted:***						
	Analyzed:	Nov-04-14 09:47					
	Units/RL:	%	RL				
Percent Moisture		11.3	1.00				
TPH By SW8015 Mod	***Extracted:***	Oct-31-14 11:00					
	Analyzed:	Nov-01-14 01:26					
	Units/RL:	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	16.9				
C12-C28 Diesel Range Hydrocarbons		ND	16.9				
C28-C35 Oil Range Hydrocarbons		ND	16.9				
Total TPH		ND	16.9				

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: RHNU 606

Work Orders : 496357, 496357 **Project ID:** 088210-08

Lab Batch #: 954426 **Sample:** 496357-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/01/14 01:26

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.9	101	70-135	
o-Terphenyl	54.2	50.0	108	70-135	

Lab Batch #: 954538 **Sample:** 496357-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/14 12:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0331	0.0300	110	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 954426 **Sample:** 663855-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/31/14 17:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	112	100	112	70-135	
o-Terphenyl	61.3	50.0	123	70-135	

Lab Batch #: 954538 **Sample:** 663926-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/03/14 11:19

SURROGATE RECOVERY STUDY

BTEX 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	0.0262	0.0300	87	80-120	

Lab Batch #: 954426 **Sample:** 663855-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/31/14 17:45

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	100	127	70-135	
o-Terphenyl	40.3	50.0	81	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: RHNU 606

Work Orders : 496357, 496357 **Project ID:** 088210-08

Lab Batch #: 954538 **Sample:** 663926-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/03/14 11:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0301	0.0300	100	80-120	

Lab Batch #: 954426 **Sample:** 663855-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/31/14 18:06

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	40.8	50.0	82	70-135	

Lab Batch #: 954538 **Sample:** 663926-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 11/03/14 11:51

SURROGATE RECOVERY STUDY

BTEX 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	0.0283	0.0300	94	80-120	

Lab Batch #: 954426 **Sample:** 496356-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/01/14 00:15

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.8	117	70-135	
o-Terphenyl	37.1	49.9	74	70-135	

Lab Batch #: 954538 **Sample:** 496357-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/14 12:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0307	0.0300	102	80-120	
4-Bromofluorobenzene	0.0316	0.0300	105	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: RHNU 606

Work Orders : 496357, 496357 **Project ID:** 088210-08

Lab Batch #: 954426 **Sample:** 496356-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/01/14 00:39

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	35.5	50.0	71	70-135	

Lab Batch #: 954538 **Sample:** 496357-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 11/03/14 12:23

SURROGATE RECOVERY STUDY

BTEX 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	
4-Bromofluorobenzene	0.0327	0.0300	109	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: RHNU 606

Work Order #: 496357, 496357 **Project ID:** 088210-08

Analyst: ARM **Date Prepared:** 11/03/2014 **Date Analyzed:** 11/03/2014

Lab Batch ID: 954538 **Sample:** 663926-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.0876	88	0.100	0.0869	87	1	70-130	35	
Toluene	<0.00200	0.100	0.0947	95	0.100	0.0936	94	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.100	100	0.100	0.0965	97	4	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.205	103	0.200	0.197	99	4	70-135	35	
o-Xylene	<0.00100	0.100	0.0958	96	0.100	0.0924	92	4	71-133	35	

Analyst: JUM **Date Prepared:** 11/06/2014 **Date Analyzed:** 11/06/2014

Lab Batch ID: 954845 **Sample:** 664103-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	50.4	101	50.0	47.8	96	5	90-110	20	

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

BS / BSD Recoveries

Project Name: RHNU 606

Work Order #: 496357, 496357 **Project ID:** 088210-08

Analyst: ARM **Date Prepared:** 10/31/2014 **Date Analyzed:** 10/31/2014

Lab Batch ID: 954426 **Sample:** 663855-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	1010	101	1000	1030	103	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1140	114	1000	1160	116	2	70-135	35	

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

Form 3 - MS Recoveries

Project Name: RHNU 606

Work Order #: 496357

Lab Batch #: 954845 **Project ID:** 088210-08

Date Analyzed: 11/06/2014 **Date Prepared:** 11/06/2014 **Analyst:** JUM

QC- Sample ID: 496357-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	2120	5640	7830	101	80-120	

Lab Batch #: 954845

Date Analyzed: 11/06/2014 **Date Prepared:** 11/06/2014 **Analyst:** JUM

QC- Sample ID: 496688-002 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	4.39	50.0	54.8	101	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: RHNU 606

Work Order # : 496357 **Project ID:** 088210-08

Lab Batch ID: 954538 **QC- Sample ID:** 496357-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/03/2014 **Date Prepared:** 11/03/2014 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00112	0.112	0.0859	77	0.112	0.0866	77	1	70-130	35	
Toluene	<0.00224	0.112	0.0919	82	0.112	0.0938	84	2	70-130	35	
Ethylbenzene	<0.00112	0.112	0.0951	85	0.112	0.0944	84	1	71-129	35	
m,p-Xylenes	<0.00224	0.224	0.195	87	0.224	0.194	87	1	70-135	35	
o-Xylene	<0.00112	0.112	0.0934	83	0.112	0.0926	83	1	71-133	35	

Lab Batch ID: 954426 **QC- Sample ID:** 496356-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 11/01/2014 **Date Prepared:** 10/31/2014 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.2	1080	1030	95	1080	969	90	6	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<16.2	1080	1160	107	1080	1100	102	5	70-135	35	

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

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

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

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

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

Sample Duplicate Recovery

Project Name: RHNU 606

Work Order #: 496357

Lab Batch #: 954497 **Project ID:** 088210-08

Date Analyzed: 11/04/2014 09:47 **Date Prepared:** 11/04/2014 **Analyst:** WRU

QC- Sample ID: 496352-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	21.2	21.7	2	20	

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

BRL - Below Reporting Limit

CHAIN OF CUSTODY

Page 1 Of 1

XENCO LABORATORIES

Setting the Standard since 1990

Stafford,Texas (281-240-4200) | Odessa, Texas (432-563-1800) | Lakeland, Florida (863-646-8526)

Dallas, Texas (214-902-0300) | Norcross, Georgia (770-449-8800) | Tampa, Florida (813-620-2000)

Service Center - San Antonio, Texas (210-509-3334) | www.xenco.com

Xenco Quote # | Xenco Job # 496357

Client / Reporting Information

Company Name / Branch: Conestoga Rovers & Associates

Company Address: 6121 Indian School Rd NE, Albuquerque NM 87110

Email: bbockisch@craworld.com | Phone No: (505) 280-0572

Project Contact: Bernie Bockisch

Samplers's Name: Steve Perez sperez@craworld.com

Project Information

Project Name/Number: 088210-08

Project Location: BHNM 606

Invoice To:

PO Number:

Analytical Information

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	1 Chloride 300.0	BTEX 8021	TPH 8015B	Field Comments
1	SO-088210-08-103014-SP-01	14'	103014	1235	S	1									X	X	X	
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level III Std QC+ Forms
- [ ] Level 3 (CLP Forms)
- [ ] TRRP Checklist
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] TRRP Level IV
- [ ] UST / RG -411

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Steven Perez	10/30/14 3:30		2	10/31/14	
3	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice: X

Cooler Temp. | Thermo. Corr. Factor: 3°

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negiotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 10/31/2014 10:45:00 AM

Work Order #: 496357

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

Temperature Measuring device used :

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 10/31/2014

Checklist reviewed by: Kelsey Brooks Date: 10/31/2014

Analytical Report 498938

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch

EOG Remediation Sites

088210-08

22-DEC-14

Collected By: Client

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-14-18), Arizona (AZ0765), Florida (E871002), Louisiana (03054)
New Jersey (TX007), North Carolina(681), Oklahoma (9218), Pennsylvania (68-03610)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Kentucky (85), DoD (L10-135)
Texas (T104704477), Louisiana (04176), USDA (P330-07-00105)

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)

22-DEC-14

Project Manager: **Bernie Bockisch**
Conestoga-Rovers & Associates-Albuquerque, NM
6121 Indian School Rd. NE Suite 200

Albuquerque, NM 87110

Reference: XENCO Report No(s): **498938**
EOG Remediation Sites
Project Address: Lea County NM

Bernie Bockisch:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 498938. 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. 498938 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

Kelsey Brooks
Project Manager

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

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

Sample Cross Reference 498938

Conestoga-Rovers & Associates-Albuquerque, NM, Albuqu

EOG Remediation Sites

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
S-088210(08)-12/12/14-JS-SB1(10')	S	12-12-14 15:58	- 10 ft	498938-001
S-088210(08)-12/12/14-JS-SB1(20')	S	12-12-14 16:05	- 20 ft	498938-002
S-088210(08)-12/12/14-JS-SB1(30')	S	12-12-14 16:08	- 30 ft	498938-003
S-088210(08)-12/12/14-JS-SB1(40')	S	12-12-14 16:12	- 40 ft	498938-004
S-088210(08)-12/12/14-JS-SB1(50')	S	12-12-14 16:18	- 50 ft	498938-005
S-088210(08)-12/12/14-JS-SB1(60')	S	12-12-14 16:51	- 60 ft	498938-006

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 498938

Conestoga-Rovers & Associates-Albuquerque, NM, Albuquerque, NM

Project Name: EOG Remediation Sites

Project Id: 088210-08
Contact: Bernie Bockisch
Project Location: Lea County NM

Date Received in Lab: Mon Dec-15-14 03:32 pm
Report Date: 22-DEC-14
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	498938-001		498938-002		498938-003		498938-004		498938-005		498938-006	
	Field Id:	-088210(08)-12/12/14-JS-S		-088210(08)-12/12/14-JS-S		-088210(08)-12/12/14-JS-S		-088210(08)-12/12/14-JS-S		-088210(08)-12/12/14-JS-S		-088210(08)-12/12/14-JS-S	
	Depth:	10 ft		20 ft		30 ft		40 ft		50 ft		60 ft	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Dec-12-14 15:58		Dec-12-14 16:05		Dec-12-14 16:08		Dec-12-14 16:12		Dec-12-14 16:18		Dec-12-14 16:51	
BTEX by EPA 8021B	**Extracted:**	Dec-18-14 16:00		Dec-18-14 16:00		Dec-18-14 16:00		Dec-18-14 16:00		Dec-18-14 16:00		Dec-18-14 16:00	
	Analyzed:	Dec-19-14 00:07		Dec-19-14 00:23		Dec-19-14 00:40		Dec-19-14 00:56		Dec-19-14 01:13		Dec-19-14 01:29	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00113	ND	0.00109	ND	0.00106	ND	0.00105	ND	0.00108	ND	0.00106
Toluene		ND	0.00226	ND	0.00219	ND	0.00212	ND	0.00211	ND	0.00216	ND	0.00213
Ethylbenzene		ND	0.00113	ND	0.00109	ND	0.00106	ND	0.00105	ND	0.00108	ND	0.00106
m,p-Xylenes		ND	0.00226	ND	0.00219	ND	0.00212	ND	0.00211	ND	0.00216	ND	0.00213
o-Xylene		ND	0.00113	ND	0.00109	ND	0.00106	ND	0.00105	ND	0.00108	ND	0.00106
Total Xylenes		ND	0.00113	ND	0.00109	ND	0.00106	ND	0.00105	ND	0.00108	ND	0.00106
Total BTEX		ND	0.00113	ND	0.00109	ND	0.00106	ND	0.00105	ND	0.00108	ND	0.00106
Inorganic Anions by EPA 300/300.1	**Extracted:**	Dec-19-14 14:30		Dec-19-14 14:30		Dec-19-14 14:30		Dec-19-14 14:30		Dec-19-14 14:30		Dec-19-14 14:30	
	Analyzed:	Dec-20-14 07:13		Dec-20-14 07:59		Dec-20-14 08:21		Dec-20-14 08:44		Dec-20-14 09:07		Dec-20-14 09:30	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		2190	226	2370	221	428	21.4	645	42.5	677	43.4	412	21.3
Percent Moisture	**Extracted:**												
	Analyzed:	Dec-16-14 17:00		Dec-16-14 17:00		Dec-16-14 17:00		Dec-16-14 17:00		Dec-16-14 17:00		Dec-16-14 17:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		11.6	1.00	9.32	1.00	6.42	1.00	5.80	1.00	7.78	1.00	6.27	1.00
TPH By SW8015 Mod	**Extracted:**	Dec-19-14 16:00		Dec-19-14 16:00		Dec-19-14 16:00		Dec-19-14 16:00		Dec-19-14 16:00		Dec-19-14 16:00	
	Analyzed:	Dec-20-14 18:36		Dec-20-14 19:01		Dec-20-14 19:25		Dec-20-14 19:49		Dec-20-14 20:13		Dec-20-14 20:37	
	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	16.9	ND	16.5	ND	16.0	ND	15.9	ND	16.2	ND	16.0
C12-C28 Diesel Range Hydrocarbons		194	16.9	111	16.5	29.6	16.0	94.4	15.9	109	16.2	55.2	16.0
C28-C35 Oil Range Hydrocarbons		ND	16.9	ND	16.5	ND	16.0	ND	15.9	ND	16.2	ND	16.0
Total TPH		194	16.9	111	16.5	29.6	16.0	94.4	15.9	109	16.2	55.2	16.0

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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

Form 2 - Surrogate Recoveries

Project Name: EOG Remediation Sites

Work Orders : 498938, **Project ID:** 088210-08

Lab Batch #: 957991 **Sample:** 498938-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/14 00:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0285	0.0300	95	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 957991 **Sample:** 498938-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/14 00:23

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 957991 **Sample:** 498938-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/14 00:40

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 957991 **Sample:** 498938-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/14 00:56

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 957991 **Sample:** 498938-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/14 01:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: EOG Remediation Sites

Work Orders : 498938, **Project ID:** 088210-08

Lab Batch #: 957991 **Sample:** 498938-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/19/14 01:29

SURROGATE RECOVERY STUDY

BTEX 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	0.0318	0.0300	106	80-120	

Lab Batch #: 958162 **Sample:** 498938-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/20/14 18:36

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	99.6	100	70-135	
o-Terphenyl	50.2	49.8	101	70-135	

Lab Batch #: 958162 **Sample:** 498938-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/20/14 19:01

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.2	99.8	91	70-135	
o-Terphenyl	46.7	49.9	94	70-135	

Lab Batch #: 958162 **Sample:** 498938-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/20/14 19:25

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.2	99.9	97	70-135	
o-Terphenyl	49.3	50.0	99	70-135	

Lab Batch #: 958162 **Sample:** 498938-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/20/14 19:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod

Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	91.8	99.9	92	70-135	
o-Terphenyl	45.9	50.0	92	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: EOG Remediation Sites

Work Orders : 498938,

Project ID: 088210-08

Lab Batch #: 958162 **Sample:** 498938-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/20/14 20:13

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.2	99.9	97	70-135	
o-Terphenyl	48.9	50.0	98	70-135	

Lab Batch #: 958162 **Sample:** 498938-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/20/14 20:37

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.8	99.7	99	70-135	
o-Terphenyl	49.3	49.9	99	70-135	

Lab Batch #: 957991 **Sample:** 666091-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/18/14 19:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0297	0.0300	99	80-120	

Lab Batch #: 958162 **Sample:** 666191-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/20/14 15:04

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	100	108	70-135	
o-Terphenyl	54.8	50.0	110	70-135	

Lab Batch #: 957991 **Sample:** 666091-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/18/14 19:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0319	0.0300	106	80-120	
4-Bromofluorobenzene	0.0258	0.0300	86	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: EOG Remediation Sites

Work Orders : 498938, **Project ID:** 088210-08

Lab Batch #: 958162 **Sample:** 666191-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/20/14 15:25

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-135	
o-Terphenyl	55.0	50.0	110	70-135	

Lab Batch #: 957991 **Sample:** 666091-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/18/14 19:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0340	0.0300	113	80-120	
4-Bromofluorobenzene	0.0263	0.0300	88	80-120	

Lab Batch #: 958162 **Sample:** 666191-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 12/20/14 15:47

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	55.5	50.0	111	70-135	

Lab Batch #: 957991 **Sample:** 498841-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/18/14 19:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0325	0.0300	108	80-120	
4-Bromofluorobenzene	0.0273	0.0300	91	80-120	

Lab Batch #: 958162 **Sample:** 499322-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/20/14 16:34

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	99.9	125	70-135	
o-Terphenyl	53.9	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.

Form 2 - Surrogate Recoveries

Project Name: EOG Remediation Sites

Work Orders : 498938, **Project ID:** 088210-08

Lab Batch #: 957991 **Sample:** 498841-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/18/14 20:15

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0264	0.0300	88	80-120	

Lab Batch #: 958162 **Sample:** 499322-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 12/20/14 16:57

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	100	121	70-135	
o-Terphenyl	53.2	50.0	106	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

BS / BSD Recoveries

Project Name: EOG Remediation Sites

Work Order #: 498938 **Project ID:** 088210-08

Analyst: ARM **Date Prepared:** 12/18/2014 **Date Analyzed:** 12/18/2014

Lab Batch ID: 957991 **Sample:** 666091-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.105	105	0.100	0.103	103	2	70-130	35	
Toluene	<0.00200	0.100	0.116	116	0.100	0.114	114	2	70-130	35	
Ethylbenzene	<0.00100	0.100	0.122	122	0.100	0.120	120	2	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.241	121	0.200	0.236	118	2	70-135	35	
o-Xylene	<0.00100	0.100	0.113	113	0.100	0.110	110	3	71-133	35	

Analyst: JUM **Date Prepared:** 12/19/2014 **Date Analyzed:** 12/20/2014

Lab Batch ID: 958136 **Sample:** 666140-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	47.7	95	50.0	47.6	95	0	90-110	20	

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

BS / BSD Recoveries

Project Name: EOG Remediation Sites

Work Order #: 498938 **Project ID:** 088210-08

Analyst: ARM **Date Prepared:** 12/19/2014 **Date Analyzed:** 12/20/2014

Lab Batch ID: 958162 **Sample:** 666191-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	847	85	1000	831	83	2	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1040	104	1000	1020	102	2	70-135	35	

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

Form 3 - MS Recoveries

Project Name: EOG Remediation Sites

Work Order #: 498938

Lab Batch #: 958136 **Project ID:** 088210-08

Date Analyzed: 12/20/2014 **Date Prepared:** 12/19/2014 **Analyst:** JUM

QC- Sample ID: 498938-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	2190	5660	8580	113	80-120	

Lab Batch #: 958136

Date Analyzed: 12/20/2014 **Date Prepared:** 12/19/2014 **Analyst:** JUM

QC- Sample ID: 499141-005 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Inorganic Anions by EPA 300 Analytes	MATRIX / MATRIX SPIKE RECOVERY STUDY					
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	12700	11700	28100	132	80-120	X

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: EOG Remediation Sites

Work Order # : 498938 **Project ID:** 088210-08

Lab Batch ID: 957991 **QC- Sample ID:** 498841-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/18/2014 **Date Prepared:** 12/18/2014 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00107	0.107	0.109	102	0.106	0.0981	93	11	70-130	35	
Toluene	<0.00214	0.107	0.121	113	0.106	0.110	104	10	70-130	35	
Ethylbenzene	<0.00107	0.107	0.129	121	0.106	0.118	111	9	71-129	35	
m,p-Xylenes	<0.00214	0.214	0.254	119	0.213	0.232	109	9	70-135	35	
o-Xylene	<0.00107	0.107	0.121	113	0.106	0.109	103	10	71-133	35	

Lab Batch ID: 958162 **QC- Sample ID:** 499322-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 12/20/2014 **Date Prepared:** 12/19/2014 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.6	1040	871	84	1040	863	83	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	96.8	1040	1150	101	1040	1120	98	3	70-135	35	

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

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

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

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

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

Sample Duplicate Recovery

Project Name: EOG Remediation Sites

Work Order #: 498938

Lab Batch #: 957791 **Project ID:** 088210-08

Date Analyzed: 12/16/2014 17:00 **Date Prepared:** 12/16/2014 **Analyst:** WRU

QC- Sample ID: 498841-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	6.38	10.3	47	20	F

Lab Batch #: 957791

Date Analyzed: 12/16/2014 17:00 **Date Prepared:** 12/16/2014 **Analyst:** WRU

QC- Sample ID: 498961-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	7.12	8.79	21	20	F

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

BRL - Below Reporting Limit

CHAIN OF CUSTODY

Page 1 Of 2

XENCO LABORATORIES

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Service Center - San Antonio, Texas (210-509-3334)

www.xenco.com

Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

Xenco Quote #

Xenco Job # 408938

Client / Reporting Information

Company Name / Branch: CRA-Albuquerque

Company Address: ~~2135 S. Loop 250 West Midland~~

Email: ~~jschnable@craworld.com~~ bbocktisch@craworld.com

Phone No:

Project Contact: ~~John Schnable~~ Bernie Bocktisch CRA-Albuquerque

Samplers's Name: John Schnable

Project Information

Project Name/Number: 088210-08-*

Project Location: Lea County, NM

Invoice To:

PO Number:

Analytical Information

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	BTEX 8021B	TPH 8015B	Cl Chloride EPA 300	Field Comments
1	S-088210(08)-12/12/14-JS-SB1(10')	10'	12-12-14	1558	S										X	X	X	
2	S-088210(08)-12/12/14-JS-SB1(20')	20'	12-12-14	1605	S										X	X	X	
3	S-088210(08)-12/12/14-JS-SB1(30')	30'	12-12-14	1608	S										X	X	X	
4	S-088210(08)-12/12/14-JS-SB1(40')	40'	12-12-14	1612	S										X	X	X	
5	S-088210(08)-12/12/14-JS-SB1(50')	50'	12-12-14	1618	S										X	X	X	
6																		
7																		
8																		
9																		
10																		

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

CRA-Albuquerque
6121 Indian School Rd. NE
Albuquerque, NM 87110

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	John Schnable	12-15-14 1532		2	12/15/14 1532	
2	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3			3	4		4
4	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
5			5			✓ 3°

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negiotiated under a fully executed client contract.

CHAIN OF CUSTODY

Page 2 Of 2

XENCO LABORATORIES

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Service Center - San Antonio, Texas (210-509-3334)

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Odessa, Texas (432-563-1800)

Norcross, Georgia (770-449-8800)

Lakeland, Florida (863-646-8526)

Tampa, Florida (813-620-2000)

Xenco Quote #

Xenco Job # 498938

Client / Reporting Information

Company Name / Branch: CRA - Albuquerque

Company Address: 6121 Indian School Rd. NE Ste 200 Albuquerque, NM

Email: bbockisch@craworld.com

Phone No: 87110

Project Contact: Bernie Bockisch 505-884-0672

Samplers's Name: John Schnable

Project Information

Project Name/Number: 088210-08-*

Project Location: Lea County, NM

Invoice To: Bernie Bockisch

PO Number:

Analytical Information

BTEX 8021B

TPH 8015B

EPA 300 Chloride

Matrix Codes

A= Air
S = Soil/Sed/Solid
GW =Ground Water
DW = Drinking Water
P = Product
SW = Surface water
SL = Sludge
WW= Waste Water
W = Wipe
O = Oil

WW= Waste Water

No.	Field ID / Point of Collection	Collection: Sample Depth	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Field Comments
1	S-088210(08)-12/12/14-JS-SB1(60')	60'	12-12-14	16:54	S	1								X	
2															
3															
4															
5															
6															
7															
8															
9															
10															

Turnaround Time (Business days)

- [ ] Same Day TAT
- [x] 5 Day TAT
- [ ] Next Day EMERGENCY
- [ ] 7 Day TAT
- [ ] 2 Day EMERGENCY
- [ ] Contract TAT
- [ ] 3 Day EMERGENCY

TAT Starts Day received by Lab, if received by 3:00 pm

Data Deliverable Information

- [ ] Level II Std QC
- [ ] Level IV (Full Data Pkg /raw data)
- [ ] Level III Std QC+ Forms
- [ ] TRRP Level IV
- [ ] Level 3 (CLP Forms)
- [ ] UST / RG -411
- [ ] TRRP Checklist

Notes:

FED-EX / UPS: Tracking #

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by	Date Time	Received By	Relinquished By	Date Time	Received By
1	John Schnable	12/15/14		2	12/15/14 1532	
3		1532		4		
5				Custody Seal #	Preserved where applicable	On Ice: ✓

Cooler Temp. Thermo. Corr. Factor 3.8

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XENCO Laboratories and its affiliates, subcontractors and assigns XENCO's standard terms and conditions of service unless previously negiotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 12/15/2014 03:32:00 PM

Work Order #: 498938

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

Temperature Measuring device used :

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

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 12/15/2014

Checklist reviewed by: Kelsey Brooks Date: 12/15/2014