1. **Ensure BLM approval/concurrence.**
2. **Submit final C-141.**

August 20 2015 Reference No. 088210-13

Mr. Zane Kurtz
Sr. Safety and Environmental Representative
5509 Champions Dr.
Midland, TX 79706
VIA E-Mail: zane_kurtz@eogresources.com

Dear Mr. Kurtz:

Re: Remediation Summary Report
Vaca 24 Fed Com 3H (API #30-025-40530)
1RP-3610
EOG Resources
Site Location: Unit N, Sec. 24, T 25-S, R 33-E
(Lat 32.113754°, Long -103.530836°)
Lea County, New Mexico

Remediation activities were performed at the Vaca 24 Fed Com 3H site from April 14, 2015 to May 20, 2015. The Vaca 24 Fed Com 3H site (hereafter referred to as the "Site"), is located within Unit N, Section 24, Township 25 South, Range 33 East, in Lea County, New Mexico (see Figure 1).

The Site is an active well location operated by EOG Resources (EOG). According to EOG personnel, a release of an unknown quantity of produced water occurred on April 13, 2015 due to a ruptured seam on a six inch poly flow line (see Appendix A). Upon discovery, the line was repaired and a vacuum truck was mobilized to the Site and used to recover approximately 30 barrels of produced water. A C-141 Form was submitted to the New Mexico Oil Conservation Division (NMOCD) and remediation permit (RP) number 1RP-3610 was assigned.

1. Introduction

Site remediation activities consisted of an excavation event accompanied by the collection and analysis of soil samples. Excavation activities were performed by Watson Construction of Hobbs, New Mexico and observed by GHD (formerly Conestoga-Rovers and Associates), of Albuquerque, New Mexico. Soil samples were collected by CRA and analyzed by Xenco Laboratories (Xenco) of Odessa, Texas.

Based on information available from the Petroleum Recovery Research Center Pit Rule Mapping Portal, the depth to groundwater at the Site is indicated to be approximately 185 feet below ground surface (bgs). Additionally, there are no well head protection areas or surface water bodies within 1,000 feet of the Site. Therefore, the preliminary total ranking score is 0 (see table below).

Based on this score, the applicable NMOCD Site-specific Recommended Remediation Action Limits (RRALs) are 10 milligrams per kilogram (mg/kg) for benzene, 50 mg/kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX), 5,000 mg/kg for total petroleum hydrocarbons (TPH), and 500 mg/kg for chlorides.

New Mexico Oil Conservation Division Site Assessment	
Ranking Criteria	Score
Depth to Ground Water (> 100 feet bgs)	0
Wellhead Protection Area (> 1000 feet from water source, > 200 feet from domestic source)	0
Distance to Surface Body Water (> 1000 feet)	0
Ranking Criteria Total Score	**0***
*Because the ranking criteria total score is 0, NMOCD established RRALs are 10 ppm for benzene, 50 ppm for total BTEX, 5,000 ppm for TPH, and 500 ppm for chlorides1.	

1 NMOCD Guidelines for Remediation of Leaks, Spills and Releases, August 13, 1993

2. Remediation Activities

CRA conducted an initial soil sampling event on April 14, 2015 to assess for the presence of hydrocarbon and produced water impacts. Soil samples were collected at three feet bgs in four locations within the areas of concern using a hand auger. The samples were field screened for chloride and submitted to Xenco for laboratory analysis of BTEX by EPA Method 8021B, TPH gasoline range organics (TPH-GRO) and diesel range organics (TPH-DRO) by EPA Modified Method SW8015B, and chloride by EPA Method 300.

Laboratory analytical results from this event indicated that chloride concentrations exceeded the RRAL in all samples with results ranging from 7,230 mg/kg to 10,600 mg/kg. However, BTEX concentrations were not detected above the RRAL and TPH concentrations were not detected above the laboratory reporting limit (see Table 1 and Appendix B). Based on the laboratory results and visual observations, the impacted area requiring excavation appeared to be large.

A scope of work was discussed and agreed upon by Dr. Tomas Oberding with the NMOCD and Mr. Jim Amos with the Bureau of Land Management (BLM) via emails on May 4, 2015. The agreed upon scope of work included the following:

- Excavation of impacted soils to a depth of approximately four feet bgs;
- Placement of a 20 mil polyethylene liner in the bottom of the excavation;
- Backfilling of excavation with clean fill material; and
- Fertilizing and reseeding of the disturbed area with a BLM approved seed mix.

Excavation activities occurred from April 27 to May 20, 2015. Field screening of soils for chloride, TPH, and organic vapors were performed to guide excavation activities. Once field screening indicated soil concentrations were below the RRALs, soil samples were collected and submitted to Xenco and analyzed for BTEX, TPH-GRO, TPH-DRO, and chloride by the methods listed above.

Laboratory analytical results for the excavation samples indicated that TPH concentrations were not detected above the RRAL and BTEX concentrations were not detected above the laboratory reporting limit (see Table 1 and Appendix B). Chloride concentrations exceeded the RRAL in several locations throughout the excavation (see Figure 2). However, all soil samples collected at the perimeter of the excavation were below the chloride RRAL. Additionally, soil samples SO-088210-13-051215-SP-04 and SO-088210-13-051215-SP-05, collected from 20 feet and 22 feet bgs adjacent to the release point, returned chloride analytical results of 810 mg/kg and 18.6 mg/kg, respectively. Based on this, the vertical extent of chloride impacts in the area of the release appears to be approximately 21 feet bgs.

A 20 mil polyethylene liner was placed in the bottom of the excavation in order to minimize vertical migration of chloride in the soil. The liner was placed without rips or tears and sections were overlapped a minimum of 24 inches. The excavation was backfilled with clean fill obtained from the Dillon pit located approximately five miles from the Site and graded to the natural ground surface. An N-P-K fertilizer and BLM #2 seed mix was broadcasted over the disturbed area and tracked into the soil using the heavy equipment on Site.

A total of approximately 4,950 cubic yards of impacted soil were removed and transported to Sundance Services, Inc. of Eunice, New Mexico, for landfill disposal. Waste manifests are included as Appendix C.

3. Summary and Recommendations

Impacted soils at the Vaca 24 Federal Com 3H site were excavated to a depth of approximately four feet bgs. Confirmatory soil samples were collected from throughout the excavation (see Figure 2) for laboratory analysis. The final dimensions of the excavation were approximately 446 feet by 70 feet and a total of approximately 4,950 cubic yards of impacted soil were removed.

On behalf of EOG Resources, GHD requests that the Site be granted no further action status. Should you have any questions, or require additional information regarding this submittal, please feel free to contact myself or Bernie Bockisch at (505) 884-0672 or Bernard.Bockisch@ghd.com.

Sincerely,

GHD

Cale Kanack
Staff Scientist

Bernard Bockisch
Senior Project Manager

CK/mc/02

Encl. (4)

Figure 1 – Site Location Map

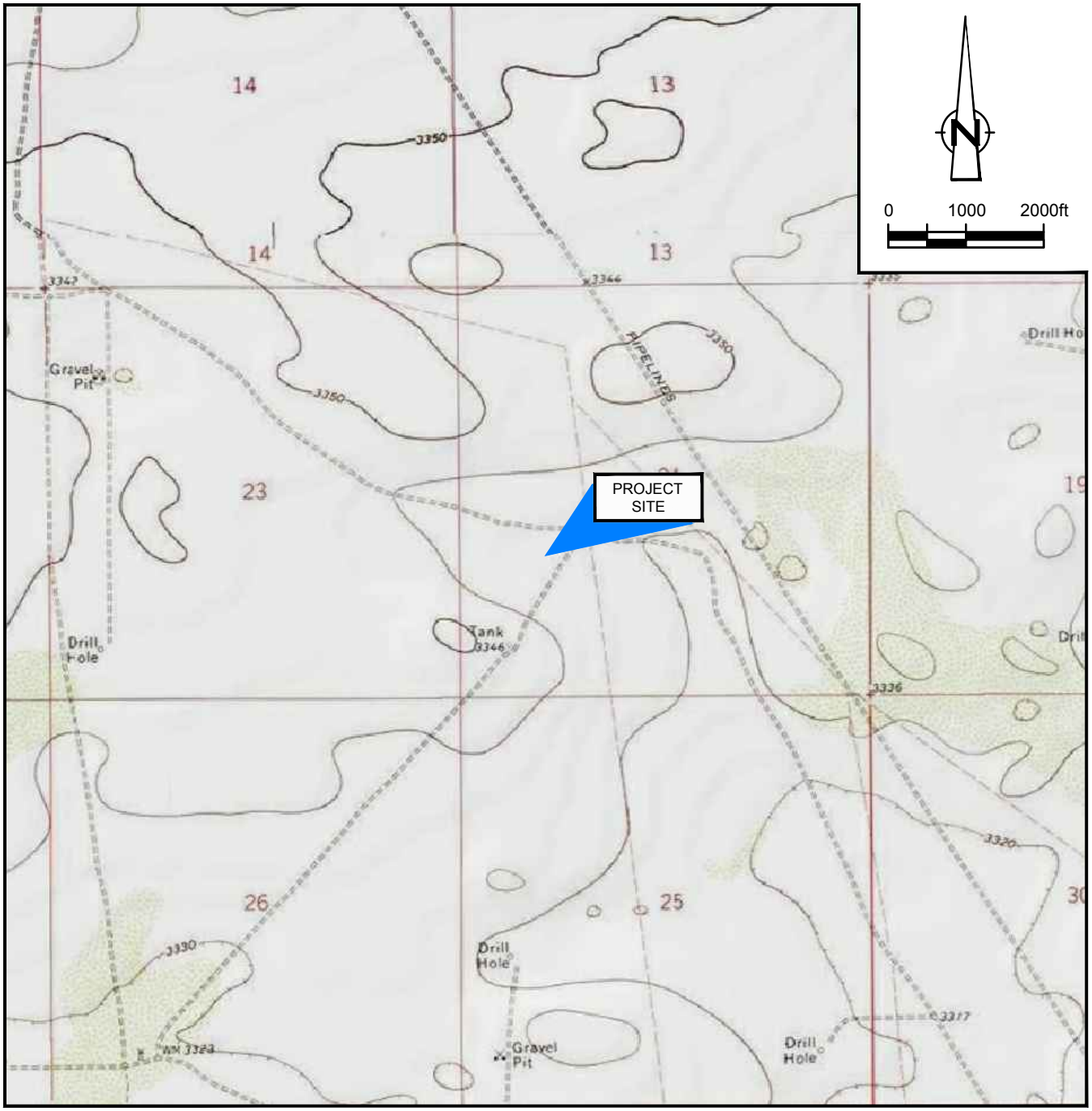
Figure 2 – Site Detail Map

Table 1 – Soil Analytical Results Summary

Appendix A – Photo Log

Appendix B – Laboratory Analytical Reports

Figures



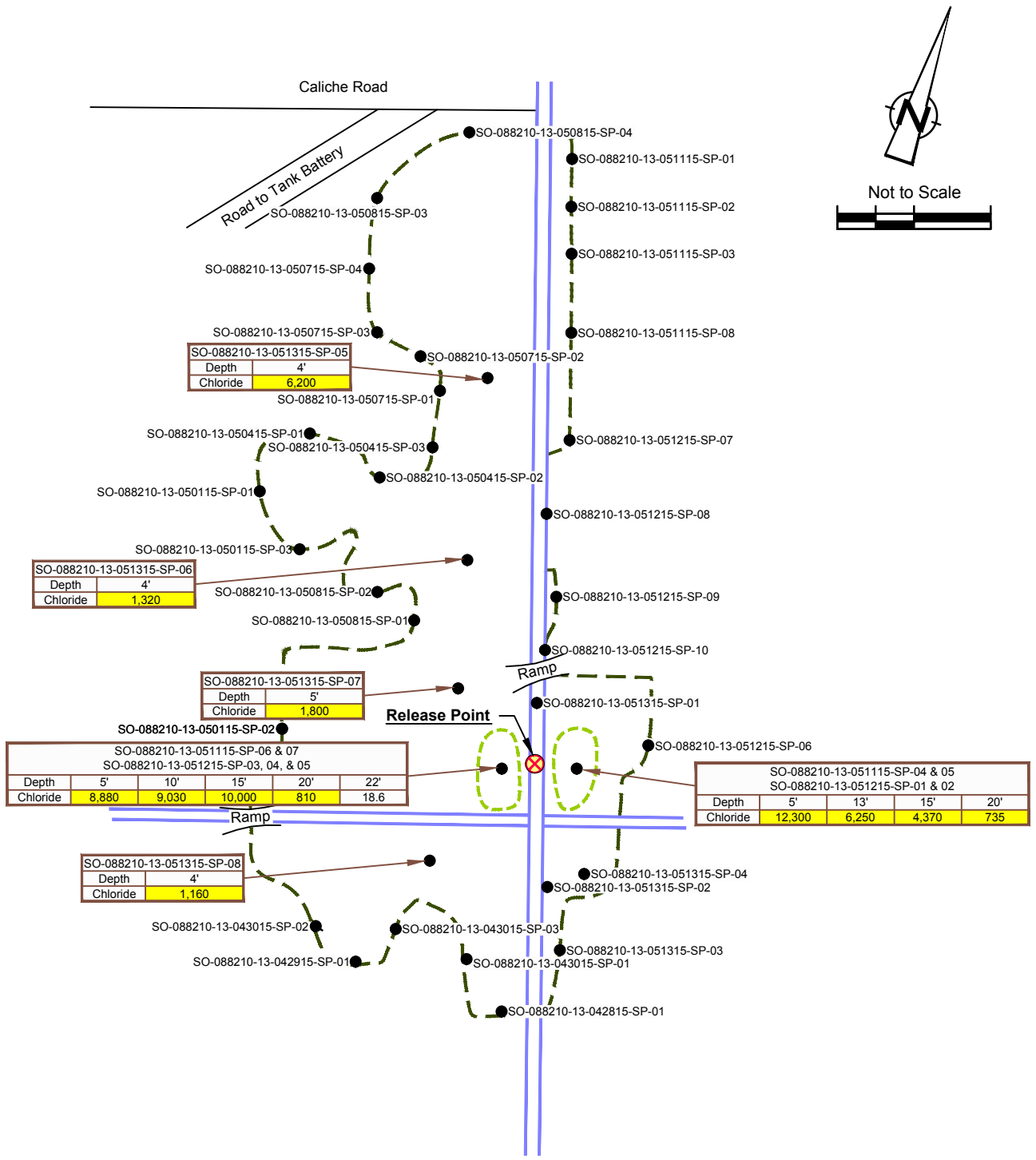
SOURCE: USGS 7.5 MINUTE QUAD
"PADUCA BREAKS EAST AND BELL LAKE, NEW MEXICO"

LAT/LONG: 32.1137° NORTH, 103.5308° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

Figure 1

SITE LOCATION MAP
VACA 24 FEDERAL COM #3H
LEA COUNTY, NEW MEXICO
EOG Resources

088210-13(000)GN-DL001 JUN 8/2015



NOTES:

1. All results are in mg/kg.
2. Highlighted cells indicate exceedance.

LEGEND

- Soil Sample Location
- Excavation Boundary
- Above Ground Flow Line

Figure 2

SITE DETAIL MAP
VACA 24 FEDERAL COM #3H
LEA COUNTY, NEW MEXICO
EOG Resources

Tables

Table 1
Soil Analytical Data Summary
Vaca 24 Fed Com 3H
Lea County, New Mexico

Sample ID	Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH			Chlorides (mg/kg)
								GRO (mg/kg)	DRO (mg/kg)	Total TPH (mg/kg)	
NMOCD RRALs (Total Ranking Score = 0)			***10***	***---***	***---***	***---***	***50***	***---***	***---***	***5000***	***500***
SO-088210-041415-SP-01*	3.0	4/14/15	**0.158**	**0.092**	< 0.001	< 0.001	**0.25**	< 17.9	< 17.9	< 17.9	**10600**
SO-088210-041415-SP-02*	3.0	4/14/15	**0.039**	**0.0326**	< 0.001	< 0.001	**0.0716**	< 17.3	< 17.3	< 17.3	**8940**
SO-088210-041415-SP-03*	3.0	4/14/15	**0.0209**	**0.0221**	< 0.001	< 0.001	**0.043**	< 17.6	< 17.6	< 17.6	**10300**
SO-088210-041415-SP-04*	3.0	4/14/15	**0.0145**	**0.00793**	< 0.001	< 0.001	**0.0224**	< 17.6	< 17.6	< 17.6	**7230**
SO-088210-13-042815-SP-01	2.5	4/28/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.1	< 16.1	< 16.1	**28.8**
SO-088210-13-042915-SP-01	3.0	4/29/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.9	< 16.9	< 16.9	**3.54**
SO-088210-13-043115-SP-01	3.0	4/30/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.9	< 16.9	< 16.9	**97.3**
SO-088210-13-043015-SP-02	3.0	4/30/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.6	< 17.6	< 17.6	**131**
SO-088210-13-043015-SP-03	3.0	4/30/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.4	< 16.4	< 16.4	**223**
SO-088210-13-050115-SP-01	3.5	5/1/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.3	< 16.3	< 16.3	**4.89**
SO-088210-13-050115-SP-02	2.5	5/1/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.3	< 16.3	< 16.3	**11.3**
SO-088210-13-050115-SP-03	3.0	5/1/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.9	< 15.9	< 15.9	**3.78**
SO-088210-13-050415-SP-01	3.3	5/4/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.6	< 16.6	< 16.6	**6.04**
SO-088210-13-050415-SP-02	3.0	5/4/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.1	< 17.1	< 17.1	**12.1**
SO-088210-13-050415-SP-03	3.3	5/4/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.6	< 16.6	< 16.6	< 2.22
SO-088210-13-050715-SP-01	3.5	5/7/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.9	< 15.9	< 15.9	**191**
SO-088210-13-050715-SP-02	3.3	5/7/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.5	< 16.5	< 16.5	**13.3**
SO-088210-13-050715-SP-03	3.3	5/7/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.5	< 15.5	< 15.5	**2.62**
SO-088210-13-050715-SP-04	3.0	5/7/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.6	< 15.6	< 15.6	**15.6**
SO-088210-13-050815-SP-01	3.5	5/8/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.5	< 15.5	< 15.5	**5.07**
SO-088210-13-050815-SP-02	3.5	5/8/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.7	< 15.7	< 15.7	**6.66**
SO-088210-13-050815-SP-03	3.5	5/8/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.3	< 16.3	< 16.3	**51**
SO-088210-13-050815-SP-04	4.0	5/8/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.4	< 17.4	< 17.4	**31.8**
SO-088210-13-051115-SP-01	3.0	5/11/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.7	< 15.7	< 15.7	**24.3**
SO-088210-13-051115-SP-02	3.0	5/11/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.8	< 15.8	< 15.8	**2.36**
SO-088210-13-051115-SP-03	2.0	5/11/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.6	< 15.6	< 15.6	**6.51**
SO-088210-13-051115-SP-04	5.0	5/11/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 18.0	< 18.0	< 18.0	**12300**
SO-088210-13-051115-SP-05	13.0	5/11/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.7	< 16.7	< 16.7	**6250**
SO-088210-13-051115-SP-06	5.0	5/11/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.6	**117**	**117**	**8880**
SO-088210-13-051115-SP-07	10.0	5/11/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.3	**19.5**	**19.5**	**9030**
SO-088210-13-051115-SP-08	2.0	5/11/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.7	< 15.7	< 15.7	**13.1**
SO-088210-13-051215-SP-01	20.0	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.5	< 15.5	< 15.5	**735**
SO-088210-13-051215-SP-02	15.0	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.9	< 15.9	< 15.9	**4370**
SO-088210-13-051215-SP-03	15.0	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.1	< 17.1	< 17.1	**10000**
SO-088210-13-051215-SP-04	20.0	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.9	< 15.9	< 15.9	**810**
SO-088210-13-051215-SP-05	22.0	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.2	< 15.2	< 15.2	**18.6**
SO-088210-13-051215-SP-06	2.5	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.6	< 15.6	< 15.6	**31.9**
SO-088210-13-051215-SP-07	2.5	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.7	< 15.7	< 15.7	**11.7**
SO-088210-13-051215-SP-08	2.5	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.4	< 15.4	< 15.4	**2.87**
SO-088210-13-051215-SP-09	2.5	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.6	< 15.6	< 15.6	< 2.09
SO-088210-13-051215-SP-10	2.5	5/12/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.5	< 15.5	< 15.5	**2.6**
SO-088210-13-051315-SP-01	2.0	5/13/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.3	< 16.3	< 16.3	**3.6**
SO-088210-13-051315-SP-02	2.5	5/13/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.1	< 16.1	< 16.1	**9.52**
SO-088210-13-051315-SP-03	2.5	5/13/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 15.7	< 15.7	< 15.7	**10.9**
SO-088210-13-051315-SP-04	2.5	5/13/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.3	< 16.3	< 16.3	**5.85**
SO-088210-13-051315-SP-05	4.0	5/13/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.5	< 16.5	< 16.5	**6200**
SO-088210-13-051315-SP-06	4.0	5/13/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 16.7	< 16.7	< 16.7	**1320**
SO-088210-13-051315-SP-07	5.0	5/13/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.3	< 17.3	< 17.3	**1800**
SO-088210-13-051315-SP-08	4.0	5/13/15	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 17.3	< 17.3	< 17.3	**1160**

Notes:
bgs = below ground surface
TPH = total petroleum hydrocarbons
NMOCD = New Mexico Oil Conservation Division
RRALs = Recommended Remediation Action Limits
Bold = Exceeds laboratory detection limits
Highlighted = Exceeds NMOCD RRALs
* = Initial soil sample collected prior to excavation activities

Appendix A
Photo Log

Photo 1 – Impacted area with previous excavation and stockpile. Photo taken facing northeast.

Photo 2 – Impacted area with previous excavations and stockpiles. Photo taken facing southeast.

Photo 3 – Northern portion of excavation. Photo taken facing north.

Photo 4 – Southern portion of excavation. Photo taken facing south.

Photo 5 – Completed excavation with liner being placed in southern end. Photo taken facing south.

Photo 6 – Liner and backfill being placed in the excavation. Photo taken facing southeast.

Photo 7 – Excavation after liner placement. Photo taken facing north.

Photo 8 – Disturbed area after backfilling and grading. Photo taken facing north.

Photo 9 – Disturbed area after backfilling and grading. Photo taken facing south.

Appendix B
Laboratory Analytical Reports

Analytical Report 506111

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch

Vaca 24 PolyLine

088210

21-APR-15

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)

21-APR-15

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

Albuquerque, NM 87110

Reference: XENCO Report No(s): **506111**
Vaca 24 PolyLine
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) 506111. 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. 506111 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 506111

Conestoga-Rovers & Associates-Albuquerque, NM, Albuqu

Vaca 24 PolyLine

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SO-088210-041415-SP-01	S	04-14-15 14:46	- 3 ft	506111-001
SO-088210-041415-SP-02	S	04-14-15 15:19	- 3 ft	506111-002
SO-088210-041415-SP-03	S	04-14-15 15:36	- 3 ft	506111-003
SO-088210-041415-SP-04	S	04-14-15 15:52	- 3 ft	506111-004

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 506111

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

Project Name: Vaca 24 PolyLine

Project Id: 088210
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Thu Apr-16-15 10:00 am
Report Date: 21-APR-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	506111-001		506111-002		506111-003		506111-004					
	Field Id:	SO-088210-041415-SP-01		SO-088210-041415-SP-02		SO-088210-041415-SP-03		SO-088210-041415-SP-04					
	Depth:	3 ft		3 ft		3 ft		3 ft					
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	Apr-14-15 14:46		Apr-14-15 15:19		Apr-14-15 15:36		Apr-14-15 15:52					
BTEX by EPA 8021B	***Extracted:***	Apr-16-15 14:00		Apr-16-15 14:00		Apr-16-15 14:00		Apr-16-15 14:00					
	Analyzed:	Apr-16-15 17:41		Apr-16-15 18:00		Apr-16-15 18:18		Apr-16-15 18:34					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		0.158	0.00119	0.0390	0.00116	0.0209	0.00117	0.0145	0.00117				
Toluene		0.0920	0.00238	0.0326	0.00231	0.0221	0.00235	0.00793	0.00234				
Ethylbenzene		ND	0.00119	ND	0.00116	ND	0.00117	ND	0.00117				
m,p-Xylenes		ND	0.00238	ND	0.00231	ND	0.00235	ND	0.00234				
o-Xylene		ND	0.00119	ND	0.00116	ND	0.00117	ND	0.00117				
Total Xylenes		ND	0.00119	ND	0.00116	ND	0.00117	ND	0.00117				
Total BTEX		0.250	0.00119	0.0716	0.00116	0.0430	0.00117	0.0224	0.00117				
Inorganic Anions by EPA 300/300.1	***Extracted:***	Apr-17-15 14:00		Apr-17-15 14:00		Apr-17-15 14:00		Apr-17-15 14:00					
	Analyzed:	Apr-17-15 18:26		Apr-17-15 19:11		Apr-17-15 19:34		Apr-17-15 19:56					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		10600	479	8940	463	10300	471	7230	471				
Percent Moisture	***Extracted:***												
	Analyzed:	Apr-16-15 17:15		Apr-16-15 17:15		Apr-16-15 17:15		Apr-16-15 17:15					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		16.4	1.00	13.6	1.00	15.1	1.00	15.0	1.00				
TPH By SW8015B Mod	***Extracted:***	Apr-16-15 14:00		Apr-16-15 14:00		Apr-16-15 14:00		Apr-16-15 14:00					
	Analyzed:	Apr-16-15 22:16		Apr-16-15 22:38		Apr-16-15 23:00		Apr-16-15 23:22					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	17.9	ND	17.3	ND	17.6	ND	17.6				
C10-C28 Diesel Range Hydrocarbons		ND	17.9	ND	17.3	ND	17.6	ND	17.6				
Total TPH		ND	17.9	ND	17.3	ND	17.6	ND	17.6				

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: Vaca 24 PolyLine

Work Orders : 506111,

Project ID: 088210

Lab Batch #: 966263 **Sample:** 506111-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 17:41

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 966263 **Sample:** 506111-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 18:00

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0326	0.0300	109	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 966263 **Sample:** 506111-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 18:18

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0312	0.0300	104	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	80-120	

Lab Batch #: 966263 **Sample:** 506111-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 18:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0308	0.0300	103	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 966262 **Sample:** 506111-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 22:16

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.0	99.6	86	70-135	
o-Terphenyl	84.2	99.6	85	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: Vaca 24 PolyLine

Work Orders : 506111, **Project ID:** 088210

Lab Batch #: 966262 **Sample:** 506111-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 22:38

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	88.0	99.9	88	70-135	
o-Terphenyl	90.0	99.9	90	70-135	

Lab Batch #: 966262 **Sample:** 506111-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 23:00

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.0	99.8	89	70-135	
o-Terphenyl	90.9	99.8	91	70-135	

Lab Batch #: 966262 **Sample:** 506111-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 23:22

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	87.6	99.8	88	70-135	
o-Terphenyl	87.8	99.8	88	70-135	

Lab Batch #: 966263 **Sample:** 691391-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/16/15 15:44

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	0.0299	0.0300	100	80-120	

Lab Batch #: 966262 **Sample:** 691390-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/16/15 20:04

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.7	100	85	70-135	
o-Terphenyl	85.5	100	86	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: Vaca 24 PolyLine

Work Orders : 506111, **Project ID:** 088210

Lab Batch #: 966263 **Sample:** 691391-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/16/15 16:01

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	0.0296	0.0300	99	80-120	

Lab Batch #: 966262 **Sample:** 691390-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/16/15 20:26

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	97.8	100	98	70-135	
o-Terphenyl	91.7	100	92	70-135	

Lab Batch #: 966263 **Sample:** 691391-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/16/15 16:17

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0285	0.0300	95	80-120	

Lab Batch #: 966262 **Sample:** 691390-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 04/16/15 20:48

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	100	101	70-135	
o-Terphenyl	98.8	100	99	70-135	

Lab Batch #: 966263 **Sample:** 506109-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 16:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0350	0.0300	117	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: Vaca 24 PolyLine

Work Orders : 506111, **Project ID:** 088210

Lab Batch #: 966262 **Sample:** 506109-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 21:32

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.7	101	70-135	
o-Terphenyl	98.6	99.7	99	70-135	

Lab Batch #: 966263 **Sample:** 506109-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 16:51

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0297	0.0300	99	80-120	
4-Bromofluorobenzene	0.0296	0.0300	99	80-120	

Lab Batch #: 966262 **Sample:** 506109-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 04/16/15 21:54

SURROGATE RECOVERY STUDY

TPH By SW8015B 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	115	99.8	115	70-135	

* Surrogate outside of Laboratory QC limits
** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

BS / BSD Recoveries

Project Name: Vaca 24 PolyLine

Work Order #: 506111 **Project ID:** 088210

Analyst: ARM **Date Prepared:** 04/16/2015 **Date Analyzed:** 04/16/2015

Lab Batch ID: 966263 **Sample:** 691391-1-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	0.0980	98	0.100	0.0959	96	2	70-130	35	
Toluene	<0.00200	0.100	0.101	101	0.100	0.0983	98	3	70-130	35	
Ethylbenzene	<0.00100	0.100	0.103	103	0.100	0.101	101	2	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.208	104	0.200	0.203	102	2	70-135	35	
o-Xylene	<0.00100	0.100	0.102	102	0.100	0.0998	100	2	71-133	35	

Analyst: JUM **Date Prepared:** 04/17/2015 **Date Analyzed:** 04/17/2015

Lab Batch ID: 966391 **Sample:** 691419-1-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	53.5	107	50.0	53.7	107	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: Vaca 24 PolyLine

Work Order #: 506111 **Project ID:** 088210

Analyst: ARM **Date Prepared:** 04/16/2015 **Date Analyzed:** 04/16/2015

Lab Batch ID: 966262 **Sample:** 691390-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	957	96	1000	926	93	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	959	96	1000	1020	102	6	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: Vaca 24 PolyLine

Work Order #: 506111

Lab Batch #: 966391 **Project ID:** 088210

Date Analyzed: 04/17/2015 **Date Prepared:** 04/17/2015 **Analyst:** JUM

QC- Sample ID: 506111-001 S **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Inorganic Anions by EPA 300 **Analytes**	**Parent Sample Result [A]**	**Spike Added [B]**	**Spiked Sample Result [C]**	**%R [D]**	**Control Limits %R**	**Flag**
Chloride	10600	12000	24300	114	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: Vaca 24 PolyLine

Work Order # : 506111 **Project ID:** 088210

Lab Batch ID: 966263 **QC- Sample ID:** 506109-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/16/2015 **Date Prepared:** 04/16/2015 **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	<0.00128	0.128	0.104	81	0.128	0.115	90	10	70-130	35	
Toluene	<0.00255	0.128	0.115	90	0.128	0.116	91	1	70-130	35	
Ethylbenzene	<0.00128	0.128	0.123	96	0.128	0.117	91	5	71-129	35	
m,p-Xylenes	<0.00255	0.255	0.266	104	0.255	0.235	92	12	70-135	35	
o-Xylene	<0.00128	0.128	0.133	104	0.128	0.116	91	14	71-133	35	

Lab Batch ID: 966262 **QC- Sample ID:** 506109-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 04/16/2015 **Date Prepared:** 04/16/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<19.2	1280	1430	112	1280	1440	113	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<19.2	1280	1300	102	1280	1510	118	15	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: Vaca 24 PolyLine

Work Order #: 506111

Lab Batch #: 966270 **Project ID:** 088210

Date Analyzed: 04/16/2015 17:15 **Date Prepared:** 04/16/2015 **Analyst:** WRU

QC- Sample ID: 506109-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Percent Moisture **Analyte**	**Parent Sample Result [A]**	**Sample Duplicate Result [B]**	**RPD**	**Control Limits %RPD**	**Flag**
Percent Moisture	22.1	21.4	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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Norcross, Georgia (770-449-8800)
Lakeland, Florida (863-646-8526)
Tampa, Florida (813-620-2000)

Xenco Quote #
Xenco Job # 506111

Client / Reporting Information

Company Name / Branch: Conestoga Rovers + Assoc.
Company Address: 1621 Indian School Rd NE, Ste 200, ABQ, NM 87110
Email: bbockisch@craworld.com Phone No: 505-280-0572
Project Contact: ~~bbockisch~~ Bernie Bockisch
Samplers's Name: Steve Perez

Project Information

Project Name/Number: Vaca 24 Poly Line / 088210
Project Location: Lea County, NM
Invoice To:
PO Number:

Analytical Information

Chloride 300.0
BTEX 8021
TPH 8015B GRO/DRO

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	Date	Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MEOH	NONE	Chloride 300.0	BTEX 8021	TPH 8015B GRO/DRO	Field Comments
1	SD-088210-041415-SP-01	3ft	4/14/15	1446	S	1									X	X	X	
2	SD-088210-041415-SP-02	↓	↓	1519	↓	↓									↓	↓	↓	
3	SD-088210-041415-SP-03	↓	↓	1536	↓	↓									↓	↓	↓	
4	SD-088210-041415-SP-04	↓	↓	1552	↓	↓									↓	↓	↓	
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:

~~Please run immediately if possible~~
~~Need results ASAP~~ Disregard note

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	Steve Perez	4/15/15 3:30	1	2	4/16/15	800
	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3			3	4		4
	Relinquished by:	Date Time:	Received By:	Custody Seal #	Preserved where applicable	On Ice / Cooler Temp. / Thermo. Corr. Factor
5			5			X / 2.5

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 negotiated under a fully executed client contract.

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 04/16/2015 10:00:00 AM

Work Order #: 506111

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

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.5
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#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: 04/16/2015

Checklist reviewed by: Julian Martinez Date: 04/16/2015

Analytical Report 507282

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch

Vaca 24 Federal Com #3H

088210/13

07-MAY-15

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-MAY-15

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

Albuquerque, NM 87110

Reference: XENCO Report No(s): **507282**
Vaca 24 Federal Com #3H
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) 507282. 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. 507282 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 507282

Conestoga-Rovers & Associates-Albuquerque, NM, Albuqu

Vaca 24 Federal Com #3H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SO-088210-13-042815-SP-01	S	04-28-15 15:49		507282-001
SO-088210-13-042915-SP-01	S	04-29-15 15:49		507282-002
SO-088210-13-043015-SP-01	S	04-29-15 13:28		507282-003
SO-088210-13-043015-SP-02	S	04-30-15 15:35		507282-004
SO-088210-13-043015-SP-03	S	04-30-15 15:38		507282-005
SO-088210-13-050115-SP-01	S	04-30-15 16:50		507282-006
SO-088210-13-050115-SP-02	S	05-01-15 13:10		507282-007
SO-088210-13-050115-SP-03	S	05-01-15 15:00		507282-008
SO-088210-13-050415-SP-01	S	05-04-15 12:45		507282-009
SO-088210-13-050415-SP-02	S	05-04-15 13:30		507282-010
SO-088210-13-050415-SP-03	S	05-04-15 14:50		507282-011

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 507282

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Wed May-06-15 10:14 am
Report Date: 07-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	507282-001		507282-002		507282-003		507282-004		507282-005		507282-006	
	Field Id:	SO-088210-13-042815-SP-05		O-088210-13-042915-SP-05		O-088210-13-043015-SP-05		O-088210-13-043015-SP-05		O-088210-13-043015-SP-05		O-088210-13-050115-SP-0	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Apr-28-15 15:49		Apr-29-15 15:49		Apr-29-15 13:28		Apr-30-15 15:35		Apr-30-15 15:38		Apr-30-15 16:50	
BTEX by EPA 8021B	*Extracted:*	May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00	
	Analyzed:	May-07-15 02:16		May-07-15 02:32		May-07-15 02:47		May-07-15 03:04		May-07-15 03:20		May-07-15 03:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00107	ND	0.00112	ND	0.00113	ND	0.00117	ND	0.00109	ND	0.00108
Toluene		ND	0.00214	ND	0.00225	ND	0.00225	ND	0.00235	ND	0.00217	ND	0.00216
Ethylbenzene		ND	0.00107	ND	0.00112	ND	0.00113	ND	0.00117	ND	0.00109	ND	0.00108
m,p-Xylenes		ND	0.00214	ND	0.00225	ND	0.00225	ND	0.00235	ND	0.00217	ND	0.00216
o-Xylene		ND	0.00107	ND	0.00112	ND	0.00113	ND	0.00117	ND	0.00109	ND	0.00108
Total Xylenes		ND	0.00107	ND	0.00112	ND	0.00113	ND	0.00117	ND	0.00109	ND	0.00108
Total BTEX		ND	0.00107	ND	0.00112	ND	0.00113	ND	0.00117	ND	0.00109	ND	0.00108
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-06-15 15:30		May-06-15 15:30		May-06-15 15:30		May-06-15 15:30		May-06-15 15:30		May-06-15 15:30	
	Analyzed:	May-06-15 20:52		May-06-15 21:38		May-06-15 22:00		May-06-15 22:23		May-06-15 22:46		May-06-15 23:08	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		28.8	2.15	3.54	2.26	97.3	11.3	131	11.8	223	21.9	4.89	2.18
Percent Moisture	*Extracted:*												
	Analyzed:	May-07-15 12:13		May-07-15 12:13		May-07-15 12:13		May-07-15 12:13		May-07-15 12:13		May-07-15 12:13	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		6.80	1.00	11.5	1.00	11.6	1.00	15.2	1.00	8.65	1.00	8.05	1.00
TPH By SW8015B Mod	*Extracted:*	May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00	
	Analyzed:	May-06-15 20:26		May-06-15 21:28		May-06-15 21:49		May-06-15 22:09		May-06-15 22:30		May-06-15 22:52	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	16.1	ND	16.9	ND	16.9	ND	17.6	ND	16.4	ND	16.3
C10-C28 Diesel Range Hydrocarbons		ND	16.1	ND	16.9	ND	16.9	ND	17.6	ND	16.4	ND	16.3
Total TPH		ND	16.1	ND	16.9	ND	16.9	ND	17.6	ND	16.4	ND	16.3

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 507282

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Wed May-06-15 10:14 am
Report Date: 07-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested											
	Lab Id:	507282-007		507282-008		507282-009		507282-010		507282-011	
	Field Id:	SO-088210-13-050115-SP-05		O-088210-13-050115-SP-05		O-088210-13-050415-SP-05		O-088210-13-050415-SP-05		O-088210-13-050415-SP-0	
	Depth:										
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-01-15 13:10		May-01-15 15:00		May-04-15 12:45		May-04-15 13:30		May-04-15 14:50	
BTEX by EPA 8021B	*Extracted:*	May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00	
	Analyzed:	May-07-15 03:53		May-07-15 04:10		May-07-15 04:26		May-07-15 04:43		May-07-15 04:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00108	ND	0.00106	ND	0.00111	ND	0.00114	ND	0.00110
Toluene		ND	0.00216	ND	0.00212	ND	0.00222	ND	0.00228	ND	0.00220
Ethylbenzene		ND	0.00108	ND	0.00106	ND	0.00111	ND	0.00114	ND	0.00110
m,p-Xylenes		ND	0.00216	ND	0.00212	ND	0.00222	ND	0.00228	ND	0.00220
o-Xylene		ND	0.00108	ND	0.00106	ND	0.00111	ND	0.00114	ND	0.00110
Total Xylenes		ND	0.00108	ND	0.00106	ND	0.00111	ND	0.00114	ND	0.00110
Total BTEX		ND	0.00108	ND	0.00106	ND	0.00111	ND	0.00114	ND	0.00110
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-06-15 15:30		May-06-15 15:30		May-06-15 15:30		May-06-15 15:30		May-06-15 15:30	
	Analyzed:	May-07-15 00:16		May-07-15 00:39		May-07-15 01:02		May-07-15 01:24		May-07-15 01:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		11.3	2.18	3.78	2.12	6.04	2.22	12.1	2.29	ND	2.22
Percent Moisture	*Extracted:*										
	Analyzed:	May-07-15 12:13		May-07-15 12:13		May-07-15 12:13		May-07-15 12:13		May-07-15 12:13	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.09	1.00	5.87	1.00	9.91	1.00	12.5	1.00	9.80	1.00
TPH By SW8015B Mod	*Extracted:*	May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00		May-06-15 17:00	
	Analyzed:	May-06-15 23:13		May-06-15 23:33		May-06-15 23:55		May-07-15 00:15		May-07-15 01:17	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	16.3	ND	15.9	ND	16.6	ND	17.1	ND	16.6
C10-C28 Diesel Range Hydrocarbons		ND	16.3	ND	15.9	ND	16.6	ND	17.1	ND	16.6
Total TPH		ND	16.3	ND	15.9	ND	16.6	ND	17.1	ND	16.6

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: Vaca 24 Federal Com #3H

Work Orders : 507282,

Project ID: 088210/13

Lab Batch #: 967570 **Sample:** 507282-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 20:26

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	108	99.8	108	70-135	
o-Terphenyl	51.0	49.9	102	70-135	

Lab Batch #: 967570 **Sample:** 507282-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 21:28

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	99.9	99.6	100	70-135	
o-Terphenyl	45.6	49.8	92	70-135	

Lab Batch #: 967570 **Sample:** 507282-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 21:49

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.1	99.6	96	70-135	
o-Terphenyl	44.3	49.8	89	70-135	

Lab Batch #: 967570 **Sample:** 507282-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 22:09

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.4	99.8	97	70-135	
o-Terphenyl	43.6	49.9	87	70-135	

Lab Batch #: 967570 **Sample:** 507282-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 22:30

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.5	99.8	99	70-135	
o-Terphenyl	44.6	49.9	89	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: Vaca 24 Federal Com #3H

Work Orders : 507282,

Project ID: 088210/13

Lab Batch #: 967570 **Sample:** 507282-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 22:52

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	99.8	111	70-135	
o-Terphenyl	50.3	49.9	101	70-135	

Lab Batch #: 967570 **Sample:** 507282-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 23:13

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	48.1	50.0	96	70-135	

Lab Batch #: 967570 **Sample:** 507282-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 23:33

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	102	99.7	102	70-135	
o-Terphenyl	46.5	49.9	93	70-135	

Lab Batch #: 967570 **Sample:** 507282-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 23:55

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.7	107	70-135	
o-Terphenyl	49.4	49.9	99	70-135	

Lab Batch #: 967570 **Sample:** 507282-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 00:15

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.8	103	70-135	
o-Terphenyl	46.7	49.9	94	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: Vaca 24 Federal Com #3H

Work Orders : 507282,

Project ID: 088210/13

Lab Batch #: 967570 **Sample:** 507282-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 01:17

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	96.3	99.9	96	70-135	
o-Terphenyl	43.0	50.0	86	70-135	

Lab Batch #: 967568 **Sample:** 507282-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 02:16

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	0.0311	0.0300	104	80-120	

Lab Batch #: 967568 **Sample:** 507282-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 02:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 967568 **Sample:** 507282-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 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	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 967568 **Sample:** 507282-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 03:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vaca 24 Federal Com #3H

Work Orders : 507282,

Project ID: 088210/13

Lab Batch #: 967568 **Sample:** 507282-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 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	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 967568 **Sample:** 507282-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 03:37

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0288	0.0300	96	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 967568 **Sample:** 507282-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 03:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0289	0.0300	96	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 967568 **Sample:** 507282-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 04:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 967568 **Sample:** 507282-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 04:26

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	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: Vaca 24 Federal Com #3H

Work Orders : 507282,

Project ID: 088210/13

Lab Batch #: 967568 **Sample:** 507282-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 04:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0284	0.0300	95	80-120	
4-Bromofluorobenzene	0.0300	0.0300	100	80-120	

Lab Batch #: 967568 **Sample:** 507282-011 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 04:59

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0294	0.0300	98	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

Lab Batch #: 967570 **Sample:** 692216-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/06/15 19:23

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	100	103	70-135	
o-Terphenyl	50.6	50.0	101	70-135	

Lab Batch #: 967568 **Sample:** 692214-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/07/15 00:38

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 967570 **Sample:** 692216-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/06/15 19:44

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	100	118	70-135	
o-Terphenyl	58.7	50.0	117	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: Vaca 24 Federal Com #3H

Work Orders : 507282,

Project ID: 088210/13

Lab Batch #: 967568 **Sample:** 692214-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/07/15 00:55

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 967570 **Sample:** 692216-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/06/15 20:05

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	59.7	50.0	119	70-135	

Lab Batch #: 967568 **Sample:** 692214-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/07/15 01:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0304	0.0300	101	80-120	

Lab Batch #: 967570 **Sample:** 507282-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 20:47

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	99.7	125	70-135	
o-Terphenyl	61.8	49.9	124	70-135	

Lab Batch #: 967568 **Sample:** 507282-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 01:26

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	0.0316	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: Vaca 24 Federal Com #3H

Work Orders : 507282,

Project ID: 088210/13

Lab Batch #: 967570 **Sample:** 507282-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/06/15 21:07

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	99.9	122	70-135	
o-Terphenyl	58.5	50.0	117	70-135	

Lab Batch #: 967568 **Sample:** 507282-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/07/15 01:43

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0310	0.0300	103	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	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: Vaca 24 Federal Com #3H

Work Order #: 507282 **Project ID:** 088210/13

Analyst: ARM **Date Prepared:** 05/06/2015 **Date Analyzed:** 05/07/2015

Lab Batch ID: 967568 **Sample:** 692214-1-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	0.0971	97	0.100	0.0991	99	2	70-130	35	
Toluene	<0.00200	0.100	0.101	101	0.100	0.103	103	2	70-130	35	
Ethylbenzene	<0.00100	0.100	0.105	105	0.100	0.108	108	3	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.212	106	0.200	0.216	108	2	70-135	35	
o-Xylene	<0.00100	0.100	0.105	105	0.100	0.107	107	2	71-133	35	

Analyst: JUM **Date Prepared:** 05/06/2015 **Date Analyzed:** 05/06/2015

Lab Batch ID: 967583 **Sample:** 692206-1-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	50.4	101	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: Vaca 24 Federal Com #3H

Work Order #: 507282 **Project ID:** 088210/13

Analyst: ARM **Date Prepared:** 05/06/2015 **Date Analyzed:** 05/06/2015

Lab Batch ID: 967570 **Sample:** 692216-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	928	93	1000	972	97	5	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	998	100	1000	1030	103	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: Vaca 24 Federal Com #3H

Work Order #: 507282

Lab Batch #: 967583 **Project ID:** 088210/13

Date Analyzed: 05/06/2015 **Date Prepared:** 05/06/2015 **Analyst:** JUM

QC- Sample ID: 507282-001 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	28.8	53.6	76.4	89	80-120	

Lab Batch #: 967583

Date Analyzed: 05/07/2015 **Date Prepared:** 05/06/2015 **Analyst:** JUM

QC- Sample ID: 507282-011 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	<2.22	55.4	60.5	109	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: Vaca 24 Federal Com #3H

Work Order # : 507282 **Project ID:** 088210/13

Lab Batch ID: 967568 **QC- Sample ID:** 507282-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/07/2015 **Date Prepared:** 05/06/2015 **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	0.101	94	0.107	0.101	94	0	70-130	35	
Toluene	<0.00215	0.107	0.105	98	0.107	0.105	98	0	70-130	35	
Ethylbenzene	<0.00107	0.107	0.109	102	0.107	0.109	102	0	71-129	35	
m,p-Xylenes	<0.00215	0.215	0.217	101	0.215	0.218	101	0	70-135	35	
o-Xylene	<0.00107	0.107	0.108	101	0.107	0.108	101	0	71-133	35	

Lab Batch ID: 967570 **QC- Sample ID:** 507282-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/06/2015 **Date Prepared:** 05/06/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<16.0	1070	1030	96	1070	1020	95	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<16.0	1070	1140	107	1070	1080	101	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: Vaca 24 Federal Com #3H

Work Order #: 507282

Lab Batch #: 967586 **Project ID:** 088210/13

Date Analyzed: 05/07/2015 12:13 **Date Prepared:** 05/07/2015 **Analyst:** WRU

QC- Sample ID: 507282-001 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	6.80	6.44	5	20	

Lab Batch #: 967586

Date Analyzed: 05/07/2015 12:13 **Date Prepared:** 05/07/2015 **Analyst:** WRU

QC- Sample ID: 507282-011 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	9.80	9.95	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

507282

CHAIN OF CUSTODY RECORD

COC NO.: 46542

PAGE 1 OF 1

(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES

Address: 1621 Indian School Rd NE Ste 200, Albuquerque NM, 87110

Phone: 505-884-0672 Fax: _____

Project No/ Phase/Task Code: 088210/13	**Laboratory Name:** Xenco Labs - Odessa	**Lab Location:** Odessa, Texas	**SSOW ID:**
Project Name: Vaca 24 Federal Com #3H	**Lab Contact:** Kelly Brooks	**Lab Quote No:**	**Cooler No:**
Project Location: Lea County, New Mexico			**Carrier:** Fed Ex
Chemistry Contact: Christine Mathews cmathews@craworld.com			**Airbill No:**
Sampler(s): Steve Perez sperez@craworld.com			**Date Shipped:** 5/5/15

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other: Jar	Total Containers/Sample	Chloride 300	TPH 8015 Ext	BTEX 8021	MS/MSD Request	Comments/ Special Instructions:
1	S-088210-13-042815-SP-01	4/28/15	1549	SO	G								X		X	X	X		
2	S-088210-13-042915-SP-01	4/29/15	1328																
3	S-088210-13-043015-SP-01	4/30/15	1535																
4	S-088210-13-043015-SP-02	4/30/15	1538																
5	S-088210-13-043015-SP-03	4/30/15	1650																
6	S-088210-13-050115-SP-01	05/01/15	1225																
7	S-088210-13-050115-SP-02	5/01/15	1310																
8	S-088210-13-050115-SP-03	5/01/15	1500																
9	S-088210-13-050415-SP-01	5/4/15	1245																
10	S-088210-13-050415-SP-02	5/4/15	1330																
11	S-088210-13-050415-SP-03	5/4/15	1450																
12																			
13																			
14																			
15																			

TAT Required in business days (use separate COCs for different TATs):

☑ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Total Number of Containers: 11

All Samples in Cooler must be on COC

Notes/ Special Requirements: B

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	Steven Perez	CRA	5/5/15	5:15		Xenco	5/6/15	1014
2.								
3.								

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

Final 1.000

Page 20 of 21

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 05/06/2015 10:14:00 AM

Work Order #: 507282

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?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#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: 05/06/2015

Checklist reviewed by: Julian Martinez Date: 05/06/2015

Analytical Report 507692

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch

Vaca 24 Federal Com #3H

088210/13

14-MAY-15

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)

14-MAY-15

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

Albuquerque, NM 87110

Reference: XENCO Report No(s): **507692**
Vaca 24 Federal Com #3H
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) 507692. 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. 507692 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 507692

Conestoga-Rovers & Associates-Albuquerque, NM, Albuqu

Vaca 24 Federal Com #3H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SO-088210-13-051115-SP-01	S	05-11-15 12:32		507692-001
SO-088210-13-051115-SP-02	S	05-11-15 13:49		507692-002
SO-088210-13-051115-SP-03	S	05-11-15 15:16		507692-003
SO-088210-13-051115-SP-04	S	05-11-15 15:53		507692-004
SO-088210-13-051115-SP-05	S	05-11-15 16:17		507692-005
SO-088210-13-051115-SP-06	S	05-11-15 17:05		507692-006
SO-088210-13-051115-SP-07	S	05-11-15 17:07		507692-007
SO-088210-13-051115-SP-08	S	05-11-15 17:09		507692-008

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 507692

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Wed May-13-15 11:00 am
Report Date: 14-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	507692-001		507692-002		507692-003		507692-004		507692-005		507692-006	
	Field Id:	SO-088210-13-051115-SP-05		O-088210-13-051115-SP-05		O-088210-13-051115-SP-05		O-088210-13-051115-SP-05		O-088210-13-051115-SP-05		O-088210-13-051115-SP-0	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-11-15 12:32		May-11-15 13:49		May-11-15 15:16		May-11-15 15:53		May-11-15 16:17		May-11-15 17:05	
BTEX by EPA 8021B	*Extracted:*	May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00	
	Analyzed:	May-13-15 18:25		May-13-15 18:42		May-13-15 18:58		May-13-15 19:14		May-13-15 19:31		May-13-15 19:47	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00104	ND	0.00105	ND	0.00104	ND	0.00120	ND	0.00111	ND	0.00117
Toluene		ND	0.00209	ND	0.00210	ND	0.00208	ND	0.00239	ND	0.00222	ND	0.00235
Ethylbenzene		ND	0.00104	ND	0.00105	ND	0.00104	ND	0.00120	ND	0.00111	ND	0.00117
m,p-Xylenes		ND	0.00209	ND	0.00210	ND	0.00208	ND	0.00239	ND	0.00222	ND	0.00235
o-Xylene		ND	0.00104	ND	0.00105	ND	0.00104	ND	0.00120	ND	0.00111	ND	0.00117
Total Xylenes		ND	0.00104	ND	0.00105	ND	0.00104	ND	0.00120	ND	0.00111	ND	0.00117
Total BTEX		ND	0.00104	ND	0.00105	ND	0.00104	ND	0.00120	ND	0.00111	ND	0.00117
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-13-15 16:00		May-13-15 16:00		May-13-15 16:00		May-13-15 16:00		May-13-15 16:00		May-13-15 16:00	
	Analyzed:	May-13-15 18:36		May-13-15 18:59		May-13-15 19:23		May-13-15 19:46		May-13-15 20:08		May-13-15 21:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		24.3	10.5	2.36	2.11	6.51	2.09	12300	481	6250	447	8880	470
Percent Moisture	*Extracted:*												
	Analyzed:	May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		4.58	1.00	5.22	1.00	4.26	1.00	16.9	1.00	10.4	1.00	14.9	1.00
TPH By SW8015B Mod	*Extracted:*	May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00	
	Analyzed:	May-13-15 16:46		May-13-15 17:52		May-13-15 18:14		May-13-15 18:36		May-13-15 18:57		May-13-15 19:19	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.7	ND	15.8	ND	15.6	ND	18.0	ND	16.7	ND	17.6
C10-C28 Diesel Range Hydrocarbons		ND	15.7	ND	15.8	ND	15.6	ND	18.0	ND	16.7	117	17.6
Total TPH		ND	15.7	ND	15.8	ND	15.6	ND	18.0	ND	16.7	117	17.6

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 507692

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Wed May-13-15 11:00 am
Report Date: 14-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	507692-007		507692-008									
	Field Id:	SO-088210-13-051115-SP-05		SO-088210-13-051115-SP-0									
	Depth:												
	Matrix:	SOIL		SOIL									
	Sampled:	May-11-15 17:07		May-11-15 17:09									
BTEX by EPA 8021B	***Extracted:***	May-13-15 15:00		May-13-15 15:00									
	Analyzed:	May-13-15 20:04		May-13-15 20:20									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		ND	0.00115	ND	0.00104								
Toluene		ND	0.00231	ND	0.00208								
Ethylbenzene		ND	0.00115	ND	0.00104								
m,p-Xylenes		ND	0.00231	ND	0.00208								
o-Xylene		ND	0.00115	ND	0.00104								
Total Xylenes		ND	0.00115	ND	0.00104								
Total BTEX		ND	0.00115	ND	0.00104								
Inorganic Anions by EPA 300/300.1	***Extracted:***	May-13-15 16:00		May-13-15 16:00									
	Analyzed:	May-13-15 21:39		May-13-15 22:02									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Chloride		9030	463	13.1	2.09								
Percent Moisture	***Extracted:***												
	Analyzed:	May-13-15 18:30		May-13-15 18:30									
	Units/RL:	%	RL	%	RL								
Percent Moisture		13.5	1.00	4.40	1.00								
TPH By SW8015B Mod	***Extracted:***	May-13-15 14:00		May-13-15 14:00									
	Analyzed:	May-13-15 19:40		May-13-15 20:01									
	Units/RL:	mg/kg	RL	mg/kg	RL								
C6-C10 Gasoline Range Hydrocarbons		ND	17.3	ND	15.7								
C10-C28 Diesel Range Hydrocarbons		19.5	17.3	ND	15.7								
Total TPH		19.5	17.3	ND	15.7								

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: Vaca 24 Federal Com #3H

Work Orders : 507692,

Project ID: 088210/13

Lab Batch #: 968082 **Sample:** 507692-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 16:46

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99.9	126	70-135	
o-Terphenyl	58.7	50.0	117	70-135	

Lab Batch #: 968082 **Sample:** 507692-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 17:52

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.7	103	70-135	
o-Terphenyl	47.4	49.9	95	70-135	

Lab Batch #: 968082 **Sample:** 507692-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 18:14

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	99.8	105	70-135	
o-Terphenyl	47.9	49.9	96	70-135	

Lab Batch #: 968080 **Sample:** 507692-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 18:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0303	0.0300	101	80-120	
4-Bromofluorobenzene	0.0308	0.0300	103	80-120	

Lab Batch #: 968082 **Sample:** 507692-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 18:36

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.8	106	70-135	
o-Terphenyl	49.6	49.9	99	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: Vaca 24 Federal Com #3H

Work Orders : 507692,

Project ID: 088210/13

Lab Batch #: 968080 **Sample:** 507692-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 18:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 968082 **Sample:** 507692-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 18:57

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.8	109	70-135	
o-Terphenyl	50.8	49.9	102	70-135	

Lab Batch #: 968080 **Sample:** 507692-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 18:58

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	0.0314	0.0300	105	80-120	

Lab Batch #: 968080 **Sample:** 507692-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 19:14

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0317	0.0300	106	80-120	

Lab Batch #: 968082 **Sample:** 507692-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 19:19

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.6	109	70-135	
o-Terphenyl	51.4	49.8	103	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vaca 24 Federal Com #3H

Work Orders : 507692,

Project ID: 088210/13

Lab Batch #: 968080 **Sample:** 507692-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 19:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0321	0.0300	107	80-120	

Lab Batch #: 968082 **Sample:** 507692-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 19:40

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.7	101	70-135	
o-Terphenyl	47.4	49.9	95	70-135	

Lab Batch #: 968080 **Sample:** 507692-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 19:47

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0325	0.0300	108	80-120	

Lab Batch #: 968082 **Sample:** 507692-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 20:01

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.9	103	70-135	
o-Terphenyl	47.1	50.0	94	70-135	

Lab Batch #: 968080 **Sample:** 507692-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 20:04

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	0.0307	0.0300	102	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vaca 24 Federal Com #3H

Work Orders : 507692,

Project ID: 088210/13

Lab Batch #: 968080 **Sample:** 507692-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 20:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0300	0.0300	100	80-120	
4-Bromofluorobenzene	0.0309	0.0300	103	80-120	

Lab Batch #: 968082 **Sample:** 692539-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 15:42

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	100	116	70-135	
o-Terphenyl	55.5	50.0	111	70-135	

Lab Batch #: 968080 **Sample:** 692535-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 16:46

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	0.0297	0.0300	99	80-120	

Lab Batch #: 968082 **Sample:** 692539-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 16:03

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-135	
o-Terphenyl	60.6	50.0	121	70-135	

Lab Batch #: 968080 **Sample:** 692535-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 17:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	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: Vaca 24 Federal Com #3H

Work Orders : 507692,

Project ID: 088210/13

Lab Batch #: 968082 **Sample:** 692539-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 16:24

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	62.2	50.0	124	70-135	

Lab Batch #: 968080 **Sample:** 692535-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 17:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 968082 **Sample:** 507692-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 17:08

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	54.7	50.0	109	70-135	

Lab Batch #: 968080 **Sample:** 507692-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 17:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 968082 **Sample:** 507692-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 17:30

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	99.9	124	70-135	
o-Terphenyl	41.4	50.0	83	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: Vaca 24 Federal Com #3H

Work Orders : 507692, **Project ID:** 088210/13

Lab Batch #: 968080 **Sample:** 507692-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 17:52

BTEX by EPA 8021B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	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: Vaca 24 Federal Com #3H

Work Order #: 507692 **Project ID:** 088210/13

Analyst: ARM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/13/2015

Lab Batch ID: 968080 **Sample:** 692535-1-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	0.0972	97	0.100	0.0975	98	0	70-130	35	
Toluene	<0.00200	0.100	0.101	101	0.100	0.102	102	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.108	108	2	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.213	107	0.200	0.216	108	1	70-135	35	
o-Xylene	<0.00100	0.100	0.104	104	0.100	0.106	106	2	71-133	35	

Analyst: JUM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/13/2015

Lab Batch ID: 968165 **Sample:** 692516-1-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	47.9	96	50.0	47.8	96	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: Vaca 24 Federal Com #3H

Work Order #: 507692 **Project ID:** 088210/13

Analyst: ARM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/13/2015

Lab Batch ID: 968082 **Sample:** 692539-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	1050	105	1000	1090	109	4	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1060	106	1000	1020	102	4	70-135	35	

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

Form 3 - MS Recoveries

Project Name: Vaca 24 Federal Com #3H

Work Order #: 507692

Lab Batch #: 968165 **Project ID:** 088210/13

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **Analyst:** JUM

QC- Sample ID: 507604-001 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	<13.0	326	323	99	80-120	

Lab Batch #: 968165

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **Analyst:** JUM

QC- Sample ID: 507695-002 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	13.3	55.1	71.7	106	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: Vaca 24 Federal Com #3H

Work Order # : 507692 **Project ID:** 088210/13

Lab Batch ID: 968080 **QC- Sample ID:** 507692-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **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	<0.00105	0.105	0.0994	95	0.105	0.101	96	2	70-130	35	
Toluene	<0.00209	0.105	0.104	99	0.105	0.105	100	1	70-130	35	
Ethylbenzene	<0.00105	0.105	0.109	104	0.105	0.111	106	2	71-129	35	
m,p-Xylenes	<0.00209	0.209	0.219	105	0.209	0.222	106	1	70-135	35	
o-Xylene	<0.00105	0.105	0.108	103	0.105	0.110	105	2	71-133	35	

Lab Batch ID: 968082 **QC- Sample ID:** 507692-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.7	1050	1130	108	1050	1170	111	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.7	1050	1050	100	1050	1250	119	17	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: Vaca 24 Federal Com #3H

Work Order #: 507692

Lab Batch #: 968107 **Project ID:** 088210/13

Date Analyzed: 05/13/2015 18:30 **Date Prepared:** 05/13/2015 **Analyst:** WRU

QC- Sample ID: 507692-001 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	4.58	4.62	1	20	

Lab Batch #: 968107

Date Analyzed: 05/13/2015 18:30 **Date Prepared:** 05/13/2015 **Analyst:** WRU

QC- Sample ID: 507695-003 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	3.30	3.30	0	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 RECORD

CONESTOGA-ROVERS & ASSOCIATES

Address: 1672 Indian School Rd NW Ste 200, Albuquerque NM 87110
Phone: 505-884-0672 Fax: _____

COC NO.: 46545
PAGE 1 OF 1
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 088210/13	Laboratory Name: Xenco-Odessa	Lab Location: Odessa, TX	SSOW ID:
Project Name: Vaca 24 Federal Com #3H	Lab Contact: Kelsey Brooks	Lab Quote No:	Cooler No:
Project Location: Lea County, NM			Carrier: Fedex
Chemistry Contact: Bernie Bockisch bbockisch@craworld.com			Airbill No:
Sampler(s): Steve Perez sperez@craworld.com			Date Shipped:

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Sample Type: Matrix Code (see back of COC)	Sample Type: Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: BTEX 8015	Chloride 300	TPH 8021	MS/MSD Request	Comments/ Special Instructions:
1	S-088210-13-051115-SP-01	05/11/15	1232	SO	G										X	X	X		
2	S-088210-13-051115-SP-02		1349																
3	S-088210-13-051115-SP-03		1516																
4	S-088210-13-051115-SP-04		1553																
5	S-088210-13-051115-SP-05		1617																
6	S-088210-13-051115-SP-06		1705																
7	S-088210-13-051115-SP-07		1707																
8	S-088210-13-051115-SP-08		1709																
9																			
10																			
11																			
12																			
13																			
14																			
15																			

TAT Required in business days (use separate COCs for different TATs):
☑ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other: 24hr

Total Number of Containers: 8
All Samples in Cooler must be on COC

Notes/ Special Requirements: 3°

	Relinquished By	Company	Date	Time		Received By	Company	Date	Time
1.	Steve Perez	CRA	5/12/15	5:30 pm	1.		5/13/15	1	1100
2.					2.				
3.					3.				

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 05/13/2015 11:00:00 AM

Work Order #: 507692

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?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#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: 05/13/2015

Checklist reviewed by: Julian Martinez Date: 05/13/2015

Analytical Report 507695

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch

Vaca 24 Federal Com #3H

088210/13

14-MAY-15

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)

14-MAY-15

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

Albuquerque, NM 87110

Reference: XENCO Report No(s): **507695**
Vaca 24 Federal Com #3H
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) 507695. 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. 507695 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 507695

Conestoga-Rovers & Associates-Albuquerque, NM, Albuqu

Vaca 24 Federal Com #3H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SO-088210-13-050715-SP-01	S	05-07-15 10:55		507695-001
SO-088210-13-050715-SP-02	S	05-07-15 12:33		507695-002
SO-088210-13-050715-SP-03	S	05-07-15 13:43		507695-003
SO-088210-13-050715-SP-04	S	05-07-15 14:13		507695-004
SO-088210-13-050815-SP-01	S	05-08-15 13:48		507695-005
SO-088210-13-050815-SP-02	S	05-08-15 14:57		507695-006
SO-088210-13-050815-SP-03	S	05-08-15 15:30		507695-007
SO-088210-13-050815-SP-04	S	05-08-15 16:05		507695-008

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 507695

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Wed May-13-15 11:00 am
Report Date: 14-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	507695-001		507695-002		507695-003		507695-004		507695-005		507695-006	
	Field Id:	SO-088210-13-050715-SP-05		O-088210-13-050715-SP-05		O-088210-13-050715-SP-05		O-088210-13-050715-SP-05		O-088210-13-050815-SP-05		O-088210-13-050815-SP-0	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-07-15 10:55		May-07-15 12:33		May-07-15 13:43		May-07-15 14:13		May-08-15 13:48		May-08-15 14:57	
BTEX by EPA 8021B	*Extracted:*	May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00	
	Analyzed:	May-13-15 20:36		May-13-15 20:53		May-13-15 21:41		May-13-15 21:55		May-13-15 22:12		May-13-15 22:28	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00106	ND	0.00110	ND	0.00103	ND	0.00104	ND	0.00103	ND	0.00105
Toluene		ND	0.00212	ND	0.00219	ND	0.00206	ND	0.00208	ND	0.00206	ND	0.00210
Ethylbenzene		ND	0.00106	ND	0.00110	ND	0.00103	ND	0.00104	ND	0.00103	ND	0.00105
m,p-Xylenes		ND	0.00212	ND	0.00219	ND	0.00206	ND	0.00208	ND	0.00206	ND	0.00210
o-Xylene		ND	0.00106	ND	0.00110	ND	0.00103	ND	0.00104	ND	0.00103	ND	0.00105
Total Xylenes		ND	0.00106	ND	0.00110	ND	0.00103	ND	0.00104	ND	0.00103	ND	0.00105
Total BTEX		ND	0.00106	ND	0.00110	ND	0.00103	ND	0.00104	ND	0.00103	ND	0.00105
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-13-15 16:00		May-13-15 16:00		May-13-15 16:00		May-13-15 16:00		May-13-15 16:00		May-13-15 16:00	
	Analyzed:	May-13-15 22:24		May-13-15 22:47		May-13-15 23:32		May-13-15 23:55		May-14-15 00:18		May-14-15 00:40	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		191	10.6	13.3	2.21	2.62	2.07	15.6	2.08	5.07	2.07	6.66	2.10
Percent Moisture	*Extracted:*												
	Analyzed:	May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		5.81	1.00	9.33	1.00	3.30	1.00	4.07	1.00	3.30	1.00	4.95	1.00
TPH By SW8015B Mod	*Extracted:*	May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00	
	Analyzed:	May-13-15 20:23		May-13-15 20:45		May-13-15 21:51		May-13-15 22:14		May-13-15 22:36		May-13-15 22:58	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.9	ND	16.5	ND	15.5	ND	15.6	ND	15.5	ND	15.7
C10-C28 Diesel Range Hydrocarbons		ND	15.9	ND	16.5	ND	15.5	ND	15.6	ND	15.5	ND	15.7
Total TPH		ND	15.9	ND	16.5	ND	15.5	ND	15.6	ND	15.5	ND	15.7

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 507695

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Wed May-13-15 11:00 am
Report Date: 14-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	507695-007		507695-008									
	Field Id:	SO-088210-13-050815-SP-05		SO-088210-13-050815-SP-0									
	Depth:												
	Matrix:	SOIL		SOIL									
	Sampled:	May-08-15 15:30		May-08-15 16:05									
BTEX by EPA 8021B	***Extracted:***	May-13-15 15:00		May-13-15 15:00									
	Analyzed:	May-13-15 22:45		May-13-15 23:01									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		ND	0.00108	ND	0.00116								
Toluene		ND	0.00217	ND	0.00231								
Ethylbenzene		ND	0.00108	ND	0.00116								
m,p-Xylenes		ND	0.00217	ND	0.00231								
o-Xylene		ND	0.00108	ND	0.00116								
Total Xylenes		ND	0.00108	ND	0.00116								
Total BTEX		ND	0.00108	ND	0.00116								
Inorganic Anions by EPA 300/300.1	***Extracted:***	May-13-15 16:00		May-13-15 16:00									
	Analyzed:	May-14-15 01:48		May-14-15 02:11									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Chloride		51.0	10.9	31.8	11.6								
Percent Moisture	***Extracted:***												
	Analyzed:	May-13-15 18:30		May-13-15 18:30									
	Units/RL:	%	RL	%	RL								
Percent Moisture		8.24	1.00	13.7	1.00								
TPH By SW8015B Mod	***Extracted:***	May-13-15 14:00		May-13-15 14:00									
	Analyzed:	May-13-15 23:20		May-13-15 23:41									
	Units/RL:	mg/kg	RL	mg/kg	RL								
C6-C10 Gasoline Range Hydrocarbons		ND	16.3	ND	17.4								
C10-C28 Diesel Range Hydrocarbons		ND	16.3	ND	17.4								
Total TPH		ND	16.3	ND	17.4								

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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: Vaca 24 Federal Com #3H

Work Orders : 507695,

Project ID: 088210/13

Lab Batch #: 968082 **Sample:** 507695-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 20:23

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.8	107	70-135	
o-Terphenyl	49.4	49.9	99	70-135	

Lab Batch #: 968080 **Sample:** 507695-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 20:36

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	

Lab Batch #: 968082 **Sample:** 507695-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 20:45

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	99.9	122	70-135	
o-Terphenyl	55.7	50.0	111	70-135	

Lab Batch #: 968080 **Sample:** 507695-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 20:53

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0298	0.0300	99	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 968080 **Sample:** 507695-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 21:41

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: Vaca 24 Federal Com #3H

Work Orders : 507695,

Project ID: 088210/13

Lab Batch #: 968082 **Sample:** 507695-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 21:51

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	126	99.9	126	70-135	
o-Terphenyl	58.5	50.0	117	70-135	

Lab Batch #: 968080 **Sample:** 507695-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 21:55

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	0.0313	0.0300	104	80-120	

Lab Batch #: 968080 **Sample:** 507695-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 22:12

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 968082 **Sample:** 507695-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 22:14

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.7	107	70-135	
o-Terphenyl	50.2	49.9	101	70-135	

Lab Batch #: 968080 **Sample:** 507695-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 22:28

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	0.0321	0.0300	107	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: Vaca 24 Federal Com #3H

Work Orders : 507695,

Project ID: 088210/13

Lab Batch #: 968082 **Sample:** 507695-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 22:36

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	103	99.8	103	70-135	
o-Terphenyl	47.1	49.9	94	70-135	

Lab Batch #: 968080 **Sample:** 507695-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 22:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0253	0.0300	84	80-120	
4-Bromofluorobenzene	0.0290	0.0300	97	80-120	

Lab Batch #: 968082 **Sample:** 507695-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 22:58

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	99.8	110	70-135	
o-Terphenyl	49.7	49.9	100	70-135	

Lab Batch #: 968080 **Sample:** 507695-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 23:01

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0326	0.0300	109	80-120	
4-Bromofluorobenzene	0.0274	0.0300	91	80-120	

Lab Batch #: 968082 **Sample:** 507695-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 23:20

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	99.7	113	70-135	
o-Terphenyl	52.1	49.9	104	70-135	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vaca 24 Federal Com #3H

Work Orders : 507695,

Project ID: 088210/13

Lab Batch #: 968082 **Sample:** 507695-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 23:41

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.9	107	70-135	
o-Terphenyl	50.4	50.0	101	70-135	

Lab Batch #: 968082 **Sample:** 692539-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 15:42

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	116	100	116	70-135	
o-Terphenyl	55.5	50.0	111	70-135	

Lab Batch #: 968080 **Sample:** 692535-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 16:46

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	0.0297	0.0300	99	80-120	

Lab Batch #: 968082 **Sample:** 692539-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 16:03

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	100	130	70-135	
o-Terphenyl	60.6	50.0	121	70-135	

Lab Batch #: 968080 **Sample:** 692535-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 17:03

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0292	0.0300	97	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: Vaca 24 Federal Com #3H

Work Orders : 507695,

Project ID: 088210/13

Lab Batch #: 968082 **Sample:** 692539-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 16:24

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	62.2	50.0	124	70-135	

Lab Batch #: 968080 **Sample:** 692535-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/13/15 17:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0295	0.0300	98	80-120	

Lab Batch #: 968082 **Sample:** 507692-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 17:08

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-135	
o-Terphenyl	54.7	50.0	109	70-135	

Lab Batch #: 968080 **Sample:** 507692-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 17:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0322	0.0300	107	80-120	
4-Bromofluorobenzene	0.0302	0.0300	101	80-120	

Lab Batch #: 968082 **Sample:** 507692-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 17:30

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	99.9	124	70-135	
o-Terphenyl	41.4	50.0	83	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: Vaca 24 Federal Com #3H

Work Orders : 507695, **Project ID:** 088210/13

Lab Batch #: 968080 **Sample:** 507692-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/13/15 17:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0320	0.0300	107	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	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: Vaca 24 Federal Com #3H

Work Order #: 507695 **Project ID:** 088210/13

Analyst: ARM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/13/2015

Lab Batch ID: 968080 **Sample:** 692535-1-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	0.0972	97	0.100	0.0975	98	0	70-130	35	
Toluene	<0.00200	0.100	0.101	101	0.100	0.102	102	1	70-130	35	
Ethylbenzene	<0.00100	0.100	0.106	106	0.100	0.108	108	2	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.213	107	0.200	0.216	108	1	70-135	35	
o-Xylene	<0.00100	0.100	0.104	104	0.100	0.106	106	2	71-133	35	

Analyst: JUM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/13/2015

Lab Batch ID: 968165 **Sample:** 692516-1-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	47.9	96	50.0	47.8	96	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: Vaca 24 Federal Com #3H

Work Order #: 507695 **Project ID:** 088210/13

Analyst: ARM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/13/2015

Lab Batch ID: 968082 **Sample:** 692539-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	1050	105	1000	1090	109	4	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1060	106	1000	1020	102	4	70-135	35	

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

Form 3 - MS Recoveries

Project Name: Vaca 24 Federal Com #3H

Work Order #: 507695

Lab Batch #: 968165 **Project ID:** 088210/13

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **Analyst:** JUM

QC- Sample ID: 507604-001 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	<13.0	326	323	99	80-120	

Lab Batch #: 968165

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **Analyst:** JUM

QC- Sample ID: 507695-002 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	13.3	55.1	71.7	106	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: Vaca 24 Federal Com #3H

Work Order # : 507695 **Project ID:** 088210/13

Lab Batch ID: 968080 **QC- Sample ID:** 507692-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **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	<0.00105	0.105	0.0994	95	0.105	0.101	96	2	70-130	35	
Toluene	<0.00209	0.105	0.104	99	0.105	0.105	100	1	70-130	35	
Ethylbenzene	<0.00105	0.105	0.109	104	0.105	0.111	106	2	71-129	35	
m,p-Xylenes	<0.00209	0.209	0.219	105	0.209	0.222	106	1	70-135	35	
o-Xylene	<0.00105	0.105	0.108	103	0.105	0.110	105	2	71-133	35	

Lab Batch ID: 968082 **QC- Sample ID:** 507692-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.7	1050	1130	108	1050	1170	111	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.7	1050	1050	100	1050	1250	119	17	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: Vaca 24 Federal Com #3H

Work Order #: 507695

Lab Batch #: 968107 **Project ID:** 088210/13

Date Analyzed: 05/13/2015 18:30 **Date Prepared:** 05/13/2015 **Analyst:** WRU

QC- Sample ID: 507692-001 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	4.58	4.62	1	20	

Lab Batch #: 968107

Date Analyzed: 05/13/2015 18:30 **Date Prepared:** 05/13/2015 **Analyst:** WRU

QC- Sample ID: 507695-003 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	3.30	3.30	0	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 RECORD

CONESTOGA-ROVERS & ASSOCIATES

Address: 1626 Indian School Rd NE Ste 200, Albq, NM 87110
Phone: 505 884-0672 Fax: _____

507695
COC NO.: 46543
PAGE 1 OF 1
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 088210/13	Laboratory Name: Xenco-Odessa	Lab Location: Odessa, TX	SSOW ID:
Project Name: Vaca 24 Federal Com #3H	Lab Contact: Kelsey Brooks	Lab Quote No:	Cooler No:
Project Location: Lea County, NM			Carrier: fedex
Chemistry Contact: Bernie Bochisch bbochisch@cramworld.com 505 280-0572			Airbill No:
Sampler(s): Steve Perez			Date Shipped:

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: Chloride 300	BTEX 8021	TPH 8015	MS/MSD Request	Comments/ Special Instructions:
1	S-088210-13-050715-SP-01	05/07/15	1055	SO	G										X	X	X		
2	S-088210-13-050715-SP-02	↓	1233	↓	↓										↓	↓	↓		
3	S-088210-13-050715-SP-03	↓	1343	↓	↓										↓	↓	↓		
4	S-088210-13-050715-SP-04	↓	1413	↓	↓										↓	↓	↓		
5	S-088210-13-050815-SP-01	05/08/15	1348	↓	↓										↓	↓	↓		
6	S-088210-13-050815-SP-02	↓	1457	↓	↓										↓	↓	↓		
7	S-088210-13-050815-SP-03	↓	1530	↓	↓										↓	↓	↓		
8	S-088210-13-050815-SP-04	↓	1605	↓	↓										↓	↓	↓		
9																			
10																			
11																			
12																			
13																			
14																			
15																			

TAT Required in business days (use separate COCs for different TATs):
☑ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other: 24hr

Total Number of Containers: 8
All Samples in Cooler must be on COC

Notes/ Special Requirements:
3°C

	Relinquished By	Company	Date	Time		Received By	Company	Date	Time
1.	Steve Perez	CRA	5/12/15	5:30pm	1.		XENCO	5/13/15	11:00
2.					2.				
3.					3.				

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

Final 1.000

Page 19 of 20

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 05/13/2015 11:00:00 AM

Work Order #: 507695

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?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#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: 05/13/2015

Checklist reviewed by: Julian Martinez Date: 05/13/2015

Analytical Report 507703

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch

Vaca 24 Federal Com #3H

088210/13

14-MAY-15

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)

14-MAY-15

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

Albuquerque, NM 87110

Reference: XENCO Report No(s): **507703**
Vaca 24 Federal Com #3H
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) 507703. 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. 507703 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 507703

Conestoga-Rovers & Associates-Albuquerque, NM, Albuqu

Vaca 24 Federal Com #3H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SO-088210-13-051215-SP-01	S	05-12-15 09:15		507703-001
SO-088210-13-051215-SP-02	S	05-12-15 09:26		507703-002
SO-088210-13-051215-SP-03	S	05-12-15 10:09		507703-003
SO-088210-13-051215-SP-04	S	05-12-15 10:14		507703-004
SO-088210-13-051215-SP-05	S	05-12-15 10:17		507703-005
SO-088210-13-051215-SP-06	S	05-12-15 12:08		507703-006
SO-088210-13-051215-SP-07	S	05-12-15 13:08		507703-007
SO-088210-13-051215-SP-08	S	05-12-15 13:48		507703-008
SO-088210-13-051215-SP-09	S	05-12-15 14:20		507703-009
SO-088210-13-051215-SP-10	S	05-12-15 14:22		507703-010

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 507703

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Wed May-13-15 11:00 am
Report Date: 14-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	507703-001		507703-002		507703-003		507703-004		507703-005		507703-006	
	Field Id:	SO-088210-13-051215-SP-05		O-088210-13-051215-SP-05		O-088210-13-051215-SP-05		O-088210-13-051215-SP-05		O-088210-13-051215-SP-05		O-088210-13-051215-SP-0	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-12-15 09:15		May-12-15 09:26		May-12-15 10:09		May-12-15 10:14		May-12-15 10:17		May-12-15 12:08	
BTEX by EPA 8021B	*Extracted:*	May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00	
	Analyzed:	May-14-15 02:15		May-14-15 02:32		May-14-15 02:48		May-14-15 03:04		May-14-15 03:21		May-14-15 03:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00103	ND	0.00106	ND	0.00114	ND	0.00106	ND	0.00101	ND	0.00104
Toluene		ND	0.00207	ND	0.00212	ND	0.00227	ND	0.00212	ND	0.00201	ND	0.00208
Ethylbenzene		ND	0.00103	ND	0.00106	ND	0.00114	ND	0.00106	ND	0.00101	ND	0.00104
m,p-Xylenes		ND	0.00207	ND	0.00212	ND	0.00227	ND	0.00212	ND	0.00201	ND	0.00208
o-Xylene		ND	0.00103	ND	0.00106	ND	0.00114	ND	0.00106	ND	0.00101	ND	0.00104
Total Xylenes		ND	0.00103	ND	0.00106	ND	0.00114	ND	0.00106	ND	0.00101	ND	0.00104
Total BTEX		ND	0.00103	ND	0.00106	ND	0.00114	ND	0.00106	ND	0.00101	ND	0.00104
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-13-15 16:00		May-13-15 16:00		May-13-15 16:00		May-13-15 18:00		May-13-15 18:00		May-13-15 18:00	
	Analyzed:	May-14-15 02:34		May-14-15 02:56		May-14-15 03:19		May-14-15 05:35		May-14-15 06:20		May-14-15 06:43	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		735	41.4	4370	426	10000	457	810	106	18.6	2.02	31.9	10.4
Percent Moisture	*Extracted:*												
	Analyzed:	May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		3.43	1.00	6.21	1.00	12.4	1.00	5.82	1.00	1.11	1.00	4.01	1.00
TPH By SW8015B Mod	*Extracted:*	May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00	
	Analyzed:	May-14-15 01:48		May-14-15 02:51		May-14-15 03:13		May-14-15 03:35		May-14-15 03:55		May-14-15 04:16	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	15.5	ND	15.9	ND	17.1	ND	15.9	ND	15.2	ND	15.6
C10-C28 Diesel Range Hydrocarbons		ND	15.5	ND	15.9	ND	17.1	ND	15.9	ND	15.2	ND	15.6
Total TPH		ND	15.5	ND	15.9	ND	17.1	ND	15.9	ND	15.2	ND	15.6

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 507703

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Wed May-13-15 11:00 am
Report Date: 14-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	507703-007		507703-008		507703-009		507703-010					
	Field Id:	SO-088210-13-051215-SP-05		O-088210-13-051215-SP-05		O-088210-13-051215-SP-05		O-088210-13-051215-SP-1					
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL					
	Sampled:	May-12-15 13:08		May-12-15 13:48		May-12-15 14:20		May-12-15 14:22					
BTEX by EPA 8021B	***Extracted:***	May-13-15 15:00		May-13-15 15:00		May-13-15 15:00		May-13-15 15:00					
	Analyzed:	May-14-15 03:54		May-14-15 04:10		May-14-15 04:27		May-14-15 04:43					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Benzene		ND	0.00105	ND	0.00103	ND	0.00104	ND	0.00103				
Toluene		ND	0.00209	ND	0.00205	ND	0.00207	ND	0.00206				
Ethylbenzene		ND	0.00105	ND	0.00103	ND	0.00104	ND	0.00103				
m,p-Xylenes		ND	0.00209	ND	0.00205	ND	0.00207	ND	0.00206				
o-Xylene		ND	0.00105	ND	0.00103	ND	0.00104	ND	0.00103				
Total Xylenes		ND	0.00105	ND	0.00103	ND	0.00104	ND	0.00103				
Total BTEX		ND	0.00105	ND	0.00103	ND	0.00104	ND	0.00103				
Inorganic Anions by EPA 300/300.1	***Extracted:***	May-13-15 18:00		May-13-15 18:00		May-13-15 18:00		May-13-15 18:00					
	Analyzed:	May-14-15 07:05		May-14-15 07:28		May-14-15 07:51		May-14-15 08:59					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		11.7	2.09	2.87	2.06	ND	2.09	2.60	2.07				
Percent Moisture	***Extracted:***												
	Analyzed:	May-13-15 18:30		May-13-15 18:30		May-13-15 18:30		May-13-15 18:30					
	Units/RL:	%	RL	%	RL	%	RL	%	RL				
Percent Moisture		4.43	1.00	2.76	1.00	4.10	1.00	3.44	1.00				
TPH By SW8015B Mod	***Extracted:***	May-13-15 14:00		May-13-15 14:00		May-13-15 14:00		May-13-15 14:00					
	Analyzed:	May-14-15 04:37		May-14-15 04:59		May-14-15 05:21		May-14-15 05:43					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C10 Gasoline Range Hydrocarbons		ND	15.7	ND	15.4	ND	15.6	ND	15.5				
C10-C28 Diesel Range Hydrocarbons		ND	15.7	ND	15.4	ND	15.6	ND	15.5				
Total TPH		ND	15.7	ND	15.4	ND	15.6	ND	15.5				

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: Vaca 24 Federal Com #3H

Work Orders : 507703,

Project ID: 088210/13

Lab Batch #: 968083 **Sample:** 507703-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 01:48

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	107	99.8	107	70-135	
o-Terphenyl	47.6	49.9	95	70-135	

Lab Batch #: 968081 **Sample:** 507703-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 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	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0312	0.0300	104	80-120	

Lab Batch #: 968081 **Sample:** 507703-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 02:32

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	0.0315	0.0300	105	80-120	

Lab Batch #: 968081 **Sample:** 507703-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 02:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0291	0.0300	97	80-120	
4-Bromofluorobenzene	0.0343	0.0300	114	80-120	

Lab Batch #: 968083 **Sample:** 507703-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 02:51

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	101	99.7	101	70-135	
o-Terphenyl	46.0	49.9	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: Vaca 24 Federal Com #3H

Work Orders : 507703,

Project ID: 088210/13

Lab Batch #: 968081 **Sample:** 507703-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 03:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0313	0.0300	104	80-120	

Lab Batch #: 968083 **Sample:** 507703-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 03:13

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	104	99.8	104	70-135	
o-Terphenyl	47.6	49.9	95	70-135	

Lab Batch #: 968081 **Sample:** 507703-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 03:21

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	0.0314	0.0300	105	80-120	

Lab Batch #: 968083 **Sample:** 507703-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 03:35

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.6	106	70-135	
o-Terphenyl	48.1	49.8	97	70-135	

Lab Batch #: 968081 **Sample:** 507703-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 03:37

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	0.0305	0.0300	102	80-120	

* Surrogate outside of Laboratory QC limits

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

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

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

Form 2 - Surrogate Recoveries

Project Name: Vaca 24 Federal Com #3H

Work Orders : 507703,

Project ID: 088210/13

Lab Batch #: 968081 **Sample:** 507703-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 03:54

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	0.0312	0.0300	104	80-120	

Lab Batch #: 968083 **Sample:** 507703-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 03:55

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	98.2	100	98	70-135	
o-Terphenyl	43.4	50.0	87	70-135	

Lab Batch #: 968081 **Sample:** 507703-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 04:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0299	0.0300	100	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 968083 **Sample:** 507703-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 04:16

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	99.9	111	70-135	
o-Terphenyl	51.1	50.0	102	70-135	

Lab Batch #: 968081 **Sample:** 507703-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 04:27

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	0.0311	0.0300	104	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: Vaca 24 Federal Com #3H

Work Orders : 507703,

Project ID: 088210/13

Lab Batch #: 968083 **Sample:** 507703-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 04:37

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	99.9	106	70-135	
o-Terphenyl	49.2	50.0	98	70-135	

Lab Batch #: 968081 **Sample:** 507703-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 04:43

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	0.0316	0.0300	105	80-120	

Lab Batch #: 968083 **Sample:** 507703-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 04:59

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	99.8	125	70-135	
o-Terphenyl	57.3	49.9	115	70-135	

Lab Batch #: 968083 **Sample:** 507703-009 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 05:21

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	130	99.9	130	70-135	
o-Terphenyl	59.9	50.0	120	70-135	

Lab Batch #: 968083 **Sample:** 507703-010 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 05:43

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	110	100	110	70-135	
o-Terphenyl	50.1	50.0	100	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: Vaca 24 Federal Com #3H

Work Orders : 507703, **Project ID:** 088210/13

Lab Batch #: 968081 **Sample:** 692536-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/14/15 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	0.0287	0.0300	96	80-120	
4-Bromofluorobenzene	0.0299	0.0300	100	80-120	

Lab Batch #: 968083 **Sample:** 692540-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/14/15 00:44

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-135	
o-Terphenyl	52.7	50.0	105	70-135	

Lab Batch #: 968081 **Sample:** 692536-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/14/15 00:55

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	0.0306	0.0300	102	80-120	

Lab Batch #: 968083 **Sample:** 692540-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/14/15 01:06

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	58.5	50.0	117	70-135	

Lab Batch #: 968081 **Sample:** 692536-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/14/15 01:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0315	0.0300	105	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	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: Vaca 24 Federal Com #3H

Work Orders : 507703,

Project ID: 088210/13

Lab Batch #: 968083 **Sample:** 692540-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/14/15 01:28

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	128	100	128	70-135	
o-Terphenyl	58.8	50.0	118	70-135	

Lab Batch #: 968081 **Sample:** 507703-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 01:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0316	0.0300	105	80-120	
4-Bromofluorobenzene	0.0303	0.0300	101	80-120	

Lab Batch #: 968083 **Sample:** 507703-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 02:09

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	99.8	120	70-135	
o-Terphenyl	55.6	49.9	111	70-135	

Lab Batch #: 968081 **Sample:** 507703-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 01:42

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0318	0.0300	106	80-120	
4-Bromofluorobenzene	0.0315	0.0300	105	80-120	

Lab Batch #: 968083 **Sample:** 507703-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/14/15 02:30

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	99.9	123	70-135	
o-Terphenyl	62.8	50.0	126	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: Vaca 24 Federal Com #3H

Work Order #: 507703 **Project ID:** 088210/13

Analyst: ARM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/14/2015

Lab Batch ID: 968081 **Sample:** 692536-1-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	0.0924	92	0.100	0.0946	95	2	70-130	35	
Toluene	<0.00200	0.100	0.0955	96	0.100	0.0989	99	3	70-130	35	
Ethylbenzene	<0.00100	0.100	0.0989	99	0.100	0.106	106	7	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.196	98	0.200	0.211	106	7	70-135	35	
o-Xylene	<0.00100	0.100	0.0997	100	0.100	0.106	106	6	71-133	35	

Analyst: JUM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/13/2015

Lab Batch ID: 968165 **Sample:** 692516-1-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	47.9	96	50.0	47.8	96	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: Vaca 24 Federal Com #3H

Work Order #: 507703 **Project ID:** 088210/13

Analyst: JUM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/14/2015

Lab Batch ID: 968166 **Sample:** 692517-1-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	50.1	100	50.0	50.0	100	0	90-110	20	

Analyst: ARM **Date Prepared:** 05/13/2015 **Date Analyzed:** 05/14/2015

Lab Batch ID: 968083 **Sample:** 692540-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	1050	105	1000	1100	110	5	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1030	103	1000	1040	104	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: Vaca 24 Federal Com #3H

Work Order #: 507703

Lab Batch #: 968165 **Project ID:** 088210/13

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **Analyst:** JUM

QC- Sample ID: 507604-001 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	<13.0	326	323	99	80-120	

Lab Batch #: 968165

Date Analyzed: 05/13/2015 **Date Prepared:** 05/13/2015 **Analyst:** JUM

QC- Sample ID: 507695-002 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	13.3	55.1	71.7	106	80-120	

Lab Batch #: 968166

Date Analyzed: 05/14/2015 **Date Prepared:** 05/13/2015 **Analyst:** JUM

QC- Sample ID: 507414-002 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	145	544	703	103	80-120	

Lab Batch #: 968166

Date Analyzed: 05/14/2015 **Date Prepared:** 05/13/2015 **Analyst:** JUM

QC- Sample ID: 507703-004 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	810	2650	3360	96	80-120	

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

BRL - Below Reporting Limit

Form 3 - MS / MSD Recoveries

Project Name: Vaca 24 Federal Com #3H

Work Order # : 507703 **Project ID:** 088210/13

Lab Batch ID: 968081 **QC- Sample ID:** 507703-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/14/2015 **Date Prepared:** 05/13/2015 **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	<0.00104	0.104	0.0927	89	0.103	0.0944	92	2	70-130	35	
Toluene	<0.00207	0.104	0.0976	94	0.103	0.0990	96	1	70-130	35	
Ethylbenzene	<0.00104	0.104	0.104	100	0.103	0.106	103	2	71-129	35	
m,p-Xylenes	<0.00207	0.207	0.208	100	0.207	0.210	101	1	70-135	35	
o-Xylene	<0.00104	0.104	0.104	100	0.103	0.106	103	2	71-133	35	

Lab Batch ID: 968083 **QC- Sample ID:** 507703-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/14/2015 **Date Prepared:** 05/13/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.5	1030	1140	111	1030	1140	111	0	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.5	1030	1060	103	1030	1180	115	11	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: Vaca 24 Federal Com #3H

Work Order #: 507703

Lab Batch #: 968107 **Project ID:** 088210/13

Date Analyzed: 05/13/2015 18:30 **Date Prepared:** 05/13/2015 **Analyst:** WRU

QC- Sample ID: 507692-001 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	4.58	4.62	1	20	

Lab Batch #: 968107

Date Analyzed: 05/13/2015 18:30 **Date Prepared:** 05/13/2015 **Analyst:** WRU

QC- Sample ID: 507695-003 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	3.30	3.30	0	20	

Lab Batch #: 968109

Date Analyzed: 05/13/2015 18:30 **Date Prepared:** 05/13/2015 **Analyst:** WRU

QC- Sample ID: 507703-005 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	1.11	1.06	5	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 RECORD

CONESTOGA-ROVERS & ASSOCIATES

Address: 1621 Indian School Blvd NE Ste 200, Albuquerque, NM 87110

Phone: _____ Fax: _____

COC NO.: 46544 (50770 3)

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 088210/13	**Laboratory Name:** Xenco-Odessa	**Lab Location:** Odessa, TX	**SSOW ID:**
Project Name: Vaca 24 Federal Com #3H	**Lab Contact:** Kelsey Brooks	**Lab Quote No:**	**Cooler No:**
Project Location: Lea County, NM			**Carrier:** fed ex
Chemistry Contact: 505 280-0572 Bernie Bockisch bbockisch@crawtd.com			**Airbill No:**
Sampler(s): Steve Perez sperez@crawtd.com			**Date Shipped:**

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: Chloride 300	BTEX 8021	TPH 8015	MS/MSD Request	Comments/ Special Instructions:
1	S-088210-13-051215-SP-01	05/12/15	915	SO											X	X	X		
2	S-088210-13-051215-SP-02		926																
3	S-088210-13-051215-SP-03		1009																
4	S-088210-13-051215-SP-04		1014																
5	S-088210-13-051215-SP-05		1017																
6	S-088210-13-051215-SP-06		1298																
7	S-088210-13-051215-SP-07		1308																
8	S-088210-13-051215-SP-08		1348																
9	S-088210-13-051215-SP-09		1420																
10	S-088210-13-051215-SP-10		1422																
11																			
12																			
13																			
14																			
15																			

TAT Required in business days (use separate COCs for different TATs):

☒ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other: 24hr

Total Number of Containers:

All Samples in Cooler must be on COC

Notes/ Special Requirements: 3°

	Relinquished By	Company	Date	Time		Received By	Company	Date	Time
1.	Steve Perez	CRA	5/12/15	5:30 pm	1.		Xenco	5/13/15	1100
2.					2.				
3.					3.				

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

Final 1.000

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 05/13/2015 11:00:00 AM

Work Order #: 507703

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?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#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: 05/13/2015

Checklist reviewed by: Julian Martinez Date: 05/13/2015

Analytical Report 507902

for

Conestoga-Rovers & Associates-Albuquerque, NM

Project Manager: Bernie Bockisch

Vaca 24 Federal Com #3H

088210/13

18-MAY-15

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)

18-MAY-15

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

Albuquerque, NM 87110

Reference: XENCO Report No(s): **507902**
Vaca 24 Federal Com #3H
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) 507902. 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. 507902 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 507902

Conestoga-Rovers & Associates-Albuquerque, NM, Albuqu

Vaca 24 Federal Com #3H

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SO-088210-051315-SP-01	S	05-13-15 13:14		507902-001
SO-088210-051315-SP-02	S	05-13-15 13:27		507902-002
SO-088210-051315-SP-03	S	05-13-15 13:41		507902-003
SO-088210-051315-SP-04	S	05-13-15 15:34		507902-004
SO-088210-051315-SP-05	S	05-13-15 15:37		507902-005
SO-088210-051315-SP-06	S	05-13-15 15:38		507902-006
SO-088210-051315-SP-07	S	05-13-15 15:39		507902-007
SO-088210-051315-SP-08	S	05-13-15 15:42		507902-008

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 507902

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Fri May-15-15 10:30 am
Report Date: 18-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	507902-001		507902-002		507902-003		507902-004		507902-005		507902-006	
	Field Id:	SO-088210-051315-SP-01		SO-088210-051315-SP-02		SO-088210-051315-SP-03		SO-088210-051315-SP-04		SO-088210-051315-SP-05		SO-088210-051315-SP-06	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	May-13-15 13:14		May-13-15 13:27		May-13-15 13:41		May-13-15 15:34		May-13-15 15:37		May-13-15 15:38	
BTEX by EPA 8021B	*Extracted:*	May-15-15 17:00		May-15-15 17:00		May-15-15 17:00		May-15-15 17:00		May-15-15 17:00		May-15-15 17:00	
	Analyzed:	May-15-15 20:58		May-15-15 21:15		May-15-15 21:31		May-15-15 22:04		May-15-15 22:21		May-15-15 22:37	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Benzene		ND	0.00109	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00110	ND	0.00111
Toluene		ND	0.00217	ND	0.00213	ND	0.00210	ND	0.00217	ND	0.00219	ND	0.00222
Ethylbenzene		ND	0.00109	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00110	ND	0.00111
m,p-Xylenes		ND	0.00217	ND	0.00213	ND	0.00210	ND	0.00217	ND	0.00219	ND	0.00222
o-Xylene		ND	0.00109	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00110	ND	0.00111
Total Xylenes		ND	0.00109	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00110	ND	0.00111
Total BTEX		ND	0.00109	ND	0.00107	ND	0.00105	ND	0.00109	ND	0.00110	ND	0.00111
Inorganic Anions by EPA 300/300.1	*Extracted:*	May-17-15 10:00		May-17-15 10:00		May-17-15 10:00		May-17-15 10:00		May-17-15 10:00		May-17-15 10:00	
	Analyzed:	May-17-15 22:43		May-17-15 23:28		May-17-15 23:51		May-18-15 00:14		May-18-15 00:36		May-18-15 00:59	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		3.60	2.18	9.52	2.15	10.9	2.10	5.85	2.17	6200	440	1320	111
Percent Moisture	*Extracted:*												
	Analyzed:	May-15-15 18:00		May-15-15 18:00		May-15-15 18:00		May-15-15 18:00		May-15-15 18:00		May-15-15 18:00	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		8.17	1.00	6.86	1.00	4.80	1.00	8.00	1.00	9.17	1.00	10.3	1.00
TPH By SW8015B Mod	*Extracted:*	May-15-15 17:00		May-15-15 17:00		May-15-15 17:00		May-15-15 17:00		May-15-15 17:00		May-15-15 17:00	
	Analyzed:	May-15-15 19:36		May-15-15 20:39		May-15-15 20:59		May-15-15 21:22		May-15-15 21:45		May-15-15 22:07	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C10 Gasoline Range Hydrocarbons		ND	16.3	ND	16.1	ND	15.7	ND	16.3	ND	16.5	ND	16.7
C10-C28 Diesel Range Hydrocarbons		ND	16.3	ND	16.1	ND	15.7	ND	16.3	ND	16.5	ND	16.7
Total TPH		ND	16.3	ND	16.1	ND	15.7	ND	16.3	ND	16.5	ND	16.7

Kelsey Brooks
Project Manager

Certificate of Analysis Summary 507902

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

Project Name: Vaca 24 Federal Com #3H

Project Id: 088210/13
Contact: Bernie Bockisch
Project Location: Lea County,NM

Date Received in Lab: Fri May-15-15 10:30 am
Report Date: 18-MAY-15
Project Manager: Kelsey Brooks

Analysis Requested													
	Lab Id:	507902-007		507902-008									
	Field Id:	SO-088210-051315-SP-07		SO-088210-051315-SP-08									
	Depth:												
	Matrix:	SOIL		SOIL									
	Sampled:	May-13-15 15:39		May-13-15 15:42									
BTEX by EPA 8021B	***Extracted:***	May-15-15 17:00		May-15-15 17:00									
	Analyzed:	May-15-15 22:54		May-15-15 23:11									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Benzene		ND	0.00115	ND	0.00115								
Toluene		ND	0.00230	ND	0.00231								
Ethylbenzene		ND	0.00115	ND	0.00115								
m,p-Xylenes		ND	0.00230	ND	0.00231								
o-Xylene		ND	0.00115	ND	0.00115								
Total Xylenes		ND	0.00115	ND	0.00115								
Total BTEX		ND	0.00115	ND	0.00115								
Inorganic Anions by EPA 300/300.1	***Extracted:***	May-17-15 10:00		May-17-15 10:00									
	Analyzed:	May-18-15 02:07		May-18-15 02:30									
	Units/RL:	mg/kg	RL	mg/kg	RL								
Chloride		1800	116	1160	116								
Percent Moisture	***Extracted:***												
	Analyzed:	May-15-15 18:00		May-15-15 18:00									
	Units/RL:	%	RL	%	RL								
Percent Moisture		13.7	1.00	13.5	1.00								
TPH By SW8015B Mod	***Extracted:***	May-15-15 17:00		May-15-15 17:00									
	Analyzed:	May-15-15 22:28		May-15-15 22:49									
	Units/RL:	mg/kg	RL	mg/kg	RL								
C6-C10 Gasoline Range Hydrocarbons		ND	17.3	ND	17.3								
C10-C28 Diesel Range Hydrocarbons		ND	17.3	ND	17.3								
Total TPH		ND	17.3	ND	17.3								

Kelsey Brooks
Project Manager

Flagging Criteria

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

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

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

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

F RPD exceeded lab control limits.

J The target analyte was positively identified below the 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: Vaca 24 Federal Com #3H

Work Orders : 507902,

Project ID: 088210/13

Lab Batch #: 968336 **Sample:** 507902-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 19:36

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	113	99.9	113	70-135	
o-Terphenyl	58.6	50.0	117	70-135	

Lab Batch #: 968336 **Sample:** 507902-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 20:39

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.9	109	70-135	
o-Terphenyl	56.1	50.0	112	70-135	

Lab Batch #: 968313 **Sample:** 507902-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 20:58

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	80-120	

Lab Batch #: 968336 **Sample:** 507902-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 20:59

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.7	114	70-135	
o-Terphenyl	57.7	49.9	116	70-135	

Lab Batch #: 968313 **Sample:** 507902-002 / SMP **Batch:** 1 **Matrix:** Soil

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

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0323	0.0300	108	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: Vaca 24 Federal Com #3H

Work Orders : 507902, **Project ID:** 088210/13

Lab Batch #: 968336 **Sample:** 507902-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 21:22

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	100	100	100	70-135	
o-Terphenyl	51.4	50.0	103	70-135	

Lab Batch #: 968313 **Sample:** 507902-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 21:31

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0302	0.0300	101	80-120	
4-Bromofluorobenzene	0.0320	0.0300	107	80-120	

Lab Batch #: 968336 **Sample:** 507902-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 21:45

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.1	99.8	94	70-135	
o-Terphenyl	48.1	49.9	96	70-135	

Lab Batch #: 968313 **Sample:** 507902-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 22:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0304	0.0300	101	80-120	
4-Bromofluorobenzene	0.0318	0.0300	106	80-120	

Lab Batch #: 968336 **Sample:** 507902-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 22:07

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	99.8	114	70-135	
o-Terphenyl	58.2	49.9	117	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: Vaca 24 Federal Com #3H

Work Orders : 507902, **Project ID:** 088210/13

Lab Batch #: 968313 **Sample:** 507902-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 22:21

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0293	0.0300	98	80-120	
4-Bromofluorobenzene	0.0311	0.0300	104	80-120	

Lab Batch #: 968336 **Sample:** 507902-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 22:28

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	117	99.7	117	70-135	
o-Terphenyl	60.2	49.9	121	70-135	

Lab Batch #: 968313 **Sample:** 507902-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 22:37

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	0.0318	0.0300	106	80-120	

Lab Batch #: 968336 **Sample:** 507902-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 22:49

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	99.9	109	70-135	
o-Terphenyl	56.0	50.0	112	70-135	

Lab Batch #: 968313 **Sample:** 507902-007 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 22:54

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0301	0.0300	100	80-120	
4-Bromofluorobenzene	0.0329	0.0300	110	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: Vaca 24 Federal Com #3H

Work Orders : 507902,

Project ID: 088210/13

Lab Batch #: 968313 **Sample:** 507902-008 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 23:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0305	0.0300	102	80-120	
4-Bromofluorobenzene	0.0319	0.0300	106	80-120	

Lab Batch #: 968336 **Sample:** 692672-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/15/15 18:33

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	100	122	70-135	
o-Terphenyl	64.0	50.0	128	70-135	

Lab Batch #: 968313 **Sample:** 692667-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/15/15 19:19

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0296	0.0300	99	80-120	
4-Bromofluorobenzene	0.0305	0.0300	102	80-120	

Lab Batch #: 968336 **Sample:** 692672-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/15/15 18:54

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	100	129	70-135	
o-Terphenyl	57.7	50.0	115	70-135	

Lab Batch #: 968313 **Sample:** 692667-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/15/15 19:36

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	0.0282	0.0300	94	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: Vaca 24 Federal Com #3H

Work Orders : 507902, **Project ID:** 088210/13

Lab Batch #: 968336 **Sample:** 692672-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/15/15 19:16

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	125	100	125	70-135	
o-Terphenyl	48.4	50.0	97	70-135	

Lab Batch #: 968313 **Sample:** 692667-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 05/15/15 19:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0309	0.0300	103	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 968336 **Sample:** 507902-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 19:57

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	127	99.9	127	70-135	
o-Terphenyl	57.3	50.0	115	70-135	

Lab Batch #: 968313 **Sample:** 507902-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 20:09

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0284	0.0300	95	80-120	

Lab Batch #: 968336 **Sample:** 507902-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 20:18

SURROGATE RECOVERY STUDY

TPH By SW8015B Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	129	99.8	129	70-135	
o-Terphenyl	59.2	49.9	119	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: Vaca 24 Federal Com #3H

Work Orders : 507902, **Project ID:** 088210/13

Lab Batch #: 968313 **Sample:** 507902-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 05/15/15 20:25

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0306	0.0300	102	80-120	
4-Bromofluorobenzene	0.0310	0.0300	103	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: Vaca 24 Federal Com #3H

Work Order #: 507902 **Project ID:** 088210/13

Analyst: ARM **Date Prepared:** 05/15/2015 **Date Analyzed:** 05/15/2015

Lab Batch ID: 968313 **Sample:** 692667-1-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	0.0945	95	0.100	0.0959	96	1	70-130	35	
Toluene	<0.00200	0.100	0.0990	99	0.100	0.101	101	2	70-130	35	
Ethylbenzene	<0.00100	0.100	0.104	104	0.100	0.106	106	2	71-129	35	
m,p-Xylenes	<0.00200	0.200	0.208	104	0.200	0.212	106	2	70-135	35	
o-Xylene	<0.00100	0.100	0.103	103	0.100	0.104	104	1	71-133	35	

Analyst: JUM **Date Prepared:** 05/17/2015 **Date Analyzed:** 05/17/2015

Lab Batch ID: 968366 **Sample:** 692709-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Inorganic Anions by EPA 300/300.1 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<2.00	50.0	48.8	98	50.0	49.9	100	2	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: Vaca 24 Federal Com #3H

Work Order #: 507902 **Project ID:** 088210/13

Analyst: ARM **Date Prepared:** 05/15/2015 **Date Analyzed:** 05/15/2015

Lab Batch ID: 968336 **Sample:** 692672-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<15.0	1000	1090	109	1000	1080	108	1	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<15.0	1000	1000	100	1000	1120	112	11	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: Vaca 24 Federal Com #3H

Work Order #: 507902

Lab Batch #: 968366 **Project ID:** 088210/13

Date Analyzed: 05/18/2015 **Date Prepared:** 05/17/2015 **Analyst:** JUM

QC- Sample ID: 507438-003 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	31.9	545	569	99	80-120	

Lab Batch #: 968366

Date Analyzed: 05/17/2015 **Date Prepared:** 05/17/2015 **Analyst:** JUM

QC- Sample ID: 507902-001 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	3.60	54.4	62.7	109	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: Vaca 24 Federal Com #3H

Work Order # : 507902 **Project ID:** 088210/13

Lab Batch ID: 968313 **QC- Sample ID:** 507902-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/15/2015 **Date Prepared:** 05/15/2015 **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	<0.00108	0.108	0.104	96	0.109	0.102	94	2	70-130	35	
Toluene	<0.00217	0.108	0.108	100	0.109	0.107	98	1	70-130	35	
Ethylbenzene	<0.00108	0.108	0.113	105	0.109	0.113	104	0	71-129	35	
m,p-Xylenes	<0.00217	0.217	0.225	104	0.217	0.231	106	3	70-135	35	
o-Xylene	<0.00108	0.108	0.111	103	0.109	0.114	105	3	71-133	35	

Lab Batch ID: 968336 **QC- Sample ID:** 507902-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 05/15/2015 **Date Prepared:** 05/15/2015 **Analyst:** ARM

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015B 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-C10 Gasoline Range Hydrocarbons	<16.3	1090	1230	113	1090	1270	117	3	70-135	35	
C10-C28 Diesel Range Hydrocarbons	<16.3	1090	1140	105	1090	1180	108	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: Vaca 24 Federal Com #3H

Work Order #: 507902

Lab Batch #: 968328 **Project ID:** 088210/13

Date Analyzed: 05/15/2015 18:00 **Date Prepared:** 05/15/2015 **Analyst:** WRU

QC- Sample ID: 507902-001 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	8.17	8.30	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 RECORD

CONESTOGA-ROVERS & ASSOCIATES

Address: 1621 Indian School Rd NE, Suite A, Albuquerque, NM, 87110
Phone: 505-884-0672 Fax: _____

COC NO.: 46540 (597907)
PAGE 1 OF 1
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 088210/13	**Laboratory Name:** Xenco - Odessa	**Lab Location:** Odessa	**SSOW ID:**
Project Name: Vaca 24 Federal Com #3H	**Lab Contact:** Kelsey Brooks	**Lab Quote No:**	**Cooler No:**
Project Location: Lea County, NM			**Carrier:** Fed-Ex
Chemistry Contact: Bernie Bochisch bbochisch@craworld.com (505) 280-0572			**Airbill No:**
Sampler(s): Steve Perez sperez@craworld.com			**Date Shipped:** 5/14/15

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Chloride 300.0	BTEX 8021	TPH 8015	MS/MSD Request	Comments/ Special Instructions:
1	~~S-088210-13-051415-SP-01~~			SO	G									1	X	X	X		
2	S-088210-13-051315-SP-01	5/13/15	1314																
3	S-088210-13-051315-SP-02		1327																
4	S-088210-13-051315-SP-03		1341																
5	S-088210-13-051315-SP-04		1534																
6	S-088210-13-051315-SP-05		1537																
7	S-088210-13-051315-SP-06		1538																
8	S-088210-13-051315-SP-07		1539																
9	S-088210-13-051315-SP-08		1542																
10																			
11																			
12																			
13																			
14																			
15																			

TAT Required in business days (use separate COCs for different TATs):
☑ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other: 24 hr

Total Number of Containers: 8
All Samples in Cooler must be on COC

Notes/ Special Requirements: 3.5

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	Steven Perez	CRA	5/14/15	5:25pm		XENCO	5/15/15	1030
2.								
3.								

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10B (20110804)

XENCO Laboratories

Prelogin/Nonconformance Report- Sample Log-In

Client: Conestoga-Rovers & Associates-Albuqu

Date/ Time Received: 05/15/2015 10:30:00 AM

Work Order #: 507902

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

Temperature Measuring device used :

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	**Yes**
#3 *Samples received on ice?	**Yes**
#4 *Custody Seals intact on shipping container/ cooler?	**N/A**
#5 Custody Seals intact on sample bottles?	**N/A**
#6 *Custody Seals Signed and dated?	**N/A**
#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)?	**No**
#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.	**No**
#22 >10 for all samples preserved with NaAsO2+NaOH, ZnAc+NaOH?	**No**

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

Analyst:

PH Device/Lot#:

Checklist completed by: Kelsey Brooks Date: 05/15/2015

Checklist reviewed by: Kelsey Brooks Date: 05/15/2015