

## SITE INFORMATION

**Report Type: Closure Request    1RP-3280**

### General Site Information:

<b>Site:</b>	Elvis Tank Battery Release				
<b>Company:</b>	ConocoPhillips				
<b>Section, Township and Range</b>	Unit Letters F	Sec. 20	T 17S	R 32E	
<b>Lease Number:</b>	API No. 30-025-33584				
<b>County:</b>	Lea				
<b>Release GPS:</b>	32.82216°			-103.79091°	
<b>Surface Owner:</b>	Federal				
<b>Mineral Owner:</b>					
<b>Directions:</b>	From Maljamar, NM (Hwy 82/Maljamar Rd): Head south on Maljamar Rd. for 2.74 miles. Turn right on Conoco Rd. Head west for 1.62 miles. Turn right onto dirt road. Head north for 0.37 miles. Arrive at location.				

### Release Data:

<b>Date Released:</b>	5/17/2013
<b>Type Release:</b>	Oil & Produced Water
<b>Source of Contamination:</b>	Tank Overflow
<b>Fluid Released:</b>	4 bbls of oil, 473 bbls of produced water
<b>Fluids Recovered:</b>	2 bbls of oil, 398 bbls of produced water

### Official Communication:

<b>Name:</b>	Marvin Soriwei	Christian M. Llull, P.G.
<b>Company:</b>	ConocoPhillips	Tetra Tech
<b>Address:</b>	935 N. Eldridge Pkwy.	8911 North Capital of Texas Hwy. Building 2, Suite 2310
<b>City:</b>	Houston, TX 77079	Austin, Texas 78759
<b>Phone number:</b>	1-832-486-2730	(512) 338-2861
<b>Fax:</b>		
<b>Email:</b>	<a href="mailto:marvin.soriwei@conocophillips.com">marvin.soriwei@conocophillips.com</a>	<a href="mailto:christian.llull@tetrattech.com">christian.llull@tetrattech.com</a>

### Site Characterization

<b>Depth to Groundwater:</b>	85' below surface
<b>Impact to groundwater or surface water:</b>	No
<b>Extents within 300 feet of a watercourse:</b>	No
<b>Extents within 200 feet of lakebed, sinkhole, or playa lake:</b>	No
<b>Extents within 300 feet of an occupied structure:</b>	No
<b>Extents within 500 horizontal feet of a private water well:</b>	No
<b>Extents within 1000 feet of any water well or spring:</b>	No
<b>Extents within incorporated municipal well field:</b>	No
<b>Extents within 300 feet of a wetland:</b>	No
<b>Extents overlying a subsurface mine:</b>	No
<b>Karst Potential:</b>	Low
<b>Extents within a 100-year floodplain:</b>	No
<b>Impact to areas not on a production site:</b>	No

### Recommended Remedial Action Levels (RRALs)

Benzene	Total BTEX	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	Chlorides
10 mg/kg	50 mg/kg	1,000 mg/kg	2,500 mg/kg	10,000 mg/kg



January 5, 2021

District Supervisor  
Oil Conservation Division, District 1  
1625 North French Drive  
Hobbs, New Mexico 88240

**Subject: Closure Request  
ConocoPhillips  
Elvis Tank Battery Release  
Unit Letter F, Section 20, Township 17 South, Range 32 East  
Lea County, New Mexico  
1RP-3280  
Incident ID# NTO1424038926**

Sir or Madam:

On behalf of ConocoPhillips Company (COP), Tetra Tech, Inc. (Tetra Tech) submits the following Closure Request for review. The Elvis Tank Battery is located approximately 2.8 miles southwest of Maljamar in Lea County, New Mexico (Site). The site is located at coordinates are 32.82216°, -103.79091° in Unit Letter F, Section 20, Township 17 South, Range 32 East. The site location is shown in Figures 1 and 2.

## BACKGROUND

According to the State of New Mexico C-141 Initial Report, on May 17, 2013, a release occurred at the Elvis Tank Battery. The release was due to the overflow of produced water tanks as resulted in 4 barrels (bbls) of oil and 473 bbls of produced water released onto the battery location, caliche road and adjacent pasture. Vacuum trucks recovered approximately 2 bbls of oil and 398 bbls of produced water. New Mexico Oil Conservation Division (NMOCD) was notified of the release on May 17, 2013. NMOCD received the initial C-141 on August 26, 2013 and it is associated with 1RP-3280. The NMOCD Incident ID for this release is NTO1424038926. The initial C-141 Form is included in Appendix A.

## SITE CHARACTERIZATION

A site characterization was performed and no watercourses, sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, springs, playa lakes, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.0029 New Mexico Administrative Code (NMAC). The Site is in an area of low karst potential.

According to the New Mexico Office of the State Engineers (NMOSE) reporting system, there are no water wells within ½ mile (800 meters) of the Site. The nearest wells are approximately 2,000 to 2,300 meters away with average depth to groundwater at 85 feet below ground surface (bgs). The site characterization data is included in Appendix B.

## REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

**TETRA TECH**

8911 N. Capital of Texas Hwy, Building 2, Suite 2310, Austin, TX, 78759  
Tel 512-338-1667 Fax 512-338-1331 [www.tetrattech.com](http://www.tetrattech.com)

Closure Request  
January 5, 2021

ConocoPhillips

Based on the site characterization, the RRALs for the Site are as follows:

Constituent	RRAL
Chloride	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

## SITE ASSESSMENT AND REMEDIATION WORK PLAN SUMMARY

Based on Tetra Tech internal documentation, at the request of COP, Tetra Tech personnel conducted a soil assessment of the release area in August 2013. This document is not found on the NMOCD online imaging database. Based on the results of the soil assessment and in accordance with NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993, Tetra Tech drafted a remediation work plan. The Work Plan details site assessment activities conducted at the Site. The Tetra Tech Remediation Work Plan is included as Appendix C. The following is a summary of the site assessment activities.

On August 14, 2013, Tetra Tech personnel installed eleven (11) auger holes (AH-1 through AH-11) within the release footprint to assess the vertical extent of impacted soil. AH-1 through AH-3 were installed on the lease adjacent to the tank battery. AH-4 through AH-6 were installed within the lined tank battery firewall. AH-7 through AH-11 were installed in the western-adjacent pasture area (Figures 3A and 3B, Appendix C). Selected samples were sent to Pace Analytical to be analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. A copy of the laboratory analytical report and chain-of-custody documentation are included in Appendix C of the Work Plan included as Appendix C. The laboratory analytical results are summarized in Table 1 of Attachment C.

According to information provided in the Work Plan, Geoffrey Leking of the NMOCD, Steve Tischer and Debrah Gann of COP and Tom Elliot of Tetra Tech met to walk the site and discuss the release. It was agreed on that further delineation of the pasture was required and that soils with a chloride concentration of greater than 1,000 mg/kg would be removed as part of the remediation. The Work Plan proposed the excavation of the areas around AH-1, AH-2 and AH-9 to a depth of 1-foot bgs. The areas within the lined tank battery (AH-4, AH-5 and AH-6) were to be excavated to the top of the liner material. Areas within the release extent in the vicinity of AH-7 and AH-8 were to be excavated to 5 feet bgs and 4 feet bgs, respectively. Additionally, the Work Plan proposed trenches be installed to confirm and define the extent of subsurface chloride impact. Following the removal and proper disposal of impacted material, the excavated area was to be backfilled with clean soil to grade.

## REMEDIATION ACTIVITIES SUMMARY

The NMOCD online imaging database contains documentation on this release consisting of the initial C-141 received by NMOCD, and a Site Closure Plan Report, dated August 21, 2014. Based on information provided in the Site Closure Plan, submitted to the NMOCD by Diamondback Disposal Services, Inc. (Diamondback), the above-mentioned Work Plan was approved by the NMOCD. No record of Work Plan approval was found in the NMOCD online imaging database. The Site Closure Plan Report detailing remedial activities performed by Diamondback is included as Attachment D.

According to the Site Closure Plan Report, Diamondback was contacted April 7, 2014 by Mr. Justin Wright, COP, to perform the remediation activities at the release site. Per the report, Diamondback began remediation of the release area on April 14, 2014.

In general accordance with the Tetra Tech Work Plan and as described in the Site Closure Plan Report, Diamondback excavated approximately 1,284 cubic yards of impacted soils from the release footprint as

**TETRA TECH**

8911 N. Capital of Texas Hwy, Building 2, Suite 2310, Austin, TX, 78759  
Tel 512-338-1667 Fax 512-338-1331 [www.tetrattech.com](http://www.tetrattech.com)

Closure Request  
January 5, 2021

ConocoPhillips

defined in figures from the Work Plan. Impacted soils were transported to an NMOCD-approved facility (R360) for proper disposal.

As written in the report, following an approval by NMOCD's Dr. Tomas Oberding, a high-density polyethylene (HDPE) liner cap was installed at the base of the extended battery area (Section 4 excavation) and backfilled with clean fill. The battery floor was brought to grade and berms were reconstructed.

On August 18, 2014, Diamondback personnel collected composite confirmation soil samples from the sidewalls and floors of the excavated areas (Sections 1 through 4), shown on the Closure Report figure, included in Appendix D. The existing Closure Report Figure 4 was modified from the original Tetra Tech figure included in the Work Plan. These soil samples were submitted to Cardinal Laboratory in Hobbs to be analyzed for TPH (EPA Method 8015M), BTEX (EPA Method 8021B) and chloride (SM4500Cl-B). All confirmation sample results associated with the confirmation sampling were below the stipulated 1,000 mg/kg for chloride and the BTEX and TPH RRALs cited in the Work Plan, except for the analytical results associated with sample SEC 4 FLOOR for chloride. Sample SEC 4 FLOOR was collected from the area of the extended battery. Table 1 summarizes the analytical results of the August 2014 confirmation sampling event.

As part of the submitted Closure Report, Diamondback proposed the backfilling of the excavated areas with clean granular soil, and contouring, crowning and seeding the area to promote vegetation growth. There is no further correspondence in the imaging database regarding the approval of the submitted Diamondback Closure Report.

Based on the review of post-2014 satellite imagery of the release area, it appears that the excavated areas were backfilled with clean soil. Satellite imagery from February 2017 indicates that the battery footprint was extended as described in the Site Closure Plan Report. The present-day battery berm exists in this described condition. Additionally, vegetation growth within the pasture portion of the release area appears to have returned to pre-release conditions.

## **VISUAL SITE INSPECTION AND FIELD SOIL SCREENING**

At the request of COP, on September 10, 2020 Tetra Tech personnel conducted a visual Site Inspection at the former release area to evaluate current conditions at the Site. The formerly impacted area was identified from the description in the C-141 and the figures from the Work Plan and Closure Report. Photographic documentation from the visual assessment (with stamped GPS coordinates) is included within Attachment D. A list of field observations describing the Site follow:

- No evidence of staining was noted in the pasture areas west of the battery.

Additionally, Tetra Tech conducted field soil screening for salinity to confirm the efficacy of remedial activities performed by Diamondback. Soils from four (4) locations within the former release footprint in the pasture were screened for using a salinity meter at a depth interval of 0 to 1-foot bgs. The field screening resulted in salinity concentrations ranging from 86 ppm to 103 ppm, which would indicate surface soil concentrations are below the current RRAL of 600 mg/kg for chloride in off-pad areas. The field soil screening results are summarized in Table 2. The soil screening sample locations are shown in Figure 4.

TETRA TECH

Closure Request  
January 5, 2021

ConocoPhillips

## CONCLUSION

Based on available assessment data, reported remediation work performed at the Site, confirmation sampling results, soil screening data and recent visual inspection at the formerly impacted surface area, ConocoPhillips requests closure for this release. The final C-141 form is enclosed in Attachment A.

Should you have any questions or comments regarding this report, please do not hesitate to contact me by telephone at 512-338-2861 or Greg at 432-687-8134.

Sincerely,



Christian M. Llull, P.G.  
Project Manager



Greg Pope, P.G.  
Program Manager

cc:  
Mr. Marvin Soriwei, RMR – ConocoPhillips  
Mr. Charles Beauvais, GPBU - ConocoPhillips

## LIST OF ATTACHMENTS

### Figures:

- Figure 1 – Site Location/Overview Map
- Figure 2 – Site Location/Topographic Map
- Figure 3 – Approximate Release Extent
- Figure 4 – Approximate Release Extent and Confirmation Screening Locations

### Tables:

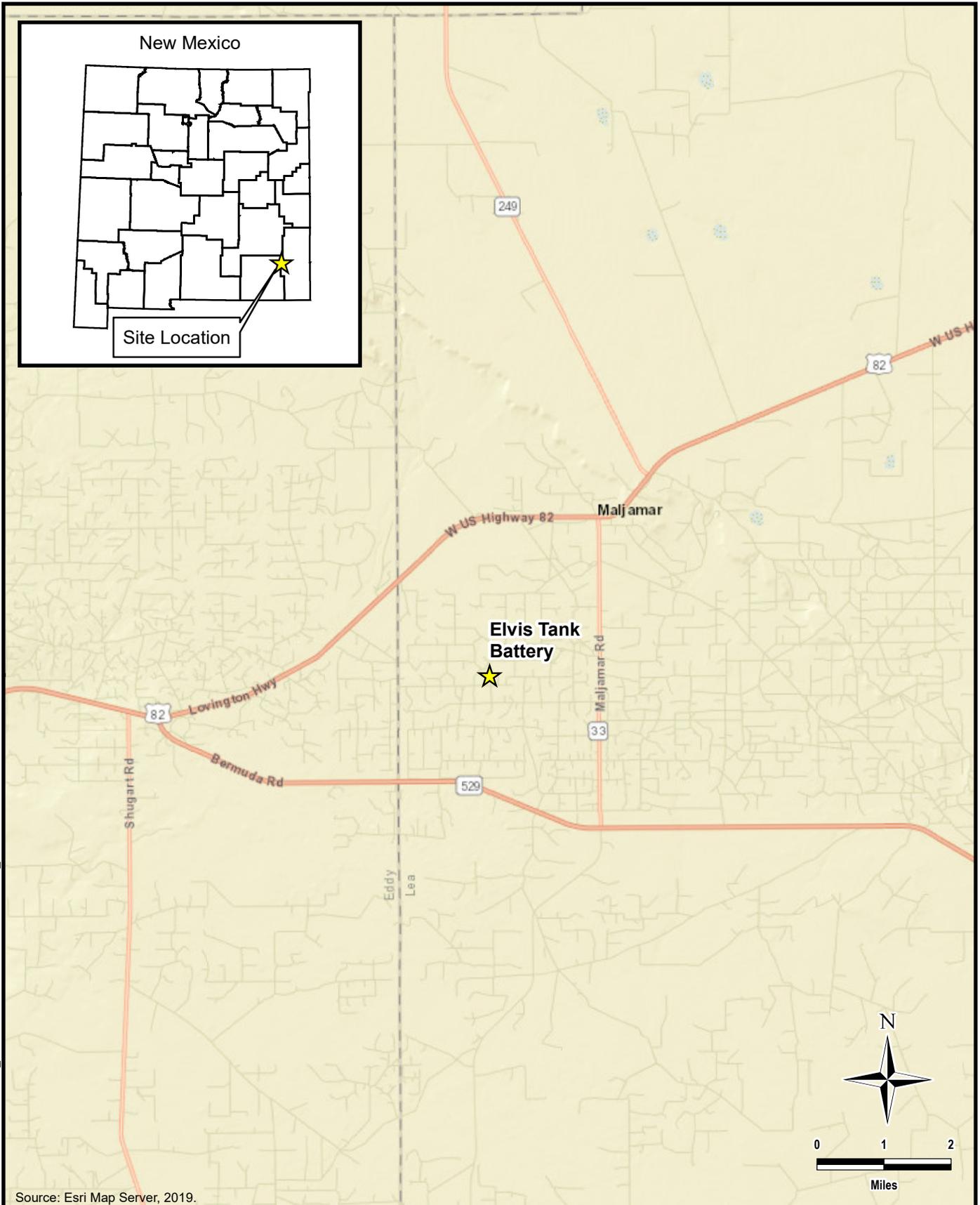
- Table 1 – Summary of Analytical Results – Confirmation Sampling
- Table 2 – Summary of Analytical Results – Soil Screening Confirmation

### Appendices:

- Appendix A – C-141 Forms
- Appendix B – Site Characterization Data
- Appendix C – Tetra Tech Remediation Work Plan
- Appendix D – Diamondback Closure Report
- Appendix E – Photographic Documentation

TETRA TECH

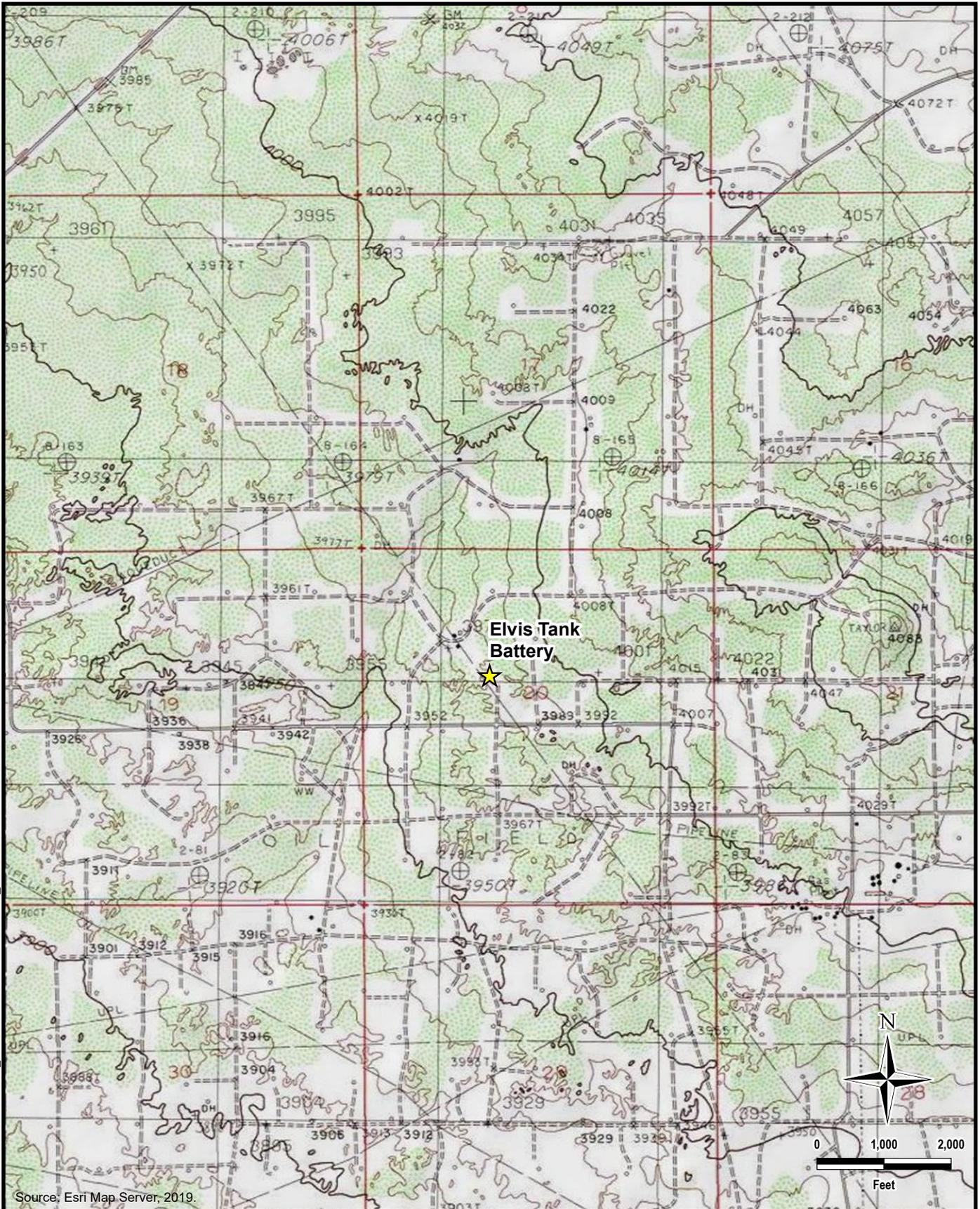
## **FIGURES**



Source: Esri Map Server, 2019.

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\ELVIS\_BATTERY\FIGURE 1 SITE LOCATION\_ELVIS.MXD

 www.tetratech.com 901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946	<b>CONOCOPHILLIPS</b> 1RP-3280 (32.822160°, -103.790910°) LEA COUNTY, NEW MEXICO	PROJECT NO.: 212C-MD-02304 DATE: November 10, 2020 DESIGNED BY: AAM
	<b>ELVIS TANK BATTERY RELEASE SITE LOCATION MAP</b>	
	Figure No. <b>1</b>	



Source: Esri Map Server, 2019.

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\ELVIS BATTERY\FIGURE 2 TOPO MAP.ELVIS.MXD



www.tetratech.com  
 901 West Wall Street, Suite 100  
 Midland, Texas 79701  
 Phone: (432) 682-4559  
 Fax: (432) 682-3946

**CONOCOPHILLIPS**

1RP-3280  
 (32.822160°, -103.790910°)  
 LEA COUNTY, NEW MEXICO

**ELVIS TANK BATTERY RELEASE  
 TOPOGRAPHIC MAP**

PROJECT NO.: 212C-MD-02304

DATE: November 10, 2020

DESIGNED BY: AAM

Figure No.

**2**



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\ELVIS\_BATTERY\FIGURE 3 RELEASE CONFIRMATION SAMPLE\_ELVIS.MXD

**Legend**

 Approximate Release Extent

Source: Esri Map Server, 2019.



 <p>www.tetratech.com 901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946</p>	<p><b>CONOCOPHILLIPS</b></p> <p>1RP-3280 (32.822160°, -103.790910°) LEA COUNTY, NEW MEXICO</p>	<p>PROJECT NO.: 212C-MD-02304</p>
	<p><b>ELVIS TANK BATTERY RELEASE APPROXIMATE RELEASE EXTENT</b></p>	<p>DATE: NOVEMBER 24, 2020</p>
	<p>DESIGNED BY: AAM</p>	<p>Figure No. <b>3</b></p>

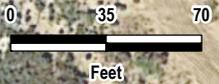


DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\ELVIS\_BATTERY\FIGURE 4 RELEASE CONFIRMATION SAMPLE\_ELVIS.MXD

**Legend**

- Confirmation Soil Screening Location
- Approximate Release Extent

Source: Esri Map Server, 2019.



<p><b>TETRA TECH</b></p> <p>www.tetratech.com</p> <p>901 West Wall Street, Suite 100 Midland, Texas 79701 Phone: (432) 682-4559 Fax: (432) 682-3946</p>	<p><b>CONOCOPHILLIPS</b></p> <p>1RP-3280 (32.822160°, -103.790910°) LEA COUNTY, NEW MEXICO</p>	<p>PROJECT NO.: 212C-MD-02304</p>
	<p><b>ELVIS TANK BATTERY RELEASE APPROXIMATE RELEASE EXTENT AND CONFIRMATION SCREENING LOCATIONS</b></p>	<p>DATE: NOVEMBER 24, 2020</p> <p>DESIGNED BY: AAM</p>
		<p>Figure No.</p> <p><b>4</b></p>

## **TABLES**

**TABLE 1**  
**SUMMARY OF ANALYTICAL RESULTS**  
**CONFIRMATION SAMPLING - 1RP-3280**  
**CONOCOPHILLIPS**  
**ELVIS TANK BATTERY 1RP-3280 RELEASE**  
**LEA COUNTY, NM**

Sample ID	Sample Date	Chloride <sup>1</sup>		BTEX <sup>2</sup>								TPH <sup>3</sup>						
				Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		Total TPH (GRO+DRO)
				mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	C <sub>6</sub> - C <sub>10</sub>	Q	C <sub>10</sub> - C <sub>28</sub>	Q	
SEC 1 S. WALL	8/18/2014	816		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-	
SEC 1 N. WALL	8/18/2014	160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		365		365	
SEC 1 FLOOR	8/18/2014	64		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-	
SEC 2 S. WALL	8/18/2014	32		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-	
SEC 2 N. WALL	8/18/2014	48		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-	
SEC 2 FLOOR	8/18/2014	64		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-	
SEC 3 S. WALL	8/18/2014	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-	
SEC 3 N. WALL	8/18/2014	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-	
SEC 3 FLOOR	8/18/2014	< 16.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-	
SEC 4 FLOOR	8/18/2014	2120		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300	< 10.0		< 10.0		-	

**NOTES:**

- ft. Feet \*
- bgs Below ground surface 1 These iterative samples are located to encompass the original sample location that triggered removal, with further excavation in each area indicated in ().
- ppm Parts per million 2 SM4500CI-B
- mg/kg Milligrams per kilogram 3 EPA Method 8021B
- TPH Total Petroleum Hydrocarbons QUALIFIERS: EPA Method 8015M
- GRO Gasoline range organics J The identification of the analyte is acceptable; the reported value is an estimate.
- DRO Diesel range organics
- ORO Oil range organics

TABLE 2  
 SUMMARY OF SOIL SCREENING RESULTS  
 SOIL SCREENING CONFIRMATION  
 1RP-3280  
 CONOCOPHILLIPS  
 ELVIS TANK BATTERY 1RP-3280 RELEASE  
 LEA COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results	Field Observations
			Chloride	
		ft. bgs	ppm	
SS-1	9/10/2020	0-1	98	No Staining, No Odor
SS-2	9/10/2020	0-1	103	No Staining, No Odor
SS-3	9/10/2020	0-1	86	No Staining, No Odor
SS-4	9/10/2020	0-1	91	No Staining, No Odor

NOTES:

- ft. Feet
- bgs Below ground surface
- ppm Parts per million

**APPENDIX A  
C-141 Forms**

HOBBS OCD

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

AUG 26 2014 Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: <b>ConocoPhillips</b>	Contact: <b>John Gates</b>
Address: <b>29 Vacuum Complex Lane Lovington, NM 88260</b>	Telephone No.: <b>575-391-3158</b>
Facility Name: <b>MCA Elvis Battery</b>	Facility Type: <b>Oil &amp; Gas</b>
Surface Owner: <b>Federal</b>	Mineral Owner: <b>Federal</b>
API No. <b>188612</b>	

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	20	17	32					Lea

Latitude: 32 49' 21.54" N

Longitude: 103 47' 26.052" W

**NATURE OF RELEASE**

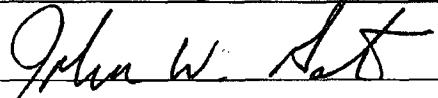
Type of Release: <b>Crude Oil &amp; Produced Water</b>	Volume of Release ~ <b>4 BBLs Oil &amp; ~473 bbls Produced Water</b>	Volume Recovered : <b>~2 bbls oil &amp; ~398 bbls water</b>
Source of Release: <b>Release overflowed from top of North West 500 bbl oil tank</b>	Date and Hour of Occurrence <b>05/17/13 Unknown Time Of occurrence</b>	Date and Hour of Discovery <b>05/17/13 @ ~0730 Hours</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Geoffrey Leking NMOCD &amp; Trishia Bad Bear BLM</b>	
By Whom? <b>John Gates</b>	Date and Hour: <b>05/17/13 @ 0746 Hours</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
Release originated from top of produced water tanks inside battery. The tanks overflowed out of top hatch onto battery location and caliche road. Transfer pumps went down which subsequently caused tanks to overflow. MSO shut in battery to stop additional fluids from being released. Spill site will be remediated in accordance with NMOCD & BLM guidelines.

Describe Area Affected and Cleanup Action Taken.\*  
Majority of spill was contained in surrounding caliche location and roadway with small amount running west off location onto sandy soil. Vacuum trucks were called to recover standing fluids. Approximately 2 BBLs of oil and approximately 398 bbls of water were recovered.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>John W. Gates</b>	Approved by Environmental Specialist: 	
Title: <b>LEAD HSE</b>	Approval Date: <b>8-26-14</b>	Expiration Date: <b>10-29-14</b>
E-mail Address: <b>John.W.Gates@conocophillips.com</b>	Conditions of Approval: <i>Site Spill repair Delimit &amp; retest over spill NMOCD guide Submit final</i>	Attached <input type="checkbox"/>
Date: <b>05/17/13</b> Phone: <b>575-391-3158</b>		<b>IRP-3280</b>

C-141 by 10-29-14

AUG 28 2014

09112 217817  
1701929 038926  
1701929 039056  
1701929 038452

Incident ID	nTO1424038926
District RP	1RP-3280
Facility ID	fTO1424038452
Application ID	pTO1424039056

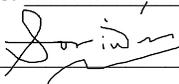
## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Marvin Soriwei Title: Program Manager, Risk Management & Remediation  
 Signature:  Date: 1/5/2021  
 email: marvin.soriwei@conocophillips.com Telephone: 8324862730

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Bradford Billings Date: 11/30/2021  
 Printed Name: Bradford Billings Title: Envi.Spec.A

**APPENDIX B**  
**Site Characterization Data**



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
<a href="#">RA 12042 POD1</a>	RA	LE		2	2	1	28	17S	32E	614891	3631181	2003	400		
<a href="#">RA 10175</a>	RA	LE			2	1	28	17S	32E	614814	3631005*	2037	158		
<a href="#">RA 12522 POD1</a>	RA	LE		3	3	4	21	17S	32E	614941	3631122	2076	100		
<a href="#">RA 12020 POD1</a>	RA	LE		2	2	1	28	17S	32E	614828	3630954	2078	120	81	39
<a href="#">RA 12522 POD2</a>	RA	LE		2	2	1	28	17S	32E	614949	3631098	2096	100		
<a href="#">RA 12522 POD3</a>	RA	LE		4	4	3	28	17S	32E	614980	3631093	2125	100		
<a href="#">RA 12521 POD1</a>	RA	LE		3	3	4	21	17S	32E	615127	3631271	2167	105	92	13
<a href="#">RA 12020 POD3</a>	RA	LE		2	1	2	28	17S	32E	615152	3631019	2310	112	83	29

Average Depth to Water: **85 feet**  
 Minimum Depth: **81 feet**  
 Maximum Depth: **92 feet**

**Record Count: 8**

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 613176.86

**Northing (Y):** 3632218.24

**Radius:** 2500

\*UTM location was derived from PLSS - see Help

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

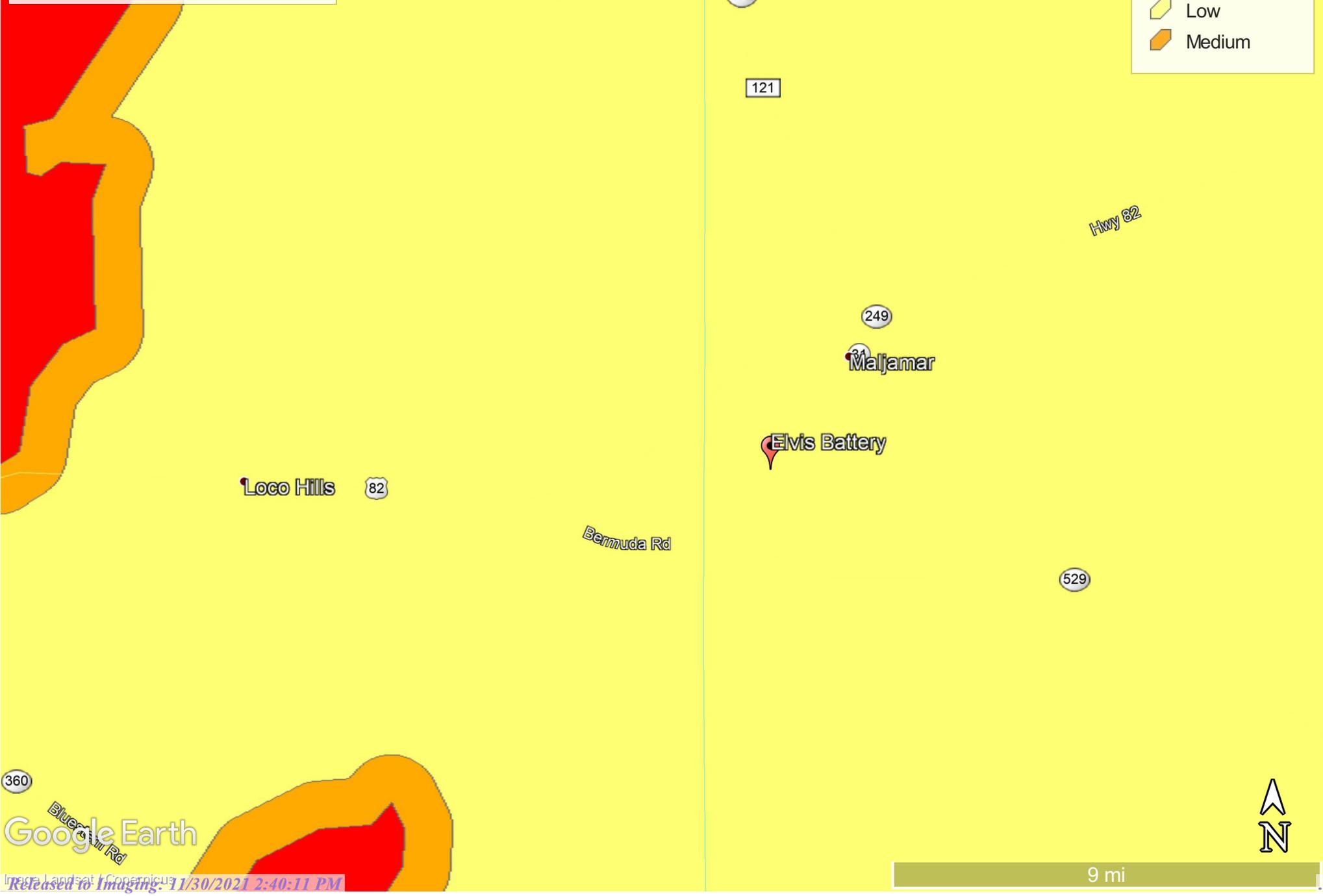
# Karst Potential Map

Elvis Tank Battery  
1RP-3280



**Legend**

-  Elvis Battery
-  High
-  Low
-  Medium

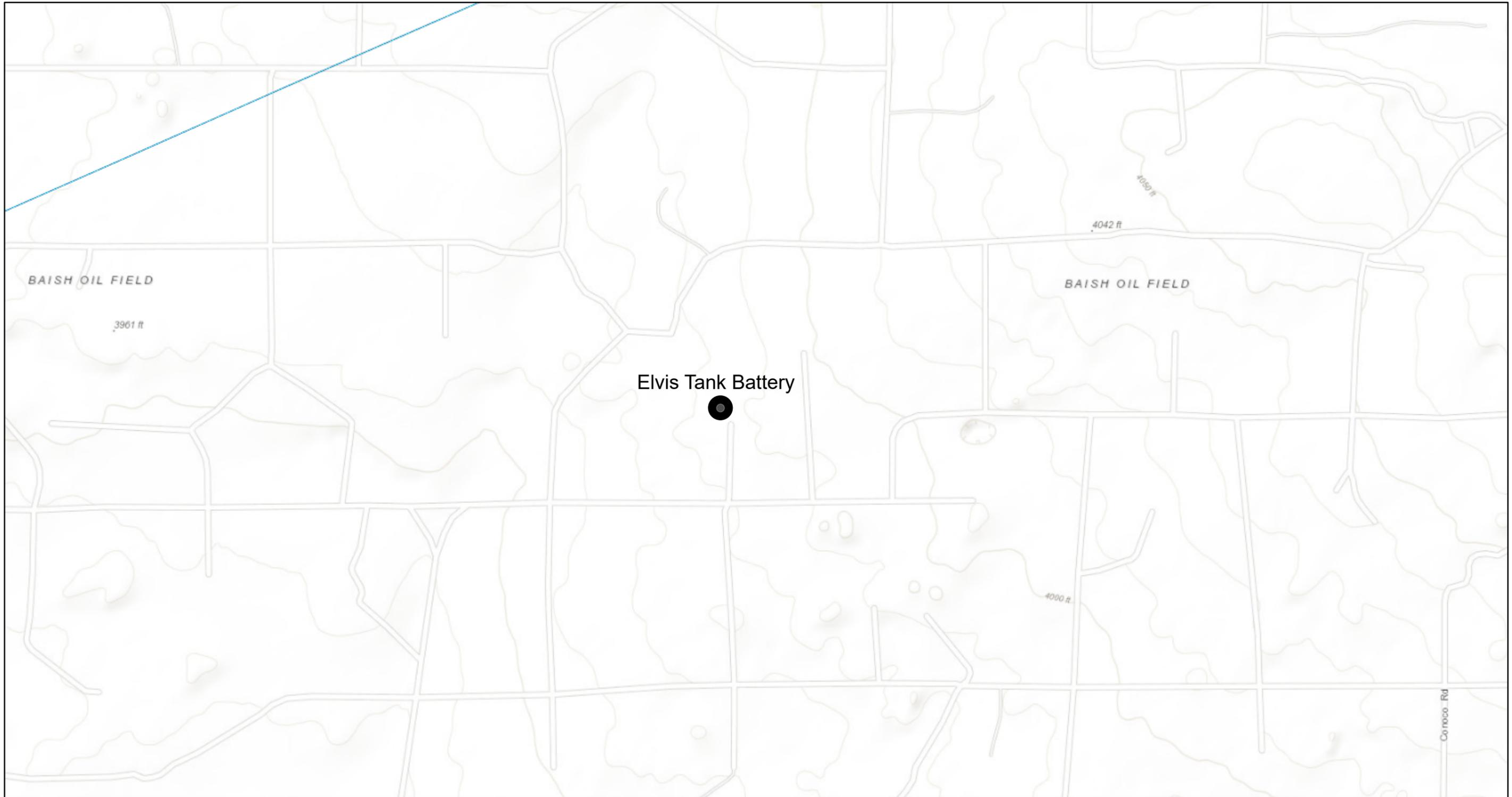


Google Earth



9 mi

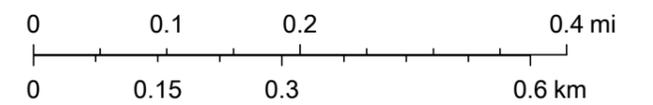
# Elvis Tank Battery



3/25/2020, 9:36:36 AM

- Override 1
- OSE Water-bodies
- PLJV Probable Playas
- OSE Streams

1:10,144



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

**APPENDIX C**  
**Tetra Tech Remediation Work Plan**

# SITE INFORMATION

## Report Type: Work Plan

<b>General Site Information:</b>					
<b>Site:</b>	Elvis Tank Battery				
<b>Company:</b>	ConocoPhillips				
<b>Section, Township and Range</b>	Unit A	Sec 20	T17S	R32E	
<b>Lease Number:</b>	API No. 188612				
<b>County:</b>	Lea County				
<b>GPS:</b>	32.82238° N			103.79107° W	
<b>Surface Owner:</b>	Federal				
<b>Mineral Owner:</b>					
<b>Directions:</b>	From Maljamar travel south on CR 2126 approx 2.3 miles to a paved road headed west. Travel on the paved road west for 1.2 miles to the caliche road and continue west for 0.4 miles. Turn north for approx. 0.3 miles and turn miles for 0.2 miles. Turn south for approx. 0.1 miles and again west for 0.2 miles. Turn back to the north for 0.1 miles and arrive at the location.				

<b>Release Data:</b>	
<b>Date Released:</b>	5/17/2013
<b>Type Release:</b>	Oil and Produced Water
<b>Source of Contamination:</b>	Overfill of Tank
<b>Fluid Released:</b>	4 bbls Oil / 473 bbls Produced Water
<b>Fluids Recovered:</b>	2 bbls Oil / 398 bbls Produced Water

<b>Official Communication:</b>			
<b>Name:</b>	John Gates		Ike Tavaréz
<b>Company:</b>	Conoco Phillips		Tetra Tech
<b>Address:</b>	29 Vacuum Lane		4000 N. Big Spring St.
<b>City:</b>	Lovington, New Mexico		Midland, Texas
<b>Phone number:</b>	575-391-3158		(432) 682-4559
<b>Fax:</b>			
<b>Email:</b>	<a href="mailto:john.w.gates@conocophillips.com">john.w.gates@conocophillips.com</a>		<a href="mailto:ike.tavarez@tetrattech.com">ike.tavarez@tetrattech.com</a>

<b>Ranking Criteria</b>		
<b>Depth to Groundwater:</b>	<b>Ranking Score</b>	<b>Site Data</b>
<50 ft	20	
50-99 ft	10	
>100 ft.	0	0
<b>WellHead Protection:</b>	<b>Ranking Score</b>	<b>Site Data</b>
Water Source <1,000 ft., Private <200 ft.	20	
Water Source >1,000 ft., Private >200 ft.	0	0
<b>Surface Body of Water:</b>	<b>Ranking Score</b>	<b>Site Data</b>
<200 ft.	20	
200 ft - 1,000 ft.	10	
>1,000 ft.	0	0
<b>Total Ranking Score:</b>		<b>0</b>

Acceptable Soil RRAL (mg/kg)		
Benzene	Total BTEX	TPH
10	50	5,000



January 31, 2014

Mr. Geoffrey Leking  
Environmental Engineer Specialist  
Oil Conservation Division, District 1  
1625 North French Drive  
Hobbs, New Mexico 88240

**Re: Work Plan for the ConocoPhillips Operating LLC., Elvis Tank Battery, Unit A, Section 20, Township 17 South, Range 32 East, Lea County, New Mexico.**

Mr. Leking:

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips (COP) to assess a spill from the Elvis Tank Battery located in Unit A, Section 20, Township 17 South, Range 32 East, Lea County, New Mexico (Site). The spill site coordinates are N 32.82238°, W 103.79107°. The site location is shown on Figures 1 and 2.

### **Background**

According to the State of New Mexico C-141 Initial Report, the leak was discovered on May 17, 2013, and released approximately four hundred and seventy three (473) barrels of produced water and four (4) barrels of oil from overflowing the top of a tank due to transfer pumps going down. To alleviate the problem, COP returned the transfer pumps into service. Three hundred and ninety eight (398) barrels of produced water and two (2) barrels of oil were recovered. The spill initiated within the lined tank battery before spilling onto the caliche road and into the pasture. The initial C-141 form is enclosed in Appendix A.

### **Groundwater**

According the USGS and NMOCD databases there are no wells listed in Section 20. COP located a water well in T-17-S, R-32-E, Section 21, Lea County, NM drilled by Scarborough Drilling and completed on 5-15-2007. However, this well (EW-1) was drilled only to 125 feet and the well log description indicates that the sediments were damp, not wet, and no water level was indicated. According to the NMOCD groundwater map the depth to groundwater is approximately 140' below surface. The groundwater data is shown in Appendix B.

Tetra Tech

4000 North Big Spring, Midland, TX 79705

Tel 432.682.4559 Fax 432.682.3946 www.tetrattech.com



## Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5000 mg/kg.

## Soil Assessment and Analytical Results

On August 14, 2013, Tetra Tech personnel inspected and sampled the spill area. Eleven (11) auger holes (AH-1 through AH-11) were installed using a stainless steel hand auger to assess the impacted soils. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, there were no BTEX impacts detected above the RRAL, however a TPH impact was detected in the subsurface soils above the RRAL. Auger hole (AH-2), showed a TPH concentration to the soils of 5,555 mg/kg at 0-1' and declined to 40 mg/kg at 1.5-2.0' below surface. All other auger hole samples were below the RRAL for BTEX and TPH.

In addition, a chloride impact was detected in auger holes (AH-1, AH-4, AH-5, AH-6, AH-7, AH-8, AH-9, AH-10 and AH-11). On the pad, auger hole (AH-1) showed a chloride impact of 7,910 mg/kg at 0-1' and declined significantly to 488 mg/kg and 217 mg/kg at 1.-5' and 2.5-3.0' respectively. In the pasture, auger holes (AH-4, AH-5 and AH-6) showed chloride levels of 10,000 mg/kg, 11,900mg/kg and 1,480 mg/kg respectively at 0-1' below surface and were not defined; however the facility liner is present within this area at approximately 1.5' below surface. Auger holes (AH-7 and AH-8) showed maximum chloride levels of 13,600 mg/kg at 3.5-4.0' and 8,340 mg/kg at 2.5-3.0' below surface and declined to 8,380 mg/kg at 4.5-5.0' and 3.5-4.0' respectively. Auger hole (AH-9) showed a chloride level of 1,360 mg/kg at 0-1.0' and declined to 20.3 mg/kg 1.5-2.0' below surface. Auger holes (AH-10 and AH-11) showed a chloride impact at 3.5-4.0' of 1,310 mg/kg and 1,370 mg/kg, respectively. These areas were not vertically defined.



## Work Plan

On November 18, 2013, NMOCD staff Mr. Geoffrey Leking, COP staff Steve Tischer and Debrah Gann and Tetra Tech staff Tom Elliott met to discuss the site. The site was walked and it was agreed upon to that further delineation was required in the pasture (sanddune complex) by either placing borings or trenches and that all elevated chlorides >1000 mg/kg would be removed.

COP proposes to remove impacted material as highlighted (green) in Table 1 and shown on Figure 4. The areas of AH-1, AH-2 and AH-9 will be excavated to a depth of approximately 1.0' below surface to remove the impacted soil. The areas of AH-4, AH-5 and AH-6 will be excavated to the top of the liner to remove the impacted material. The area of AH-7 will be excavated to approximately 5.0' below surface and AH-8 excavated to approximately 4.0' below surface.

In the area of AH-7, AH-8, AH-10 and AH-11 backhoe trenches will be installed to confirm and define the chloride extents. Based on the results, the areas will be excavated to the appropriate depth. If deeper impacts are detected, a liner or a 1.0' clay cap will be installed at a depth of 4.0' below surface in AH-7, AH-8, AH-10 and AH-11. All of the impacted material will be transported to proper disposal and the excavations will be backfilled with clean soil to grade. If the impacted soil is not vertically defined, Tetra Tech will install a borehole to define the extents.

The proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. In addition, impacted soil around oil and gas equipment, structures or lines may not be feasible or practicable to be removed due to safety concerns. As such, Tetra Tech will excavate the soils to the maximum extent practicable.

Upon completion, a final report will be submitted to the NMOCD. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call me at (432) 682-4559.

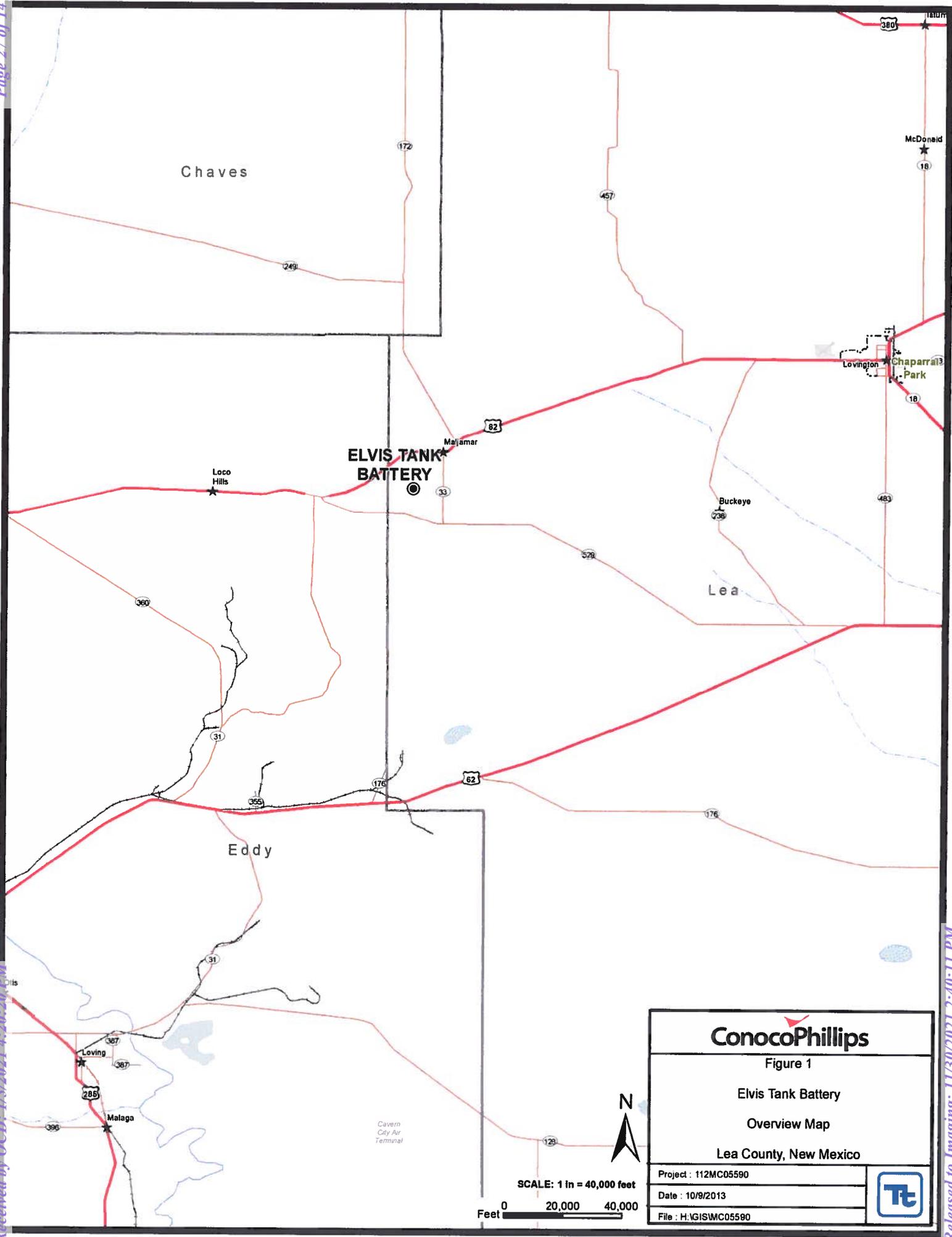
Respectfully submitted,  
TETRA TECH

A handwritten signature in blue ink, appearing to read 'Tom Elliott'.

Tom Elliott  
Project Manager

cc: Steve Tischer – COP  
Jim Amos - BLM

# FIGURES



**ConocoPhillips**

Figure 1

Elvis Tank Battery

Overview Map

Lea County, New Mexico

Project : 112MC05590

Date : 10/9/2013

File : H:\GIS\MC05590



SCALE: 1 in = 40,000 feet

0 20,000 40,000  
Feet

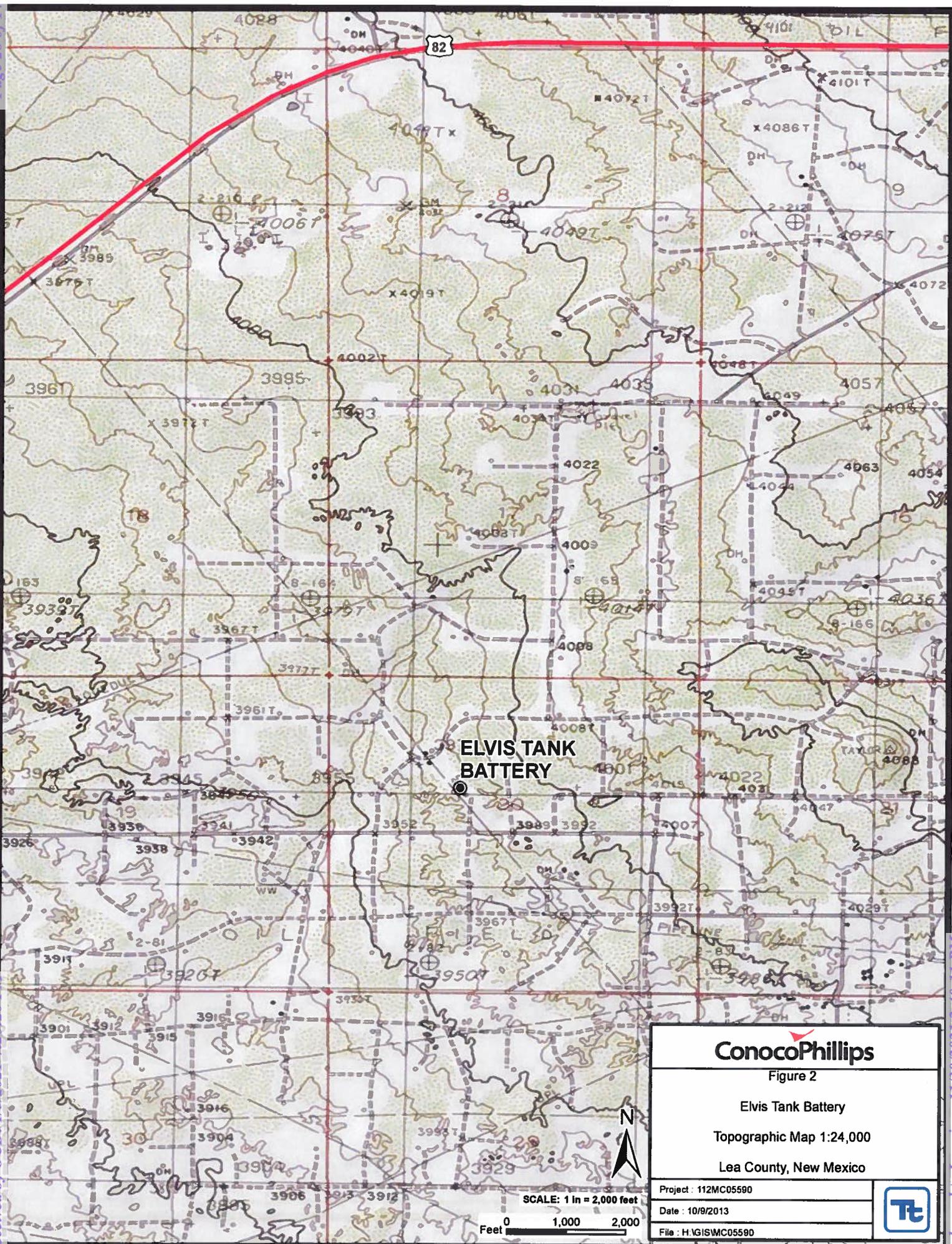
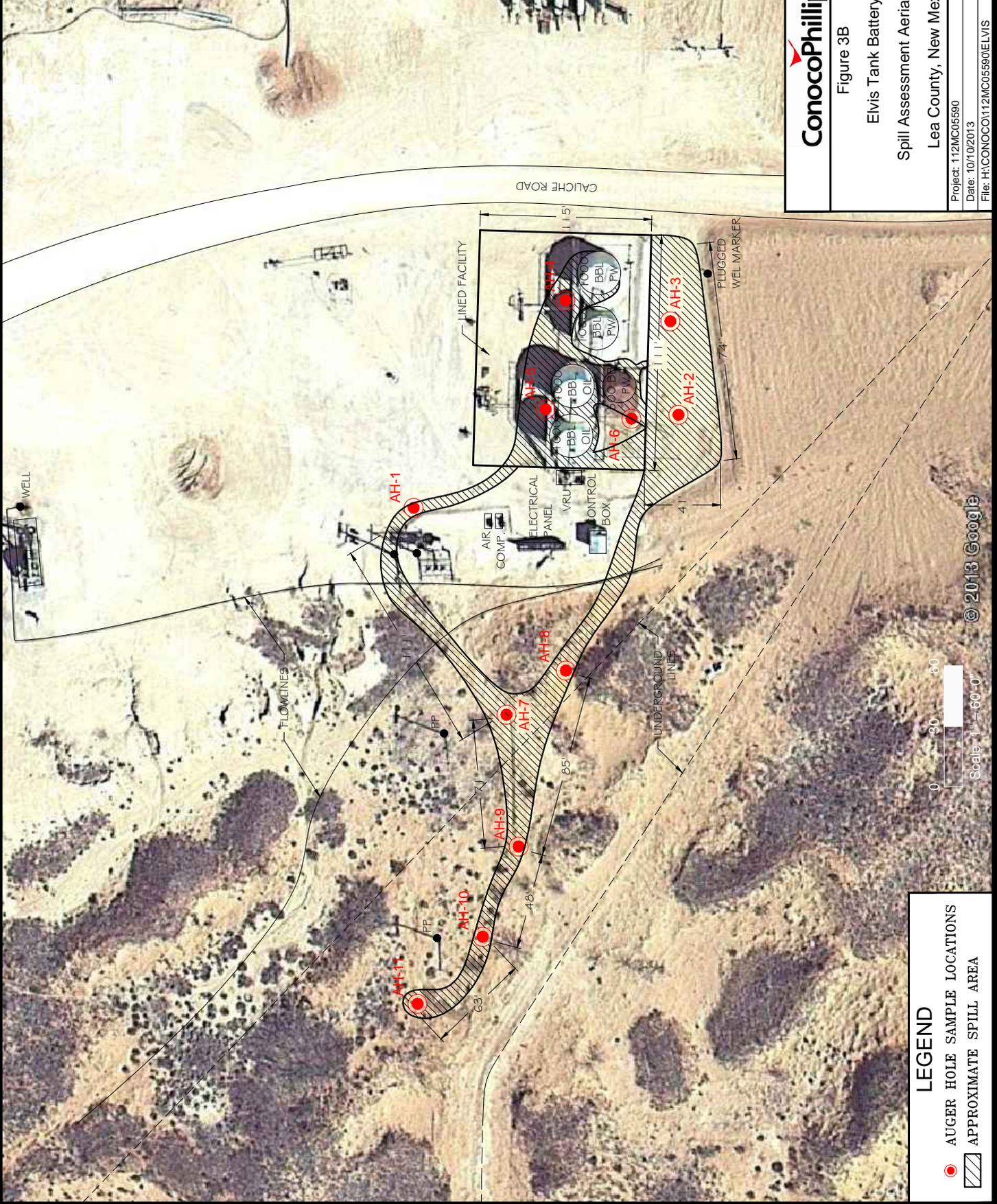
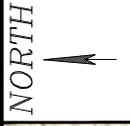


Figure 2	
Elvis Tank Battery	
Topographic Map 1:24,000	
Lea County, New Mexico	
Project : 112MC05590	
Date : 10/9/2013	
File : H.VGISMC05590	



**ConocoPhillips**

Figure 3B  
 Elvis Tank Battery  
 Spill Assessment Aerial Map  
 Lea County, New Mexico

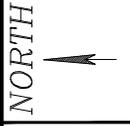
Project: 112MC05590  
 Date: 10/10/2013  
 File: H:\CONOCO\112MC05590\ELVIS

**LEGEND**

- AUGER HOLE SAMPLE LOCATIONS
- APPROXIMATE SPILL AREA



© 2013 Google



**ConocoPhillips**

Figure 3A

Elvis Tank Battery

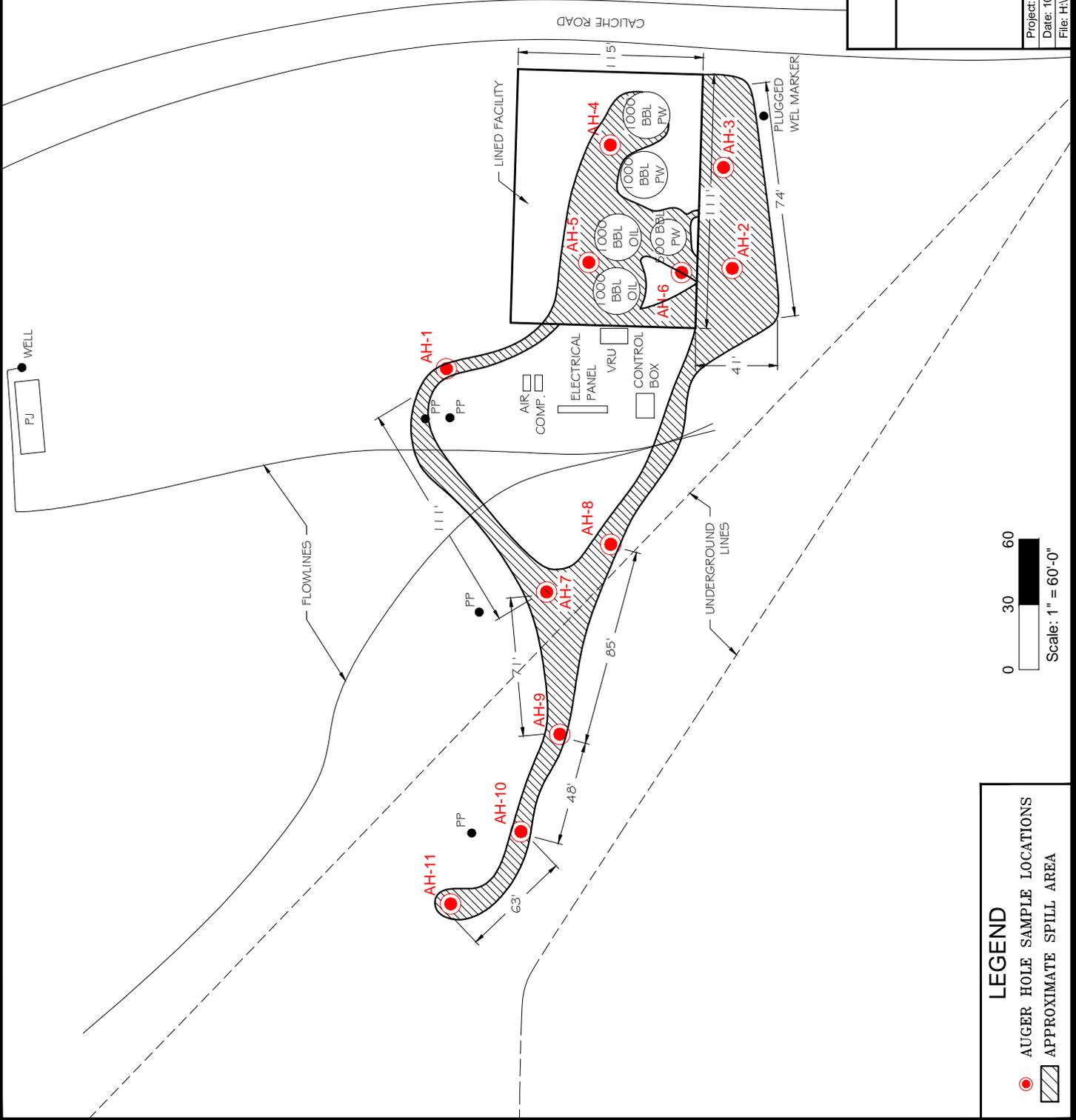
Spill Assessment Map

Lea County, New Mexico

Project: 112MC05590

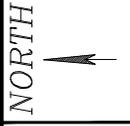
Date: 10/10/2013

File: H:\CONOCO\112MC05590\ELVIS



**LEGEND**

- AUGER HOLE SAMPLE LOCATIONS
- APPROXIMATE SPILL AREA



**ConocoPhillips**

Figure 4

Elvis Tank Battery

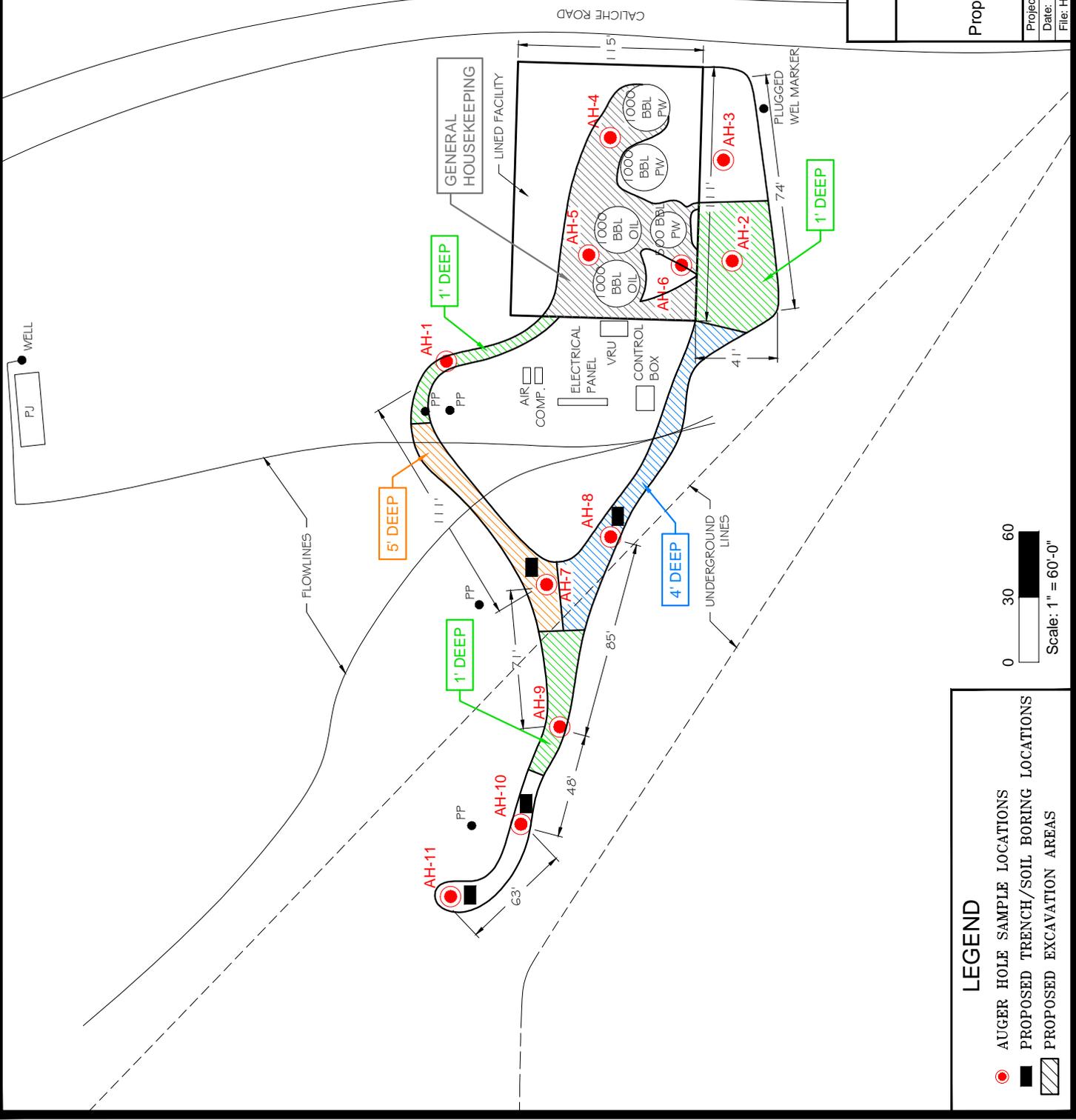
Proposed Excavation Areas & Depth Map

Lea County, New Mexico

Project: 112MC05590

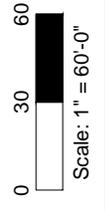
Date: 10/10/2013

File: H:\CONOCO\112MC05590\ELVIS



**LEGEND**

- AUGER HOLE SAMPLE LOCATIONS
- PROPOSED TRENCH/SOIL BORING LOCATIONS
- PROPOSED EXCAVATION AREAS



# PHOTOGRAPHS

ConocoPhillips  
Elvis TB  
Lea County, New Mexico



TETRA TECH

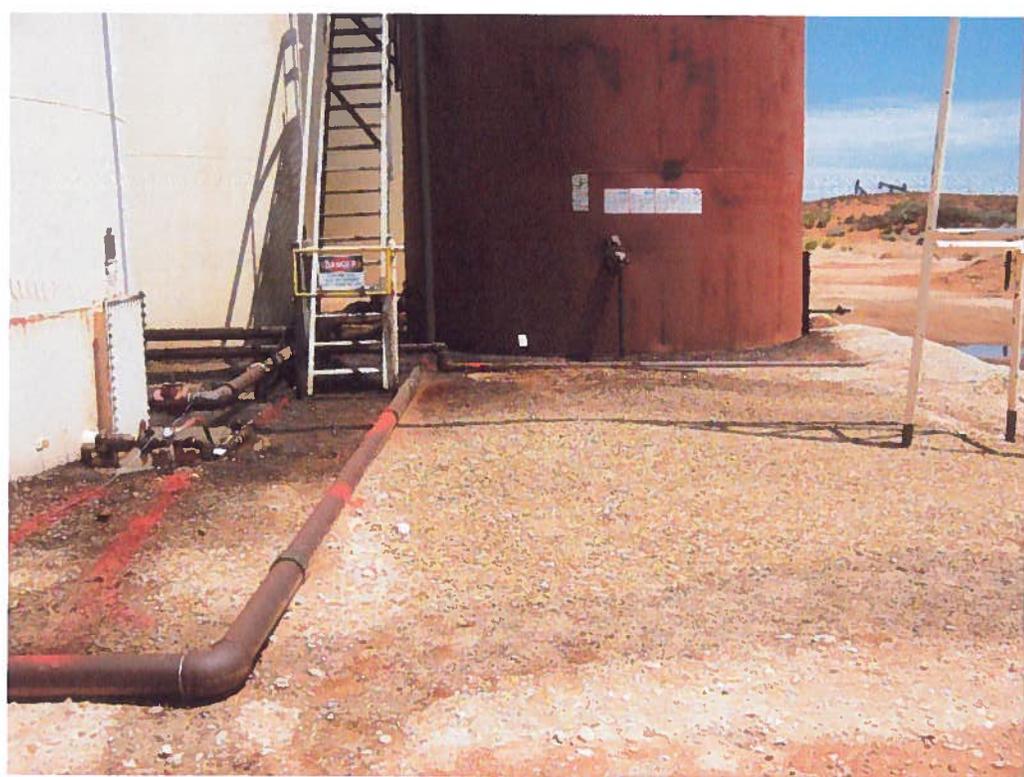


View North – Area of AH-2



View East – Area of AH-2 and AH-3

ConocoPhillips  
Elvis TB  
Lea County, New Mexico



View East – Area of AH-6



View Southeast – Area of AH-5

ConocoPhillips  
Elvis TB  
Lea County, New Mexico



View West – Area of AH-7



View East – Area of AH-8

# TABLES

**TABLE 1**  
**Conoco Phillips**  
**Elvis Tank Battery**  
**Lea County, New Mexico**

Sample Location	Date	BEB Sample Depth (ft)	Excavation Depth (ft)	Soil Status		Benzene (mg/kg)	BTEX			Total BTEX (mg/kg)	TPH			Chloride (mg/kg)
				In-Situ	Removed		Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)		GRO (mg/kg)	DRO (mg/kg)	Total (mg/kg)	
OCD Cleanup Guidelines for Groundwater >150 ft.														
AH-1	8/14/2013	0-1	0	X		<0.0012	<0.0012	<0.0012	<0.0035	50	0.40	705	705	7,910
	8/14/2013	1.5-2.0	0	X		---	---	---	---	---	---	---	---	488
	8/14/2013	2.5-3.0	0	X		---	---	---	---	---	---	---	---	217
	8/14/2013	3.5-4.0	0	X		---	---	---	---	---	---	---	---	18.9
	8/14/2013	4.5-5.0	0	X		---	---	---	---	---	---	---	---	48.7
	8/14/2013	5.5-6.0	0	X		---	---	---	---	---	---	---	---	374
	8/14/2013	6.5-7.0	0	X		---	---	---	---	---	---	---	---	357
	8/14/2013	7.5-8.0	0	X		---	---	---	---	---	---	---	---	463
AH-2	8/14/2013	8.5-9.0	0	X		---	---	---	---	---	---	---	---	629
	8/14/2013	9.5-10.0	0	X		---	---	---	---	---	---	---	---	324
	8/14/2013	0-1	0	X		<0.0052	6.6	<0.0052	9.9	16.5	265	5,290	5,555	637
	8/14/2013	1.5-2.0	0	X		---	---	---	---	---	1.2	38.4	40	400
AH-3	8/14/2013	2.5-3.0	0	X		---	---	---	---	---	---	---	---	333
	8/14/2013	3.5-4.0	0	X		---	---	---	---	---	---	---	---	192
	8/14/2013	4.5-5.0	0	X		---	---	---	---	---	---	---	---	574
	8/14/2013	0-1	0	X		<0.0051	0.98	<0.0051	4.9	5.88	163	1,670	1,833	399
	8/14/2013	1.5-2.0	0	X		---	---	---	---	---	---	---	---	17.5
	8/14/2013	2.5-3.0	0	X		---	---	---	---	---	---	---	---	39.5
AH-4 (Liner Present)	8/14/2013	3.5-4.0	0	X		---	---	---	---	---	---	---	---	105
	8/14/2013	4.5-5.0	0	X		---	---	---	---	---	---	---	---	195
	8/14/2013	0-1	0	X		<0.0011	<0.0011	<0.0011	<0.0033	<0.0033	2.0	3,770	3,772	10,000
	8/14/2013	0-1	0	X		<0.0055	<0.0055	<0.0055	<0.017	<0.0055	1.0	1,300	1,301	11,900
AH-5 (Liner Present)	8/14/2013	0-1	0	X		<0.0059	0.48	0.13	14.0	301	3,550	3,851	1,480	

**TABLE 1**  
**Conoco Philips**  
**Elvis Tank Battery**  
**Lea County, New Mexico**

Sample Location	Date	BEB Sample Depth (ft)	Excavation Depth (ft)	Soil Status		Benzene (mg/kg)	BTEX			Total BTEX (mg/kg)	TPH			Chloride (mg/kg)
				In-Situ	Removed		Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)		GRO (mg/kg)	DRO (mg/kg)	Total (mg/kg)	
OCD Cleanup Guidelines for Groundwater >150 ft.														
AH-7	8/14/2013	0-1	0	X		<0.0051	<0.0051	<0.0051	<0.015	<0.015	1.2	392	393	4,400
	8/14/2013	1.5-2.0	0	X		---	---	---	---	---	---	---	---	4,900
	8/14/2013	2.5-3.0	0	X		---	---	---	---	---	---	---	---	5,870
	8/14/2013	3.5-4.0	0	X		---	---	---	---	---	---	---	---	13,600
	8/14/2013	4.5-5.0	0	X		---	---	---	---	---	---	---	---	8,380
Trench or Soil Boring														
AH-8	8/14/2013	0-1	0	X		<0.001	<0.001	<0.001	<0.0031	<0.0031	0.42	56.1	57	3,220
	8/14/2013	1.5-2.0	0	X		---	---	---	---	---	---	---	---	215
	8/14/2013	2.5-3.0	0	X		---	---	---	---	---	---	---	---	8,340
	8/14/2013	3.5-4.0	0	X		---	---	---	---	---	---	---	---	4,350
Trench or Soil Boring														
AH-9	8/14/2013	0-1	0	X		<0.0062	<0.0062	<0.0062	<0.019	<0.019	1.6	730	732	1,360
	8/14/2013	1.5-2.0	0	X		---	---	---	---	---	---	---	---	20.3
	8/14/2013	2.5-3.0	0	X		---	---	---	---	---	---	---	---	90.0
	8/14/2013	3.5-4.0	0	X		---	---	---	---	---	---	---	---	208
Trench or Soil Boring														
AH-10	8/14/2013	0-1	0	X		<0.0051	<0.0051	<0.0051	<0.015	<0.015	<0.26	3970	3970	7.2
	8/14/2013	1.5-2.0	0	X		---	---	---	---	---	---	---	---	48.3
	8/14/2013	2.5-3.0	0	X		---	---	---	---	---	---	---	---	825
	8/14/2013	3.5-4.0	0	X		---	---	---	---	---	---	---	---	1,310
Trench or Soil Boring														
AH-11	6/26/2013	0-1	0	X		<0.0010	<0.0010	<0.0010	<0.0031	<0.0031	0.25	4910	4910	282
	8/14/2013	1.5-2.0	0	X		---	---	---	---	---	---	---	---	99.8
	8/14/2013	2.5-3.0	0	X		---	---	---	---	---	---	---	---	701
	8/14/2013	3.5-4.0	0	X		---	---	---	---	---	---	---	---	1,370
Trench or Soil Boring														

(-) Not Analyzed  
 (BEB) Below Excavation Bottom  
 Proposed Excavation Depths  
 Trench or Soil Boring Proposed Trench or soil boring to defir

## APPENDIX A

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

### Release Notification and Corrective Action

#### OPERATOR

Initial Report  Final Report

Name of Company: <b>ConocoPhillips</b>	Contact: <b>John Gates</b>
Address: <b>29 Vacuum Complex Lane Lovington, NM 88260</b>	Telephone No.: <b>575-391-3158</b>
Facility Name: <b>MCA Elvis Battery</b>	Facility Type: <b>Oil &amp; Gas</b>
Surface Owner: <b>Federal</b>	Mineral Owner: <b>Federal</b>
API No. <b>188612</b>	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	20	17	32					Lea

Latitude: 32 49' 21.54" N

Longitude: 103 47' 26.052" W

#### NATURE OF RELEASE

Type of Release: <b>Crude Oil &amp; Produced Water</b>	Volume of Release ~ <b>4 BBLs Oil &amp; ~473 bbls Produced Water</b>	Volume Recovered : <b>~2 bbls oil &amp; ~398 bbls water</b>
Source of Release: <b>Release overflowed from top of North West 500 bbl oil tank</b>	Date and Hour of Occurrence <b>05/17/13 Unknown Time Of occurrence</b>	Date and Hour of Discovery <b>05/17/13 @ ~0730 Hours</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Geoffrey Leking NMOCD &amp; Trishia Bad Bear BLM</b>	
By Whom? <b>John Gates</b>	Date and Hour: <b>05/17/13 @ 0746 Hours</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

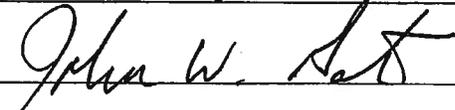
Describe Cause of Problem and Remedial Action Taken.\*

Release originated from top of produced water tanks inside battery. The tanks overflowed out of top hatch onto battery location and caliche road. Transfer pumps went down which subsequently caused tanks to overflow. MSO shut in battery to stop additional fluids from being released. Spill site will be remediated in accordance with NMOCD & BLM guidelines.

Describe Area Affected and Cleanup Action Taken.\*

Majority of spill was contained in surrounding caliche location and roadway with small amount running west off location onto sandy soil. Vacuum trucks were called to recover standing fluids. Approximately 2 BBLs of oil and approximately 398 bbls of water were recovered.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>John W. Gates</b>	Approved by Environmental Specialist:	
Title: <b>LEAD HSE</b>	Approval Date:	Expiration Date:
E-mail Address: <b>John.W.Gates@conocophillips.com</b>	Conditions of Approval:	
Date: <b>05/17/13</b> Phone: <b>575-391-3158</b>	Attached <input type="checkbox"/>	

## APPENDIX B

**Water Well Data  
Average Depth to Groundwater (ft)  
ConocoPhillips - Elvis TB  
Lea County, New Mexico**

16 South			32 East		
6	5	4	3	2	1
			65	265	265
7	8	9	10	11	12
					215
18	17	16	15	14	13
			221		215
19	20	21	22	23	24
220		210		210	
30	29	28	27	26	25
				243	
31	32	33	34	35	36
					260

16 South			33 East		
6	5	180	4	3	130
			150		148
7	8		9	10	11
		200		182	142
18	17	16	15	14	13
		182	180	175	143
19	20	21	22	23	24
				120	
30	29	28	27	26	25
		191	190	130	143
31	32	33	34	35	36
		190	168		160

16 South			34 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

17 South			32 East		
6	5	4	82	3	2
			175	60	1
7	8	9	10	11	12
				88	120
18	17	16	15	14	13
19	20	21	22	23	24
			SITE		
30	180	29	28	27	26
dry					
31	32	33	34	35	36
Brown					

17 South			33 East		
6	90	5	4	3	155
				2	158
7	167	8	9	10	11
		173	161		12
18	17	16	15	14	13
		188	180		165
19	20	21	22	23	24
		SITE		115	
30	69	29	28	27	26
		60			25
31	32	33	34	35	36
			120	155	

17 South			34 East		
6	120	5	4	3	2
			65	95	80
7	157	8	9	10	11
		140	140	95	92
18	17	16	15	14	13
		160	113	60	60
19	20	21	22	23	24
		78	140	153	109
30	29	28	27	26	25
					82
31	32	33	34	35	36

18 South			32 East		
6	5	4	65	3	2
				Prong #2	1
7	460	8	9	10	11
					82
18	17	16	15	14	13
		84			
19	20	21	22	23	24
		164		429	
30	29	28	27	26	25
31	32	33	34	35	36
				117	

18 South			33 East		
6	5	4	3	2	1
			60		
7	8	100	9	10	11
				62	46
18	17	16	15	14	13
		85		36	60
19	20	21	22	23	24
		>140			195
30	29	28	27	26	25
		35			
31	32	33	34	35	36
			177		

18 South			34 East		
6	5	4	3	2	1
			87	102	107
7	8	9	10	11	12
			83	148	110
18	17	16	15	14	13
			125	108	110
19	20	21	22	23	24
		105	125	103	96
30	29	28	27	26	25
				112	117
31	32	33	34	35	36
				118	

- New Mexico State Engineers Well Reports
- USGS Well Reports
- Geology and Groundwater Conditions in Southern Eddy, County, NM
- NMOCD - Groundwater Data
- Field water level
- New Mexico Water and Infrastructure Data System

## APPENDIX C



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

September 06, 2013

Steven P. Tischer  
ConocoPhillips Company  
3300 N. A Street, Bldg 6  
Midland, TX 79710

RE: Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Dear Steven Tischer:

Enclosed are the analytical results for sample(s) received by the laboratory on August 16, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Report Revised 9/6/13 - Additional analysis requested.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Shelly Connelly

shelly.connelly@pacelabs.com  
Project Manager

Enclosures

cc: Tom Elliott, Tetra Tech



**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**Pace Analytical Services, Inc.**  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### CERTIFICATIONS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

---

**Dallas Certification IDs**

400 West Bethany Dr Suite 190 75013 Allen TX 75013  
Texas Certification #: T104704232-12-4  
Kansas Certification #: E-10388

Arkansas Certification #: 88-0647  
Oklahoma Certification #: 2012-080  
Louisiana Certification #: 02007

---

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### SAMPLE SUMMARY

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Lab ID	Sample ID	Matrix	Date Collected	Date Received
757578001	AH-1 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578002	AH-1 (1.5-2.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578003	AH-1 (2.5-3.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578004	AH-1 (3.5-4.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578005	AH-1 (4.5-5.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578006	AH-1 (5.5-6.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578007	AH-1 (6.5-7.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578008	AH-1 (7.5-8.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578009	AH-1 (8.5-9.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578010	AH-1 (9.5-10.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578011	AH-2 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578012	AH-2 (1.5-2.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578013	AH-2 (2.5-3.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578014	AH-2 (3.5-4.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578015	AH-2 (4.5-5.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578016	AH-3 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578017	AH-3 (1.5-2.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578018	AH-3 (2.5-3.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578019	AH-3 (3.5-4.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578020	AH-3 (4.5-5.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578021	AH-4 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578022	AH-5 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578023	AH-6 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578024	AH-7 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578025	AH-7 (1.5-2.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578026	AH-7 (2.5-3.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578027	AH-7 (3.5-4.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578028	AH-7 (4.5-5.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578029	AH-8 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578030	AH-8 (1.5-2.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578031	AH-8 (2.5-3.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578032	AH-8 (3.5-4.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578033	AH-9 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578034	AH-9 (1.5-2.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578035	AH-9 (2.5-3.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578036	AH-9 (3.5-4.0')	Solid	08/14/13 00:00	08/16/13 14:37
757578037	AH-10 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### SAMPLE SUMMARY

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Lab ID	Sample ID	Matrix	Date Collected	Date Received
767678038	AH-10 (1.5-2.0')	Solid	08/14/13 00:00	08/16/13 14:37
767678039	AH-10 (2.5-3.0')	Solid	08/14/13 00:00	08/16/13 14:37
767678040	AH-10 (3.5-4.0')	Solid	08/14/13 00:00	08/16/13 14:37
767678041	AH-11 (0-1.0')	Solid	08/14/13 00:00	08/16/13 14:37
767678042	AH-11 (1.5-2.0')	Solid	08/14/13 00:00	08/16/13 14:37
767678043	AH-11 (2.5-3.0')	Solid	08/14/13 00:00	08/16/13 14:37
767678044	AH-11 (3.5-4.0')	Solid	08/14/13 00:00	08/16/13 14:37

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**SAMPLE ANALYTE COUNT**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Lab ID	Sample ID	Method	Analysts	Analytes Reported
757578001	AH-1 (0-1.0')	EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578002	AH-1 (1.5-2.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578003	AH-1 (2.5-3.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578004	AH-1 (3.5-4.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578005	AH-1 (4.5-5.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578006	AH-1 (5.5-6.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578007	AH-1 (6.5-7.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578008	AH-1 (7.5-8.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578009	AH-1 (8.5-9.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578010	AH-1 (9.5-10.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578011	AH-2 (0-1.0')	EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578012	AH-2 (1.5-2.0')	EPA 8015B Modified	PMS	3
		EPA 8015B	ZST	2
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578013	AH-2 (2.5-3.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578014	AH-2 (3.5-4.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578015	AH-2 (4.5-6.0')	ASTM D2974-87	MDG	1

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**SAMPLE ANALYTE COUNT**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Lab ID	Sample ID	Method	Analysts	Analytes Reported
757578016	AH-3 (0-1.0')	EPA 9056A	MDG	1
		EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
757578017	AH-3 (1.5-2.0')	EPA 9056A	MDG	1
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578018	AH-3 (2.5-3.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578019	AH-3 (3.5-4.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578020	AH-3 (4.5-5.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578021	AH-4 (0-1.0')	EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578022	AH-5 (0-1.0')	EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578023	AH-6 (0-1.0')	EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578024	AH-7 (0-1.0')	EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578025	AH-7 (1.5-2.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578026	AH-7 (2.5-3.0')	ASTM D2974-87	MDG	1

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**SAMPLE ANALYTE COUNT**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 9056A	MDG	1
757578027	AH-7 (3.5-4.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578028	AH-7 (4.5-5.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578029	AH-8 (0-1.0')	EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578030	AH-8 (1.5-2.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578031	AH-8 (2.5-3.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578032	AH-8 (3.5-4.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578033	AH-9 (0-1.0')	EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578034	AH-9 (1.5-2.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578035	AH-9 (2.5-3.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578036	AH-9 (3.5-4.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578037	AH-10 (0-1.0')	EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578038	AH-10 (1.5-2.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578039	AH-10 (2.5-3.0')	ASTM D2974-87	MDG	1
		EPA 9056A	MDG	1
757578040	AH-10 (3.5-4.0')	ASTM D2974-87	MDG	1

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



### SAMPLE ANALYTE COUNT

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Lab ID	Sample ID	Method	Analysts	Analytes Reported
757578041	AH-11 (0-1.0')	EPA 9056A	MDG	1
		EPA 8015B Modified	TA	3
		EPA 8015B	ZST	2
		EPA 8021	ZST	5
		ASTM D2974-87	MDG	1
757578042	AH-11 (1.5-2.0')	EPA 9056A	MDG	1
		ASTM D2974-87	MDG	1
757578043	AH-11 (2.5-3.0')	EPA 9056A	MDG	1
		ASTM D2974-87	MDG	1
757578044	AH-11 (3.5-4.0')	EPA 9056A	MDG	1
		ASTM D2974-87	MDG	1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Sample: AH-1 (0-1.0') Lab ID: 767678001 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
 Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	705 mg/kg		38.8	21.1	10	08/21/13 12:25	08/22/13 14:05		M6
<b>Surrogates</b>									
a-Pinene (S)	43 %		10-140		10	08/21/13 12:25	08/22/13 14:05		
n-Triacontane (S)	213 %		10-140		10	08/21/13 12:25	08/22/13 14:05		S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	0.40 mg/kg		0.058	0.0095	1	08/19/13 14:10	08/19/13 16:12		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109 %		44-135		1	08/19/13 14:10	08/19/13 16:12	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND mg/kg		0.0012	0.00015	1	08/19/13 14:33	08/19/13 16:12	71-43-2	
Ethylbenzene	ND mg/kg		0.0012	0.00012	1	08/19/13 14:33	08/19/13 16:12	100-41-4	
Toluene	ND mg/kg		0.0012	0.000082	1	08/19/13 14:33	08/19/13 16:12	108-88-3	
Xylene (Total)	ND mg/kg		0.0035	0.0035	1	08/19/13 14:33	08/19/13 16:12	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	108 %		70-130		1	08/19/13 14:33	08/19/13 16:12	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	12.9 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	7910 mg/kg		115	57.4	100	08/20/13 15:56	08/22/13 03:08	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-1 (1.5-2.0') Lab ID: 767578002 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	12.2 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	488 mg/kg		11.4	5.7	10	08/20/13 15:56	08/22/13 04:02	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-1 (2.5-3.0') Lab ID: 767578003 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	3.6 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	217 mg/kg		10.4	5.2	10	08/20/13 15:56	08/22/13 04:19	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-1 (3.5-4.0') Lab ID: 767678004 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	2.0 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	18.9 mg/kg		1.0	0.51	1	08/20/13 15:56	08/21/13 14:01	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-1 (4.6-6.0') Lab ID: 767678006 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	3.2 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	48.7 mg/kg		1.0	0.52	1	08/20/13 15:56	08/21/13 14:37	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-1 (5.5-6.0') Lab ID: 767678006 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	9.7 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	374 mg/kg		11.1	5.5	10	08/20/13 15:56	08/22/13 08:34	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-1 (6.5-7.0') Lab ID: 767578007 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	6.4 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	357 mg/kg		10.7	5.3	10	08/20/13 15:56	08/22/13 08:52	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-1 (7.6-8.0') Lab ID: 757678008 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
	Analytical Method: ASTM D2974-87								
Percent Moisture	6.5 %		0.50	0.50	1		08/20/13 13:00		
<b>9066 IC Anions 28 Days</b>									
	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	463 mg/kg		10.7	5.3	10	08/20/13 15:56	08/22/13 09:09	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-1 (8.5-9.0') Lab ID: 767678009 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	7.1 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	629 mg/kg		10.8	5.4	10	08/20/13 15:56	08/22/13 09:27	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-1 (9.6-10.0') Lab ID: 757578010 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	19.9 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	324 mg/kg		12.5	6.2	10	08/20/13 15:56	08/22/13 09:45	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Sample: AH-2 (0-1.0') Lab ID: 757578011 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
 Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	5290	mg/kg	343	187	100	08/21/13 12:25	08/23/13 03:13		
<b>Surrogates</b>									
a-Pinene (S)	208	%	10-140		100	08/21/13 12:25	08/23/13 03:13		S4
n-Triacontane (S)	1260	%	10-140		100	08/21/13 12:25	08/23/13 03:13		CH,S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	265	mg/kg	25.8	4.2	500	08/19/13 14:10	08/20/13 20:18		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	88	%	44-135		500	08/19/13 14:10	08/20/13 20:18	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND	mg/kg	0.0052	0.00069	5	08/19/13 14:33	08/20/13 15:06	71-43-2	
Ethylbenzene	6.6	mg/kg	0.052	0.0054	50	08/19/13 14:33	08/20/13 21:50	100-41-4	
Toluene	ND	mg/kg	0.0052	0.00037	5	08/19/13 14:33	08/20/13 15:06	108-88-3	
Xylene (Total)	9.9	mg/kg	0.15	0.15	50	08/19/13 14:33	08/20/13 21:50	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	80	%	70-130		50	08/19/13 14:33	08/20/13 21:50	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	1.8	%	0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	637	mg/kg	10.2	5.1	10	08/20/13 15:56	08/22/13 10:03	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Sample: AH-2 (1.5-2.0') Lab ID: 767678012 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	38.4 mg/kg		3.5	1.9	1	08/27/13 17:08	08/29/13 12:49		M1
<b>Surrogates</b>									
a-Pinene (S)	41 %		10-140		1	08/27/13 17:08	08/29/13 12:49		
n-Triacontane (S)	68 %		10-140		1	08/27/13 17:08	08/29/13 12:49		
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	1.2 mg/kg		0.26	0.043	5	08/27/13 16:38	08/27/13 18:55		M1
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	152 %		44-135		5	08/27/13 16:38	08/27/13 18:55	460-00-4	S0
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	4.3 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	400 mg/kg		10.5	5.2	10	08/20/13 15:56	08/22/13 10:57	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-2 (2.6-3.0') Lab ID: 767578013 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	3.9 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	333 mg/kg		10.4	5.2	10	08/20/13 15:56	08/22/13 11:15	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-2 (3.5-4.0') Lab ID: 757578014 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	15.0 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	192 mg/kg		1.2	0.59	1	08/20/13 15:56	08/21/13 21:47	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc.



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-2 (4.5-5.0') Lab ID: 767678016 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	17.0 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	574 mg/kg		12.1	6.0	10	08/20/13 15:56	08/22/13 12:10	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-3 (0-1.0') Lab ID: 757678016 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	1670	mg/kg	172	93.6	50	08/21/13 12:25	08/22/13 16:50		
<b>Surrogates</b>									
a-Pinene (S)	103	%	10-140		50	08/21/13 12:25	08/22/13 16:50		
n-Triacontane (S)	547	%	10-140		50	08/21/13 12:25	08/22/13 16:50		CH,S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	163	mg/kg	25.7	4.2	500	08/19/13 14:10	08/20/13 20:48		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	44-135		500	08/19/13 14:10	08/20/13 20:48	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND	mg/kg	0.0051	0.00068	5	08/19/13 14:33	08/20/13 15:37	71-43-2	1t
Ethylbenzene	0.98	mg/kg	0.051	0.0053	50	08/19/13 14:33	08/20/13 22:21	100-41-4	
Toluene	ND	mg/kg	0.0051	0.00037	5	08/19/13 14:33	08/20/13 15:37	108-88-3	
Xylene (Total)	4.9	mg/kg	0.15	0.15	50	08/19/13 14:33	08/20/13 22:21	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	111	%	70-130		50	08/19/13 14:33	08/20/13 22:21	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	1.8	%	0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	399	mg/kg	10.2	5.1	10	08/20/13 15:56	08/22/13 12:28	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-3 (1.5-2.0') Lab ID: 767678017 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	16.4 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	17.6 mg/kg		1.2	0.60	1	08/20/13 15:56	08/22/13 00:09	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-3 (2.6-3.0') Lab ID: 767578018 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	25.0 %		0.50	0.50	1		08/20/13 13:00		
<b>9066 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	39.5 mg/kg		1.3	0.67	1	08/20/13 15:56	08/22/13 00:45	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-3 (3.5-4.0') Lab ID: 757578019 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	21.6 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	105 mg/kg		1.3	0.64	1	08/20/13 15:56	08/22/13 01:21	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-3 (4.5-5.0') Lab ID: 767678020 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	19.0 %		0.50	0.50	1		08/20/13 13:00		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	196 mg/kg		1.2	0.62	1	08/20/13 15:56	08/22/13 01:57	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM

Page 28 of 80



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Sample: AH-4 (0-1.0') Lab ID: 757678021 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
 Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8016M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	3770	mg/kg	363	198	100	08/21/13 12:25	08/22/13 17:45		
<b>Surrogates</b>									
a-Pinene (S)	63	%	10-140		100	08/21/13 12:25	08/22/13 17:45		
n-Triacontane (S)	1080	%	10-140		100	08/21/13 12:25	08/22/13 17:45		CH,S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	2.0	mg/kg	0.054	0.0089	1	08/19/13 14:10	08/19/13 17:44		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	13	%	44-135		1	08/19/13 14:10	08/19/13 17:44	460-00-4	S0
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND	mg/kg	0.0011	0.00014	1	08/19/13 14:33	08/19/13 17:44	71-43-2	
Ethylbenzene	ND	mg/kg	0.0011	0.00011	1	08/19/13 14:33	08/19/13 17:44	100-41-4	
Toluene	ND	mg/kg	0.0011	0.000077	1	08/19/13 14:33	08/19/13 17:44	108-88-3	
Xylene (Total)	ND	mg/kg	0.0033	0.0033	1	08/19/13 14:33	08/19/13 17:44	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	12	%	70-130		1	08/19/13 14:33	08/19/13 17:44	460-00-4	S0
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	6.7	%	0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	10000	mg/kg	214	107	200	08/21/13 11:37	08/23/13 14:59	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Sample: AH-5 (0-1.0') Lab ID: 767578022 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
 Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	1300 mg/kg		367	200	100	08/21/13 12:25	08/22/13 18:40		
<b>Surrogates</b>									
a-Pinene (S)	59 %		10-140		100	08/21/13 12:25	08/22/13 18:40		
n-Triacontane (S)	1220 %		10-140		100	08/21/13 12:25	08/22/13 18:40		CH,S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	1.0 mg/kg		0.28	0.045	5	08/19/13 14:10	08/20/13 10:10		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109 %		44-135		5	08/19/13 14:10	08/20/13 10:10	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND mg/kg		0.0055	0.00073	5	08/19/13 14:33	08/20/13 10:10	71-43-2	
Ethylbenzene	ND mg/kg		0.0055	0.00057	5	08/19/13 14:33	08/20/13 10:10	100-41-4	
Toluene	ND mg/kg		0.0055	0.00039	5	08/19/13 14:33	08/20/13 10:10	108-88-3	
Xylene (Total)	ND mg/kg		0.017	0.017	5	08/19/13 14:33	08/20/13 10:10	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	109 %		70-130		5	08/19/13 14:33	08/20/13 10:10	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	8.0 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	11900 mg/kg		217	109	200	08/21/13 11:37	08/23/13 15:52	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Sample: AH-6 (0-1.0') Lab ID: 767578023 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	3550	mg/kg	395	215	100	08/21/13 12:25	08/22/13 19:34		
<b>Surrogates</b>									
a-Pinene (S)	262	%	10-140		100	08/21/13 12:25	08/22/13 19:34		S4
n-Triacontane (S)	1120	%	10-140		100	08/21/13 12:25	08/22/13 19:34		CH,S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	301	mg/kg	29.4	4.8	500	08/19/13 14:10	08/21/13 17:25		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	88	%	44-135		500	08/19/13 14:10	08/21/13 17:25	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND	mg/kg	0.0059	0.00078	5	08/19/13 14:33	08/20/13 12:14	71-43-2	
Ethylbenzene	0.48	mg/kg	0.0059	0.00061	5	08/19/13 14:33	08/20/13 12:14	100-41-4	
Toluene	0.13	mg/kg	0.0059	0.00042	5	08/19/13 14:33	08/20/13 12:14	108-88-3	
Xylene (Total)	14.0	mg/kg	0.71	0.71	200	08/19/13 14:33	08/21/13 15:32	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	91	%	70-130		5	08/19/13 14:33	08/20/13 12:14	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	14.4	%	0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	1480	mg/kg	11.7	5.8	10	08/21/13 11:37	08/23/13 16:10	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-7 (0-1.0') Lab ID: 767578024 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	392 mg/kg		34.4	18.7	10	08/21/13 12:25	08/23/13 06:47		
<b>Surrogates</b>									
a-Pinene (S)	47 %		10-140		10	08/21/13 12:25	08/23/13 06:47		
n-Triacontane (S)	210 %		10-140		10	08/21/13 12:25	08/23/13 06:47		CH,S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	1.2 mg/kg		1.0	0.17	20	08/19/13 14:10	08/20/13 18:14		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98 %		44-135		20	08/19/13 14:10	08/20/13 18:14	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND mg/kg		0.0051	0.00068	5	08/19/13 14:33	08/20/13 10:41	71-43-2	1t
Ethylbenzene	ND mg/kg		0.0051	0.00054	5	08/19/13 14:33	08/20/13 10:41	100-41-4	
Toluene	ND mg/kg		0.0051	0.00037	5	08/19/13 14:33	08/20/13 10:41	108-88-3	
Xylene (Total)	ND mg/kg		0.015	0.015	5	08/19/13 14:33	08/20/13 10:41	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	116 %		70-130		5	08/19/13 14:33	08/20/13 10:41	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	1.7 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	4400 mg/kg		102	50.9	100	08/21/13 11:37	08/23/13 16:28	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-7 (1.5-2.0') Lab ID: 767678026 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	3.2 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	4900 mg/kg		103	51.6	100	08/21/13 11:37	08/23/13 16:46	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-7 (2.6-3.0') Lab ID: 767678026 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>		Analytical Method: ASTM D2974-87							
Percent Moisture	3.9 %		0.50	0.50	1		08/20/13 13:30		
<b>9066 IC Anions 28 Days</b>		Analytical Method: EPA 9056A Preparation Method: EPA 9056A							
Chloride	5870 mg/kg		104	52.0	100	08/21/13 11:37	08/23/13 17:04	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-7 (3.5-4.0') Lab ID: 767578027 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	13.8 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	13600 mg/kg		232	116	200	08/21/13 11:37	08/23/13 17:21	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc.



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-7 (4.5-5.0') Lab ID: 757578028 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	9.7 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	8380 mg/kg		111	55.4	100	08/21/13 11:37	08/23/13 17:39	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-8 (0-1.0') Lab ID: 757678029 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	56.1 mg/kg		34.7	18.9	10	08/21/13 12:25	08/23/13 07:40		
<b>Surrogates</b>									
a-Pinene (S)	62 %.		10-140		10	08/21/13 12:25	08/23/13 07:40		
n-Triacontane (S)	202 %.		10-140		10	08/21/13 12:25	08/23/13 07:40		CH,S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	0.42 mg/kg		0.052	0.0085	1	08/19/13 14:10	08/19/13 19:48		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	114 %.		44-135		1	08/19/13 14:10	08/19/13 19:48	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND mg/kg		0.0010	0.00014	1	08/19/13 14:33	08/19/13 19:48	71-43-2	
Ethylbenzene	ND mg/kg		0.0010	0.00011	1	08/19/13 14:33	08/19/13 19:48	100-41-4	
Toluene	ND mg/kg		0.0010	0.000074	1	08/19/13 14:33	08/19/13 19:48	108-88-3	
Xylene (Total)	ND mg/kg		0.0031	0.0031	1	08/19/13 14:33	08/19/13 19:48	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	112 %.		70-130		1	08/19/13 14:33	08/19/13 19:48	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	2.7 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	3220 mg/kg		103	51.4	100	08/21/13 11:37	08/23/13 18:33	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-8 (1.5-2.0') Lab ID: 757578030 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	10.3 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	215 mg/kg		1.1	0.56	1	08/21/13 11:37	08/23/13 00:24	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-8 (2.5-3.0') Lab ID: 757578031 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	11.1 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	8340 mg/kg		113	56.3	100	08/21/13 11:37	08/23/13 18:51	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-8 (3.5-4.0') Lab ID: 757578032 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	27.6 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	4350 mg/kg		138	69.1	100	08/21/13 11:37	08/23/13 19:44	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM

Page 40 of 80



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Sample: AH-9 (0-1.0') Lab ID: 767678033 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
 Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	730	mg/kg	41.2	22.5	10	08/21/13 12:25	08/23/13 08:33		
<b>Surrogates</b>									
a-Pinene (S)	46	%	10-140		10	08/21/13 12:25	08/23/13 08:33		
n-Triacontane (S)	140	%	10-140		10	08/21/13 12:25	08/23/13 08:33		CH
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	1.6	mg/kg	0.31	0.051	5	08/19/13 14:10	08/20/13 11:12		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	133	%	44-135		5	08/19/13 14:10	08/20/13 11:12	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND	mg/kg	0.0062	0.00082	5	08/19/13 14:33	08/20/13 11:12	71-43-2	
Ethylbenzene	ND	mg/kg	0.0062	0.00064	5	08/19/13 14:33	08/20/13 11:12	100-41-4	
Toluene	ND	mg/kg	0.0062	0.00044	5	08/19/13 14:33	08/20/13 11:12	108-88-3	
Xylene (Total)	ND	mg/kg	0.019	0.019	5	08/19/13 14:33	08/20/13 11:12	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	132	%	70-130		5	08/19/13 14:33	08/20/13 11:12	460-00-4	S3
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	18.3	%	0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	1360	mg/kg	12.2	6.1	10	08/21/13 11:37	08/23/13 20:02	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-9 (1.5-2.0') Lab ID: 757578034 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	8.6 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	20.3 mg/kg		1.1	0.55	1	08/21/13 11:37	08/23/13 03:58	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

Date: 09/06/2013 02:13 PM

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-9 (2.5-3.0') Lab ID: 767678036 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	24.0 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	90.0 mg/kg		1.3	0.66	1	08/21/13 11:37	08/23/13 07:30	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-9 (3.5-4.0') Lab ID: 767678036 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	14.3 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	208 mg/kg		1.2	0.58	1	08/21/13 11:37	08/23/13 08:05	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-10 (0-1.0') Lab ID: 767678037 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	3790	mg/kg	340	185	100	08/21/13 12:25	08/22/13 23:11		
<b>Surrogates</b>									
a-Pinene (S)	72	%	10-140		100	08/21/13 12:25	08/22/13 23:11		
n-Triacontane (S)	855	%	10-140		100	08/21/13 12:25	08/22/13 23:11		CH,S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	ND	mg/kg	0.26	0.042	5	08/19/13 14:10	08/20/13 11:43		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	44-135		5	08/19/13 14:10	08/20/13 11:43	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND	mg/kg	0.0051	0.00068	5	08/19/13 14:33	08/20/13 11:43	71-43-2	
Ethylbenzene	ND	mg/kg	0.0051	0.00053	5	08/19/13 14:33	08/20/13 11:43	100-41-4	
Toluene	ND	mg/kg	0.0051	0.00036	5	08/19/13 14:33	08/20/13 11:43	108-88-3	
Xylene (Total)	ND	mg/kg	0.015	0.015	5	08/19/13 14:33	08/20/13 11:43	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	105	%	70-130		5	08/19/13 14:33	08/20/13 11:43	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	0.61	%	0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	7.2	mg/kg	1.0	0.50	1	08/21/13 11:37	08/23/13 08:44	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-10 (1.6-2.0') Lab ID: 757578038 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	1.0 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	48.3 mg/kg		1.0	0.51	1	08/21/13 11:37	08/23/13 09:01	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-10 (2.5-3.0') Lab ID: 767678039 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	8.3 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	825 mg/kg		10.9	5.5	10	08/21/13 11:37	08/23/13 20:20	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-10 (3.5-4.0') Lab ID: 767678040 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid  
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	13.9 %		0.50	0.50	1		08/20/13 13:30		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	1310 mg/kg		11.6	5.8	10	08/21/13 11:37	08/23/13 20:38	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

Sample: AH-11 (0-1.0') Lab ID: 757578041 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8015M Diesel Range Organics</b>									
Analytical Method: EPA 8015B Modified Preparation Method: EPA 3550 Modified									
Diesel Range Organics	4910	mg/kg	341	186	100	08/21/13 12:25	08/23/13 00:32		
<b>Surrogates</b>									
a-Pinene (S)	69	%	10-140		100	08/21/13 12:25	08/23/13 00:32		
n-Triacontane (S)	945	%	10-140		100	08/21/13 12:25	08/23/13 00:32		CH,S4
<b>Gasoline Range Organics</b>									
Analytical Method: EPA 8015B Preparation Method: EPA 5035A/5030B									
Gasoline Range Organics	0.25	mg/kg	0.051	0.0084	1	08/19/13 14:10	08/19/13 21:21		
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	104	%	44-135		1	08/19/13 14:10	08/19/13 21:21	460-00-4	
<b>8021 GCV Low BTEX</b>									
Analytical Method: EPA 8021 Preparation Method: EPA 5030									
Benzene	ND	mg/kg	0.0010	0.00014	1	08/19/13 14:33	08/19/13 21:21	71-43-2	
Ethylbenzene	ND	mg/kg	0.0010	0.00011	1	08/19/13 14:33	08/19/13 21:21	100-41-4	
Toluene	ND	mg/kg	0.0010	0.000073	1	08/19/13 14:33	08/19/13 21:21	108-88-3	
Xylene (Total)	ND	mg/kg	0.0031	0.0031	1	08/19/13 14:33	08/19/13 21:21	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	103	%	70-130		1	08/19/13 14:33	08/19/13 21:21	460-00-4	
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	0.98	%	0.50	0.50	1		08/20/13 14:00		
<b>9066 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	282	mg/kg	10.1	5.0	10	08/21/13 11:37	08/23/13 21:32	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc.



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

### ANALYTICAL RESULTS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-11 (1.5-2.0') Lab ID: 767678042 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>									
Analytical Method: ASTM D2974-87									
Percent Moisture	12.6 %		0.50	0.50	1		08/20/13 14:00		
<b>9056 IC Anions 28 Days</b>									
Analytical Method: EPA 9056A Preparation Method: EPA 9056A									
Chloride	99.8 mg/kg		1.1	0.57	1	08/21/13 11:37	08/23/13 12:36	16887-00-6	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM

Page 50 of 80



**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-11 (2.6-3.0') Lab ID: 757578043 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	7.6 %		0.50	0.50	1		08/20/13 14:00		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	701 mg/kg		10.8	5.4	10	08/21/13 11:37	08/23/13 22:43	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

**ANALYTICAL RESULTS**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Sample: AH-11 (3.6-4.0') Lab ID: 757578044 Collected: 08/14/13 00:00 Received: 08/16/13 14:37 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>Percent Moisture</b>	Analytical Method: ASTM D2974-87								
Percent Moisture	17.6 %		0.50	0.50	1		08/20/13 14:00		
<b>9056 IC Anions 28 Days</b>	Analytical Method: EPA 9056A Preparation Method: EPA 9056A								
Chloride	1370 mg/kg		12.1	6.1	10	08/21/13 11:37	08/23/13 23:01	16887-00-6	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM



**QUALITY CONTROL DATA**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

QC Batch: GCV/1172 Analysis Method: EPA 8015B  
QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics  
Associated Lab Samples: 757578001, 757578011, 757578016, 757578021, 757578022, 757578023, 757578024, 757578029, 757578033, 757578037, 757578041

METHOD BLANK: 36479 Matrix: Solid  
Associated Lab Samples: 757578001, 757578011, 757578016, 757578021, 757578022, 757578023, 757578024, 757578029, 757578033, 757578037, 757578041

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	0.050	08/19/13 11:52	
4-Bromofluorobenzene (S)	%	111	44-135	08/19/13 11:52	

LABORATORY CONTROL SAMPLE: 36480

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	.5	0.50	100	63-116	
4-Bromofluorobenzene (S)	%			107	44-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36481 36482

Parameter	Units	757578001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Gasoline Range Organics	mg/kg	0.40	.57	.57	0.96	1.0	97	104	40-140	4	20	
4-Bromofluorobenzene (S)	%						103	99	44-135			

**REPORT OF LABORATORY ANALYSIS**

Date: 09/06/2013 02:13 PM

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**QUALITY CONTROL DATA**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

QC Batch: GCV/1177 Analysis Method: EPA 8015B  
 QC Batch Method: EPA 5035A/5030B Analysis Description: Gasoline Range Organics  
 Associated Lab Samples: 757578012

METHOD BLANK: 37693 Matrix: Solid  
 Associated Lab Samples: 757578012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	0.050	08/27/13 17:53	
4-Bromofluorobenzene (S)	%	106	44-135	08/27/13 17:53	

LABORATORY CONTROL SAMPLE: 37694

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	.5	0.45	89	63-116	
4-Bromofluorobenzene (S)	%			96	44-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37695 37696

Parameter	Units	757578012		37696		MS % Rec	MSD % Rec	% Rec Limits	Max		Qual	
		Result	MS Spike Conc.	MSD Spike Conc.	Result				MSD Result	RPD		RPD
Gasoline Range Organics	mg/kg	1.2	2.6	2.6	4.9	4.0	141	107	40-140	20	20	M1
4-Bromofluorobenzene (S)	%						140	103	44-135			S0

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc.



**QUALITY CONTROL DATA**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

QC Batch: GCV1174 Analysis Method: EPA 8021  
 QC Batch Method: EPA 5030 Analysis Description: 8021 Low Level Solid GCV  
 Associated Lab Samples: 757578001, 757578011, 757578016, 757578021, 757578022, 757578023, 757578024, 757578029, 757578033, 757578037, 757578041

METHOD BLANK: 36500 Matrix: Solid  
 Associated Lab Samples: 757578001, 757578011, 757578016, 757578021, 757578022, 757578023, 757578024, 757578029, 757578033, 757578037, 757578041

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	mg/kg	ND	0.0010	08/19/13 11:52	
Ethylbenzene	mg/kg	ND	0.0010	08/19/13 11:52	
Toluene	mg/kg	ND	0.0010	08/19/13 11:52	
Xylene (Total)	mg/kg	ND	0.0030	08/19/13 11:52	
4-Bromofluorobenzene (S)	%	110	70-130	08/19/13 11:52	

LABORATORY CONTROL SAMPLE: 36501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	mg/kg	.05	0.048	97	70-130	
Ethylbenzene	mg/kg	.05	0.050	99	70-130	
Toluene	mg/kg	.05	0.048	97	70-130	
Xylene (Total)	mg/kg	.15	0.14	96	70-130	
4-Bromofluorobenzene (S)	%			105	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36502 36503

Parameter	Units	757578001 Result	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Spike Conc.	MSD Spike Conc.	MS Result						
Benzene	mg/kg	ND	.057	.057	0.057	0.055	98	95	70-130	4	20	
Ethylbenzene	mg/kg	ND	.057	.057	0.046	0.049	80	85	70-130	6	20	
Toluene	mg/kg	ND	.057	.057	0.056	0.052	96	90	70-130	7	20	
Xylene (Total)	mg/kg	ND	.17	.17	0.14	0.14	81	80	70-130	1	20	
4-Bromofluorobenzene (S)	%						102	98	70-130			

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



**QUALITY CONTROL DATA**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

QC Batch: OEXT/2410 Analysis Method: EPA 8015B Modified  
 QC Batch Method: EPA 3550 Modified Analysis Description: EPA 8015 Modified  
 Associated Lab Samples: 757578001, 757578011, 757578016, 757578021, 757578022, 757578023, 757578024, 757578029, 757578033, 757578037, 757578041

METHOD BLANK: 36878 Matrix: Solid  
 Associated Lab Samples: 757578001, 757578011, 757578016, 757578021, 757578022, 757578023, 757578024, 757578029, 757578033, 757578037, 757578041

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	ND	3.4	08/22/13 12:04	
a-Pinene (S)	%.	77	10-140	08/22/13 12:04	
n-Triacontane (S)	%.	115	10-140	08/22/13 12:04	

LABORATORY CONTROL SAMPLE: 36879

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics	mg/kg	33.3	25.6	77	40-140	
a-Pinene (S)	%.			47	10-140	
n-Triacontane (S)	%.			89	10-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36880 36881

Parameter	Units	757578001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Diesel Range Organics	mg/kg	705	38.2	38.2	793	748	228	110	40-140	6	40	M6
a-Pinene (S)	%.						55	43	10-140			
n-Triacontane (S)	%.						236	132	10-140			S4

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

QC Batch: OEXT/2442      Analysis Method: EPA 8015B Modified  
QC Batch Method: EPA 3550 Modified      Analysis Description: EPA 8015 Modified  
Associated Lab Samples: 757578012

METHOD BLANK: 37708      Matrix: Solid  
Associated Lab Samples: 757578012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	ND	3.4	08/29/13 10:07	
a-Pinene (S)	%	81	10-140	08/29/13 10:07	
n-Triacontane (S)	%	112	10-140	08/29/13 10:07	

LABORATORY CONTROL SAMPLE: 37709

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Diesel Range Organics	mg/kg	33.3	31.4	94	40-140	
a-Pinene (S)	%			79	10-140	
n-Triacontane (S)	%			100	10-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37710      37711

Parameter	Units	757578012		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
		Result	Conc.								
Diesel Range Organics	mg/kg	38.4	34.7	45.8	47.0	21	25	40-140	2	40	M1
a-Pinene (S)	%					35	36	10-140			
n-Triacontane (S)	%					39	42	10-140			

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc.



**QUALITY CONTROL DATA**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

QC Batch: PMST/1190 Analysis Method: ASTM D2974-87  
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
Associated Lab Samples: 757578001, 757578002, 757578003, 757578004, 757578005, 757578006, 757578007, 757578008, 757578009,  
757578010, 757578011, 757578012, 757578013, 757578014, 757578015, 757578016, 757578017, 757578018,  
757578019, 757578020

SAMPLE DUPLICATE: 36682

Parameter	Units	757578001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	12.9	13.9	7	20	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



Pace Analytical Services, Inc.  
400 West Bethany Drive - Suite 190  
Allen, TX 75013  
(972)727-1123

**QUALITY CONTROL DATA**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

QC Batch: PMST/1191 Analysis Method: ASTM D2974-87  
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture  
Associated Lab Samples: 757578021, 757578022, 757578023, 757578024, 757578025, 757578026, 757578027, 757578028, 757578029,  
757578030, 757578031, 757578032, 757578033, 757578034, 757578035, 757578036, 757578037, 757578038,  
757578039, 757578040

SAMPLE DUPLICATE: 36683

Parameter	Units	757578021 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.7	6.0	11	20	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..

Date: 09/06/2013 02:13 PM





QUALITY CONTROL DATA

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

QC Batch: WETA/2849 Analysis Method: EPA 9056A  
QC Batch Method: EPA 9056A Analysis Description: 9056 IC Anions  
Associated Lab Samples: 757578001, 757578002, 757578003, 757578004, 757578005, 757578006, 757578007, 757578008, 757578009, 757578010, 757578011, 757578012, 757578013, 757578014, 757578015, 757578016, 757578017, 757578018, 757578019, 757578020

METHOD BLANK: 36666 Matrix: Solid  
Associated Lab Samples: 757578001, 757578002, 757578003, 757578004, 757578005, 757578006, 757578007, 757578008, 757578009, 757578010, 757578011, 757578012, 757578013, 757578014, 757578015, 757578016, 757578017, 757578018, 757578019, 757578020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	1.0	08/21/13 12:32	

LABORATORY CONTROL SAMPLE: 36667

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	50	46.3	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36668 36669

Parameter	Units	757578001		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.									MSD Spike Conc.
Chloride	mg/kg	7910	5740	5740	13700	13700	101	101	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36670 36671

Parameter	Units	757578011		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		Result	MS Spike Conc.									MSD Spike Conc.
Chloride	mg/kg	637	509	509	1150	1130	101	97	90-110	1	20	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



**QUALITY CONTROL DATA**

Project: 112MC05590/Conoco-Elvis Tank  
 Pace Project No.: 757578

QC Batch: WETA/2850 Analysis Method: EPA 9056A  
 QC Batch Method: EPA 9056A Analysis Description: 9056 IC Anions  
 Associated Lab Samples: 757578021, 757578022, 757578023, 757578024, 757578025, 757578026, 757578027, 757578028, 757578029,  
 757578030, 757578031, 757578032, 757578033, 757578034, 757578035, 757578036, 757578037, 757578038,  
 757578039, 757578040

METHOD BLANK: 36672 Matrix: Solid  
 Associated Lab Samples: 757578021, 757578022, 757578023, 757578024, 757578025, 757578026, 757578027, 757578028, 757578029,  
 757578030, 757578031, 757578032, 757578033, 757578034, 757578035, 757578036, 757578037, 757578038,  
 757578039, 757578040

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	1.0	08/22/13 16:40	

LABORATORY CONTROL SAMPLE: 36673

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	50	46.1	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36674 36675

Parameter	Units	757578021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/kg	10000	10700	10700	20500	20300	98	96	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36676 36677

Parameter	Units	757578031 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/kg	8340	5630	5630	14100	14000	102	102	90-110	0	20	

**REPORT OF LABORATORY ANALYSIS**

Date: 09/06/2013 02:13 PM

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**QUALITY CONTROL DATA**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

QC Batch: WETA/2851 Analysis Method: EPA 9056A  
QC Batch Method: EPA 9056A Analysis Description: 9056 IC Anions  
Associated Lab Samples: 757578041, 757578042, 757578043, 757578044

METHOD BLANK: 36678 Matrix: Solid  
Associated Lab Samples: 757578041, 757578042, 757578043, 757578044

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/kg	ND	1.0	08/23/13 10:30	

LABORATORY CONTROL SAMPLE: 36679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/kg	50	46.4	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36680 36681

Parameter	Units	757578041 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/kg	282	505	505	765	770	96	97	90-110	1	20	

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALIFIERS

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

#### DEFINITIONS

- DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
- ND - Not Detected at or above adjusted reporting limit.
- J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- MDL - Adjusted Method Detection Limit.
- PRL - Pace Reporting Limit.
- RL - Reporting Limit.
- S - Surrogate
- 1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.
- Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
- LCS(D) - Laboratory Control Sample (Duplicate)
- MS(D) - Matrix Spike (Duplicate)
- DUP - Sample Duplicate
- RPD - Relative Percent Difference
- NC - Not Calculable.
- SG - Silica Gel - Clean-Up
- U - Indicates the compound was analyzed for, but not detected.
- N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
- Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
- TNI - The Nelac Institute

#### ANALYTE QUALIFIERS

- 1t The internal standard response is below criteria confirmed by reanalysis. Results for all compounds may be biased high.
- CH The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
- S0 Surrogate recovery outside laboratory control limits.
- S3 Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
- S4 Surrogate recovery not evaluated against control limits due to sample dilution.

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
757578001	AH-1 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578011	AH-2 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578012	AH-2 (1.5-2.0')	EPA 3550 Modified	OEXT/2442	EPA 8015B Modified	GCSV/1776
757578016	AH-3 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578021	AH-4 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578022	AH-5 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578023	AH-6 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578024	AH-7 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578029	AH-8 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578033	AH-9 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578037	AH-10 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578041	AH-11 (0-1.0')	EPA 3550 Modified	OEXT/2410	EPA 8015B Modified	GCSV/1758
757578001	AH-1 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578011	AH-2 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578012	AH-2 (1.5-2.0')	EPA 5035A/5030B	GCV/1177	EPA 8015B	GCV/1178
757578016	AH-3 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578021	AH-4 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578022	AH-5 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578023	AH-6 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578024	AH-7 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578029	AH-8 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578033	AH-9 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578037	AH-10 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578041	AH-11 (0-1.0')	EPA 5035A/5030B	GCV/1172	EPA 8015B	GCV/1173
757578001	AH-1 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578011	AH-2 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578016	AH-3 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578021	AH-4 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578022	AH-5 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578023	AH-6 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578024	AH-7 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578029	AH-8 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578033	AH-9 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578037	AH-10 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578041	AH-11 (0-1.0')	EPA 5030	GCV/1174	EPA 8021	GCV/1175
757578001	AH-1 (0-1.0')	ASTM D2974-87	PMST/1190		
757578002	AH-1 (1.5-2.0')	ASTM D2974-87	PMST/1190		
757578003	AH-1 (2.5-3.0')	ASTM D2974-87	PMST/1190		
757578004	AH-1 (3.5-4.0')	ASTM D2974-87	PMST/1190		
757578005	AH-1 (4.5-5.0')	ASTM D2974-87	PMST/1190		
757578006	AH-1 (5.5-6.0')	ASTM D2974-87	PMST/1190		
757578007	AH-1 (6.5-7.0')	ASTM D2974-87	PMST/1190		
757578008	AH-1 (7.5-8.0')	ASTM D2974-87	PMST/1190		
757578009	AH-1 (8.5-9.0')	ASTM D2974-87	PMST/1190		
757578010	AH-1 (9.5-10.0')	ASTM D2974-87	PMST/1190		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
757578011	AH-2 (0-1.0')	ASTM D2974-87	PMST/1190		
757578012	AH-2 (1.5-2.0')	ASTM D2974-87	PMST/1190		
757578013	AH-2 (2.5-3.0')	ASTM D2974-87	PMST/1190		
757578014	AH-2 (3.5-4.0')	ASTM D2974-87	PMST/1190		
757578016	AH-2 (4.5-5.0')	ASTM D2974-87	PMST/1190		
757578016	AH-3 (0-1.0')	ASTM D2974-87	PMST/1190		
757578017	AH-3 (1.5-2.0')	ASTM D2974-87	PMST/1190		
757578018	AH-3 (2.5-3.0')	ASTM D2974-87	PMST/1190		
757578019	AH-3 (3.5-4.0')	ASTM D2974-87	PMST/1190		
757578020	AH-3 (4.5-5.0')	ASTM D2974-87	PMST/1190		
757578021	AH-4 (0-1.0')	ASTM D2974-87	PMST/1191		
757578022	AH-5 (0-1.0')	ASTM D2974-87	PMST/1191		
757578023	AH-6 (0-1.0')	ASTM D2974-87	PMST/1191		
757578024	AH-7 (0-1.0')	ASTM D2974-87	PMST/1191		
757578025	AH-7 (1.5-2.0')	ASTM D2974-87	PMST/1191		
757578026	AH-7 (2.5-3.0')	ASTM D2974-87	PMST/1191		
757578027	AH-7 (3.5-4.0')	ASTM D2974-87	PMST/1191		
757578028	AH-7 (4.5-5.0')	ASTM D2974-87	PMST/1191		
757578029	AH-8 (0-1.0')	ASTM D2974-87	PMST/1191		
757578030	AH-8 (1.5-2.0')	ASTM D2974-87	PMST/1191		
757578031	AH-8 (2.5-3.0')	ASTM D2974-87	PMST/1191		
757578032	AH-8 (3.5-4.0')	ASTM D2974-87	PMST/1191		
757578033	AH-9 (0-1.0')	ASTM D2974-87	PMST/1191		
757578034	AH-9 (1.5-2.0')	ASTM D2974-87	PMST/1191		
757578035	AH-9 (2.5-3.0')	ASTM D2974-87	PMST/1191		
757578036	AH-9 (3.5-4.0')	ASTM D2974-87	PMST/1191		
757578037	AH-10 (0-1.0')	ASTM D2974-87	PMST/1191		
757578038	AH-10 (1.5-2.0')	ASTM D2974-87	PMST/1191		
757578039	AH-10 (2.5-3.0')	ASTM D2974-87	PMST/1191		
757578040	AH-10 (3.5-4.0')	ASTM D2974-87	PMST/1191		
757578041	AH-11 (0-1.0')	ASTM D2974-87	PMST/1192		
757578042	AH-11 (1.5-2.0')	ASTM D2974-87	PMST/1192		
757578043	AH-11 (2.5-3.0')	ASTM D2974-87	PMST/1192		
757578044	AH-11 (3.5-4.0')	ASTM D2974-87	PMST/1192		
757578001	AH-1 (0-1.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578002	AH-1 (1.5-2.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578003	AH-1 (2.5-3.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578004	AH-1 (3.5-4.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578005	AH-1 (4.5-5.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578006	AH-1 (5.5-6.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578007	AH-1 (6.5-7.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578008	AH-1 (7.5-8.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578009	AH-1 (8.5-9.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578010	AH-1 (9.5-10.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578011	AH-2 (0-1.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578012	AH-2 (1.5-2.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757578013	AH-2 (2.5-3.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 112MC05590/Conoco-Elvis Tank  
Pace Project No.: 757578

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
757678014	AH-2 (3.5-4.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757678016	AH-2 (4.5-5.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757678016	AH-3 (0-1.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757678017	AH-3 (1.5-2.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757678018	AH-3 (2.5-3.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757678019	AH-3 (3.5-4.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757678020	AH-3 (4.5-5.0')	EPA 9056A	WETA/2849	EPA 9056A	WETA/2856
757678021	AH-4 (0-1.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678022	AH-5 (0-1.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678023	AH-6 (0-1.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678024	AH-7 (0-1.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678025	AH-7 (1.5-2.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678026	AH-7 (2.5-3.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678027	AH-7 (3.5-4.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678028	AH-7 (4.5-5.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678029	AH-8 (0-1.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678030	AH-8 (1.5-2.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678031	AH-8 (2.5-3.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678032	AH-8 (3.5-4.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678033	AH-9 (0-1.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678034	AH-9 (1.5-2.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678035	AH-9 (2.5-3.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678036	AH-9 (3.5-4.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678037	AH-10 (0-1.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678038	AH-10 (1.5-2.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678039	AH-10 (2.5-3.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678040	AH-10 (3.5-4.0')	EPA 9056A	WETA/2850	EPA 9056A	WETA/2857
757678041	AH-11 (0-1.0')	EPA 9056A	WETA/2851	EPA 9056A	WETA/2858
757678042	AH-11 (1.5-2.0')	EPA 9056A	WETA/2851	EPA 9056A	WETA/2858
757678043	AH-11 (2.5-3.0')	EPA 9056A	WETA/2851	EPA 9056A	WETA/2858
757678044	AH-11 (3.5-4.0')	EPA 9056A	WETA/2851	EPA 9056A	WETA/2858

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..





WD# 757578

PAGE: 3 OF 5

# Analysis Request of Chain of Custody Record



**TETRA TECH**  
 1910 N. Big Spring St.  
 Midland, Texas 79705  
 (432) 682-4559 • Fax (432) 682-3946

Field Temp  
 0.20C

CLIENT NAME: Conoco Phillips SITE MANAGER: Tom Elliott

PROJECT NO.: 112 McOssard PROJECT NAME: Conoco-Elvis Tank Area Hwy

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD				
									HCL	HNO3	ICE	NONE	
021	8/14	-	S		6	AH-4 (0-1.0')	1			X			
022					1	AH-5 (0-1.0')							
023					1	AH-6 (0-1.0')							
024					1	AH-7 (0-1.0')							
025					1	AH-7 (1.5-2.0')							
026					1	AH-7 (2.5-3.0')							
027					1	AH-7 (3.5-4.0')							
028					1	AH-7 (4.5-5.0')							
029					1	AH-8 (0-1.0')							
030	8/14	-	S		6	AH-8 (1.5-2.0')	1			X			

RELINQUISHED BY: (Signature) [Signature] Date: 8-15-20 Time: 17:00 RECEIVED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 RELINQUISHED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ RECEIVED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 RELINQUISHED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ RECEIVED BY: (Signature) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

RECEIVING LABORATORY: Face Analytical  
 ADDRESS: 100 W. Pechan, Suite 100  
 CITY: Albany STATE: TX ZIP: 75012  
 CONTACT: Sally Cordeiro PHONE: 972-21-1122 DATE: 8-16-13 TIME: 1:43 pm  
 REMARKS: X See 021

ANALYSIS REQUEST (Circle or Specify Method No.)	RESULTS
PAH 8270	
RCPA Metals Ag As Ba Cd Cr Pb Hg Se	
TCLP Metals Ag As Ba Cd Vr Pd Hg Se	
TCLP Volatiles	
TCLP Semi Volatiles	
RCI	
GC/MS Vol. 8240/8260/824	
GC/MS Semi. Vol. 8270/826	
PCB's 8080/608	
Pest. 808/608	
Gamma Spec.	
Alpha Beta (Air)	
PLM (Asbestos)	
Major Anions/Cations, pH, TDS	

SAMPLED BY: (Print & Initial) Tom Elliott Date: 8-14-20 Time: \_\_\_\_\_  
 SAMPLE SHIPPED BY: (Circle) FEDEX  TRUCK  BUS  UPS  AIRBILL #: \_\_\_\_\_ OTHER: \_\_\_\_\_  
 TETRA TECH CONTACT PERSON: Tom Elliott Results by: \_\_\_\_\_  
 RUSH Charges Authorized: Yes  No

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.



WO# 757578

# Analysis Request of Chain of Custody Record



**TETRA TECH**  
 1910 N. Big Spring St.  
 Midland, Texas 79705  
 (432) 682-4559 • Fax (432) 682-3946

Field Temp  
0.2α

CLIENT NAME: <u>Conoco Phillips</u>		SITE MANAGER: <u>Tom Elliott</u>	
PROJECT NO.: <u>1121405510</u>		PROJECT NAME: <u>Conoco-Elus Tank Bentley</u>	
LAB I.D. NUMBER		SAMPLE IDENTIFICATION	
DATE	TIME	DATE	TIME
2013			
041	8/14	6 AH-11	(0-1.0)
042	8/14	6 AH-11	(1.5-2.0)
043	8/14	6 AH-11	(2.5-3.0)
044	8/14	6 AH-11	(3.5-4.0)

RELINQUISHED BY: (Signature)	Date: <u>8-13-2013</u>	RECEIVED BY: (Signature)	Date: <u>8-16-13</u>
RELINQUISHED BY: (Signature)	Time: <u>17:30</u>	RECEIVED BY: (Signature)	Time: <u>14:37 pm</u>
RELINQUISHED BY: (Signature)	Date: _____	RECEIVED BY: (Signature)	Date: _____
RELINQUISHED BY: (Signature)	Time: _____	RECEIVED BY: (Signature)	Time: _____

RECEIVING LABORATORY: Phase Analytical  
 ADDRESS: 400 W. Bellway  
 CITY: Hickory STATE: TX ZIP: 75013  
 PHONE: 972-327-4223

REMARKS: See pg 1

PAGE: 5 OF: 5

ANALYSIS REQUEST (Circle or Specify Method No.)

Major Anions/Cations, pH, TDS	
PLM (Asbestos)	
Alpha Beta (Air)	
Gamma Spec.	
Chloride	X
Pest. 808/608	X
PCBs 8080/608	X
GC,MS Semi. Vol. 8270/625	X
GC,MS Vol. 8240/8260/624	X
RCI	
TCLP Semi Volatiles	
TCLP Volatiles	
TCLP Metals Ag As Ba Cd Cr Pb Hg Se	
TCLP Metals Ag As Ba Cd Cr Pb Hg Se	
PAH 8270	
PH 8015 MOD. TX1005 (Ext. to C35)	
BTEX 8021B	NO

SAMPLED BY: (Print & Initial) Tom Elliott Date: 8-14-2013

TIME: 6:06

AIRBILL #:

OTHER:

RESULTS BY:

RUSH CHARGES AUTHORIZED: Yes  No

TETRA TECH CONTACT PERSON: Tom Elliott @ TetraTech.com

Please fill out all copies - Laboratory retains Yellow copy - Return Original copy to Tetra Tech - Project Manager retains Pink copy - Accounting receives Gold copy.

Sample Condition Upon Receipt



Client Name: Conoco Phillips Pace #: 757578

Courier:  Fed Ex  UPS  USPS  Client  Courier  LSO  Pace Other \_\_\_\_\_

Tracking #: 7964 7565 8121

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no  N/A

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used IR-01 IR-02 Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Cooler Temperature (Corrected, if applicable) 0.20C Ice Visible in Sample Containers:  yes  no

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: MM 8-19-13

Sample Receiving	
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 4.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A 5.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A 6.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 7.
Sample Labels match COC: -Includes date/time/ID/Analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 8.
All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, O&G	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 9. (Circle) HNO3 H2SO4 NaOH HCl If applicable see below.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A pH strip lot #: _____ Potassium Iodide strip lot #: _____ Lead Acetate strip lot #: _____
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 10.
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A 11.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 12.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 13.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A 14.

Client Notification/ Resolution:

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Project Manager Review: [Signature]

Date: 8/19/13

### Sample Container Count



DOC PAGE 1 of 5  
 DOC ID# \_\_\_\_\_

Pace Project # 157578

Sample Line Item	BP2N	AG1U	VG9U	VG9H	BP2S	BP1U	BP2U	BG1H	AG1S	BP20	SP5T	WGFU	WGKU	Comments
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

Container Codes	DG9H	40mL HCL	amber vial	AF	Air Filter	BP1N	1 liter HNO3	plastic	DG9P	40mL TSP	amber vial
DG9H	40mL HCL	amber vial		AG1H	1 liter HCL	BP1S	1 liter H2SO4	plastic	DG9S	40mL H2SO4	amber vial
AG1U	1 liter	unpreserved	amber glass	AG1S	1 liter H2SO4	BP1U	1 liter	unpreserved plastic	DG9T	40mL Na Thio	amber vial
WG9U	4oz	clear soil jar		AG1T	1 liter Na Thiosulfate	BP1Z	1 liter	NaOH, Zn, Ac	DG9U	40mL unpreserved	amber vial
				AG2N	500mL HNO3	BP2A	500mL	NaOH, Asc Acid plastic		Wiper/Swab	
BP2N	500mL	HNO3	plastic	AG2S	500mL H2SO4	BP2O	500mL	NaOH plastic	JGFU	4oz unpreserved	amber wide
BP2U	500mL	unpreserved	plastic	AG2U	500mL unpreserved	BP2Z	500mL	NaOH, Zn Ac		Summa Can	
BP2S	500mL	H2SO4	plastic	AG3U	250mL unpreserved	BP3A	250mL	NaOH, Asc Acid plastic	VG9H	40mL HCL	clear vial
BP3N	250mL	HNO3	plastic	BG1H	1 liter HCL	BP3C	250mL	NaOH plastic	VG9T	40mL Na Thio.	clear vial
BP3U	250mL	unpreserved	plastic	BG1S	1 liter H2SO4	BP3Z	250mL	NaOH, Zn Ac plastic	VG9U	40mL unpreserved	clear vial
BP3S	250mL	H2SO4	plastic	BG1T	1 liter Na Thiosulfate				VSG	Headspace	septa vial & HCL
AG3S	250mL	H2SO4	glass	BG1U	1 liter unpreserved	DG9B	40mL	Na Bisulfate	WGFU	4oz wide jar	w/hexane wipe
AG1S	1 liter	H2SO4	amber glass	BP1A	1 liter NaOH, Asc Acid	DG9M	40mL	MeOH clear vial	ZPLC	Ziploc Bag	
BP1U	1 liter	unpreserved	plastic	SP5T	120mL Coliform	SP5U	120mL	Coliform unpreserved	GN	General unpreserved	
WG9U	8oz	wide jar	unpreserved								
Other											





Sample Container Count



COC PAGE 4 of 5  
COC ID#

Pace Project # 757578

Sample Line Item	BP2N	AG1U	VG9U	VG9H	BP2S	BP1U	BP2U	BG1H	AG1S	BP20	SP5T	WG9U	WGKU	Comments
1												/		
2												/		
3												/		
4												/		
5												/		
6												/		
7												/		
8												/		
9												/		
10												/		
11												/		
12												/		

Container Codes	DG9H	40mL HCL	amber vial	AF	Air Filter	BP1N	1 liter HNO3	plastic	DG9P	40mL TSP	amber vial
DG9H	40mL HCL	amber vial	AF	Air Filter	BP1N	1 liter HNO3	plastic	DG9P	40mL TSP	amber vial	
AG1U	1 liter unpreserved	amber glass	AG1H	1 liter HCL	BP1S	1 liter H2SO4	plastic	DG9S	40mL H2SO4	amber vial	
WG9U	4oz clear soil jar		AG1S	1 liter H2SO4	BP1U	1 liter unpreserved	plastic	DG9T	40mL Na Thio	amber vial	
R	terra core kit		AG1T	1 liter Na Thiosulfate	BP1Z	1 liter NaOH, Zn, Ac		DG9U	40mL unpreserved	amber vial	
BP2N	500mL HNO3	plastic	AG2N	500mL HNO3	BP2A	500mL NaOH, Asc Acid	plastic		Wipe/Swab		
BP2U	500mL unpreserved	plastic	AG2S	500mL H2SO4	BP2O	500mL NaOH	plastic	JGFU	4oz unpreserved	amber wide	
BP2S	500mL H2SO4	plastic	AG2U	500mL unpreserved	BP2Z	500mL NaOH, Zn Ac		U	Summa Can		
BP3N	250mL HNO3	plastic	AG3U	250mL unpreserved	BP3A	250mL NaOH, Asc Acid	plastic	VG9H	40mL HCL	clear vial	
BP3U	250mL unpreserved	plastic	BG1H	1 liter HCL	BP3C	250mL NaOH	plastic	VG9T	40mL Na Thio.	clear vial	
BP3S	250mL H2SO4	plastic	BG1S	1 liter H2SO4	BP3Z	250mL NaOH, Zn Ac	plastic	VG9U	40mL unpreserved	clear vial	
AG3S	250mL H2SO4	glass	BG1T	1 liter Na Thiosulfate	C	Air Cassettes		VSG	Headspace septa	vial & HCL	
AG1S	1 liter H2SO4	amber glass	BG1U	1 liter unpreserved	DG9B	40mL Na Bisulfate	amber vial	WGFY	4oz wide jar	w/hexane wipe	
BP1U	1 liter unpreserved	plastic	BP1A	1 liter NaOH, Asc Acid	DG9M	40mL MeOH	clear vial	ZPLC	Ziploc Bag		
WGKU	8oz wide jar	unpreserved	SP5T	120mL Coliform	SP5U	120mL Coliform	unpreserved	GN	General unpreserved		
Other											

Sample Container Count



DOC PAGE 5 of 5  
 DOC ID# \_\_\_\_\_

Pace Project # 757578

Sample Line Item	BP2N	AG1U	VG9U	VG9H	BP2S	BP1U	BP2U	BG1H	AG1S	BP20	SP5T	WGFU	WGKU	Comments
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

Container Codes

Container Code	Description	AF	Air Filter	BP1N	BP1S	BP1U	BP1Z	BP2A	BP2O	BP2Z	BP3A	BP3C	BP3Z	C	DG9B	DG9M	SP5U	Other
DG9H	40mL HCL amber vial																	
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1N	BP1S	BP1U	BP1Z	BP2A	BP2O	BP2Z	BP3A	BP3C	BP3Z	C	DG9B	DG9M	SP5U	
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass															
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl															
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass															
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass															
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla															
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla															
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass															
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass															
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla															
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass															
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic															
WGKU	8oz wide jar unpreserved	SP5T	120mL Coliform Na Thiosulfate															
Other																		

**Shelly Connelly - RE: Report: 112MC05590/Conoco-Elvis Tank - Pace ID 757578**

---

**From:** "Elliott, Tom" <Tom.Elliott@tetrattech.com>  
**To:** Shelly Connelly <Shelly.Connelly@pacelabs.com>, Steven Tischer <steve.p...>  
**Date:** 8/27/2013 2:25 PM  
**Subject:** RE: Report: 112MC05590/Conoco-Elvis Tank - Pace ID 757578

---

Shelly,

Please run the next horizon below the 0-1' for TPH only. It is listed below.

**Sample:** AH-2 (1.5-2.0') **Lab ID:** 757578012 **Collected:** 08/14/13 00:00 **Received:** 08/16/13 14:37 **Matrix:** Solid

Thanks,

**Tom Elliott** | Project Manager / Environmental Scientist  
 Phone: 432.687.8120 | Mobile 432-631-0348 | Fax:432.682.3946  
[Tom.Elliott@tetrattech.com](mailto:Tom.Elliott@tetrattech.com)

Tetra Tech | Complex World, CLEAR SOLUTIONS™  
 4000 N. Big Spring | Suite 401 | Midland, TX 79705 | [www.tetrattech.com](http://www.tetrattech.com)

---

**From:** Shelly Connelly [mailto:Shelly.Connelly@pacelabs.com]  
**Sent:** Tuesday, August 27, 2013 2:13 PM  
**To:** Steven Tischer  
**Cc:** Elliott, Tom  
**Subject:** Report: 112MC05590/Conoco-Elvis Tank - Pace ID 757578

Attached are the results from the Conoco Elvis Tank project. Please note that sample 757578011 [AH-2 (0-1)] did have a total TPH greater than 5000. According to the notes on the bottom of the C-O-C we need to run the deeper sample if Total BTEX exceeds 50 mg/kg and/or TPH >5000 mg/kg. This sample has TPH totaling 5555 mg/kg. I need to know which of the deeper depths you would like to have run and if you need the BTEX, TPH-DRO and TPH-GRO analyzed.

These samples expire tomorrow so a prompt response is needed to insure the holding times are met please.

Thanks and have a great day!

Pace Dallas will be closed, Monday, September 2nd in observance of Labor Day.

Shelly Connelly  
Client Services Manager- Dallas



400 W. Bethany, Suite 190  
Allen, TX 75013  
**Phone: (972) 727-1123**  
**Fax: (972) 727-1175**  
**Email: [Shelly.Connelly@pacelabs.com](mailto:Shelly.Connelly@pacelabs.com)**

---

This email has been scanned by the Symantec Email Security.cloud service.  
For more information please visit <http://www.symanteccloud.com>

---

**APPENDIX D**  
**Diamondback Closure Report**

HOBBS OCD

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

AUG 26 2014

Form C-141  
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company: <b>ConocoPhillips</b>	Contact: <b>John Gates</b>
Address: <b>29 Vacuum Complex Lane Lovington, NM 88260</b>	Telephone No.: <b>575-391-3158</b>
Facility Name: <b>MCA Elvis Battery</b>	Facility Type: <b>Oil &amp; Gas</b>

Surface Owner: <b>Federal</b>	Mineral Owner: <b>Federal</b>	API No. <b>188612</b>
-------------------------------	-------------------------------	-----------------------

**LOCATION OF RELEASE**

Unit Letter	Section 20	Township 17	Range 32	Feet from the	North/South Line	Feet from the	East/West Line	County Lea
-------------	---------------	----------------	-------------	---------------	------------------	---------------	----------------	---------------

Latitude: 32 49' 21.54" N

Longitude: 103 47' 26.052" W

**NATURE OF RELEASE**

Type of Release: <b>Crude Oil &amp; Produced Water</b>	Volume of Release ~ <b>4 BBLs Oil &amp; ~473 bbls Produced Water</b>	Volume Recovered : <b>~2 bbls oil &amp; ~398 bbls water</b>
Source of Release: <b>Release overflowed from top of North West 500 bbl oil tank</b>	Date and Hour of Occurrence <b>05/17/13 Unknown Time Of occurrence</b>	Date and Hour of Discovery <b>05/17/13 @ ~0730 Hours</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Geoffrey Leking NMOCD &amp; Trishia Bad Bear BLM</b>	
By Whom? <b>John Gates</b>	Date and Hour: <b>05/17/13 @ 0746 Hours</b>	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

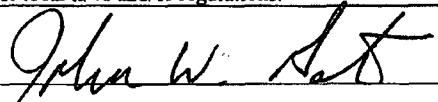
Describe Cause of Problem and Remedial Action Taken.\*

Release originated from top of produced water tanks inside battery. The tanks overflowed out of top hatch onto battery location and caliche road. Transfer pumps went down which subsequently caused tanks to overflow. MSO shut in battery to stop additional fluids from being released. Spill site will be remediated in accordance with NMOCD & BLM guidelines.

Describe Area Affected and Cleanup Action Taken.\*

Majority of spill was contained in surrounding caliche location and roadway with small amount running west off location onto sandy soil. Vacuum trucks were called to recover standing fluids. Approximately 2 BBLs of oil and approximately 398 bbls of water were recovered.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>John W. Gates</b>	Approved by Environmental Specialist: 	
Title: <b>LEAD HSE</b>	Approval Date: <b>8-26-14</b>	Expiration Date: <b>10-29-14</b>
E-mail Address: <b>John.W.Gates@conocophillips.com</b>	Conditions of Approval: <i>Site Spill repair Delimit &amp; monitor over spill NMOCD guidance Submit final</i>	Attached <input type="checkbox"/>
Date: <b>05/17/13</b> 3158		<b>IRP-3280</b>

C-141 by 10-29-14

AUG 28 2014

09112 217817  
1701929 038926  
1701929 039056  
1701929 038452

# Elvis Tank Battery

(Located in Section-20 Township 17S Range 32E)

## Site Closure Plan

Presented to:

**ConocoPhillips**  
**HC 60, Box 66**  
**Lovington, NM 88260**

Prepared By:



Diamondback Disposal Services, Inc.  
PO Box 2491  
Hobbs, NM 88241



**DISPOSAL SERVICES, INC.**  
P.O. Box 2491•Hobbs, NM 88241  
Ph: (575) 392-9996•Fx: (575) 392-9376

August 21, 2014

Conoco Phillips  
HC 60 Box 66  
Lovington, NM 88260

**Re: Closure Report Elvis Tank Battery**

Dear Mr. Wright,

Diamondback Disposal Services, Inc. (Diamondback) would like to take this time to thank you and Conoco Phillips for the opportunity to be of service in the remediation of the above-mentioned site. Please find in the following closure report: the job overview, Remediation Activities, laboratory analysis, and site map of the project.

**Note:** Diamondback Disposal Services, Inc., (Diamondback) with offices at 2525 N. West County Road, Hobbs, New Mexico 88241 (the Company), has prepared this “Remediation Report” for the Elvis Tank Battery, to the best of its ability. No warranty, expressed or implied, is made or intended. The report was prepared for Conoco Phillips, which offices at 29 Vacuum Complex Lane, Lovington NM 88260 (the Client). All information disclosed in this plan is for internal purposes only and is considered confidential. By accepting this document, the recipient agrees to keep confidential the information contained herein. The recipient further agrees not to copy, reproduce or distribute to any third party this project plan in whole or in part, without express written permission from the Company or Client.

Once again if there is anything that Diamondback can be of assistance with, or if you have any questions, or need more data in regards to this project please call us at any time.

Sincerely

Justin Roberts  
President  
Diamondback Disposal Services, Inc.

Conoco Phillips  
Elvis Tank Battery

## **Introduction**

This report presents the results of remediation activities at the Elvis Tank Battery. The site is located in Section 20, Township 17S, Range 32E in Lea County, New Mexico. Impacted areas are owned by Bureau of Land Management. Diamondback Disposal Services, Inc. (Diamondback) was contacted April 7, 2014 by Mr. Justin Wright, of Conoco Phillips Inc, to perform the remediation activities at the spill site. The remediation was performed according to a NMOCD approved work plan (produced by others), which is in general accordance with the New Mexico Oil Conservation Division (NMOCD) rules and regulations. The following sections present: an overview, remediation activities, and recommendations of all remediation work performed on site.

## **Overview**

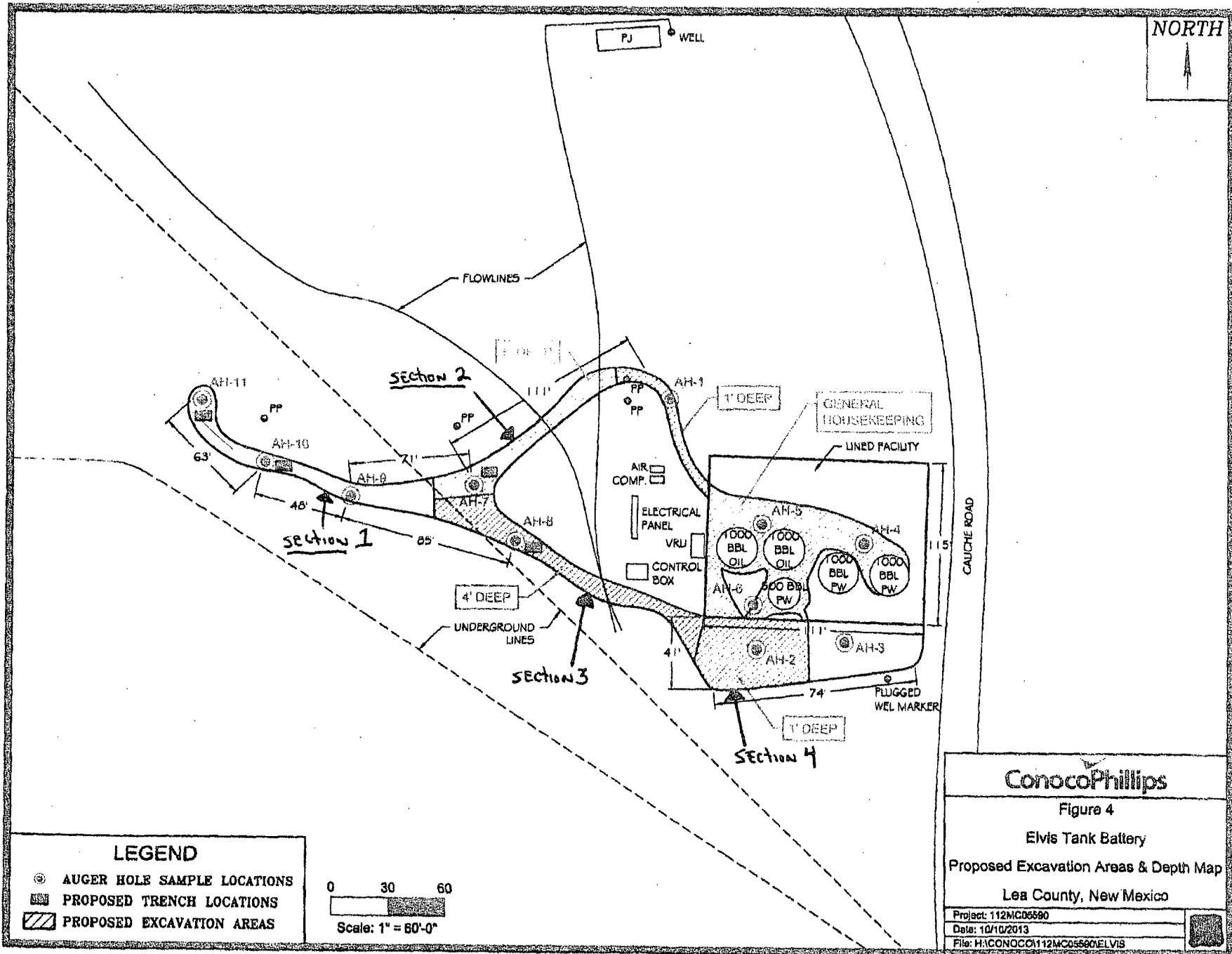
The spill site is located mostly on BLM land consisting of good grass, prairie, or range lands with a little ponding on COPC location. Transfer pumps went down in the battery causing approximately 473 bbls of produced water, and 4 bbls of oil to be lost, with approximately 398 bbls and 2bbls, respectively being recovered from the use of a vacuum truck. Approximately 4,721 square feet of BLM land was impacted. Based on the information reviewed at the State Engineers web site, there are not any wells in Section 20. The depth to groundwater in the area is estimated to be greater than 150' below ground surface (BGS), according to the NMOCD groundwater map. There were no water courses affected, no water wells within 1,000 feet, and no surface water bodies within 1,000 feet of the site, giving this site a ranking criteria score of zero. The potential contaminants of concern are mid to high-level concentrations of petroleum-based hydrocarbons and chlorides that were lost due to a leak in the well casing.

## **Remediation Activities**

On April 14, 2014 Diamondback began excavating impacted areas defined by maps from NMOCD approved work plan. Approximately 1,284 cy of impacted soils were excavated and transported to R-360, NMOCD approved disposal facility. After approval by Dr. Tomas Oberding with NMOCD, Diamondback installed a HDPE liner cap in the extended battery area (see attached map section 4), and backfilled with clean fill. The batter floor was brought to grade and berms were re-constructed. On August 18, 2104 Diamondback collected composite samples of the walls and floors of all sections of excavation (see attached map). The samples were packaged and sent to Cardinal Laboratory (with COC) for analysis of TPH, BTEX, and Chlorides (see analytical).

## **Recommendations**

Upon reviewing the analytical provided by the third party independent lab, it is our belief the contaminants shown to be left are well below acceptable limits for sites with ranking criteria of zero. Diamondback feels all guidelines for remediation of leaks and spills have been met. This being said we propose to backfill the excavated area with clean granular soil, contour, crown, and seed area to promote vegetation growth. Diamondback feels this method will significantly reduce migration of impacted material through the vadose zone therefore leaving the site in a manner that will pose very little if any future environmental threat.





PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

August 19, 2014

JUSTIN ROBERTS  
DIAMONDBACK DISPOSAL SERVICE INC.  
P. O. BOX 2491  
HOBBS, NM 88241

RE: ELVIS TANK BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 08/18/14 11:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 1 S. WALL (H402521-01)**

BTEX 8021B		mg/kg		Analyzed By: ck						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43		
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53		
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08		
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05		
Total BTEX	<0.300	0.300	08/18/2014	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	816	16.0	08/18/2014	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458		
DRO >C10-C28	<10.0	10.0	08/18/2014	ND	182	90.8	200	2.60		

Surrogate: 1-Chlorooctane 90.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 99.0 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 1 N. WALL (H402521-02)**

BTEX 8021B		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43	
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53	
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08	
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05	
Total BTEX	<0.300	0.300	08/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	08/18/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458	
DRO >C10-C28	365	10.0	08/18/2014	ND	182	90.8	200	2.60	

Surrogate: 1-Chlorooctane 90.5 % 65.2-140

Surrogate: 1-Chlorooctadecane 114 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 1 FLOOR (H402521-03)**

BTEX 8021B		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43	
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53	
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08	
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05	
Total BTEX	<0.300	0.300	08/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PII) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/18/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458	
DRO >C10-C28	<10.0	10.0	08/18/2014	ND	182	90.8	200	2.60	

Surrogate: 1-Chlorooctane 84.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 93.8 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager

Page 4 of 13



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 2 S. WALL (H402521-04)**

BTEX 8021B		mg/kg		Analyzed By: ck						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43		
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53		
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08		
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05		
Total BTEX	<0.300	0.300	08/18/2014	ND						

Surrogate: 4-Bromofluorobenzene (PIL) 101 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	08/18/2014	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458		
DRO >C10-C28	<10.0	10.0	08/18/2014	ND	182	90.8	200	2.60		

Surrogate: 1-Chlorooctane 96.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 2 N. WALL (H402521-05)**

BTEX 8021B		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43	
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53	
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08	
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05	
Total BTEX	<0.300	0.300	08/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PII) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/18/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458	
DRO >C10-C28	<10.0	10.0	08/18/2014	ND	182	90.8	200	2.60	

Surrogate: 1-Chlorooctane 92.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 2 FLOOR (H402521-06)**

BTEX 8021B		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43	
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53	
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08	
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05	
Total BTEX	<0.300	0.300	08/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 103 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/18/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458	
DRO >C10-C28	<10.0	10.0	08/18/2014	ND	182	90.8	200	2.60	

Surrogate: 1-Chlorooctane 99.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 106 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 3 N. WALL (H402521-07)**

BTEX 8021B		mg/kg		Analyzed By: ck						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43		
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53		
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08		
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05		
Total BTEX	<0.300	0.300	08/18/2014	ND						

Surrogate: 4-Bromofluorobenzene (PIE) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	08/18/2014	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458		
DRO >C10-C28	<10.0	10.0	08/18/2014	ND	182	90.8	200	2.60		

Surrogate: 1-Chlorooctane 93.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 99.9 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 3 S. WALL (H402521-08)**

BTEX 80218		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43	
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53	
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08	
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05	
Total BTEX	<0.300	0.300	08/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 103 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/18/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458	
DRO >C10-C28	<10.0	10.0	08/18/2014	ND	182	90.8	200	2.60	

Surrogate: 1-Chlorooctane 87.0 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.4 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 3 FLOOR (H402521-09)**

BTEX 8021B		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43	
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53	
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08	
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05	
Total BTEX	<0.300	0.300	08/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIL) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/18/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458	
DRO >C10-C28	<10.0	10.0	08/18/2014	ND	182	90.8	200	2.60	

Surrogate: 1-Chlorooctane 92.2 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**

DIAMONDBACK DISPOSAL SERVICE INC.  
 JUSTIN ROBERTS  
 P. O. BOX 2491  
 HOBBS NM, 88241  
 Fax To: (575) 392-9376

Received:	08/18/2014	Sampling Date:	08/18/2014
Reported:	08/19/2014	Sampling Type:	Soil
Project Name:	ELVIS TANK BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	MALJAMAR, NM		

**Sample ID: SEC 4 FLOOR (H402521-10)**

BTEX 8021B		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/18/2014	ND	1.86	93.1	2.00	7.43	
Toluene*	<0.050	0.050	08/18/2014	ND	1.69	84.7	2.00	8.53	
Ethylbenzene*	<0.050	0.050	08/18/2014	ND	1.89	94.7	2.00	8.08	
Total Xylenes*	<0.150	0.150	08/18/2014	ND	5.63	93.8	6.00	8.05	
Total BTEX	<0.300	0.300	08/18/2014	ND					

Surrogate: 4-Bromofluorobenzene (PIE) 104 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2120	16.0	08/18/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	08/18/2014	ND	180	90.0	200	0.458	
DRO >C10-C28	<10.0	10.0	08/18/2014	ND	182	90.8	200	2.60	

Surrogate: 1-Chlorooctane 88.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 98.0 % 63.6-154

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Caley D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500CHB does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

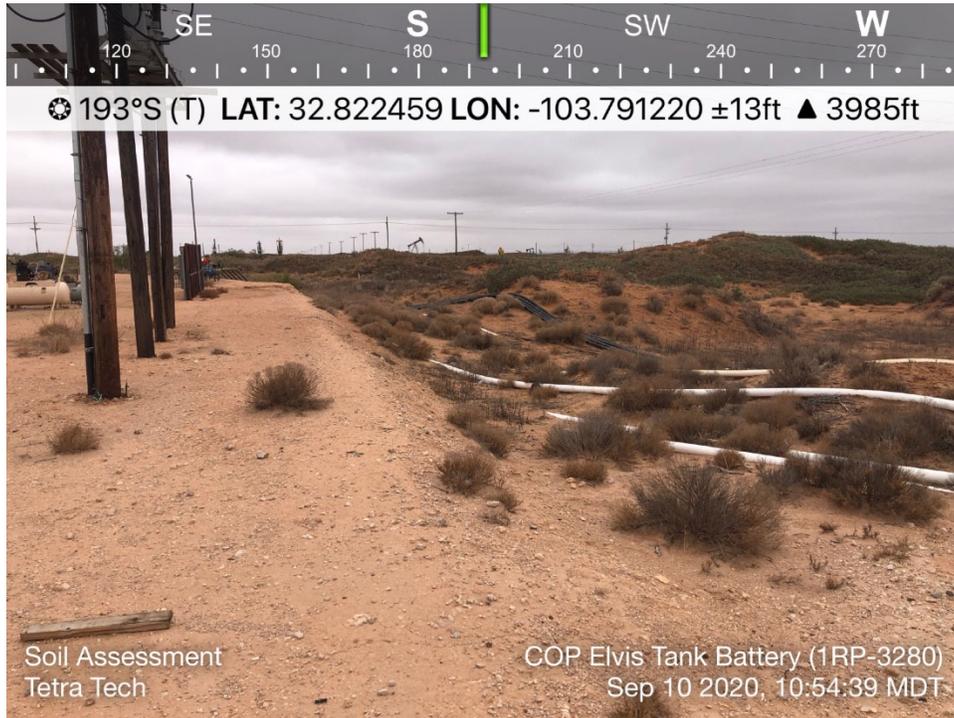
*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager

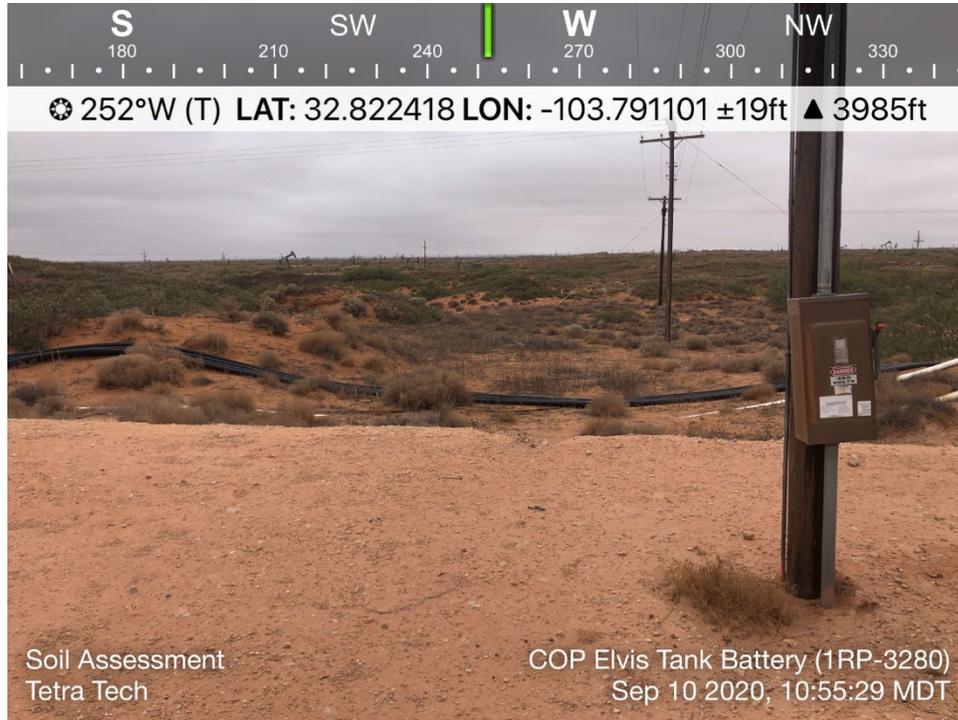


## **APPENDIX E**

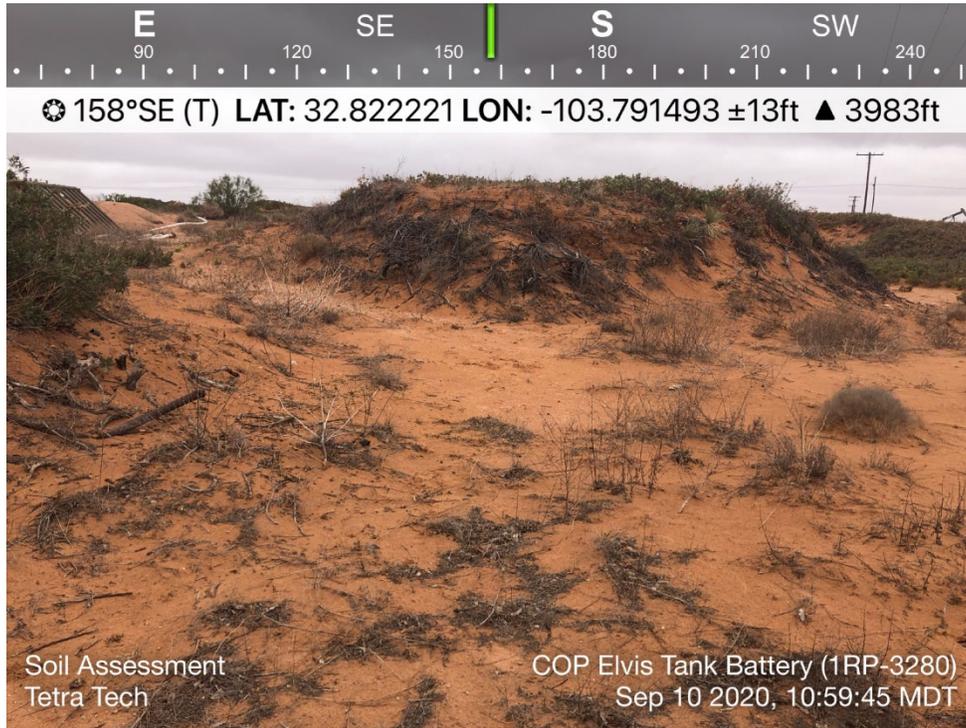
### **Photographic Documentation**



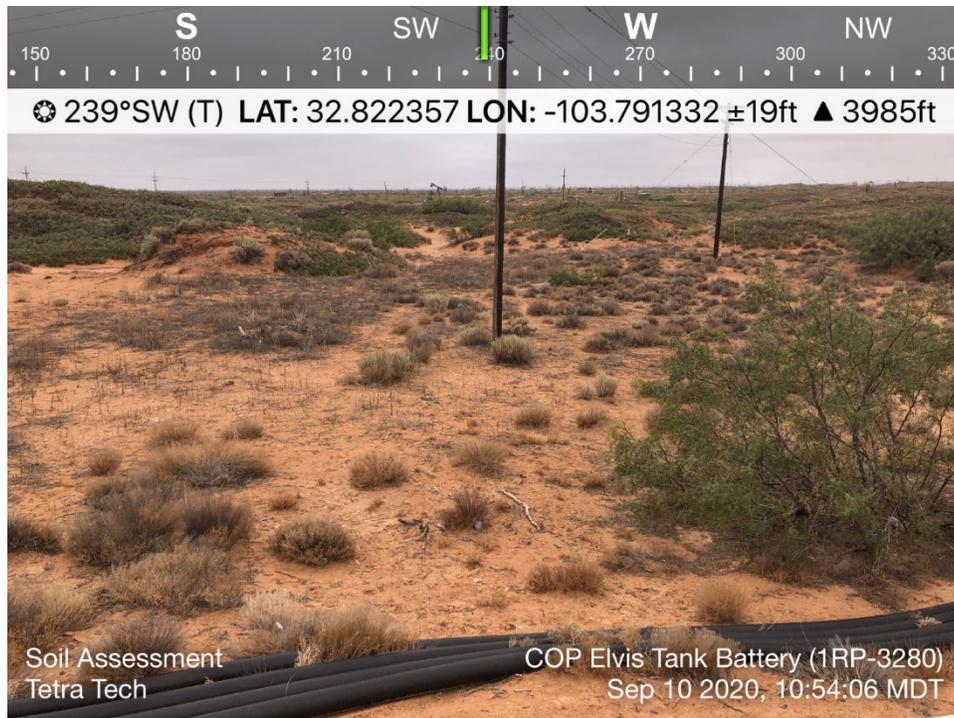
TETRA TECH, INC. PROJECT NO. 212C-MD-02304	DESCRIPTION	View southeast. Western edge of lease pad in northern portion of the release footprint.	1
	SITE NAME	Elvis Tank Battery Release – 1RP-3280	9/10/2020



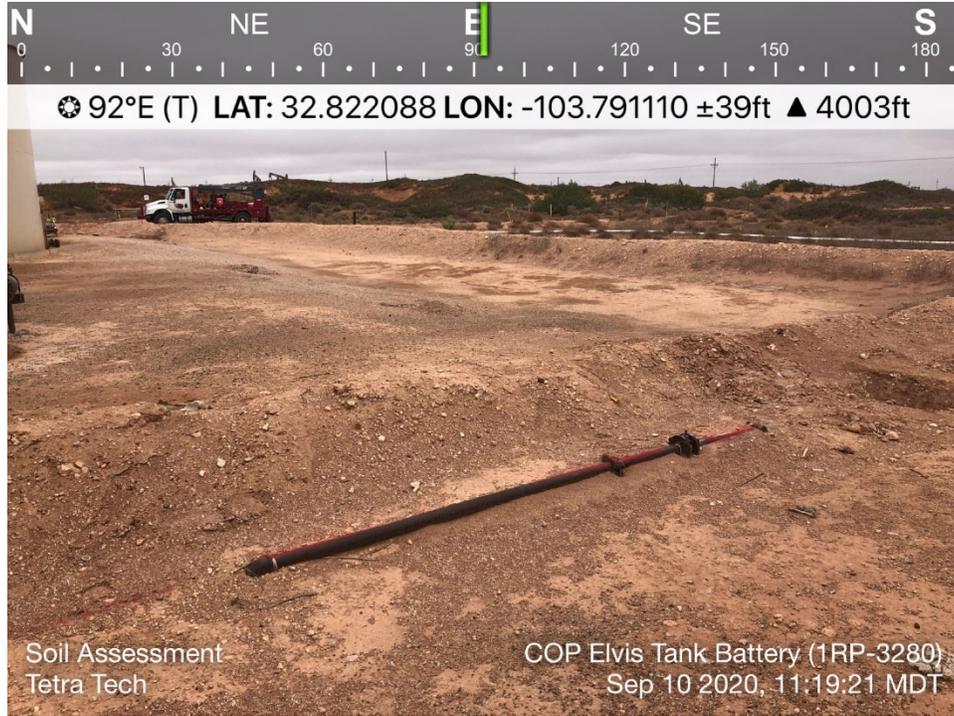
TETRA TECH, INC. PROJECT NO. 212C-MD-02304	DESCRIPTION	View southeast. Overview of western portion of release footprint.	2
	SITE NAME	Elvis Tank Battery Release – 1RP-3280	9/10/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02304	DESCRIPTION	View southeast. Central portion of release footprint west of the lease pad.	3
	SITE NAME	Elvis Tank Battery Release – 1RP-3280	9/10/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02304	DESCRIPTION	View southwest. Western extent of release footprint.	4
	SITE NAME	Elvis Tank Battery Release – 1RP-3280	9/10/2020



TETRA TECH, INC. PROJECT NO. 212C-MD-02304	DESCRIPTION	View east. Extended and lined tank battery firewall.	5
	SITE NAME	Elvis Tank Battery Release – 1RP-3280	9/10/2020

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
 Action 13928

**CONDITIONS**

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 13928
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
bbillings	None	11/30/2021