



# AE Order Number Banner

## Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



**App Number:** pSEB0811960554

**2RP - 162**

**DAVID H ARRINGTON OIL & GAS INC**

4/30/2009

District I  
1625 N. French Dr , Hobbs, NM 88240  
District II  
1301 W Grand Avenue, 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

MAR 31 2009

Form C-141  
Revised October 10, 2003  
Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

13500411957900 OPERATOR		<input type="checkbox"/> Initial Report	<input checked="" type="checkbox"/> Final Report
Name of Company: <i>David H. Arrington Oil &amp; Gas, Inc.</i>		Contact: <i>Jack Bledsoe</i>	
Address: <i>PO Box 2071, Midland, Texas 79702</i>		Telephone No. <i>432-682-6685</i>	
Facility Name: <i>Federal 34 #1 Tank Battery</i>		Facility Type: <i>Production Tank Battery</i>	

Surface Owner: <i>Federal</i>	Mineral Owner	Lease No. <i>21028</i>
-------------------------------	---------------	------------------------

3001522738 LOCATION OF RELEASE								
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	34	20S	26E	960	South	1980	West	Eddy

Latitude *32° 31' 29.60"* Longitude *104° 22' 20.10"*

NATURE OF RELEASE

Type of Release: <i>Condensate &amp; Produced Water</i>	Volume of Release: <i>4 bbls</i>	Volume Recovered: <i>0 bbls</i>
Source of Release: <i>Overflow of gunbarrel</i>	Date and Hour of Occurrence <i>4/01/08</i>	Date and Hour of Discovery <i>4/01/08, 1000 hrs</i>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour;	
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.\*

*Water dump on gas separator stuck open allowing gas to enter gunbarrel. Gas pressure popped open thief hatch, allowing 4 bbls of condensate & Produced water to run out on ground inside firewall of tank battery. Repaired dump valve on gas separator.*

Describe Area Affected and Cleanup Action Taken.\*

*All areas within firewall of tank battery impacted. Most heavily impacted soil was excavated and shipped off-site for disposal. Remaining impacted soil was placed back into excavation along with clean soil and then capped with 20 mil polyethylene liner. Details in final report.*

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: <i>Shane Estep</i>		OIL CONSERVATION DIVISION	
Printed Name: <i>Shane Estep</i>		Approved by District Supervisor: <i>[Signature]</i>	
Title: <i>Project Manager</i>		Approval Date: <i>4-28-09</i>	Expiration Date: <i>N/A</i>
E-mail Address: <i>shane@etechenv.com</i>		Conditions of Approval: <i>N/A</i>	Attached <input type="checkbox"/> <i>N/A</i>
Date: <i>March 30, 2009</i>	Phone: <i>432-563-2200</i>		

\* Attach Additional Sheets If Necessary

*2RP-162*

MAR 31 2009



***Federal 34 #1  
Remediation Report***

***DAVID H. ARRINGTON OIL & GAS, INC.  
EDDY COUNTY, NEW MEXICO***



# ***Federal 34 #1 Remediation Report***

***DAVID H. ARRINGTON OIL & GAS, INC.  
EDDY COUNTY, NEW MEXICO***

**DATE PREPARED:**

March 26, 2008

**ETECH PROJECT NO.**

163-1724-000

**PREPARED FOR:**

State of New Mexico Oil Conservation Division

**PREPARED ON BEHALF OF:**

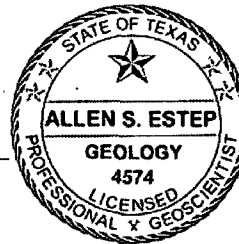
David H. Arrington Oil & Gas, Inc.

**PREPARED BY:**

Etech Environmental & Safety Solutions, Inc.

A handwritten signature in black ink, appearing to read "Shane Estep", is written over a horizontal line.

SHANE ESTEP, P.G.



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## **1.0 Executive Summary**

On February 27, 2009, Etech Environmental & Safety Solutions, Inc. (Etech) completed the final soil sampling to conclude the remediation of hydrocarbon and chloride impacted soil at the Federal 34 #1 tank battery site owned by David H. Arrington Oil & Gas, Inc. (DHA). The remediation activities were associated with historic small releases occurring over the approximate twenty-six (26) year life of the tank battery.

The scope of work for remediation of the site was approved by the New Mexico Oil Conservation Division (NMOCD) in a letter dated October 14, 2008. The initial remediation was to consist of excavation and off-site disposal of the areas with chloride contamination exceeding 1,000 ppm. The remainder of the soil impacted with chlorides and hydrocarbons was to be blended with clean soil to reduce the contaminant levels.

During the remediation phase of the project Ms. Terry Gregston with the Bureau of Land Management (BLM) conducted an inspection of the site. After discussing the project with Ms. Gregston, it was determined the BLM would not allow blending of the impacted soil for remediation of the site.

Discussions with the NMOCD and BLM were held to determine the best approach to completion of the site remediation. BLM was not concerned with placing the low level impacted soil back into the excavation around the tank battery but the NMOCD was not receptive to action and preferred to have the remaining impacted soil transported off-site for disposal. Etech and DHA expressed concerns with transporting the remaining soil for off-site disposal based on the cost of the proposal and the fact that the site is an active oil & gas production site and another release was highly likely to occur in the future.

A compromise was reached with the NMOCD and agreed to by the BLM. This approach would place the low level impacted soil back into the excavation and then cover the impacted soil with a plastic liner to prevent rainwater and future releases from driving the chlorides deeper to the groundwater.

Final remediation of the site was started on January 27, 2009 by placing the low level impacted soil back into the excavation surrounding the tank battery. This phase of the remediation was completed on February 4, 2009 with the placement of the 20 mil plastic liner around the existing tank battery.

Final clearance samples were collected from the area of the location pad where the impacted soil was stock piled. The sample laboratory analytical results revealed low levels of chloride impacts at one point with the level at 432 mg/kg.

## **2.0 Introduction**

The Federal 34 Well #1 and tank battery site is located in Eddy County, New Mexico. The well and tank battery site are located approximately 12.5 miles northwest of Carlsbad, New Mexico on the south side of Lake Brantley Dam. The site is located in Unit N Section 34, T20S, R26E, Eddy County, New Mexico and has an API #30-015-22738. The New Mexico Lease number is NM-96833.

The immediate area consists of strong slopping to the east and southeast in the direction of the Pecos River. To the north and northeast of the site are the dam of Lake Brantley and Brantley Lake State Park. The area immediately surrounding the site is pasture and undeveloped range lands. A topographic map showing the location of the site is provided as Figure 1.

On July 28, 2008, DHA personnel contacted Etech assist in the delineation and remediation of the Federal 34 #1 tank battery site. A pervious assessment had been conducted at the site by another environmental company with the collection of near surface samples within the firewalls of the tank battery. This initial assessment revealed hydrocarbon and chloride impacted soil within the top 2 feet of the site.

Etech conducted an initial site inspection on July 29, 2008. On August 1, 2008 during the removal of a produced water tank, impacted soil was excavated from under the old tank. A soil sample was collected from the bottom of the excavation to determine the levels of contamination in the rock layer immediately underlying the surface soil.

Etech then scheduled and completed another sampling event with the collection of samples from soil borings conducted at the site August 7, 2008. This sampling completed the vertical delineation of the impacted soil within the firewalls of the tank battery.

## **3.0 Site Description**

### **3.1 General Location Setting**

The site is located in Eddy County approximately 12.5 miles northwest of Carlsbad, New Mexico east of State Highway 285.

The spill site lies within the United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map Lake McMillan South dated 1995 at the following coordinate:

N 32° 31' 29.6"  
W 104° 22' 20.1"

According to the topographic map the surface slope in the area of the spill site is to the southeast. The surrounding land is unimproved range land with oil & gas operations.

### **3.2 Geologic and Hydrogeologic Setting**

The soil at this site appears to be part of the Upton gravelly loam. Typically, this type of soil is gently sloping to steep, deep and moderately deep, loamy soils over sandstone or strongly cemented limestone gravels.

Thickness of the soil above the Bkm horizon ranges from 7 to 20 inches. Texture of the fine-earth fraction of the A and Bk horizons ranges from sandy loam to clay loam. The texture varies little between horizons within a given pedon, the fine-earth fraction having a clay content between about 15 and 30 percent, and sand content between 20 to 60 percent. Volume of coarse fragments, generally of limestone or hardened calcium carbonate gravel, ranges from 15 to 35 percent. More than 40 percent of the soil mass less than 20 mm consist of limestone fragments and secondary carbonates.

A review of records on the New Mexico Office of the State Engineer revealed one (1) water well within the same section as the tank battery. The depth to groundwater within this water well was determined to be 135 feet below the surface. Also, there were no identified other water sources within 1,000 feet of the tank battery and the distance to surface water was measured at approximately 3,000 feet to the Pecos River. With all of these factors considered it was determined the site ranking score was 0 points allowing for a remediation level of 5,000 mg/Kg for TPH.

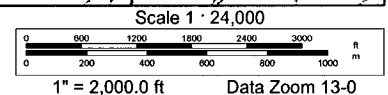


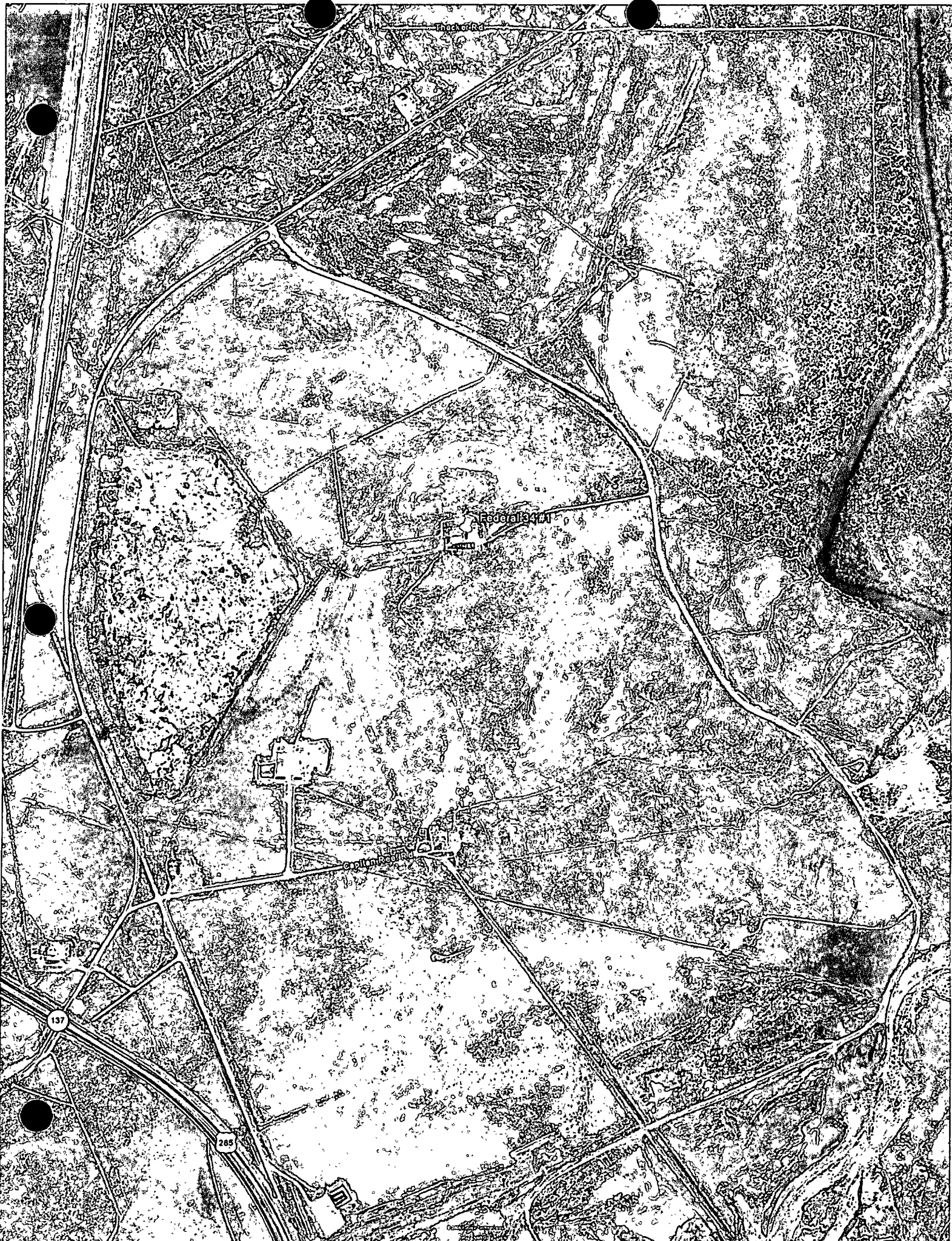


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www.delorme.com





Highway 137

Federal 94/11

County Road 100

137

285

Copyright 1994

## 4.0 Remediation

The following contains details of each phase of the remediation and presents summaries of the analytical data collected from each phase.

### 4.1 Initial Remediation Activities

Initial remediation activities were started at the site in October 27 2008. This phase of the remediation involved the excavation and stockpiling of the impacted soil. Impacted soil was excavated from around the storage tanks and all areas within the firewall of the tank battery. The excavation was completed until bedrock was encountered at approximately 2 to 3 feet in depth.

Samples were collected from the bottom of the excavation. The samples were analyzed for chlorides; the laboratory analytical results are presented in the following table:

<b>Analytical Results from Remediation Excavation Activities – November 5, 2008 (mg/kg)</b>				
<b>Sample #</b>	N. of West Tanks	S. of West Tanks	NW Gun Barrel	SE Gun Barrel
<b>Chlorides</b>	16	<16	320	96

<b>Analytical Results from Remediation Excavation Activities – November 5, 2008 (mg/kg)</b>			
<b>Sample #</b>	Between West Tanks	NE Gun Barrel	Between East Tanks
<b>Chlorides</b>	336	336	<16

<b>Analytical Results from Remediation Excavation Activities – November 5, 2008 (mg/kg)</b>			
<b>Sample #</b>	NE Corner	Central	SW Corner
<b>Chlorides</b>	192	192	48

<b>Analytical Results from Remediation Excavation Activities – November 5, 2008 (mg/kg)</b>						
<b>Sample #</b>	<b>TPH-GRO</b>	<b>TPH-DRO</b>	<b>Benzene</b>	<b>Toluene</b>	<b>Ethylbenzene</b>	<b>Xylene</b>
NE Corner	<10.0	58.0	<0.050	<0.050	0.083	0.458
Central	333	1,660	<0.050	<0.050	0.261	1.01
SW Corner	39.8	324	<0.050	<0.050	0.111	0.449

NR – Indicates analysis not run on sample

Site maps detailing the sample collections points are as follows:

After a review of the initial analytical results, additional excavation activities were conducted within areas determined to still be exceeding the approved remediation levels. The excavation was continued around the gun barrel, between the west storage tanks and within the northwest corner of the tank battery firewall.

After completion of this additional excavation, samples were collected from the bottom of the excavations and submitted to the laboratory for chloride analysis. The laboratory results are summarized in the following table:

<b>Analytical Results from Remediation Excavation Activities – November 7, 2008 (mg/kg)</b>				
<b>Sample #</b>	Main NW Gun Barrel	Main NE Gun Barrel	Between West Tanks	East Side NW Corner
<b>Chlorides</b>	16	<16	144	48

Based on the results of this new analytical data, all soil impacted above the established remediation levels had been removed from the tank battery area with the exception of the soil remaining under the existing storage tanks.

#### **4.2 Off-Site Disposal of Impacted Soil**

As approved in the remediation scope of work, the impacted soil with chloride levels exceeding 1,000 mg/kg was transported off-site for disposal at CRI. Approximately 220 cubic yards of impacted soil was transported for off-site disposal. Clean soil was transported to the site to be blended with the remaining impacted soil prior to placing back into the excavation.

#### **4.3 Blending and Backfilling of Excavation**

As Etech was preparing to complete the remediation of the site by blending the remaining impacted soil with clean soil to reduce the contaminant levels, Ms. Terry Gregston with the BLM arrived at the site to check on the progress of the project.

Ms. Gregston was informed of the activities conducted to date and of the next step in the completion of the remediation as per the OCD approved remediation work plan. Ms. Gregston stated the BLM does not allow blending of contamination for remediation. After detailing the contaminant levels remaining in the soil at the site she said the BLM would allow the impacted soil to be placed back into the excavation as is since it would have to be dealt with when the site was closed and based on the fact that additional spills are likely to happen again in the future at the site.

The details of the conversation with the BLM were forwarded to the OCD but the OCD did not concur with just placing the impacted soil back into the excavation to complete the remediation of the site. After discussions with the OCD a compromise was reached and agreed to by the BLM.

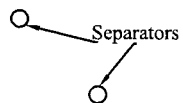
The final remedial method agreed to was to complete the backfilling of the excavation with the impacted soil and clean soil. Next the area of impacted soil would be covered with a 20 mil thick polyethylene liner. The liner would be cut out around the tanks and equipment and would be over the firewall surrounding the tank battery. This liner would reduce the amount of rainfall hitting the impacted soil and would capture most of any future releases at the site.

The final phase of the remediation was started January 27, 2009. Samples were collected of the remaining impacted soil to document levels of contamination. Backfilling of the excavation, construction of the firewalls and lining of the area was completed by February 2, 2009.

Analytical results from samples collected from the remaining impacted soil are presented in the following table:

<b>Analytical Results from Backfilled Soil – December 3, 2008 (mg/kg)</b>				
<b>Sample #</b>	<b>Chlorides</b>	<b>TPH-GRO</b>	<b>TPH-DRO</b>	<b>Total TPH</b>
Composite Smp #1	148	1,730	1,070	2,800
Composite Smp #2	72.6	508	1,090	1,598
Composite Smp #3	178	1,630	944	2,574
Composite Smp #4	183	1,870	896	2,766
Composite Smp #5	178	1,200	960	2,160
Composite Smp #6	167	1,630	992	2,622

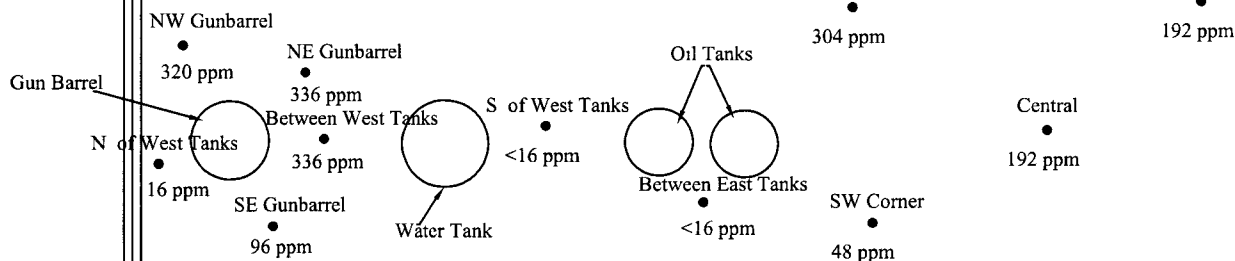
A site map detailing the sample collections points is presented in the following site map:



Wellhead

Free Water Knock Out Tank

Separator



Uphill Side of Location



## Remediation Site Map

Federal 34 #1 Tank Battery and Wellhead

David H. Arrington Oil & Gas, Inc.

Unit N Sec. 34, T20S, R26E

Eddy County, New Mexico

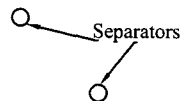
November 5, 2008

## Legend

Prepared By:



Scale 1" = 34.75'



Wellhead

Free Water Knock Out Tank

Separator

NE Gunbarrel  
<16 ppm  
NW Gunbarrel  
16 ppm  
Between West Tanks  
144 ppm  
Water Tank

Oil Tanks

NW Corner  
48 ppm

Uphill Side of Location



## Remediation Site Map

Federal 34 #1 Tank Battery and Wellhead

David H. Arrington Oil & Gas, Inc.

Unit N Sec. 34, T20S, R26E

Eddy County, New Mexico

November 7, 2008

Legend

Scale 1" = 34.75'

Prepared By:

**ETECH**  
Environmental & Safety Solutions, Inc.

## **5.0 Conclusions**

According to the original remediation scope of work and the amended scope of work approved by the OCD and BLM all aspects of the field work have been completed. This report provides the documentation to close out the remediation of the Federal 34 #1 site.



## **6.0 References**

- 1) Soil Survey of Eddy County, New Mexico – United States Department of Agriculture  
Soil Conservation Service
- 2) United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of  
Engineers wetlands delineation manual. Waterways Experiment Station Technical  
Report Y-87-1.
- 3) National Research Council. 1995. Wetlands: Characteristics and boundaries.

## **Appendix A – Waste Disposal Manifest**

## Shipper's No \_\_\_\_\_

Carrier's Name: Phoenix Environmental

Carrier's No 207

RECEIVED subject to the classifications and tariffs in effect on the date of the issue of this Bill of lading.

at Federal 34 #1 <sup>98833</sup> (Date) 10-30-08 FROM David H. Arrington Oilegas

[illegible]

Consigned TO Controlled Recovery Inc. (Print or street address for purposes of notification only)  
On Collect or Delivery Shipment, the letters "CO" must appear before consignee's name or its otherwise provided in Item 410, Sec. 1

Subject to section 7 of conditions if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

Destination \_\_\_\_\_ Street \_\_\_\_\_ City \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Route \_\_\_\_\_ Delivery Address ★ \_\_\_\_\_

Delivering Carrier \_\_\_\_\_ Car or Vehicle Initials and No. \_\_\_\_\_

Collect on Delivery \$ \_\_\_\_\_ And Remit to \_\_\_\_\_

**C.O.D.** Charges to be  
Paid by  
☐ Shipper ☐ Consignee

If charges are to be prepaid write amount here. "To Be Prepaid"

Street		City	State	
HM	Kind of Package, Description of Articles, Special Marks, and Exceptions	Weight (Subject to Correction)	Class or Rate	Check Column
	Non-Haz Contaminated Soil			
	Federal 34 #1 Tank Battery			
	API # 30-015-22738			
	Edye County NM			

Received \$ \_\_\_\_\_ to apply  
in prepayment of the charges on the  
property described herein

Agent or Contact

Per \_\_\_\_\_  
(The signature here acknowledges only  
the amount prepaid.)  
Clarence A. Johnson

\_\_\_\_\_

<sup>1</sup> The fibers contained used for this shipment conform to the specifications set forth in the box packer's certificate thereon and all other requirements of Rule 41 of the Uniform Freight Classification, and Rule 5 of the National Motor Freight Classification."

\*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight. **NOTE** — Where the rate is dependent on value, shippers are required to state specifically in writing the actual or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding.

Shipper, Per \_\_\_\_\_ Agent \_\_\_\_\_

Permanent post-office  
address of shipper

Per

THIS SHIPPING ORDER must be legibly filled in, in ink, in indelible pencil, or in Carbon, and retained by the Agent (C. 10)

Shipper's No

Carrier's Name: Phoenix Environmental

Carrier's No 207

RECEIVED subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

at Federal 34 #1 (Date) 10-30-00 FROM David H. Arrington (Address)

the property described below, in apparent good order, except as noted (contents of packages unknown), marked, consigned, and destined as shown below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own railroad, water line, highway, route or routes, or within the territory of its highway operations otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier, that all property, over all or any portion of said route to destination, and as to each party a copy thereof, is hereby agreed to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Freight Bill of Lading, set forth (1) in the Uniform Freight Classification in effect on the date hereof, if this is a rail or rail water shipment, or (2) on the applicable motor carrier classification or tariff if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

(Mail or street address for purposes of notification only)

Consigned TO Controlled Recovery Inc

On Collect on Delivery Shipments, the letters "C.O.D." must appear before consignee's name or as otherwise provided in Item 430 Sec. 1

Destination \_\_\_\_\_ Street \_\_\_\_\_ City \_\_\_\_\_

County \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Route \_\_\_\_\_ Delivery Address ★ \_\_\_\_\_

(\*To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

Delivering Carrier \_\_\_\_\_ Car or Vehicle Initials and No. \_\_\_\_\_

Collect on Delivery \$ \_\_\_\_\_ And Remit to \_\_\_\_\_

Subject to Section 7 of conditions of this shipment, as to be delivered to the consignee without recourse on the consignor the consignor shall sign the following statement.

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

Kent Johnson  
(Signature of consignee)

C. O. D. Charges to be

Paid by

☐ Shipper ☐ Consignee

If charges are to be prepaid write or stamp here "To Be Prepaid"

H M	Kind of Package, Description of Articles, Special Marks and Exceptions	Weight (Subject to Corrections)	Class or Rate	Check Column
	<u>Non-Haz Contaminated Soil</u>			
	<u>Federal 34 #1 Tank Batteries</u>			
	<u>API # 30-015-22738</u>			
	<u>Edley County NM</u>			

Received \$ \_\_\_\_\_ to apply in prepayment of the charges on the property described herein.

Agent or Cashier

By \_\_\_\_\_  
(The signature here acknowledges only the amount prepaid.)

Charges Advanced

\*The fibre containers used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all other requirements of Rule 14 of the Uniform Freight Classification and Rule 5 of the National Motor Freight Classification.

(Shipper's signature in lieu of stamp not a part of bill of lading approved by the Interstate Commerce Commission)

\*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.

NOTE.—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_

Shipper, Per \_\_\_\_\_

Permanent post-office address of shipper \_\_\_\_\_

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading

2

## STRAIGHT BILL OF LADING—SHORT FORM

Shipper's No \_\_\_\_\_  
Carrier's Name Phoenix Environmental Carrier's No 207

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading.

at Federal 34 #1 96833 (Date) 10-29-08 FROM David H. Arrington Oil + Gas

the property described below, in apparent good order except as noted (consent and conditions of contents of packages, unless marked, consigned and delivered as shown below with said company (the word company being understood throughout this contract) as including any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own railroad, water line, highway, route or route or within the territory of its highway operations, otherwise to deliver to another carrier on the route to said destination, it is hereby agreed, as to each carrier of all or any portion of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in the Uniform Freight Classification in effect on the date hereof, if this is a rail or rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned TO: Controlled Recovery, Inc. (City or street address for purposes of notification only)  
On Collect on Delivery Shipments, the letters "COD" must appear below consignee's name or as otherwise provided in Item 430, Sec. 1.Destination \_\_\_\_\_ Street \_\_\_\_\_ City \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_Route \_\_\_\_\_ Delivery Address \_\_\_\_\_  
(A to be filled in only when shipper desires and guaranteeing traffic provides for delivery thereof.)

Delivering Carrier \_\_\_\_\_ Car or Vehicle Initials and No. \_\_\_\_\_

Collect on Delivery \$ \_\_\_\_\_ And Remit to \_\_\_\_\_

Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

HM	Kind of Package, Description of Articles, Special Marks, and Exceptions	Weight (Subject to Consensus)	Class or Rate	Check Columns
1	Non-Haz Contaminated Soil			
	(Federal 34 #1 Tank Battery)			
	API # 30-015-22738			
	Eddy County, NM			

\*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.  
NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.  
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_ per \_\_\_\_\_

Shipper, Per \_\_\_\_\_ Agent \_\_\_\_\_

Permanent post-office address of shipper \_\_\_\_\_ Per \_\_\_\_\_

Paul M. CRZ 1



THIS SHIPPING ORDER must be legibly filled in, in ink, in indelible pencil, or in Carbon, and retained by the Agent.

Shipper's No. \_\_\_\_\_

Carrier's Name Phoenix Express, Inc.

Carrier's No. \_\_\_\_\_

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading.

at Federal 34 #1 96833 (Date) FROM David H. Acington Oil & Gas

the property described below, in apparent good order, except as noted (contents of packages unknown), marked, consigned, and desired as shown below, which said company (the word company being understood to mean any person or corporation in possession of the property under the contract) agreed to carry to its destination, subject to the terms and conditions of the Uniform Domestic Freight Bill of Lading set forth in the Uniform Freight Classification in effect on the date hereof, and to the applicable interstate carrier classification or tariff if this is a motor carrier shipment. Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back hereof, for the classification or tariff which govern the transportation of this shipment and the said terms and conditions are hereby agreed to by the shipper as accepted for receipt and the consignee.

Consigned TO Controlled Resources, Inc. (Name of street address for purposes of notification only)  
On Collect or Delivery Shipments the letters "C.O.D." must appear before consignee's name or as otherwise provided in Part 430 Sec 1.

Destination St. Louis Street \_\_\_\_\_ City \_\_\_\_\_  
County \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Route \_\_\_\_\_ Delivery Address \_\_\_\_\_  
(To be filled in only when shipment requires delivery to a specific address)

Delivering Carrier Phoenix Car or Vehicle Initials and No. 200

Collect on Delivery \$ \_\_\_\_\_ And Remit to \_\_\_\_\_

Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_

HM	Kind of Package, Description of Articles, Special Marks and Exceptions	Weight (Subject to Tare)	Class or Rate	Check Column
1	<u>Non-Haz Contaminated Sol</u>			
	<u>Federal 34 #1 Tank Battery</u>			
	<u>API # 30-DLS-22738</u>			
	<u>Eddy County, NM</u>			

\*If the shipment moves between two ports by a carrier by water the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.  
NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.  
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \_\_\_\_\_

Shipper's Per \_\_\_\_\_

Permanent post-office address of shipper \_\_\_\_\_

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignee the consignee shall sign the following statement:  
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of consignee)

C. O. D. Charges to be Paid by:  
☐ Shipper ☐ Consignee

If charges are to be prepaid write or stamp here, "To be Prepaid"

Received \$ \_\_\_\_\_ in payment of the charges on the property described herein.

Agent or Factor \_\_\_\_\_

(The signature here acknowledges only the amount prepaid.)

Charges Advanced \_\_\_\_\_

1. The three containers used for this shipment conform to the specifications set forth in the box maker's certificate thereon and all other requirements of Rule 41 of the Uniform Freight Classification and Rule 5 of the National Motor Freight Classification.  
2. Shippers' receipt in lieu of stamp not a part of bill of lading approved by the Interstate Commerce Commission.

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

**Appendix B – Laboratory Analytical Data**





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

**ANALYTICAL RESULTS FOR  
ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.  
ATTN: SHANE ESTEP  
P.O. BOX 8469  
MIDLAND, TX 79708  
FAX TO: (432) 563-2213**

Receiving Date: 11/05/08  
Reporting Date: 11/05/08  
Project Owner: DAOG  
Project Name: FEDERAL 34 #1 MAIN BATTERY  
Project Location: CARLSBAD, NM

Analysis Date: 11/05/08  
Sampling Date: 11/05/08  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl <sup>-</sup> (mg/kg)
H16272-1	N. OF WEST TANKS	16
H16272-2	S. OF WEST TANKS	< 16
H16272-3	NW GUN BARREL	320
H16272-4	SE GUN BARREL	96
H16272-5	BETWEEN WEST TANKS	336
H16272-6	NE GUN BARREL	336
H16272-7	BETWEEN EAST TANKS	< 16
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-CIB
--------------------------	----------

**Note:** Analyses performed on 1:4 w:v aqueous extracts.

**Chemist**

Date \_\_\_\_\_

H16272 Etech

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 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.



# ARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR  
ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.  
ATTN: SHANE ETEP  
P.O. BOX 8469  
MIDLAND, TX 79708  
FAX TO (432) 563-2213

Receiving Date: 11/05/08  
Reporting Date: 11/07/08  
Project Owner: DAOG  
Project Name: FEDERAL 34 #1 MAIN BATTERY  
Project Location: CARLSBAD, NM

Sampling Date: 11/05/08  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: HM

LAB NO.	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE:		11/06/08	11/06/08	11/07/08	11/07/08	11/07/08	11/07/08
H16272-1	N. OF WEST TANKS	270	556	0.140	0.456	0.859	7.18
H16272-2	S. OF WEST TANKS	546	1,450	0.061	0.270	0.738	7.91
H16272-4	SE GUN BARREL	115	82.5	0.059	0.314	0.931	5.32
H16272-7	BETWEEN EAST TANKS	64.7	289	0.103	0.320	0.672	5.02
Quality Control		543	474	0.042	0.055	0.055	0.160
True Value QC		500	500	0.050	0.050	0.050	0.150
% Recovery		109	94.8	84.0	110	110	107
Relative Percent Difference		2.2	1.6	12.0	0.9	1.8	1.8

METHODS. TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B.

  
Lab Director

  
Date

H16272 BTEX8015 ETECH

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# CARDINAL LABORATORIES

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(575) 393-2326 Fax (575) 393-2476

Page \_\_\_\_ of \_\_\_\_

Company Name: <u>Etech Environmental</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>											
Project Manager: <u>Shane Estep</u>				P.O. #:				<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <u>Chlorides</u> <u>TPH</u> <u>BTEX</u> </div> <div style="width: 70%;"></div> </div>											
Address: <u>PO Box 8469</u>				Company:															
City: <u>Midland</u> State: <u>TX</u> Zip: <u>79708</u>				Attn:															
Phone #: <u>432-563-2200</u> Fax #: <u>432-563-2213</u>				Address:															
Project #: _____ Project Owner: <u>DITOG</u>				City:															
Project Name: <u>Federal 34 #1 Main Battery</u>				State: _____ Zip: _____															
Project Location: <u>Carlsbad NM</u>				Phone #: _____															
Sampler Name: <u>Shane Estep</u>				Fax #: _____															
FOR USE ONLY																			
Lab I.D.		Sample I.D.		IGRAB OR (COMP. #) CONTAINERS		MATRIX		PRESERV		SAMPLING									
						GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER		ACID/BASE ICE/COOL OTHER		DATE TIME									
H16272-1		N. of West Tanks		61		X		X		11-5-08 1131		X							
-2		S. of West Tanks		1		X		X		1227		X							
-3		NW Gun Barrel		1		X		X		1248		Cancel as per CI results							
-4		SE Gun Barrel		1		X		X		1254		Cancel as per CI results							
-5		Between West Tanks		1		X		X		1301		Cancel as per CI results							
-6		NE Gun Barrel		1		X		X		1307		Cancel as per CI results							
-7		Between East Tanks		1		X		X		1315		Cancel as per CI results							

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising hereunder shall be limited to the amount paid by the client for the analysis and the amount of the fee for the analysis and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. The amount of the fee for the analysis shall be deemed to be the amount of the fee for the analysis and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished By: <u>Shane Estep</u>		Date: <u>11-5-08</u>		Received By: <u>Mike LeBut</u>		Phone Result: <input type="checkbox"/> No		Add'l Phone #:	
Relinquished By: _____		Time: <u>1415h</u>		Received By: _____		Fax Result: <input type="checkbox"/> No		Add'l Fax #:	
Delivered By: (Circle One)		Temp		Sample Condition		CHECKED BY		REMARKS: <u>Held TPH + BTEX after chlorides</u>	
Sampler - UPS - Bus - Other:				Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		(Initials) <u>MCB</u>			

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.



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

ANALYTICAL RESULTS FOR  
ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC  
ATTN: SHANE ETEP  
P O. BOX 8469  
MIDLAND, TX 79708  
FAX TO (432) 563-2213

Receiving Date: 11/05/08  
Reporting Date: 11/07/08  
Project Owner: DAOG  
Project Name: FEDERAL 34 #1 EAST SIDE  
Project Location: CARLSBAD, NM

Sampling Date: 11/05/08  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: HM

LAB NO.	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE:		11/07/08	11/07/08	11/07/08	11/07/08	11/07/08	11/07/08
H16273-1	NE CORNER	<10.0	58.0	<0.050	<0.050	0.083	0.458
H16273-2	CENTRAL	333	1,660	<0.050	<0.050	0.261	1.01
H16273-3	SW CORNER	39.8	324	<0.050	<0.050	0.111	0.449
Quality Control		543	474	0.042	0.055	0.055	0.160
True Value QC		500	500	0.050	0.050	0.050	0.150
% Recovery		109	94.8	84.0	110	110	107
Relative Percent Difference		2.2	1.6	12.0	0.9	1.8	1.8

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8021B.

  
Lab Director

  
Date

H16273 BTEX8015 ETECH

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ANALYTICAL RESULTS FOR  
ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.  
ATTN: SHANE ESTEP  
P.O. BOX 8469  
MIDLAND, TX 79708  
FAX TO: (432) 563-2213

Receiving Date: 11/05/08  
Reporting Date: 11/05/08  
Project Owner: DAOG  
Project Name: FEDERAL 34 #1 EAST SIDE  
Project Location: CARLSBAD, NM

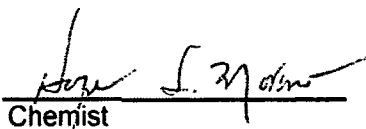
Analysis Date: 11/05/08  
Sampling Date: 11/05/08  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl <sup>-</sup> (mg/kg)
H16273-1	NE CORNER	192
H16273-2	CENTRAL	192
H16273-3	SW CORNER	48
H16273-4	NW CORNER	304
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods

4500-Cl<sup>-</sup>B

Note: Analyses performed on 1:4 w:v aqueous extracts.

  
Chemist

11-05-08  
Date

H16273 Etech

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Page \_\_\_\_ of \_\_\_\_

Company Name <u>Etech Environmental</u>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
Project Manager: <u>Shane Estep</u>		P.O. #:		<div style="display: flex; justify-content: space-between;"> <div> <u>Chlorides</u>  <u>TPH</u>  <u>BTEX</u> </div> <div></div> </div>											
Address: <u>P.O. Box 8469</u>		Company:													
City: <u>Midland</u> State: <u>TX</u> Zip: <u>79708</u>		Attn:													
Phone #: <u>563-2800</u> Fax #: <u>432-563-2213</u>		Address:													
Project #: _____ Project Owner: <u>DAOG</u>		City:													
Project Name: <u>Federal 34 #1 East Side</u>		State: _____ Zip: _____													
Project Location: <u>Carlsbad Dug</u>		Phone #:													
Sampler Name: <u>Shane Estep</u>		Fax #:													

FOR LAB USE ONLY		# GRAB OR (COMP)	# CONTAINERS	MATRIX					PRESERV	SAMPLING																
Lab I.D.	Sample I.D.			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE: ICE / COOL OTHER	DATE	TIME														
H116273	NE Corner	9	1							11-5-08	1148	X	X	X												
-2	Central										1153															
-3	SW Corner										1204															
-4	NW Corner										1209				Cancel as per CL results. Ch 117											

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice and all costs of collections, including attorney's fees.

Sampler Relinquished By: <u>Shane Estep</u>		Date: <u>11-5-08</u>	Received By: <u>Misty Lubat</u>	Phone Result: <input type="checkbox"/> No	Add'l Phone #: _____
Relinquished By: _____		Date: _____	Received By: _____	Fax Result: <input type="checkbox"/> No	Add'l Fax #: _____
Delivered By (Circle One) Sampler - UPS - Bus - Other.		Temp. _____	Sample Condition: Cool Intact <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHECKED BY: (Initials) <u>MCB</u>	

REMARKS: Hold TPH + BTEX for chloride results

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.

**ANALYTICAL RESULTS FOR  
ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.  
ATTN: SHANE ESTEP  
P.O. BOX 8469  
MIDLAND, TX 79708  
FAX TO: (432) 563-2213**

Receiving Date: 11/07/08  
Reporting Date: 11/07/08  
Project Owner: DAOG  
Project Name: FEDERAL 34 #1  
Project Location: CARLSBAD, NM

Analysis Date: 11/07/08  
Sampling Date: 11/07/08  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: TR

LAB NO.	SAMPLE ID	Cl <sup>-</sup> (mg/kg)
H16281-1	MAIN NW GUN BARREL	16
H16281-2	MAIN NE GUN BARREL	< 16
H16281-3	MAIN BETWEEN WEST TANKS	144
H16281-4	EAST SIDE NW CORNER	48
Quality Control		490
True Value QC		500
% Recovery		98.0
Relative Percent Difference		2.0

**METHOD:** Standard Methods 4500-CIB

**Note:** Analyses performed on 1:4 w:v aqueous extracts.

**Chemist**

**Date**

H16281 Etech



# ARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR  
ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.  
ATTN: SHANE ESTEP  
P.O. BOX 8469  
MIDLAND, TX 79708  
FAX TO: (432) 563-2213

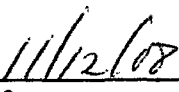
Receiving Date: 11/07/08  
Reporting Date: 11/12/08  
Project Owner: DAOG  
Project Name: FEDERAL 34 #1  
Project Location: CARLSBAD, NM

Sampling Date: 11/07/08  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: CK

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)
		11/10/08	11/10/08
H16281-1	MAIN NW GUN BARREL	64.7	288
H16281-2	MAIN NE GUN BARREL	1,090	747
H16281-3	MAIN BETWEEN WEST TANKS	8,250	5,900
H16281-4	EAST SIDE NW CORNER	69.6	277
Quality Control		429	411
True Value QC		500	500
% Recovery		85.8	82.2
Relative Percent Difference		12.7	0.6

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

  
Lab Director

  
Date

H16281 T ETECH

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ANALYTICAL RESULTS FOR  
ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.  
ATTN: SHANE ESTEP  
P.O. BOX 8469  
MIDLAND, TX 79708  
FAX TO (432) 563-2213

Receiving Date: 11/07/08  
Reporting Date: 11/12/08  
Project Owner: DAOG  
Project Name: FEDERAL 34 #1  
Project Location: CARLSBAD, NM

Sampling Date: 11/07/08  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: ZL

LAB NUMBI SAMPLE ID	ANALYSIS DATE	BENZENE		ETHYL TOTAL	
		(mg/kg)	TOLUENE (mg/kg)	BENZENE (mg/kg)	XYLENES (mg/kg)
H16281-1 MAIN NW GUN BARREL	11/11/08	<0.050	<0.050	<0.050	<0.150
H16281-2 MAIN NE GUN BARREL	11/11/08	<0.050	<0.050	0.385	4.97
H16281-3 MAIN BETWEEN WEST TANKS	11/11/08	0.174	0.363	3.44	8.13
H16281-4 EAST SIDE NW CORNER	11/11/08	<0.050	<0.050	<0.050	0.547
Quality Control		0.048	0.051	0.055	0.155
True Value QC		0.050	0.050	0.050	0.150
% Recovery		96.0	102	110	103
Relative Percent Difference		6.1	4.0	11.1	11.2

METHOD: EPA SW-846 8260

TEXAS NELAP CERTIFICATION T104704398-08-TX FOR BENZENE, TOLUENE, ETHYL BENZENE, AND TOTAL XYLENES.

Chemist

Date

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# CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240

(575) 393-2326 Fax (575) 393-2476

Page \_\_\_\_ of \_\_\_\_

Company Name: <u>Estech Environmental</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																			
Project Manager: <u>Shane Estep</u>				P.O. #:				<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chlorides</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX</div> </div>																			
Address: <u>PO Box 8469</u>				Company:																							
City: <u>M. Island</u> State: <u>TX</u> Zip: <u>75708</u>				Attn:																							
Phone #: <u>432-563-2200</u> Fax #: <u>432-563-2213</u>				Address:																							
Project #: _____ Project Owner: <u>DAN G</u>				City:																							
Project Name: <u>Federal 34 #1</u>				State: _____ Zip: _____																							
Project Location: <u>Carlsbad, NMI</u>				Phone #: _____																							
Sampler Name: <u>Shane Estep</u>				Fax #: _____																							
FOR LAB USE ONLY				MATRIX		PRESERV		SAMPLING																			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER	DATE	TIME													
H16281-1	Main NW Gun Barrel	G	1			X				X			11-7-08	0944	X	X	X										
-2	Main NE Gun Barrel													0946													
-3	Main Between West Tanks													0953													
-4	East Side NW Corner													0959													

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Terms and Conditions. Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice and all costs of collections including attorneys fees.

Sampler Relinquished: <u>Shane Estep</u>		Date: <u>11-7-08</u>	Received By: <u>Marty Lubut</u>	Phone Result: <input type="checkbox"/> No	Add'l Phone #: _____
Relinquished By: _____		Time: <u>1141</u>	Received By: _____	Fax Result: <input type="checkbox"/> No	Add'l Fax #: _____
Delivered By: (Circle One)		Date: _____	Temp: _____	REMARKS:	
Sampler - UPS - Bus - Other: _____		Time: _____	Sample Condition:	432-557-6080	
			Cool Intact		
			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
			CHECKED BY: <u>MCAB</u>		
			(Initials)		

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476.



# ARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR  
ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.  
ATTN: SHANE ESTEP  
P.O. BOX 8469  
MIDLAND, TX 79708  
FAX TO: (432) 563-2213

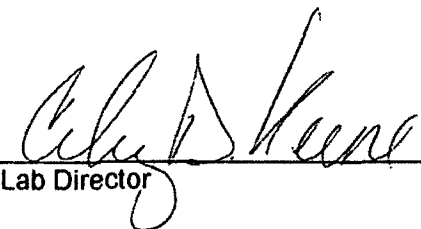
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Reporting Date: 11/18/08  
Project Owner: DAOG  
Project Name: FEDERAL 34 #1  
Project Location: CARLSBAD, NM

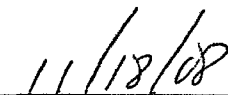
Sampling Date: 11/17/08  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: AB

LAB NUMBER	SAMPLE ID	GRO (C <sub>6</sub> -C <sub>10</sub> ) (mg/kg)	DRO (>C <sub>10</sub> -C <sub>28</sub> ) (mg/kg)
------------	-----------	--	--

ANALYSIS DATE	11/17/08	11/17/08
H16341-1 SE GUNBARREL	44.9	138
Quality Control	538	443
True Value QC	500	500
% Recovery	108	88.6
Relative Percent Difference	0.5	14.8

METHODS: TPH GRO & DRO: EPA SW-846 8015 M

  
Lab Director

  
Date

H16341 T ETECH

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**ANALYTICAL RESULTS FOR  
ETECH ENVIRONMENTAL & SAFETY SOLUTIONS, INC.  
ATTN: SHANE ESTEP  
P.O. BOX 8469  
MIDLAND, TX 79708  
FAX TO: (432) 563-2213**

Receiving Date: 11/17/08  
Reporting Date: 11/18/08  
Project Owner: DAOG  
Project Name: FEDERAL 34 #1  
Project Location: CARLSBAD, NM

Analysis Date: 11/17/08  
Sampling Date: 11/17/08  
Sample Type: SOIL  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: TR

LAB NO.	SAMPLE ID	C <sup>-</sup> (mg/kg)
H16341-2	STOCK PILE	1,310
Quality Control		510
True Value QC		500
% Recovery		102
Relative Percent Difference		2.0

**METHOD:** Standard Methods

**4500-CI-B**

**Note:** Analysis performed on a 1:4 w:v aqueous extract.

Joe S. Moore  
Chemist

11-18-63  
Date

**H16341 Etech**

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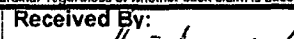
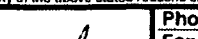


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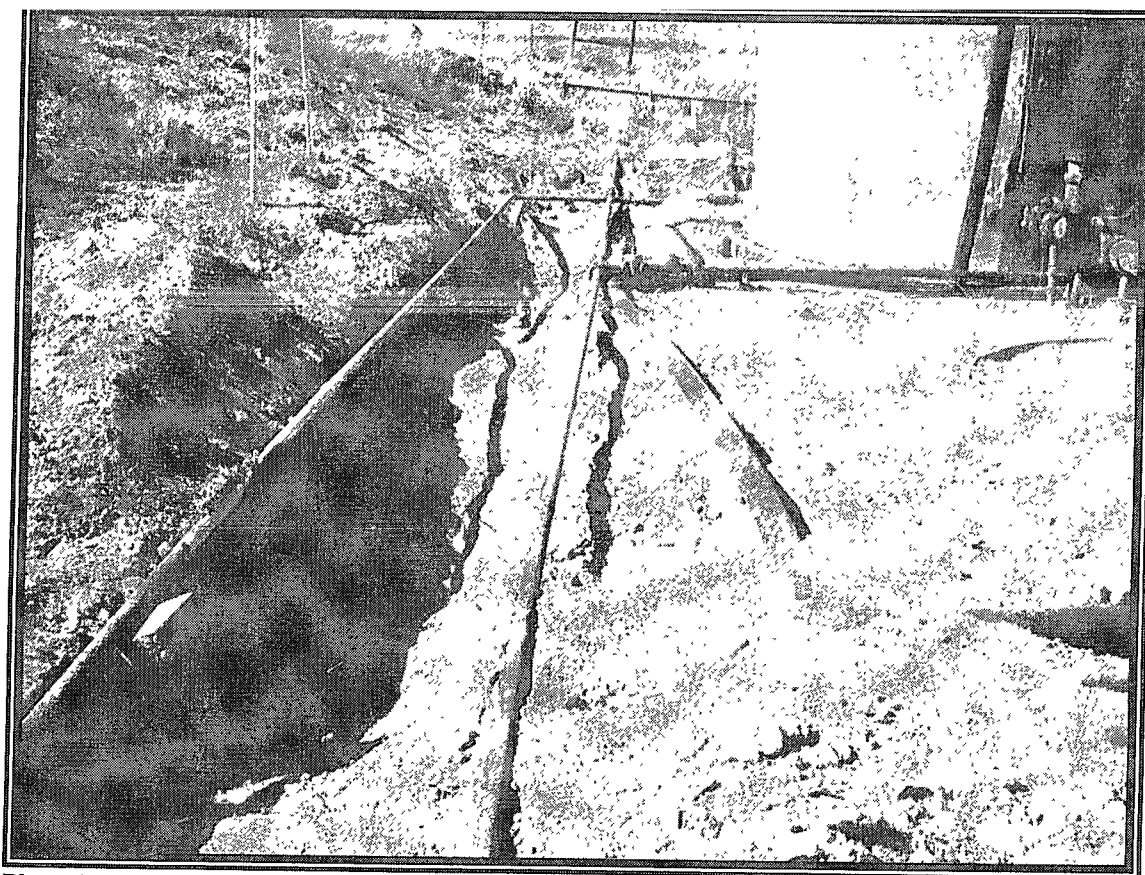
Page \_\_\_\_\_ of \_\_\_\_\_

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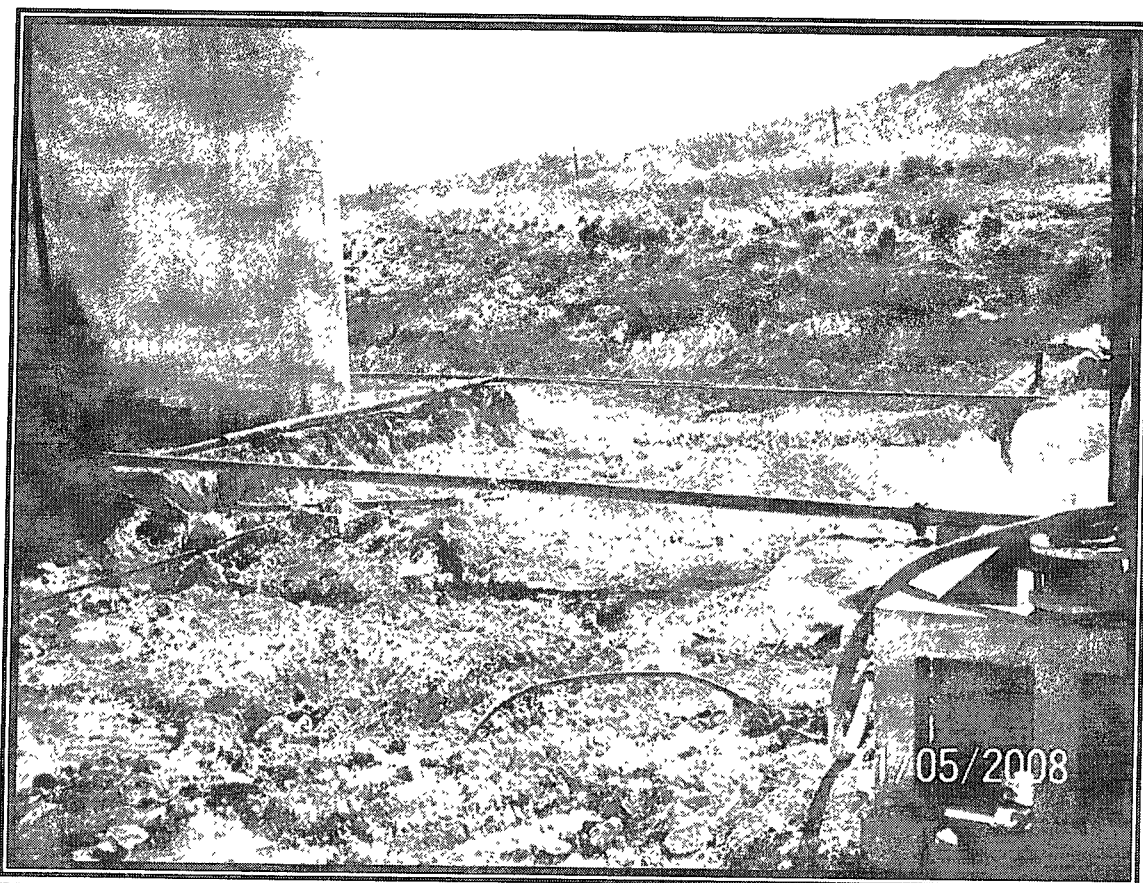
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<b>Relinquished By:</b>  		<b>Date:</b>  <b>Time:</b>		<b>Received By:</b>  			
<b>Delivered By: (Circle One)</b> Sampler - UPS - Bus - Other:				<b>Temp.</b>  	<b>Sample Condition</b> Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	<b>CHECKED BY:</b> (Initials) 	

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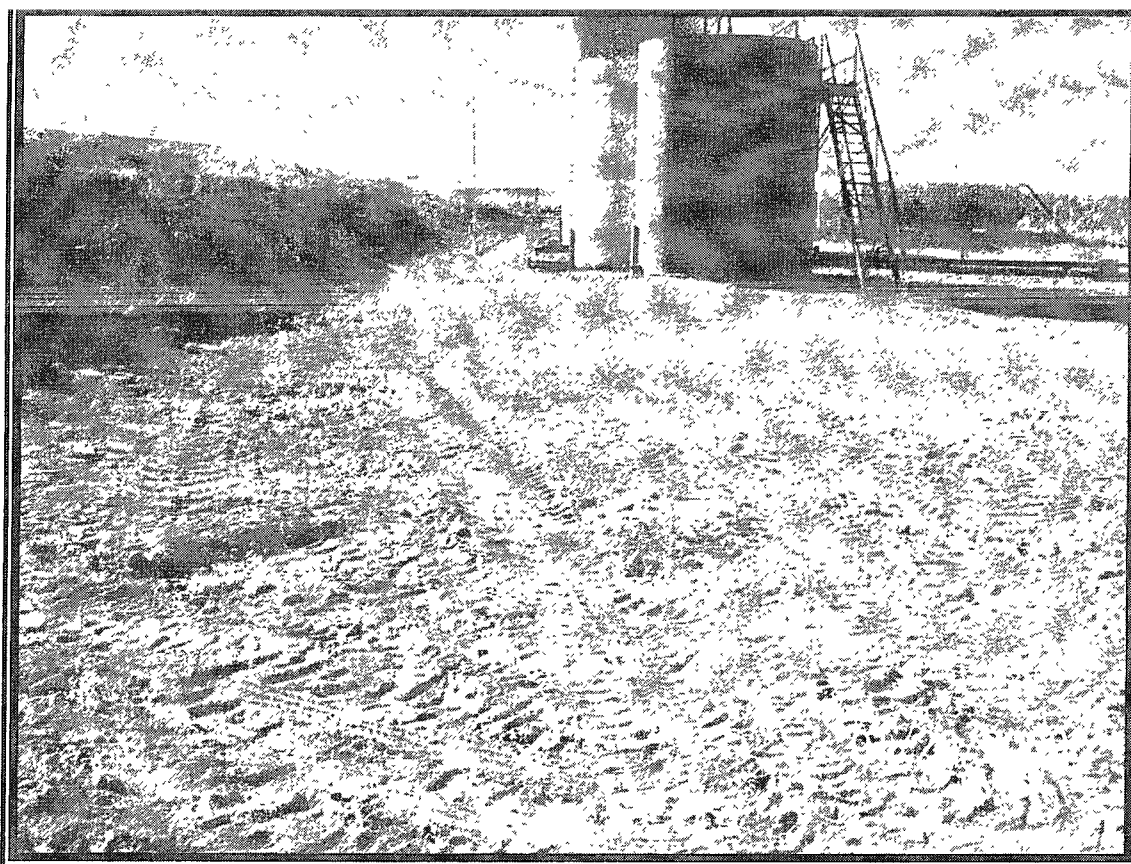
## **Appendix C – Supporting Documentation**



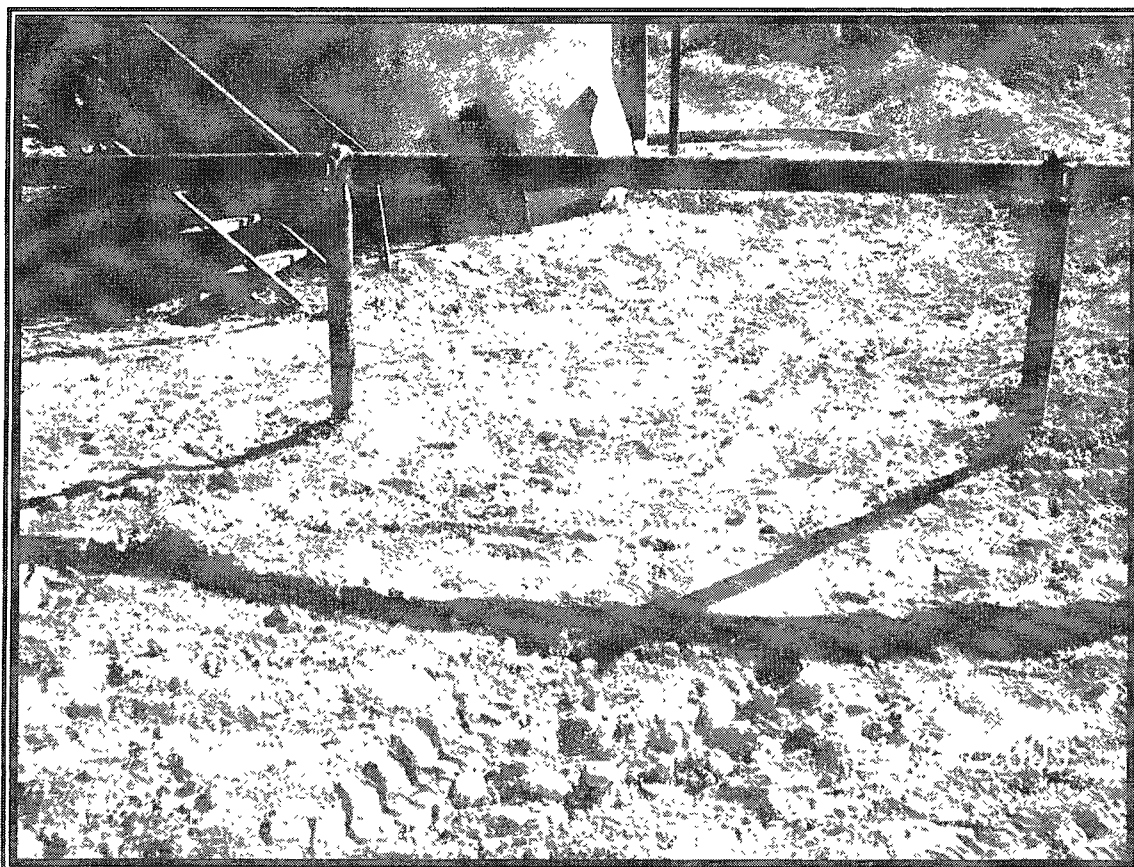
**Photo 1 - Backside of tank battery after excavation.**



**Photo 2 - Between tanks after excavation.**

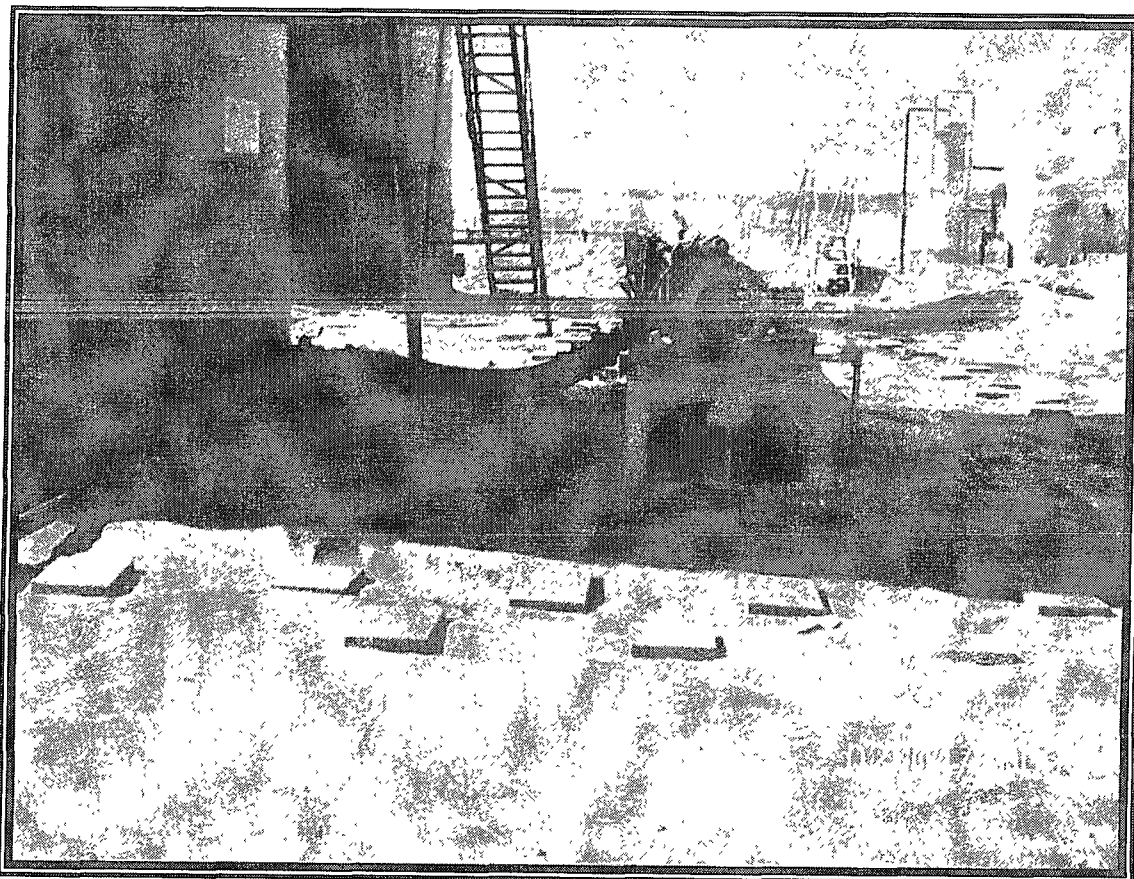


**Photo 3 - Tank battery after backfilling.**

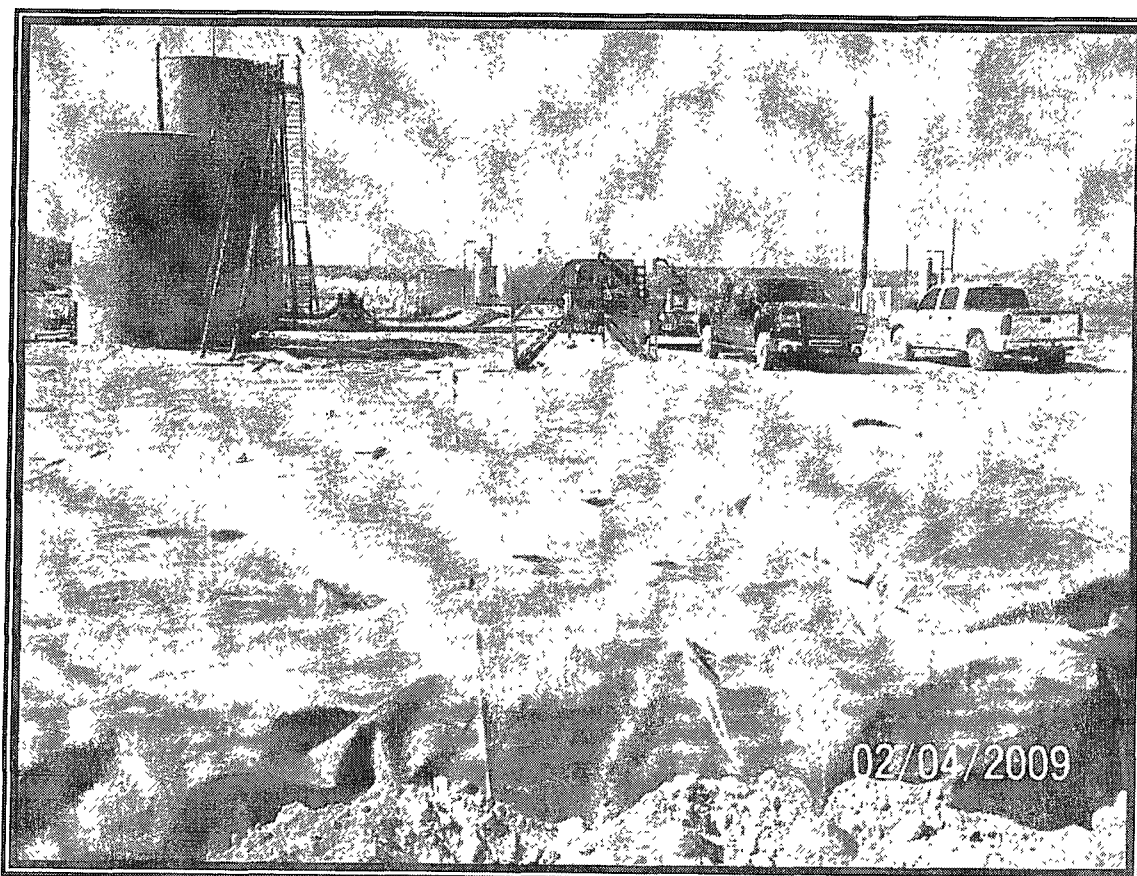


**Photo 4 - Gunbarrel after backfilling.**





**Photo 5 - Front side of tank battery after lining.**



**Photo 6 - Tank battery after remediation and lining.**