



**Whole Earth Environmental, Inc.**

2103 Arbor Cove  
Katy, Tx. 77494  
281.394.2050  
whearth@msn.com

January 1, 2008

NMOCD  
1625 North French Drive  
Hobbs, NM 88241

**Reference: NMOCD Case No. ACO 212-0**

Attn: Larry Johnson

Dear Mr. Johnson:

Enclosed, please find a copy of the closure report for the New Mexico State BB battery remediation project. As you will note, the remediation activities went well beyond the original requirement of removing free hydrocarbons from the areas outside the facility perimeter. We undertook a complete restoration of the facility to include the removal of all free hydrocarbons within the battery, removal and restoration of the containment berms, moving the flowlines inside containment, new fencing, removal of surplus equipment and the remediation of an old (previously unidentified) pit.

During the course of the project we stayed in close contact with Mr. Carl Lane Johnson, (the surface leasee), to insure his satisfaction with the work performed. At the conclusion of the remediation project, we were able to free up an additional one-third acre of land for grazing while providing him a new stock pond for his cattle.

Thank you again for the opportunity of working with you on this very interesting project.

Warmest personal regards,

Mike Griffin  
President  
Whole Earth Environmental, Inc.

**RECEIVED**

JAN 16 2008

**HOBBS OCD**

RP#1419



## **Executive Summary**

### **Location**

The site is located approximately thirty-five miles west of the city of Tatum, Lea County, New Mexico on state lands. The primary land use is grazing of cattle; however extensive oil and gas operations are prevalent in the area. The area is semi-arid with a net precipitation/evaporation amount of -73" per year. The legal description of the site is Unit J, Sec. 6, T-25S, R-37E.

### **Site History**

A tank overflow was reported by Phoenix on August 13, 2007. Approximately twenty-five barrels of crude oil were spilled and approximately 18 barrels were recovered. Most of the spill was contained within the berms; however a portion escaped containment and ran in a generally east-west line along the northern fence line.

### **Investigation Activities**

Whole Earth Environmental collected four 0-24" composite soil samples along the affected area and had them tested for TPH and Chlorides. The oil is a heavy, almost asphaltic gravity therefore BTEX was not tested within the field screen.

The detailed results of the test are contained within the Laboratory Analytical section of this report. The summary is that there was no discernable chloride impact; however, TPH concentrations range from 7,370 – 61,900 ppm.

### **Remediation Activities**

The remediation project consisted of the following activities:

- All wells feeding the battery were shut in. All flowlines were removed from the northern spill area and replaced whenever signs of corrosion or external damage were discovered.
- The perimeter fences were removed to provide free access to the location.
- The surplus separator and 300 bbl. tank were removed and scrapped.
- The spill materials prompting the Notice of Violation (NOV) were excavated and sent to commercial disposal.
- All stained areas within the perimeter of the facility were excavated and sent to commercial disposal.

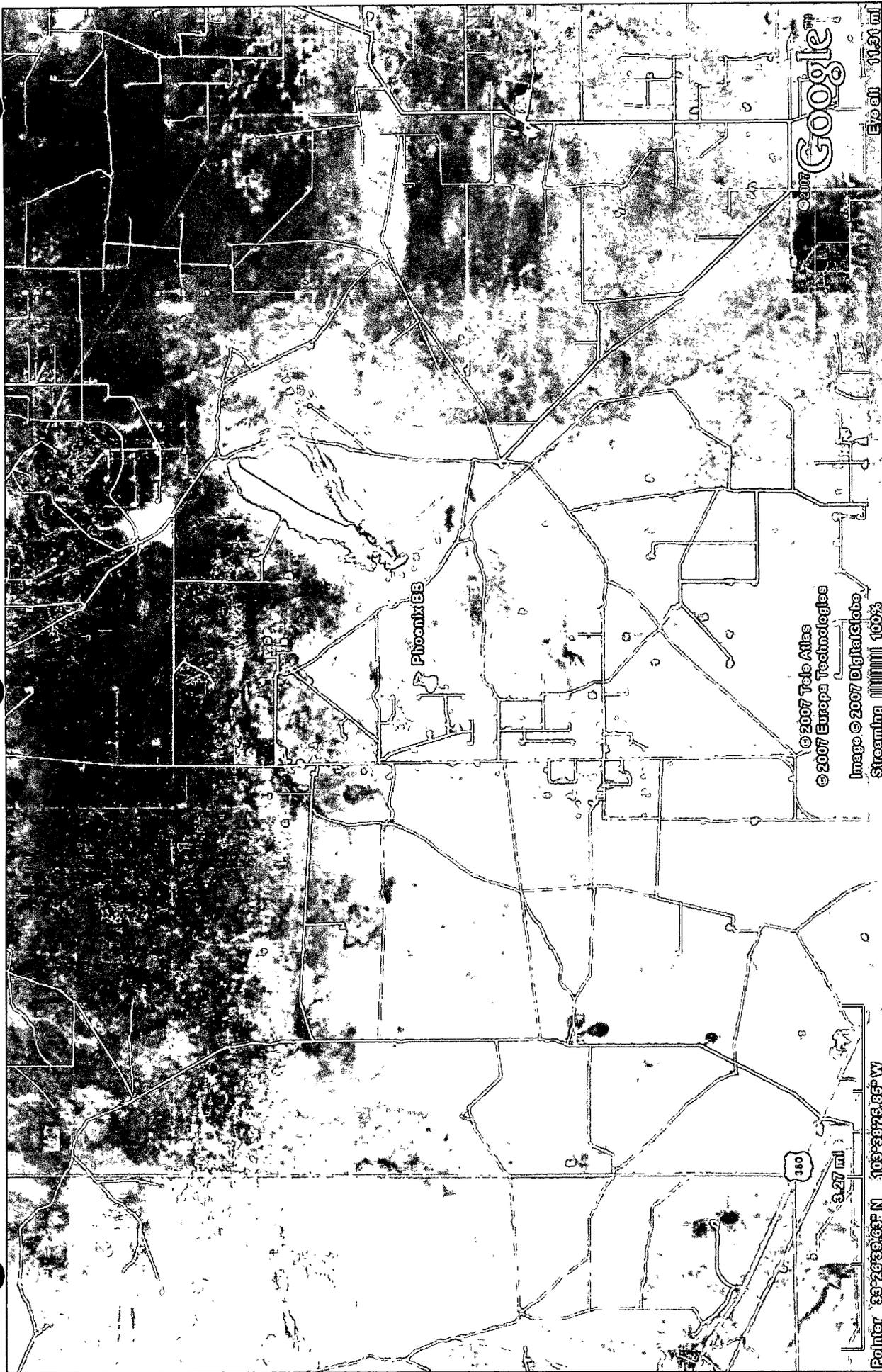
- The containment berms surrounding the tanks were removed and sent to commercial disposal.
- A stain area at the eastern edge of the facility was excavated to a total depth of approximately 12' below ground surface. The area was later discovered to be a trash pit consisting primarily of heavily weathered, asphaltic tank bottoms.
- A geo-synthetic bentonite liner was installed at the bottom of the pit area to prevent any potential vertical migration of the remaining sub-strait chlorides to the surface.
- The pit area was backfilled with fresh soil and clay.
- The original spill area lying outside of the facility perimeter was backfilled with fresh topsoil and clay. The area was graded to replicate background elevations.
- The flowlines were re-installed within the facility.
- New containment berms were erected around the entire facility to include the remaining separator.
- Fresh caliche was spread and compacted over the entire facility.
- A boring was advanced within the pit with split spoon soil samples obtained in five-foot increments to a depth of forty-five feet below ground surface in order to determine the vertical extent of chloride migration, (Exhibit 13).
- New fences were erected around the battery.

A total of 2006 cubic yards of asphaltic materials were excavated and sent to commercial disposal.



## **Exhibit Index**

1. Satellite Photo of Location (Zoom Out)
2. Satellite Photo of Location (Zoom In)
3. Site Diagram
4. Lease Sign
5. Berm Area Prior to Remediation
6. Berm Area After Remediation
7. Stain Area Prior to Remediation
8. Stain Area Prior to Remediation
9. Stain Area After to Remediation
10. Overall Area Prior to Remediation
11. Overall Area During to Remediation
12. Overall Area After Remediation
13. Test Boring Chloride Concentrations
14. Boring Log



Phoenix 88

© 2007 Google

Eye alt 11.31 mi

© 2007 Tele Atlas

© 2007 Europa Technologies

Image © 2007 DigitalGlobe

Streaming IIIIIII 100%

340

3.27 mi

Pointer 33°26'39.63" N 105°30'23.65" W

Phoenix EB

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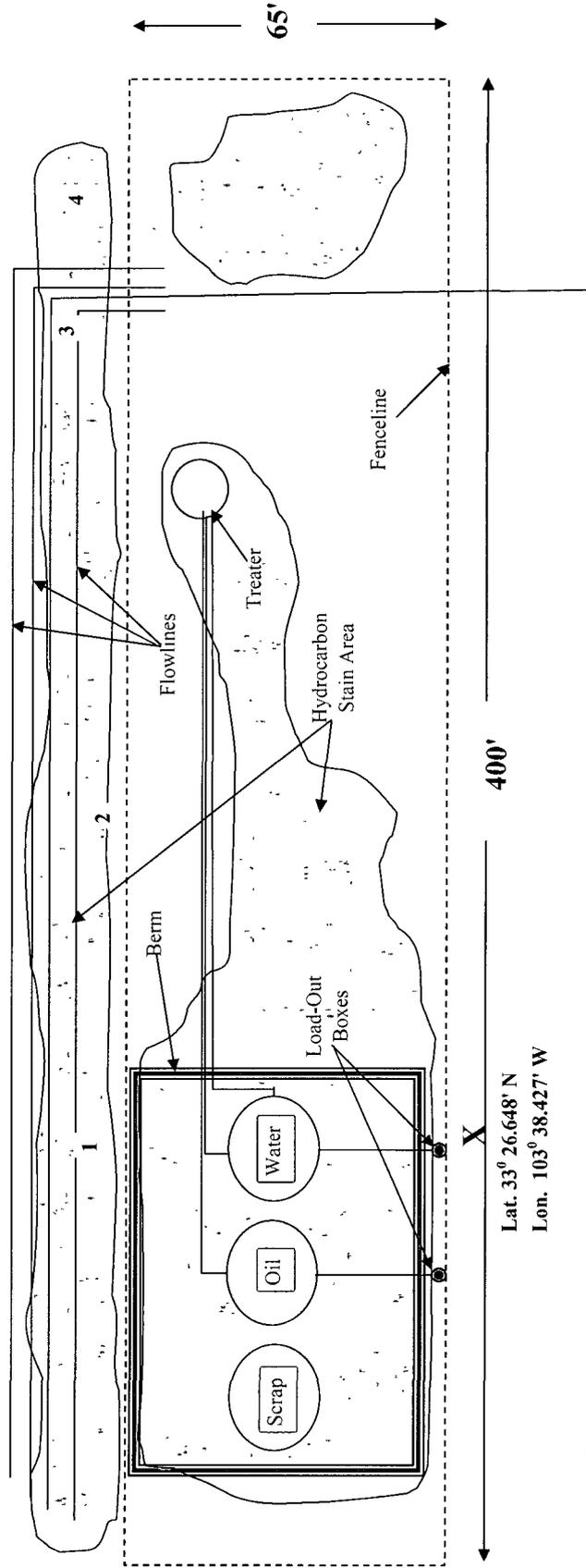
Eye all 00411

© 2007 Tele Atlas  
© 2007 Europa Technologies

Image © 2007 DigitalGlobe  
Streaming 100%

261 ft  
Pointer 33°26'39.66" N 103°39'25.85" W

# Phoenix Hydrocarbons NM State BB Tank Battery Site Diagram



Lat. 33° 26.648' N  
Lon. 103° 38.427' W

- Berm Volume = approx. 80 cy.
- Surface Stains = approx. 40 cy.
- Outside Fence = approx. 450 cy.
- Backfill = approx. 500 cy.

PHOENIX HYDROCARBONS OPERATING CORP.

N.M. STATE BB

TANK BATTER #1

SEC. 14, T10S, R32E

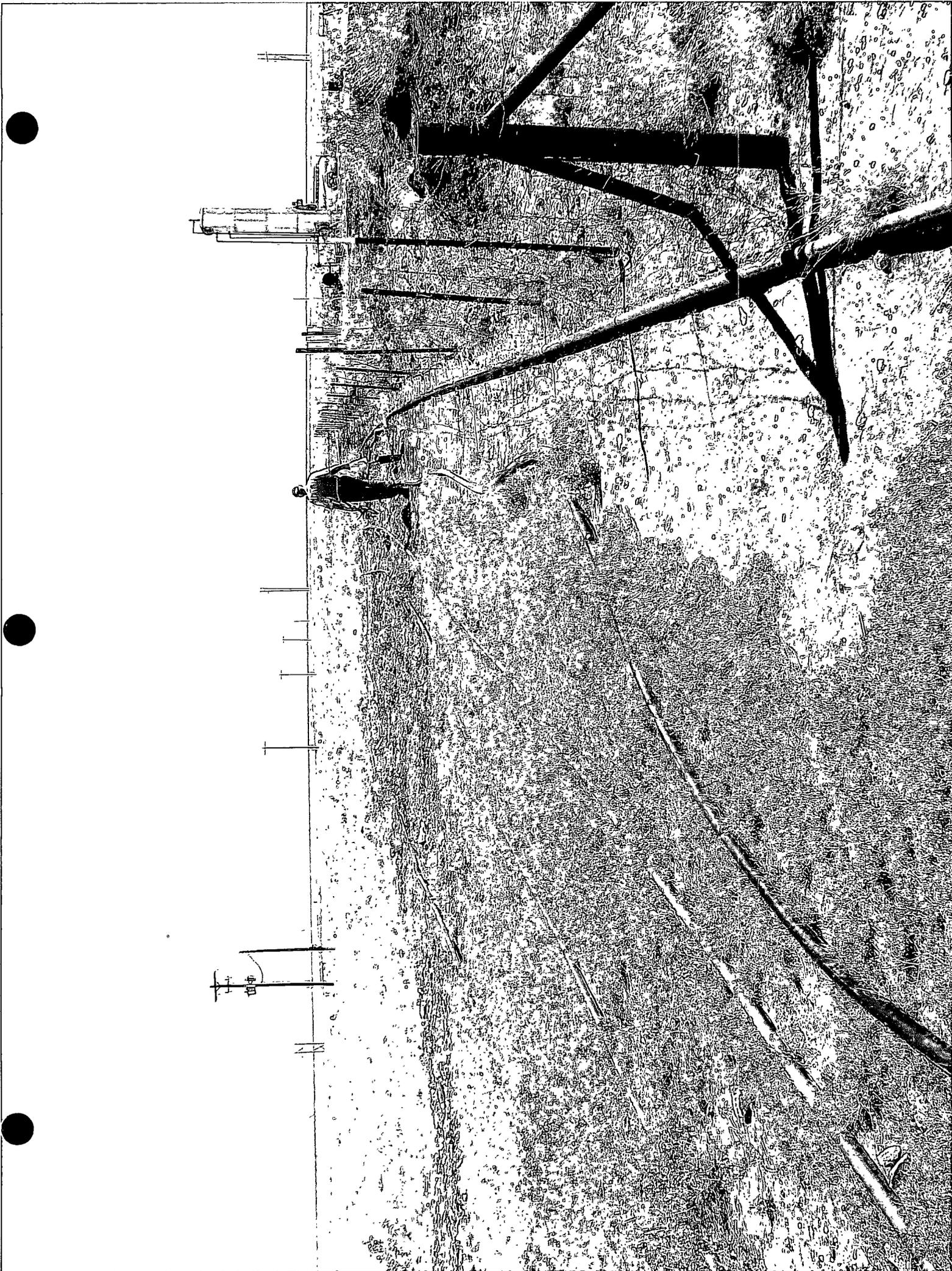
LEA COUNTY, NEW MEXICO

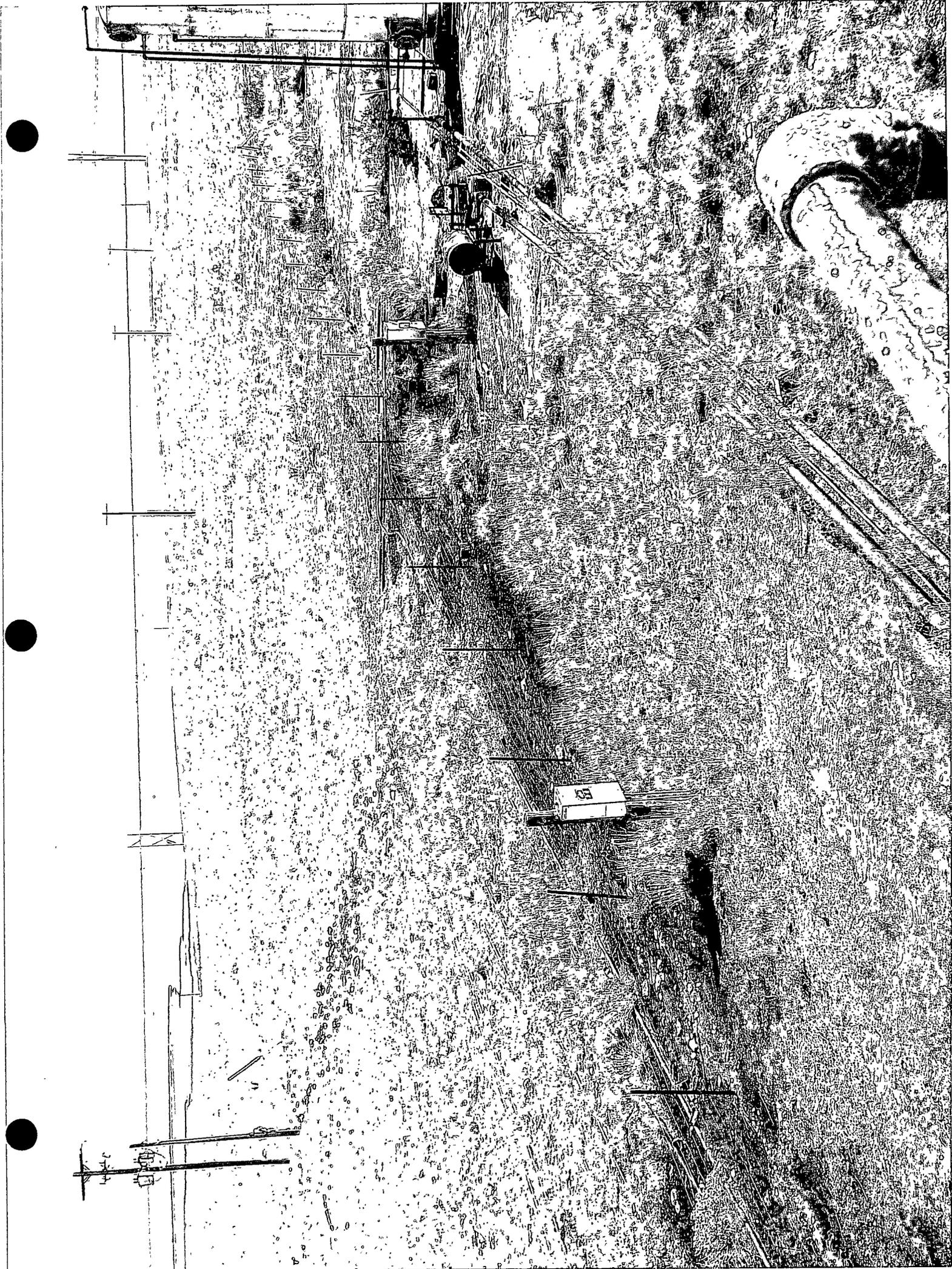


10-16-2007 09:07



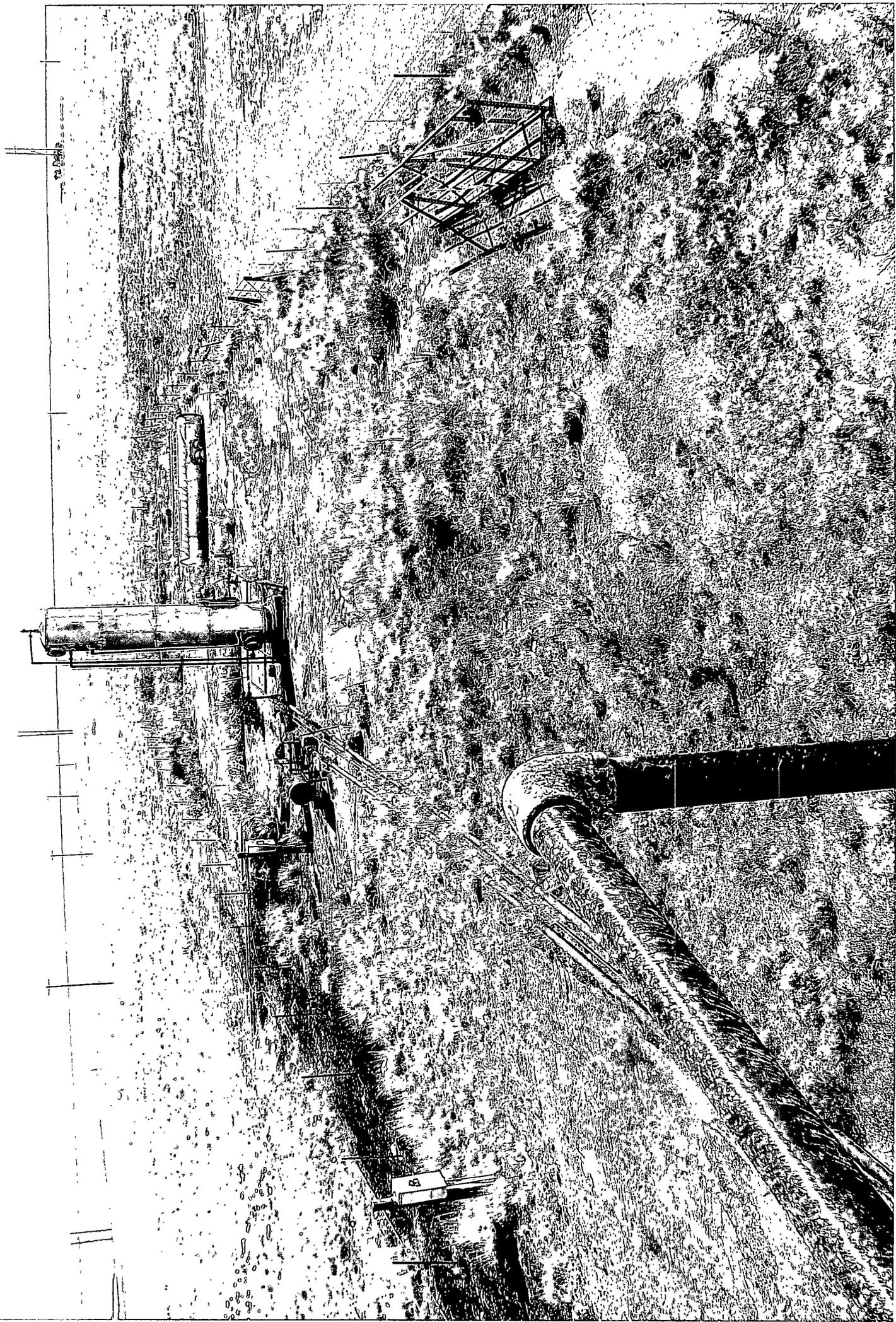
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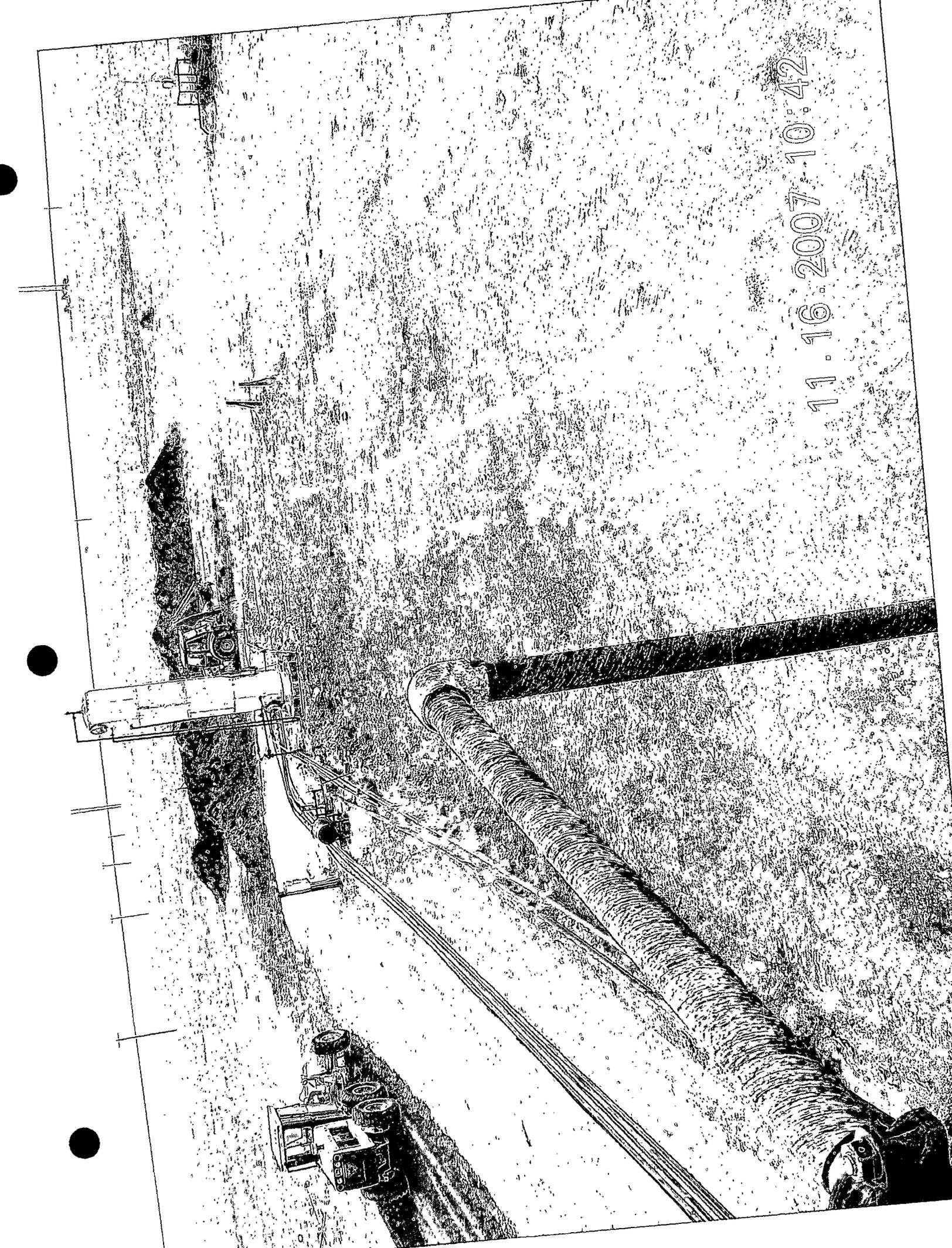


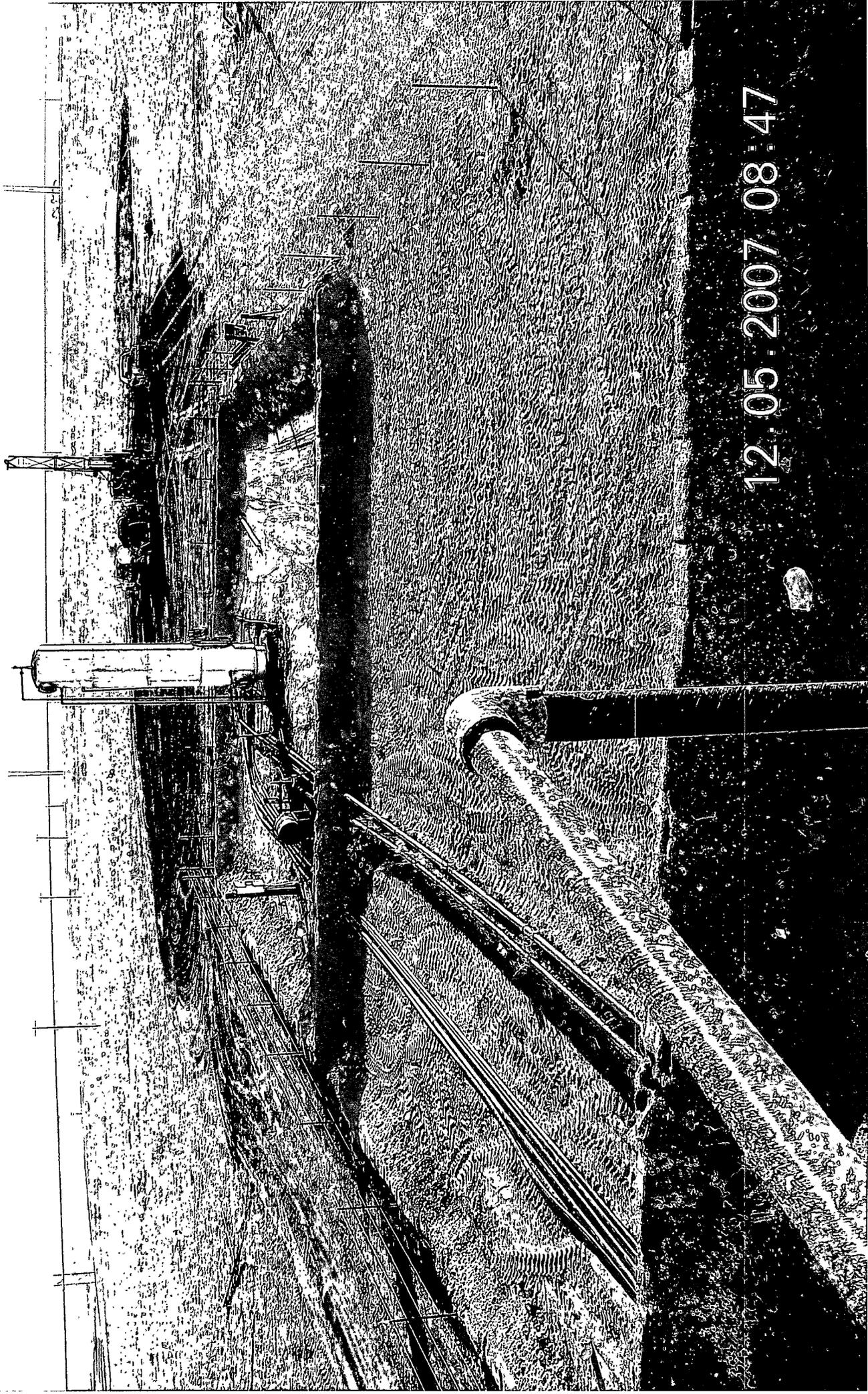
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11.16.2007 10:42





12.05.2007 08:47



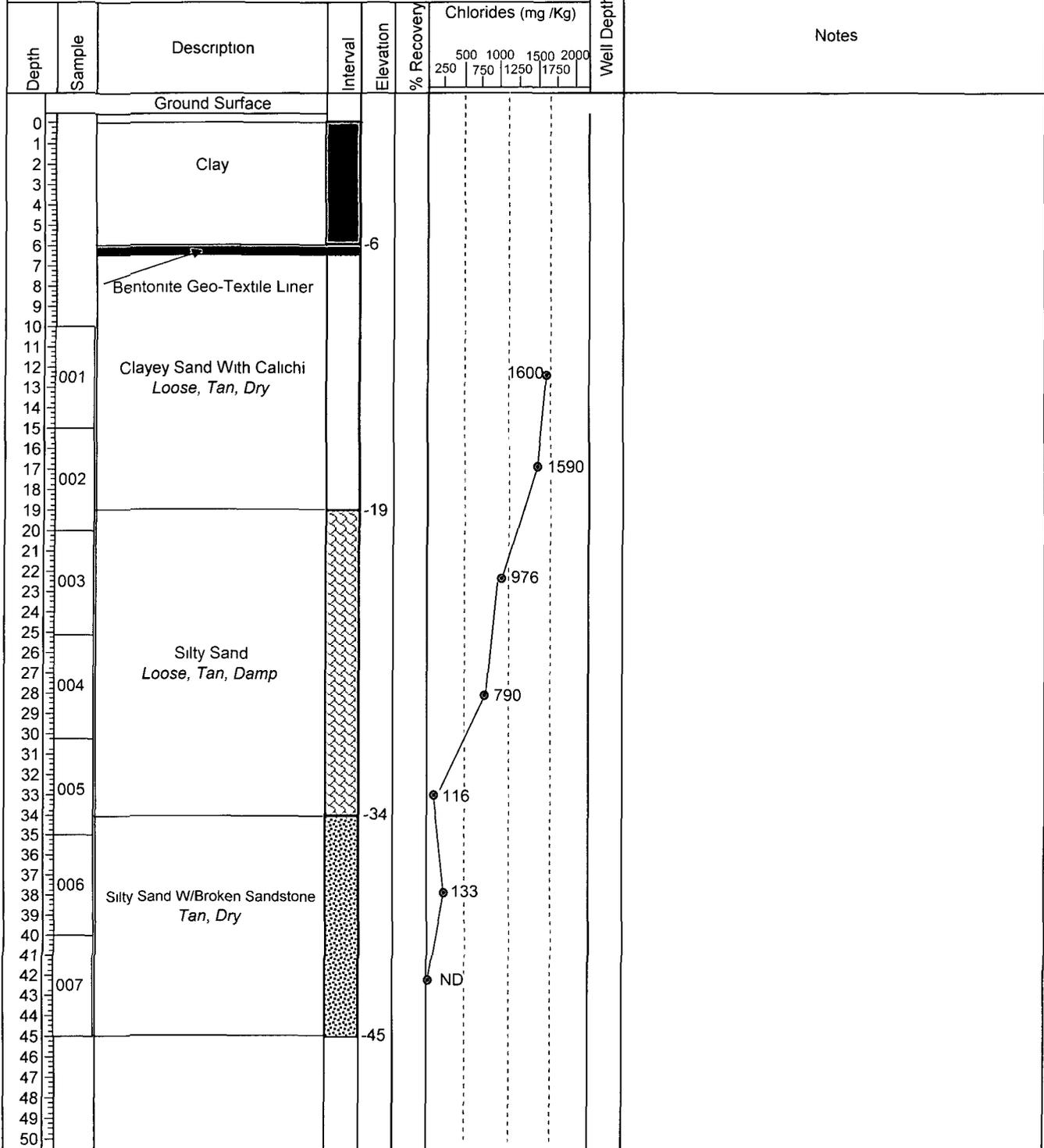
Whole Earth Environmental, Inc.

2103 Arbor Cove  
 Katy, Tx 77494  
 281 394 2050  
 wearth@msn.com

**Log of Phoenix BB Battery Borehole**

Client	Phoenix Hydrocarbons	Drill Method	Split Spoon Auger
Project	BB Battery	Borehole Dia.	1 7/8"
Location	Lea County, N.M.	Total Depth	35' bgs
Latitude		Driller	Atkins Engr.
Longitude		Bore Purpose	Delineation
Date Drilled	12/5/2007	Status	Grouted
Date Completed	12/5/2007	Technician	M. Griffin

**Subsurface Profile**



## Log of Boring Phoenix State BB Battery

Whole Earth Environmental  
 2103 Arbor Cove  
 Katy, TX 77494

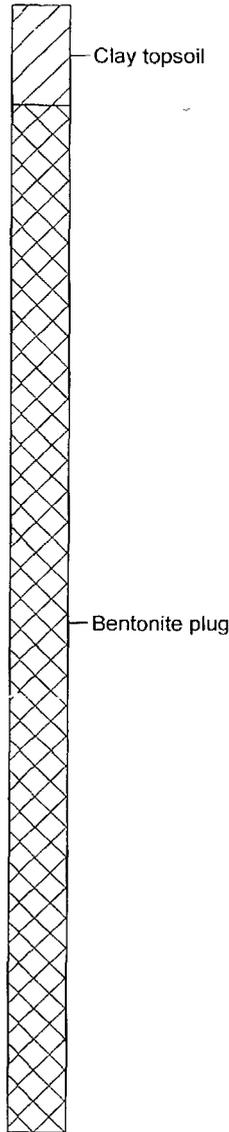
Contact: Mike Griffin

Job# WHOLETH.CAP.07

Date 12/05/07  
 Drill Start 1130  
 Drill End 1300  
 Boring Location SE corner of pit  
 Site Location State BB Battery

Auger Type : 6¼ Hollow Stem  
 Logged By : Mort Bates

Depth in Feet	GRAPHIC	USCS	Sample	DESCRIPTION
0		CL		Clay, loose, brown, damp
5			1	
10		SC	2	Clayey sand w/ caliche, loose, tan, dry
15			3	
20			4	Silty sand, loose, tan, damp
25		SM	5	
30			6	
35			7	Silty sand w/ broken sandstone, tan, dry
40		SM	8	
45			9	
				Total Depth 45'





## **Procedures**

This section contains copies of the sample collection and field chloride titration procedures employed on this project.



QP-77

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**WHOLE EARTH ENVIRONMENTAL  
QUALITY PROCEDURE**

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**Procedure for Obtaining  
Soil Samples for Transportation to a Laboratory**

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Completed By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Effective Date:    /    /

---

**1.0 Purpose**

This procedure outlines the methods to be employed when obtaining soil samples to be taken to a laboratory for analysis.

**2.0 Scope**

This procedure is to be used when collecting soil samples intended for ultimate transfer to a testing laboratory.

**3.0 Preliminary**

3.1 Obtain sterile sampling containers from the testing laboratory designated to conduct analyses of the soil. The shipment should include a Certificate of Compliance from the manufacturer of the collection bottle or vial and a Serial Number for the lot of containers. Retain this Certificate for future documentation purposes.

3.2 If collecting TPH, BTEX, RCRA 8 metals, cation / anions or O&G, the sample jar may be a clear 4 oz. container with Teflon lid. If collecting PAH's, use an amber 4 oz. container with Teflon lid.

**4.0 Chain of Custody**

4.1 Prepare a Sample Plan. The plan will list the number, location and designation of each planned sample and the individual tests to be performed on the sample. The sampler will check the list against the available inventory of appropriate sample collection bottles to insure against shortage.

4.2 Transfer the data to the Laboratory Chain of Custody Form. Complete all sections of the form except those that relate to the time of delivery of the samples to the laboratory.

- 4.3 Pre-label the sample collection jars. Include all requested information except time of collection. (Use a fine point Sharpie to insure that the ink remains on the label). Affix the labels to the jars.

### **5.0 Sampling Procedure**

- 5.1 Go to the sampling point with the sample container. If not analyzing for ions or metals, use a trowel to obtain the soil. Do not touch the soil with your bare hands. Use new latex gloves with each sample to help minimize any cross-contamination. Try to avoid collecting rocks or vegetation.
- 5.2 Pack the soil tightly into the container leaving the top slightly domed. Screw the lid down tightly. Enter the time of collection onto the sample collection jar label.
- 5.3 Place the sample directly on ice for transport to the laboratory.
- 5.4 Complete the Chain of Custody form to include the collection times for each sample. Deliver all samples to the laboratory.

### **6.0 Documentation**

- 6.1 The testing laboratory shall provide the following minimum information:
- A. Client, Project and sample name.
  - B. Signed copy of the original Chain of Custody Form including data on the time the sample was received by the lab.
  - C. Results of the requested analyses
  - D. Test Methods employed
  - E. Quality Control methods and results



QP-96

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**WHOLE EARTH ENVIRONMENTAL  
QUALITY PROCEDURE**

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**Sampling and Testing Protocol  
Chloride Titration Using .1 Normal  
Silver Nitrate Solution**

---

Completed By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Effective Date: / /

---

**1.0 Purpose**

This procedure is to be used to determine the concentrations of chlorides in soils.

**2.0 Scope**

This procedure is to be used as the standard field measurement for soil chloride concentrations.

**3.0 Sample Collection and Preparation**

3.1 Collect at least 80 g. of soil from the sample collection point. Take care to insure that the sample is representative of the general background to include visible concentrations of hydrocarbons and soil types. If necessary, prepare a composite sample of soils obtained at several points in the sample area. Take care to insure that no loose vegetation, rocks or liquids are included in the sample(s).

3.2 The soil sample(s) shall be immediately inserted into a one quart or larger polyethylene freezer bag. Care should be taken to insure that no cross-contamination occur between the soil sample and the collection tools or sample processing equipment.

3.3 The sealed sample bag should be massaged to break up any clods.

#### 4.0 Sample Preparation

- 4.1 Tare a plastic cup having a minimum six-ounce capacity. Add between 80-120 grams of the soil sample and record the weight.
- 4.2 Add the same weight of distilled water to the soil sample and stir thoroughly using a glass or plastic stir stick.
- 4.3 Allow the sample to set for a period of thirty minutes. The sample should be stirred at least three times before fluid extraction.
- 4.4 Carefully pour off the free liquid from the sample through a paper filter into a clean plastic cup.

#### 5.0 Titration Procedure

- 5.1 Using a graduated pipette, remove 10 ml extract and dispense into a clean plastic cup.
- 5.2 Add 2-3 drops 5% potassium chromate ( $K_2CrO_4$ ) to mixture.
- 5.3 If the sample contains any sulfides (hydrogen or iron sulfides are common to oilfield soil samples) add 2-3 drops of hydrogen peroxide ( $H_2O_2$ ) to mixture. Allow the mixture to set for a minimum of five minutes.
- 5.4 Using a 1 ml pipette, carefully add .1 normal silver nitrate solution to sample until solution turns salmon red when viewed with yellow goggles. Be consistent with endpoint recognition.

#### 6.0 Calculation

Multiply the amount of silver nitrate used in step 5.4 by 354.5 to obtain the chloride concentration in mg/L.



## **Laboratory Analytical Results**

This section contains a copy the chain of custody, laboratory analytical results and quality control information for soil samples processed during this project.



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PHONE (505) 393-2326 • 101 E MARLAND • HOBBS, NM 88240

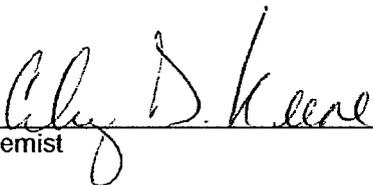
ANALYTICAL RESULTS FOR  
 WHOLE EARTH ENVIRONMENTAL  
 ATTN: MICHAEL C. GRIFFIN  
 2103 ARBOR COVE  
 KATY, TX 77494  
 FAX TO: (281) 394-2051

Receiving Date: 11/09/07  
 Reporting Date: 11/09/07  
 Project Owner: PHOENIX  
 Project Number: STATE BB  
 Project Location: NOT GIVEN

Sampling Date: 11/09/07  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: SB  
 Analyzed By: CK

LAB NUMBER	SAMPLE ID	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL BENZENE (mg/kg)	TOTAL XYLENES (mg/kg)
ANALYSIS DATE		11/09/07	11/09/07	11/09/07	11/09/07
H13677-1	STATE BB 10'	0.070	1.16	5.03	4.17
Quality Control		0.106	0.107	0.108	0.327
True Value QC		0.100	0.100	0.100	0.300
% Recovery		106	107	108	109
Relative Percent Difference		2.8	1.0	1.0	1.9

METHOD: EPA SW-846 8021B

  
 Chemist

11/09/07  
 Date

H13677B WEE

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ANALYTICAL RESULTS FOR  
 WHOLE EARTH ENVIRONMENTAL  
 ATTN: MICHAEL C. GRIFFIN  
 2103 ARBOR COVE  
 KATY, TX 77494  
 FAX TO: (281) 394-2051

Receiving Date: 11/08/07  
 Reporting Date: 11/09/07  
 Project Owner: PHOENIX  
 Project Name: STATE BB  
 Project Location: NOT GIVEN

Sampling Date: 11/09/07  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: SB  
 Analyzed By: BC/KS

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)	CI* (mg/Kg)
ANALYSIS DATE		11/09/07	11/09/07	11/09/07
H13677-1	STATE BB 10'	25.5	308	16800
Quality Control		758	798	500
True Value QC		800	800	500
% Recovery		94.8	99.7	100
Relative Percent Difference		6.3	0.4	<0.1

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; CI: Std. Methods 4500-CI'B  
 \*Analysis performed on a 1:4 w:v aqueous extract.

  
 Chemist

11/9/07  
 Date

H13677A WEE

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# **Analytical Report 294176**

**for**

## **Whole Earth Environmental**

**Project Manager: Mike Griffin**

**Phoenix BB Battery**

**18-DEC-07**



**11381 Meadowglen, Suite L Houston, TX 77082 Ph:(281) 589-0692 Fax:(281) 589-0695**

**Texas certification numbers:  
Houston, TX T104704215**

**Florida certification numbers:  
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675**

**Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America  
Midland - Corpus Christi - Atlanta**



18-DEC-07

Project Manager: **Mike Griffin**  
**Whole Earth Environmental**  
2103 Arbor Cove  
Katy, TX 77494

Reference: XENCO Report No: **294176**  
**Phoenix BB Battery**  
Project Address:

**Mike Griffin:**

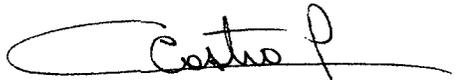
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 294176. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 294176 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

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

Respectfully,

  
**Carlos Castro**

Managing Director, Texas

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# Certificate of Analysis Summary 294176

## Whole Earth Environmental, Katy, TX

**Project Name: Phoenix BB Battery**

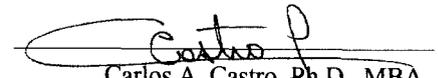
**Project Id:**  
**Contact:** Mike Griffin  
**Project Location:**

**Date Received in Lab:** Dec-07-07 12:00 pm  
**Report Date:** 18-DEC-07  
**Project Manager:** Cori Goodman

<i>Analysis Requested</i>	<i>Lab Id:</i>	294176-001	294176-002	294176-003	294176-004
	<i>Field Id:</i>	BB-15	BB-20	BB-25	BB-30
	<i>Depth:</i>				
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Dec-05-07 00:00	Dec-05-07 00:00	Dec-05-07 00:00	Dec-05-07 00:00
<b>Inorganic Anions by EPA 300</b>	<i>Extracted:</i>				
	<i>Analyzed:</i>	Dec-12-07 22:38	Dec-13-07 01:15	Dec-13-07 01:39	Dec-13-07 02:03
	<i>Units/RL:</i>	mg/kg    RL	mg/kg    RL	mg/kg    RL	mg/kg    RL
Chloride		1600    25.0	1590    25.0	976    25.0	790    25.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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**Carlos A. Castro, Ph.D., MBA**  
 Managing Director, Texas



# Certificate of Analysis Summary 294176

## Whole Earth Environmental, Katy, TX

**Project Name: Phoenix BB Battery**

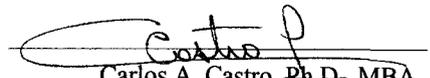
**Project Id:**  
**Contact:** Mike Griffin  
**Project Location:**

**Date Received in Lab:** Dec-07-07 12:00 pm  
**Report Date:** 18-DEC-07  
**Project Manager:** Cori Goodman

<i>Analysis Requested</i>	<i>Lab Id:</i>	294176-005	294176-006	294176-007	
	<i>Field Id:</i>	BB-35	BB-40	BB-45	
	<i>Depth:</i>				
	<i>Matrix:</i>	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	Dec-05-07 00:00	Dec-05-07 00:00	Dec-05-07 00:00	
<b>Inorganic Anions by EPA 300</b>	<i>Extracted:</i>				
	<i>Analyzed:</i>	Dec-13-07 02.27	Dec-13-07 03.39	Dec-13-07 04.03	
	<i>Units/RL:</i>	mg/kg    RL	mg/kg    RL	mg/kg    RL	
Chloride		116    25.0	133    25.0	BRL    25.0	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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**Carlos A. Castro, Ph.D., MBA**  
 Managing Director, Texas



## Flagging Criteria

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

\* Outside XENCO'S scope of NELAC Accreditation

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2505 N. Falkenburg Rd., Tampa, FL 33619  
5757 NW 158th St, Miami Lakes, FL 33014

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(214) 902 0300	(214) 351-9139
(210) 509-3334	(201) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555



# Blank Spike Recovery

Project Name: Phoenix BB Battery

Work Order #: 294176

Project ID:

Lab Batch #: 710291

Sample: 710291-1-BKS

Matrix: Solid

Date Analyzed: 12/12/2007

Date Prepared: 12/12/2007

Analyst: MAB

Reporting Units: mg/kg

Batch #: 1

## BLANK /BLANK SPIKE RECOVERY STUDY

Inorganic Anions by EPA 300 Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	<5.00	50.0	50.6	101	75-125	

Blank Spike Recovery [D] = 100\*[C]/[B]

All results are based on MDL and validated for QC purposes



# Form 3 - MSD Recoveries

**Project Name: Phoenix BB Battery**

Work Order #: 294176

Project ID:

Lab Batch ID: 710291

QC- Sample ID: 294176-001 S

Batch #: 1 Matrix: Soil

Date Analyzed: 12/13/2007

Date Prepared: 12/13/2007

Analyst: MAB

Reporting Units: mg/kg

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY**

Inorganic Anions by EPA 300  Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	1600	250	1900	120	250	1880	112	7	75-125	20	

Matrix Spike Percent Recovery [D] = 100\*(C-A)/B  
Relative Percent Difference RPD = 200\*(D-G)/(D+G)

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

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



# Sample Duplicate Recovery

Project Name: Phoenix BB Battery

Work Order #: 294176

Lab Batch #: 710291

Date Analyzed: 12/13/2007

QC- Sample ID: 294176-001 D

Reporting Units: mg/kg

Project ID:

Analyst: MAB

Date Prepared: 12/13/2007

Batch #: 1

Matrix: Soil

## SAMPLE / SAMPLE DUPLICATE RECOVERY

Inorganic Anions by EPA 300	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Chloride	1600	1610	1	20	

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



- 11381 Meadowglen, Suite L, Houston TX 77082 281-589-0692
- 5309 Wurzbach, Suite 104, San Antonio, TX 78238 210-509-3334
- 11078 Morrison Lane, Suite D, Dallas, TX 75229 972-481-9999

**ANALYSIS REQUEST & CHAIN OF CUSTODY RECORD**

LAB ONLY: 294176-H

- 5757 N.W. 158th Street, Miami Lakes, FL 33014 305-823-8500
- 2618 South Falkenburg Rd, Riverview, FL 33569 813-620-2000

Serial #: 194137 Page 1 of 1

Company-City: Whole Earth Environ Phone: \_\_\_\_\_ TAT: 5h 12h 24h 48h 3d 5d 7d 10d 21d  Standard TAT is project specific. It is typically 5-7 Working Days for level II and 10+ Working days for level III and IV data.

Project Name: Phoenix BB Battery  Previously performed at XENCO Site: \_\_\_\_\_ Project ID: \_\_\_\_\_

Proj. Manager (PM): M. Griffin

Fax Results to:  PM or e-mail to: wholeearth@msn.com Fax No: \_\_\_\_\_

Invoice to:  Accounting  Inc. Invoice with Final Report  Invoice must have a P.O. Bill to: \_\_\_\_\_

Quote No: \_\_\_\_\_ P.O No: \_\_\_\_\_  Call for a P.O.

Reg Program: CLP AFCEE TRRP DW UST State Other: \_\_\_\_\_

Target DLs ( DW CRDL TRRP QAPP MDLs See Lab PM Attached Call )

TRRP PCLs: Tier 1 Tier 2 Residential Industrial

LPST No.:( Required)

Sampler Name: \_\_\_\_\_ Signature: M. Griffin

Sample ID	Sampling Date	Time	Depth ft in' m	Matrix	Composite	Grab	# Containers	Container Size	Container Type	Preservatives	BTEX by 8021	8260	602	624	Other	TAT	5h	12h	24h	48h	3d	5d	7d	10d	21d	Remarks									
											BTEX-MTBE by 8021	8260	624	Other	TPH by TX1005 FL-Pro 1664												8015GGRO	8015DDRO	418.1	PAHs by 8270	8310	Metals by 6020	200.8	8RCRA Tot Pb	TCLP8
1 BB-15	12-5-07			S																															
2 BB-20																																			
3 BB-25																																			
4 BB-30																																			
5 BB-35																																			
6 BB-40																																			
7 BB-45																																			
8																																			
9																																			
10																																			

Relinquished by ( Initials and Sign) M. Griffin Date & Time \_\_\_\_\_ Relinquished to ( Initials and Sign) \_\_\_\_\_ Date & Time \_\_\_\_\_ Rush Charges are Pre-Approved upon requesting them.

Instructions: All XENCO Standard Terms and Conditions Apply.

Lab: [Signature] 12/7/07 12:00 Containers Received: 7 Cooler Temperature: 4.0°C

Preservatives: Various (V), HCl pH<2 (H), H2SO4 pH<2 (S), HNO3 pH<2 (N), Asbc Acid&NaOH (A), ZnAc&NaOH (Z), (Cool,<4C) (C), None (NA), See Label (L), Other (O) \_\_\_\_\_  
 Cont. Size: 4oz (4), 8oz (8), 32oz (32), 40ml VOA (V), 1L (1), 500ml (5), Tedlar Bag (B), Wipe (W), Other \_\_\_\_\_ Cont. Type: Glass Amb (A), Glass Clear (C), Plastic (P), Other (O) \_\_\_\_\_

Matrix: Air (A), Product (P), Solid(S), Water (W)

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294176-H