



21 September 2005

Mr. Mike Bratcher, Environmental Engineer  
New Mexico Oil Conservation Division  
1301 West Grand Avenue  
Artesia, New Mexico 88210

RECEIVED  
SEP 28 2005  
066-ARTESIA

Re: Initial C-141 Chesapeake Energy-Principle 1 & 2 Battery– Reference #160032  
UL-C (NE¼ of the NW¼) of Section 27, Township 18 South, Range 31 East  
Latitude N 32° 43' 23.131" and Longitude W 103° 51' 37.137"

Dear Mr. Bratcher:

Environmental Plus, Inc. (EPI), on behalf of Mr. Bradley Blevins, Chesapeake Energy Corporation (Chesapeake), submits the attached New Mexico Oil Conservation Division (NMOCD) form C-141 for the above-referenced leak site located on land owned by the United States Federal Government and managed by the United States Department of the Interior – Bureau of Land Management.

The site is located approximately 9.5 miles southeast of Loco Hills, New Mexico (reference *Figure 1*). Information obtained from the New Mexico Office of the State Engineer's website and a United States Geological Survey (USGS) database indicated there are no water supply wells located within a 1,000-foot radius of the release site (reference *Figure 2*). Groundwater level data indicates an average depth to water of approximately 381.5 feet below ground surface (bgs). Based on available information, it is estimated that the depth to groundwater at the site is over 100 feet bgs. The attached site information and metrics form ranks the site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993).

The release of 154 barrels of produced water was the result of a lightening strike on a 500 barrel fiberglass water tank. Upon discovery of the release, the supply well was shut in and a vacuum truck was contracted to recover remaining fluid on the ground. Approximately 80 barrels of produced water were recovered from the release.

If there are any questions please feel free to contact me at (505) 394-3481 or via e-mail at [iolness@envplus.net](mailto:iolness@envplus.net) or Mr. Bradley Blevins at (505) 391-1462 ext. 24 or via e-mail at [bblevins@chkenergy.com](mailto:bblevins@chkenergy.com). All official communication should be addressed to:

Mr. Bradley Blevins  
Chesapeake Energy  
5014 Carlsbad Highway  
Hobbs, New Mexico 88240

Sincerely,

ENVIRONMENTAL PLUS, INC.



Iain Olness, P.G.  
Hydrogeologist

cc: Bradley Blevins, Chesapeake Energy – Hobbs, NM  
Curtis Blake, Chesapeake Energy – Hobbs, NM  
Jace Marshall, Chesapeake Energy – Oklahoma City, OK  
Paul Evans, U.S. Department of Interior, Bureau of Land Management – Carlsbad, NM



Information and Metrics

**Incident Date:**  
17 September 2005

**NMOCD Notified:**  
18 September 2005

<b>Site:</b> Principle 1 & 2 Battery		<b>Assigned Site Reference #:</b> 160032	
<b>Company:</b> Chesapeake Energy			
<b>Street Address:</b> 5014 Carlsbad Highway			
<b>Mailing Address:</b> 5014 Carlsbad Highway			
<b>City, State, Zip:</b> Hobbs, New Mexico 88240			
<b>Representative:</b> Bradley Blevins			
<b>Representative Telephone:</b> (505) 391-1462 ext. 24			
<b>Telephone:</b>			
<b>Fluid volume released (bbls):</b> 154 barrels		<b>Recovered (bbls):</b> ≈80 barrels	
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
<b>Leak, Spill, or Pit (LSP) Name:</b> Principle 1 & 2 Battery			
<b>Source of contamination:</b> 500 barrel produced water tank.			
<b>Land Owner, i.e., BLM, ST, Fee, Other:</b> United States Government- Bureau of Land Manangement			
<b>LSP Dimensions:</b> 100 feet by 100 feet, and 60 feet by 90 feet			
<b>LSP Area:</b> ≈5,100 ft <sup>2</sup>			
<b>Location of Reference Point (RP):</b>			
<b>Location distance and direction from RP:</b>			
<b>Latitude:</b> N 32° 43' 23.131"			
<b>Longitude:</b> W 103° 51' 37.137"			
<b>Elevation above mean sea level:</b> 3,635			
<b>Feet from South Section Line:</b>			
<b>Feet from West Section Line:</b>			
<b>Location- Unit or ¼:</b> NE¼ of the NW¼		<b>Unit Letter:</b> C	
<b>Location- Section:</b> 27			
<b>Location- Township:</b> T18S			
<b>Location- Range:</b> R31E			
<b>Surface water body within 1000' radius of site:</b> none			
<b>Domestic water wells within 1000' radius of site:</b> none			
<b>Agricultural water wells within 1000' radius of site:</b> none			
<b>Public water supply wells within 1000' radius of site:</b> none			
<b>Depth from land surface to ground water (DG):</b> > 100 feet			
<b>Depth of contamination (DC):</b> unknown			
<b>Depth to ground water (DG - DC = DtGW):</b> > 100 feet			
<b>1. Ground Water</b>		<b>2. Wellhead Protection Area</b>	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or; <200' from private domestic water source: 20 points	
If Depth to GW 50 to 99 feet: 10 points		If >1000' from water source, or; >200' from private domestic water source: 0 points	
If Depth to GW >100 feet: 0 points		If >1000' from water source, or; >200' from private domestic water source: 0 points	
Ground water Score = 0		Wellhead Protection Area Score = 0	
Site Rank (1+2+3) = 10		Surface Water Score = 0	
<b>Total Site Ranking Score and Acceptable Concentrations</b>			
Parameter	>19	10-19	0-9
Benzene <sup>1</sup>	10 ppm	10 ppm	10 ppm
BTEX <sup>1</sup>	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1,000 ppm	5,000 ppm

<sup>1</sup> 100 ppm field VOC headspace measurement may be substituted for lab analysis

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

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

30-015-32616

**Release Notification and Corrective Action**

**OPERATOR**

☒ Initial Report ☐ Final Report

<b>Name of Company:</b> Chesapeake Energy	<b>Contact:</b> Bradley Blevins
<b>Address:</b> 5014 Carlsbad Highway	<b>Telephone No.:</b> (505) 391-1462 ext. 24
<b>Facility Name:</b> Principle 1 & 2 Battery	<b>Facility Type:</b> Tank Battery

<b>Surface Owner:</b> United States Government- Bureau of Land Management	<b>Mineral Owner:</b> United States Government- Bureau of Land Management	<b>Lease No.:</b> BLM #LC-029392-B
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**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	27	18S	31E	990	North	1650	West	Eddy

Latitude: N 32° 43' 23.131" Longitude: W 103° 51' 37.137"

**NATURE OF RELEASE**

<b>Type of Release:</b> Produced Water	<b>Volume of Release:</b> 154 barrels	<b>Volume Recovered:</b> 80 barrels
<b>Source of Release:</b> Tank Battery	<b>Date and Hour of Occurrence:</b> September 17, 2005 P.M.	<b>Date and Hour of Discovery:</b> September 18, 2005 A.M.
<b>Was Immediate Notice Given?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	<b>If YES, To Whom?</b> Gerry Güya, NMOCD- Artesia	
<b>By Whom?</b> Bradley Blevins, Chesapeake	<b>Date and Hour:</b> September 18, 2005 @ 1100 hours	
<b>Was a Watercourse Reached?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If YES, Volume Impacting the Watercourse:</b> Not Applicable	

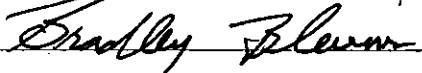
**If a Watercourse was Impacted, Describe Fully.\*** Not Applicable

**Describe Cause of Problem and Remedial Action Taken.\*** Lightning strike threw 500 barrel fiberglass water tank approximately 100-feet from tank battery location. Wells were shut in upon discovery.

**Describe Area Affected and Cleanup Action Taken.\*** Approximately 5,100 square feet of surface area was impacted by the release. The site will be delineated and a Remediation/Closure Plan developed and submitted to the NMOCD.

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.

**OIL CONSERVATION DIVISION**

<b>Signature:</b> 	<b>Approved by District Supervisor:</b>	
<b>Printed Name:</b> Bradley Blevins	<b>Approval Date:</b>	
<b>Title:</b> Field Technician	<b>Expiration Date:</b>	<b>Attached</b> <input type="checkbox"/>
<b>E-mail Address:</b> bblevins@chkenenergy.com	<b>Conditions of Approval:</b>	
<b>Date:</b> 9-27-05 <b>Phone:</b> (505) 391-1462 ext. 24		

\* Attach Additional Sheets If Necessary

TABLE 1

Well Data

Chesapeake Energy Principle 1 & 2 Battery (Ref. #160032)

Well Number	Division <sup>A</sup>	Owner	Use	Twp	Rng	Sec	q	q	q	Latitude	Longitude	Date Measured	Surface Elevation <sup>B</sup>	Well Depth (ft bgs)	Depth to Water (ft bgs)
CP 00896	3	Thelma A. Webber & B.L.M.	STK	18S	31E	14	4	4	1	N32° 44' 24" 57" E	W103° 50' 7" 41" E	17-Mar-94		400	
USGS #1				18S	31E	01	4	4	4						454.25
USGS #2				18S	31E	12	2	3	1			17-Mar-94			434.14
USGS #3				18S	31E	14	2	2	1			17-Mar-94			376.82
USGS #4				18S	31E	35	3	1	3			17-Mar-94			260.67

\* = Data obtained from the New Mexico Office of the State Engineer Website ([http://waters.ose.state.nm.us:7001/AWATURS/wr\\_RegisServlet](http://waters.ose.state.nm.us:7001/AWATURS/wr_RegisServlet)) and the USGS website (<http://waterdata.usgs.gov/nwis/>).

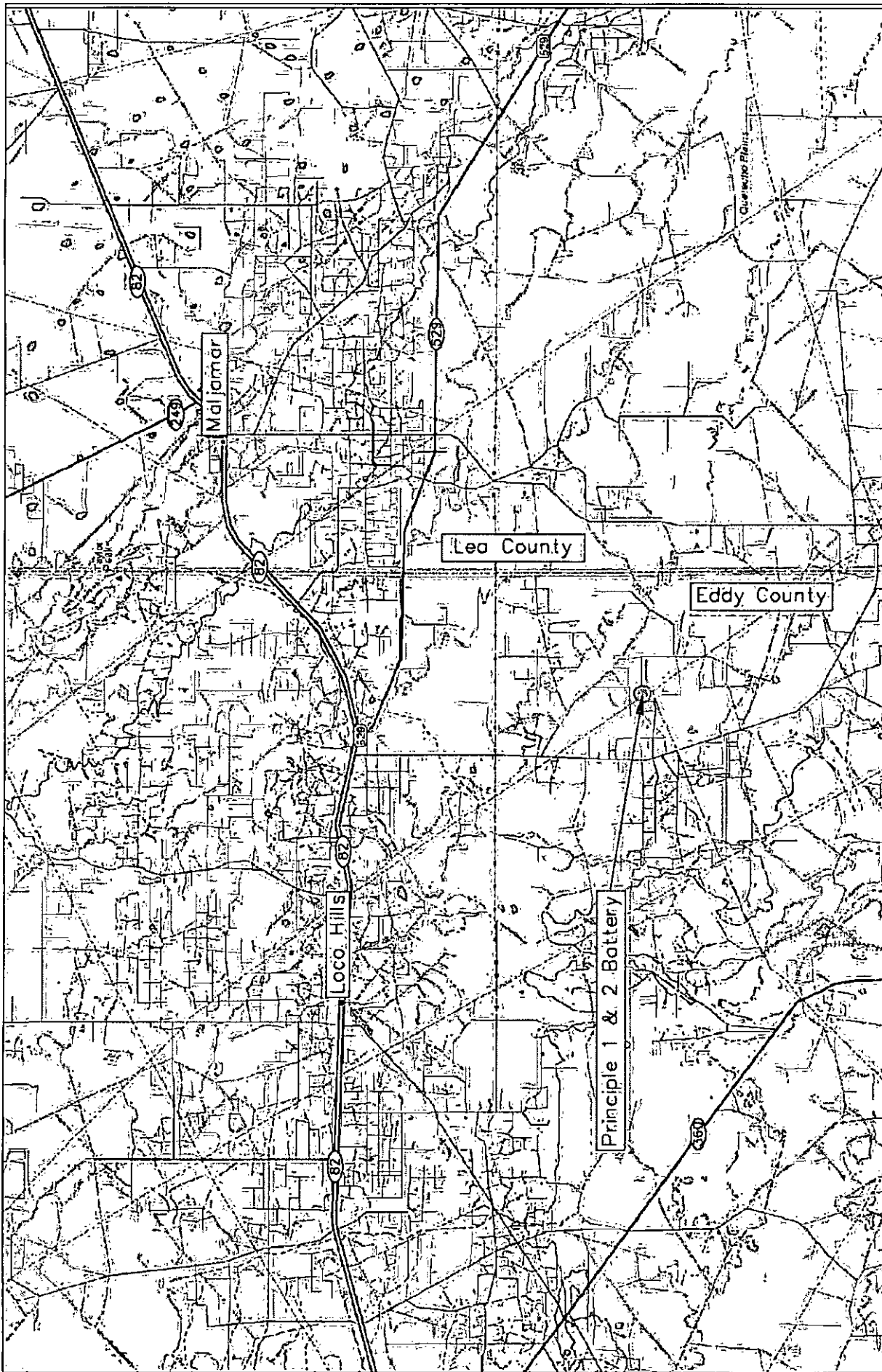
Shaded areas indicate well locations shown on Figure 2

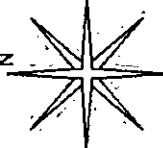
<sup>A</sup> = in acre feet per annum

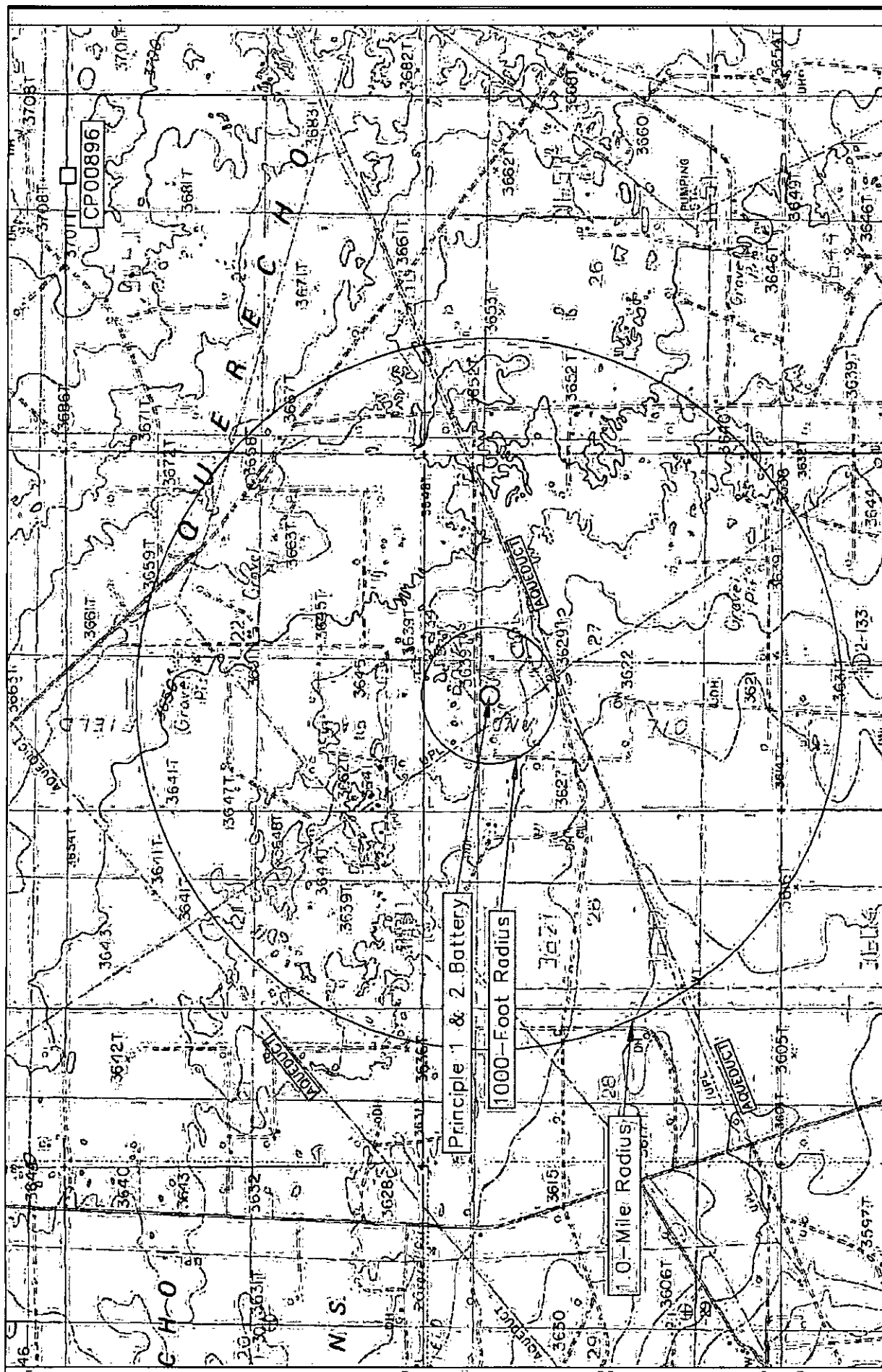
<sup>B</sup> = Elevation interpolated from USGS topographical map based on referenced location.

STK = Livestock Watering

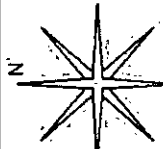
quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are biggest to smallest

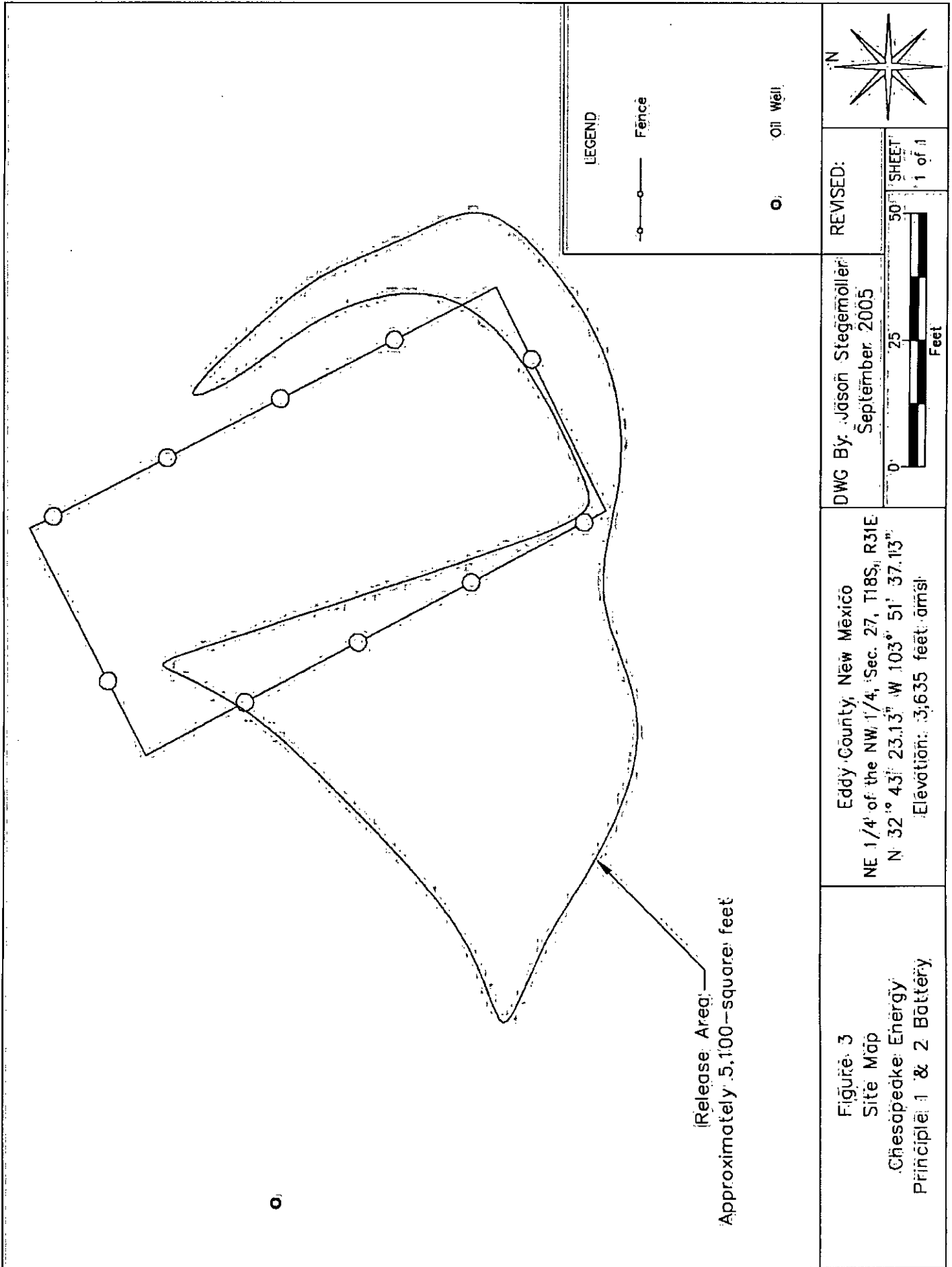


	REMISED:	DWG. By: Jason Stagemöller September 2005.	0 3.0 6.0 Miles	SHEET 1 of 1
Eddy County, New Mexico NE 1/4 of the NW 1/4, Sec. 27, T18S, R31E N 32° 43' 23.13" W 103° 51' 37.13" Elevation: 3,635 feet amsl	Figure 1 Area Map Chesapeake Energy Principle 1 & 2 Battery			



<p>Figure 2 Site Location Map Chesapeake Energy Principle 1 &amp; 2 Battery</p>	<p>Eddy County, New Mexico NE 1/4 of the NW 1/4, Sec. 27, T18S, R31E N 32° 43' 23.13" W 103° 51' 37.13" Elevation: 3,635 feet amsl</p>	<p>DWG By: Jason Stegemöller September 2005.</p>	<p>REVISED:</p>	<p>4,000' SHEET 1 of 1</p>
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(Release Area: Approximately 5,100-square feet)

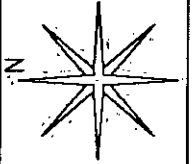
Figure 3  
Site Map  
Chesapeake Energy  
Principle 1 & 2 Battery

Eddy County, New Mexico  
NE 1/4 of the NW 1/4, Sec. 27, T18S, R31E  
N 32° 43' 23.13" W 103° 51' 37.13"  
Elevation: 3,635 feet amsl

DWG By: Jason Stegemöller  
September 2005

REVISED:

SHEET  
1 of 1



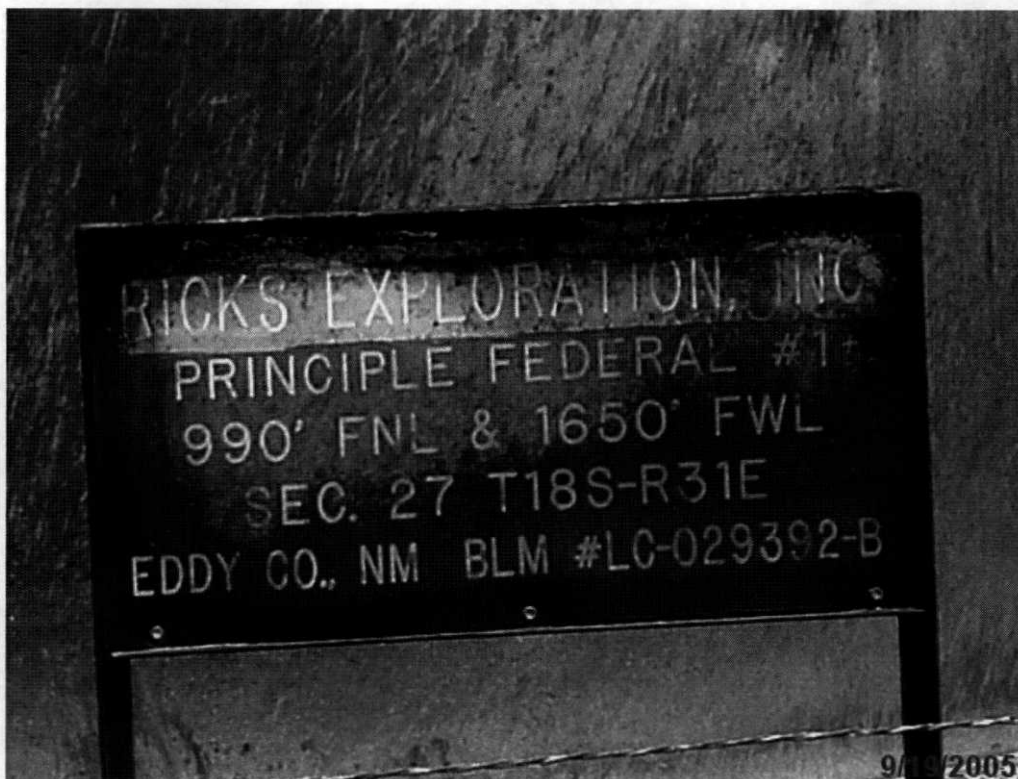
LEGEND

—○— Fence

○ Oil Well

0 25 50  
Feet

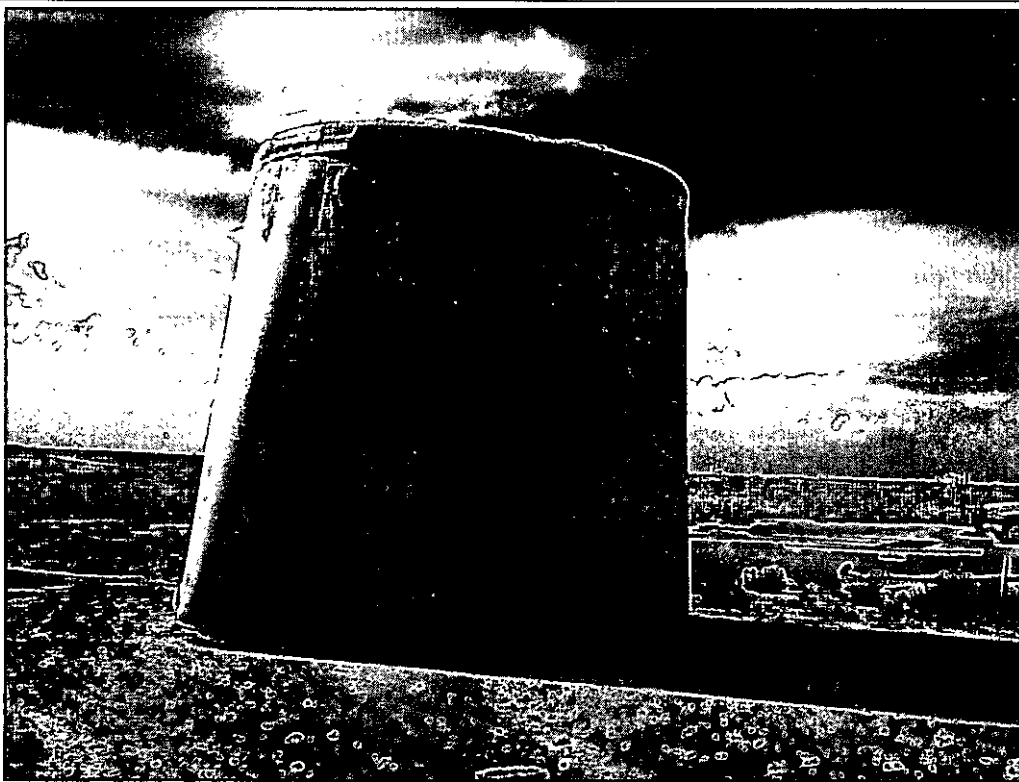




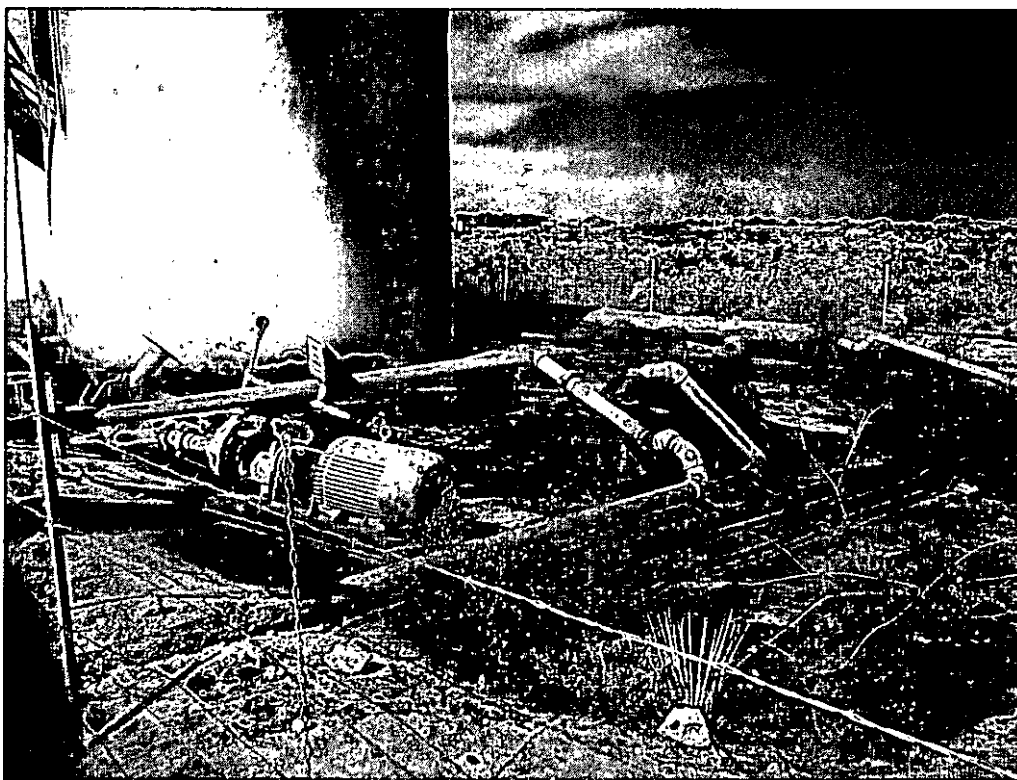
Photograph #1- Lease Sign.



Photograph #2- Release area looking northerly. Dark colored soil indicates contamination.



Photograph #4- Fiberglass tank struck by lightening.



Photograph #5- Fiberglass tank position inside fenced and bermed battery location.