

**Guye, Gerry, EMNRD**

**From:** Bratcher, Mike, EMNRD  
**Sent:** Friday, November 09, 2007 9:47 AM  
**To:** camoore@basspet.com  
**Cc:** jerry brian; Guye, Gerry, EMNRD  
**Subject:** Horned Toad 36 St.007  
**Attachments:** BEPCO\_HornedToad.doc



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

BEPCO, L.P.  
PO Box 2760  
Midland, TX 79702-2760  
ATTN: Ann Moore

November 5, 2007

Reference: Horned Toad 36 St. 007 API: 30-015-34347 G-36-24s-29e Eddy County New Mexico

Operator,

The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of a Soil Investigation Plan (Plan) prepared and submitted to the OCD by your contractor, Elke Environmental, Inc. The Plan provides site specific data for ranking the site per OCD Rules and Guidelines and outlines methods to be utilized in delineating contaminants that may be present at this site due to a release that occurred on August 27, 2007.

The Plan is approved with the following stipulations:

- Notify the OCD District 2 Office 24 hours to commencement of activities.
- Notify the OCD District 2 Office 24 hours prior to obtaining samples where analyses of samples obtained are to be presented to the OCD.
- A Remediation Workplan is to be formulated based on delineation results and submitted to the OCD District 2 Office no later than November 26, 2007. Please include analytical data obtained during the delineation process.

Please be advised that this approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, this approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If this office can be of assistance in this matter, please contact myself or Gerry Guye.

Sincerely,

Mike Bratcher  
NMOCD District 2  
1301 W. Grand Ave.  
Artesia, NM  
(505) 748-1283 Ext. 108  
(505) 626-0857  
[mke.bratcher@state.nm.us](mailto:mke.bratcher@state.nm.us)

OCT 22 2007  
OCD-ARTESIA

# **BEPCO, L.P.**

## **C141 SOIL INVESTIGATION PLAN**

**HORNED TOAD 36 STATE #7 WELL SITE**

**API #: 30-015-34347**

**UL-G (SW $\frac{1}{4}$  OF THE NE $\frac{1}{4}$ ) OF SECTION 36 T24S R29E  
LATITUDE: N32° 10.554'      LONGITUDE: 103° 56.129'  
~12.1 MILES SE (BEARING 128.8°) OF THE LOVING  
EDDY COUNTY, NEW MEXICO**

**October 12, 2007**

**PREPARED FOR BASS ENTERPRISES BY:**

**ELKE ENVIRONMENTAL, INC.**

**P.O. BOX 1830; 3506 N. WEST COUNTY RD.**

**HOBBS, NM 88241**

**PHONE: 575-738-0138; FAX: 575-738-0140**

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## 1.0 Introduction and Background

This report addresses a proposed Soil Investigation prior to submittal of a C-141 Remediation Plan for the >25-bbl release of crude oil (BEPCO) Horned Toad 36 State #7 well-site. The release occurred at 2:30 PM on August 27, 2007 when fumes and volatile mist from a faulty blowout prevention device was ignited by a Kill truck on location during a work over of the well. This plan proposes to delineate the vertical and horizontal extents of the hydrocarbon and chloride contamination on the BEPCO location that resulted from the above described release.

The BEPCO Horned Toad 36 State #7 oil production well is located on State owned land in Unit Letter G, (SW¼ of the NE¼), Section 36, T24S, R29E. . The GPS coordinates are: Latitude: N32° 10.554'; Longitude: 103° 56.129'. A location map, topographical map, aerial photo of the site and a site detail drawing are included as Plates 1-4 in the Attachments.

### CONTACT INFORMATION

BEPCO, L.P.:

Ann Moore, Production Clerk  
Phone: 432-683-2277      email: [camoore@basspet.com](mailto:camoore@basspet.com)  
Mailing Address: P.O. Box 2760, Midland, TX 79702-2760

ELKE Environmental, Inc.:

Jerry Brian, General Manager/Registered Environmental Manager  
Phone: 575-738-0138      email: [jrbrian@verizon.net](mailto:jrbrian@verizon.net)  
Mailing Address: 3506 N. West County Road, Hobbs, NM 88241

## 2.0 Site Description

### 2.1 Geological Description

This area of Eddy County (Cedar Canyon) is notable for its predominant and extensive sand dune surface structure with dramatic variations in elevation and contour due to the numerous eroded drainage channels extending west to the Pecos River. The sand dune areas located on the plateaus are underlain by a thick layer of calciferous rock at depths ranging from a few feet to greater than 25-ft.

### 2.2 Ecological Description

The area is typical of the Upper Chihuahuan Desert Biome consisting primarily of hummocky sand hills covered with Harvard Shin Oak (*Quercus harvardi*) interspersed with Honey Mesquite (*Prosopis glandulosa*) along with typical desert grasses, flowering annuals and flowering perennials. Mammals represented, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, Mule Deer, Bobcat, Red Fox and Coyote. Reptiles, Amphibians, and Birds are numerous and typical of area. A survey of Listed, Threatened, or Endangered species was not conducted.

### 2.3 Area Ground Water

Based on the Chevron-Texaco ground water elevation contour map, depth to ground water is projected to be >175-feet below ground surface (bgs).

## ***2.4 Area Water Wells***

There are no recorded or observed water wells within 1000 horizontal feet of the site.

## ***2.5 Area Surface Water Features***

A notable branch of the Cedar Canyon drainage system is within 200 horizontal feet of the site. (See Plate 3 – Aerial Photo)

## **3.0 Contaminant and Size of Area**

The primary Contaminants of Concern (COC's) are petroleum based hydrocarbons and total chlorides. The release affected area was contained within the well pad area, primarily on the west and north sides.

The fluids associated with this release are considered RCRA Exempt oilfield waste. No evidence of other contaminants was observed.

## **4.0 NMOCD Site Ranking Table**

Preliminary investigation and evaluation of this site indicate that the chemical parameters of the soil and the physical parameters of the ground water are characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the following New Mexico Oil Conservation Division (NMOCD) publications:

- *Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)*
- *Unlined Surface Impoundment Closure Guidelines (February 1993)*

Acceptable thresholds for contaminants/constituents of concern (CoCs), i.e., TPH<sup>8015m</sup>, Benzene, and the mass sum of Benzene, Toluene, Ethyl Benzene, and total Xylenes (BTEX<sup>8260</sup>), was determined based on the NMOCD Ranking Criteria as follows:

- *Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.*
- *Wellhead Protection Area, i.e., distance from fresh water supply wells.*
- *Distance to Surface Water Body, i.e., horizontal distance to all down gradient surface water bodies.*

Based on the proximity of the site to area water wells, surface water bodies, and depth to ground water from the lower most contamination, the NMOCD ranking score for the site is 20 points with the soil remedial goals highlighted in the Site Ranking Table on the following page.

## NMOCD Site Ranking Table

1. GROUND WATER		2. WELLHEAD PROTECTION		3. DISTANCE TO SURFACE WATER	
DEPTH TO GW <50 FEET: 20 POINTS		IF <1000' FROM WATER SOURCE, OR; <200' FROM PRIVATE DOMESTIC WATER SOURCE: 20 POINTS		<200 HORIZONTAL FEET: 20 POINTS	
DEPTH TO GW 50 TO 99 FEET: 10 POINTS				200-1000 HORIZONTAL FEET: 10 POINTS	
DEPTH TO GW >100 FEET: 0 POINTS		IF >1000' FROM WATER SOURCE, OR; >200' FROM PRIVATE DOMESTIC WATER SOURCE: 0 POINTS		>1000 HORIZONTAL FEET: 0 POINTS	
GROUND WATER SCORE = 0		WELLHEAD PROTECTION SCORE= 0		SURFACE WATER SCORE= 20	
<b>SITE RANK (1+2+3) = 0 + 0 + 20 = 20 POINTS</b>					
<b>TOTAL SITE RANKING SCORE AND ACCEPTABLE REMEDIAL GOAL CONCENTRATIONS</b>					
PARAMETER	20+	10	0		
BENZENE	10 PPM	10 PPM	10 PPM		
BTEX	50 PPM	50 PPM	50 PPM		
TPH	100 PPM	1000 PPM	5000 PPM		

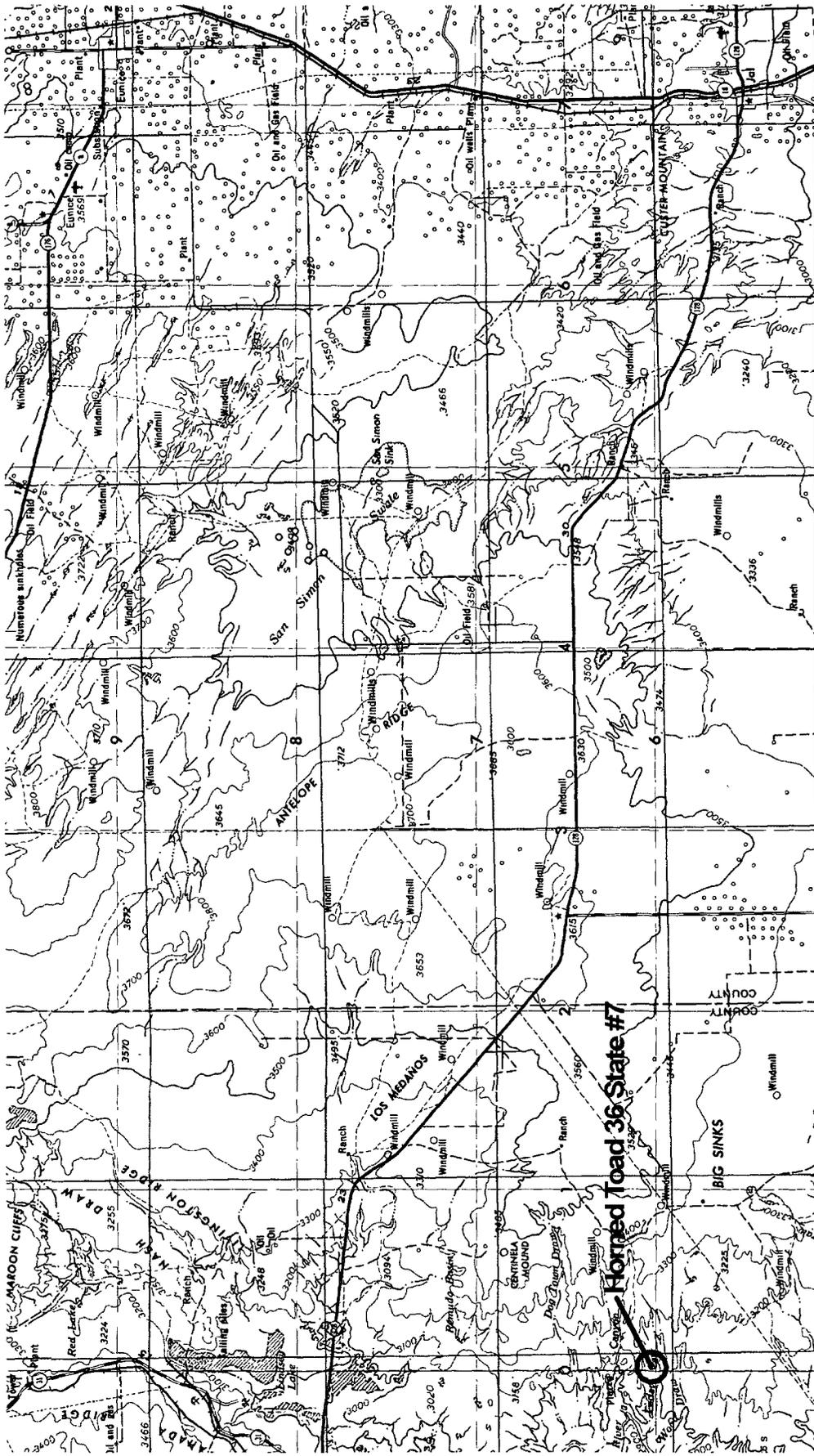
### 5.0 Proposed Soil Investigation

The delineation of the vertical and horizontal contamination extents will be accomplished by exploratory trenching of the release affected well pad area. Trenching will be accomplished with the use of a backhoe. Four initial trenches will be extended outwardly (N, E, W, S) from the well bore. Most visually stained impacted soil was removed and disposed of subsequent to the release event, thus vertical and horizontal contaminant extent will be determined by field testing for total chlorides utilizing Hach test strips. Samples displaying total chloride concentrations less than the NMWQCC standard of 250-ppm shall be considered free of contamination (unless background chloride concentrations are higher than the standard). Additional trenching may occur based on the results of the preliminary four trenches.

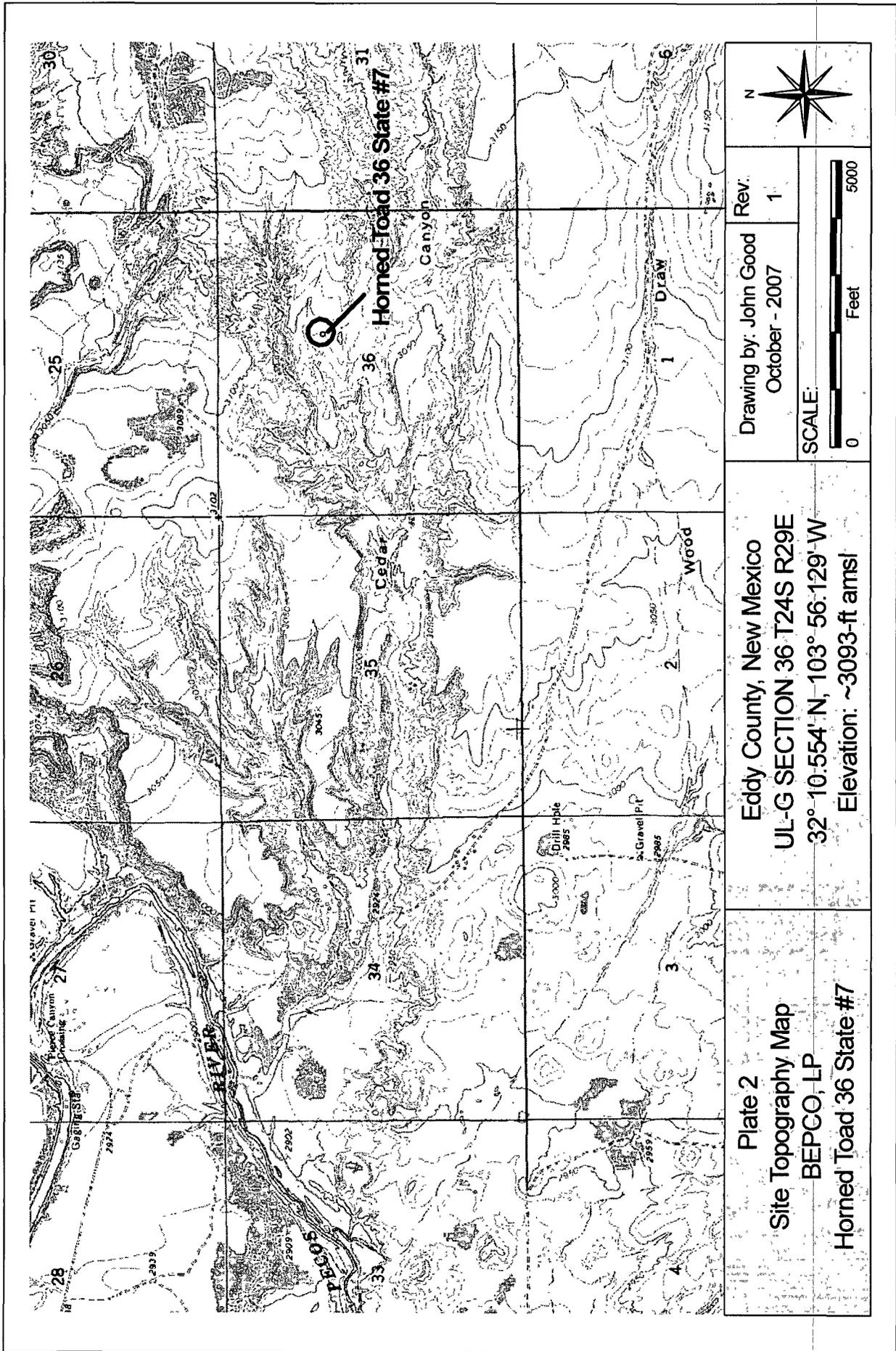
Based on the results of the above proposed soil investigation, a C141 Remediation Work Plan will be prepared and submitted to NMOCD for approval prior to any remedial activities at this site.

#### ATTACHMENTS

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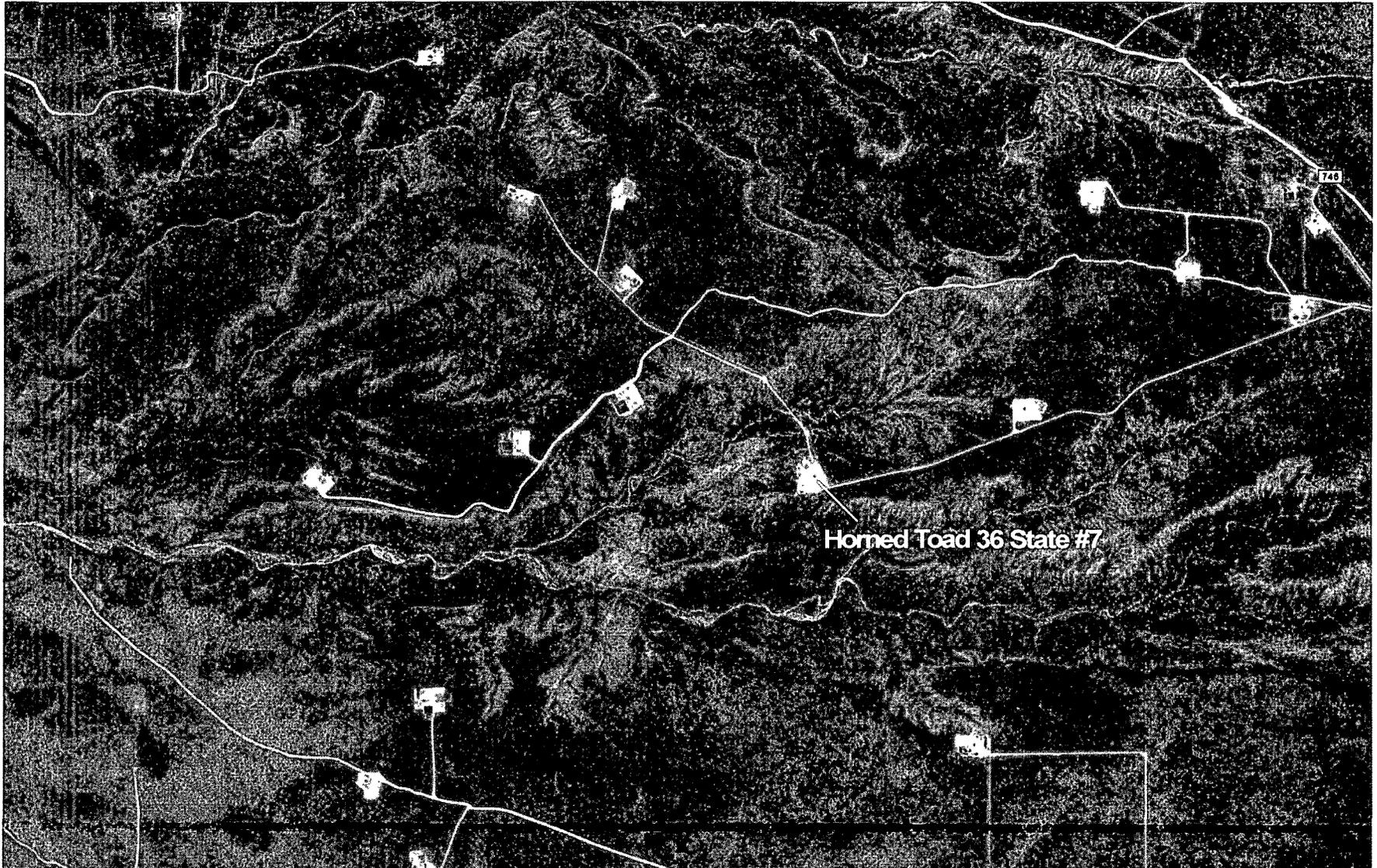
<p>Plate 2 Site Topography Map BEPCO, LP Horned Toad 36 State #7</p>	<p>Eddy County, New Mexico UL-G SECTION 36 T24S R29E 32° 10.554' N, 103° 56.129' W Elevation: ~3093-ft amsl</p>	<p>Drawing by: John Good October - 2007</p>	<p>Rev. 1</p>
<p>SCALE: 0 Miles 10</p>		<p>0 Miles 10</p>	



Drawing by: John Good  
 October - 2007  
 Rev. 1  
 SCALE:  
 0 5000  
 Feet

Eddy County, New Mexico  
 UL-G SECTION 36 T24S R29E  
 32° 10.554' N, 103° 56.129' W  
 Elevation: ~3093-ft amsl

Plate 2  
 Site Topography Map  
 BEPCO, LP  
 Horned Toad 36 State #7



<p>Plate 3 Site Vicinity Aerial Photograph BBEPCO, LP Horned Toad 36 State #7</p>	<p>Eddy County, New Mexico UL-G SECTION 36 T24S R29E 32° 10.554' N, 103° 56.129' W Elevation: ~3093-ft amsl</p>	<p>Drawing by: John Good October - 2007</p>	<p>Rev: 1</p>	
		<p>SCALE:  0: Feet 3600</p>		

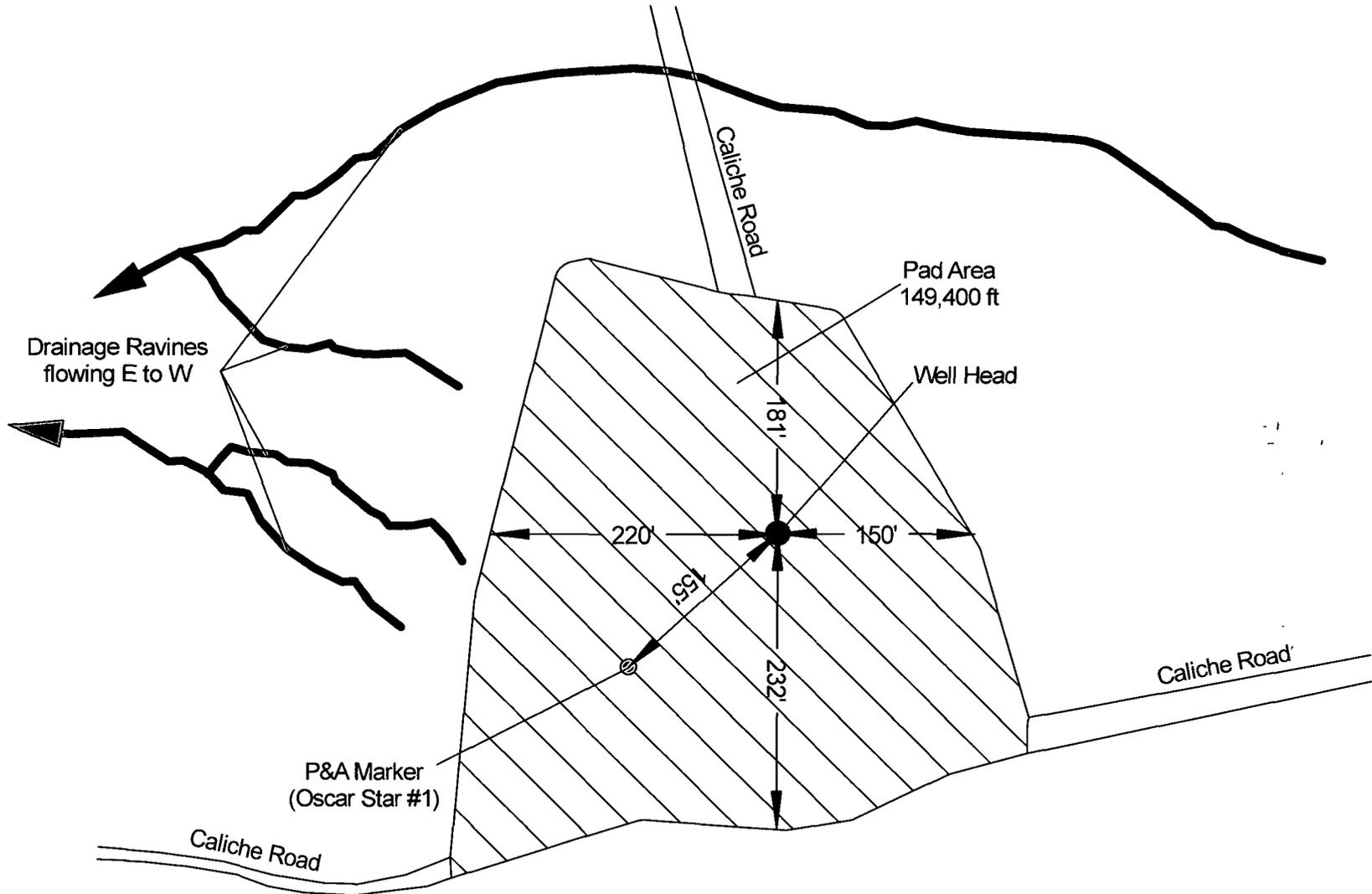
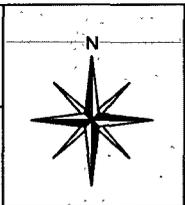


Plate 4  
Site Detail and Sample Points  
BEPCO, LP  
Horned Toad 36 State #7

Eddy County, New Mexico  
UL-G SECTION 36 T24S R29E  
32° 10.554' N, 103° 56.129' W  
Elevation: ~3093-ft amsl

Drawing by: John Good  
October - 2007  
SCALE:  
0 Feet 240



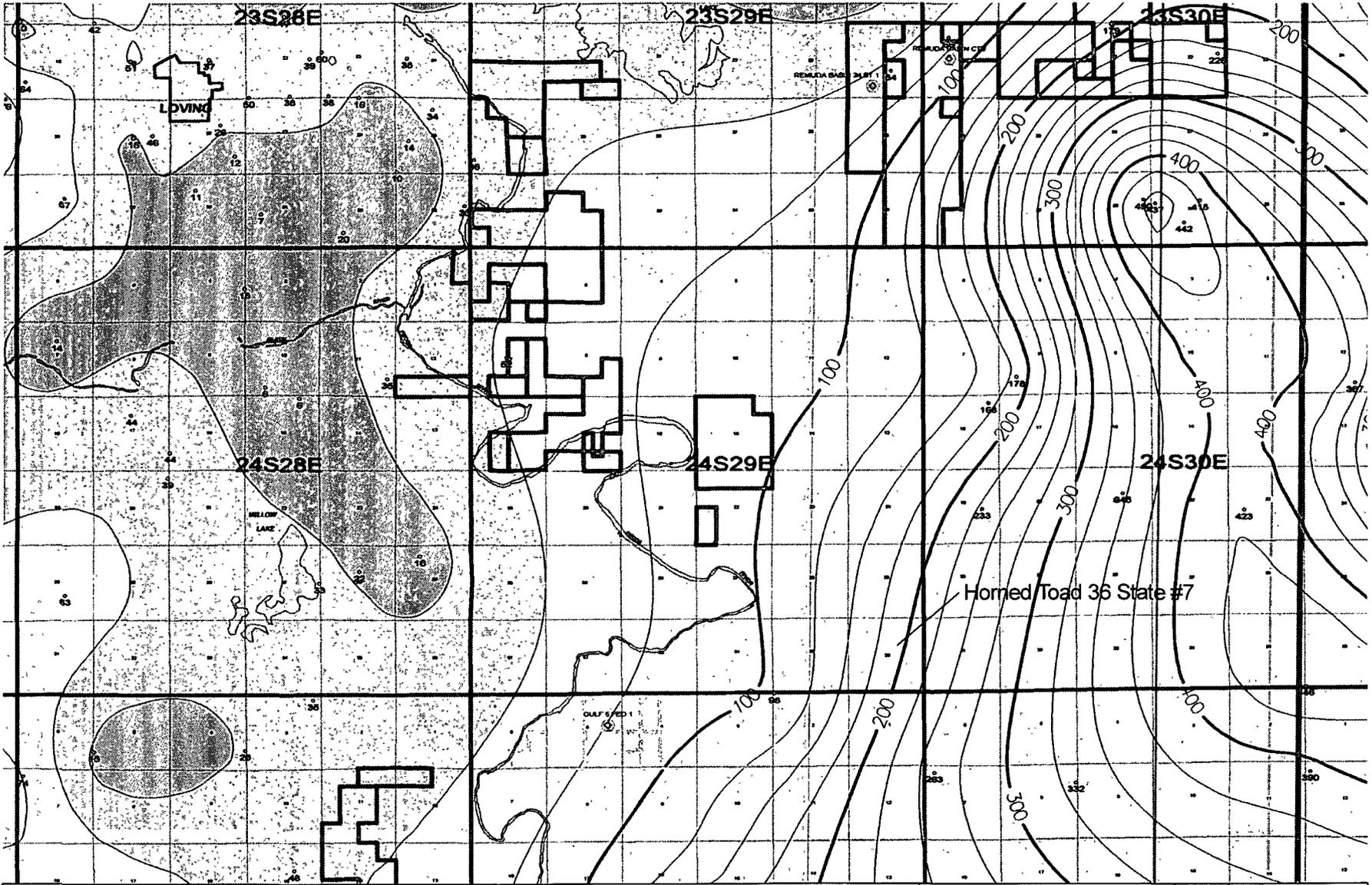
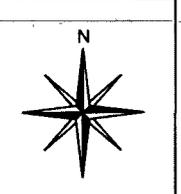
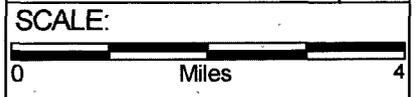


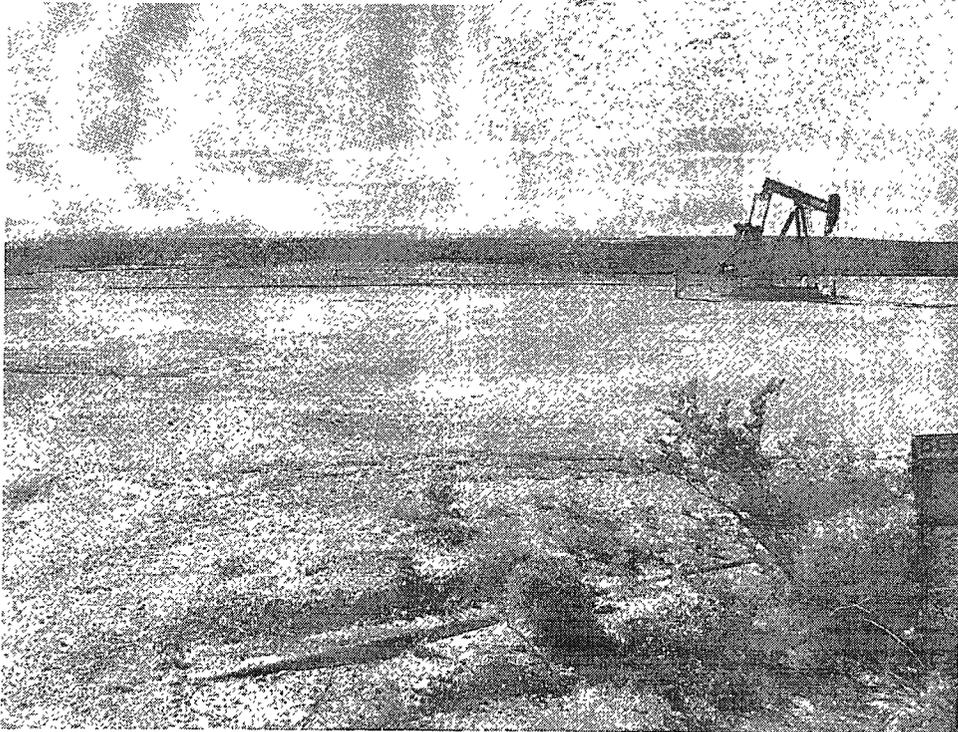
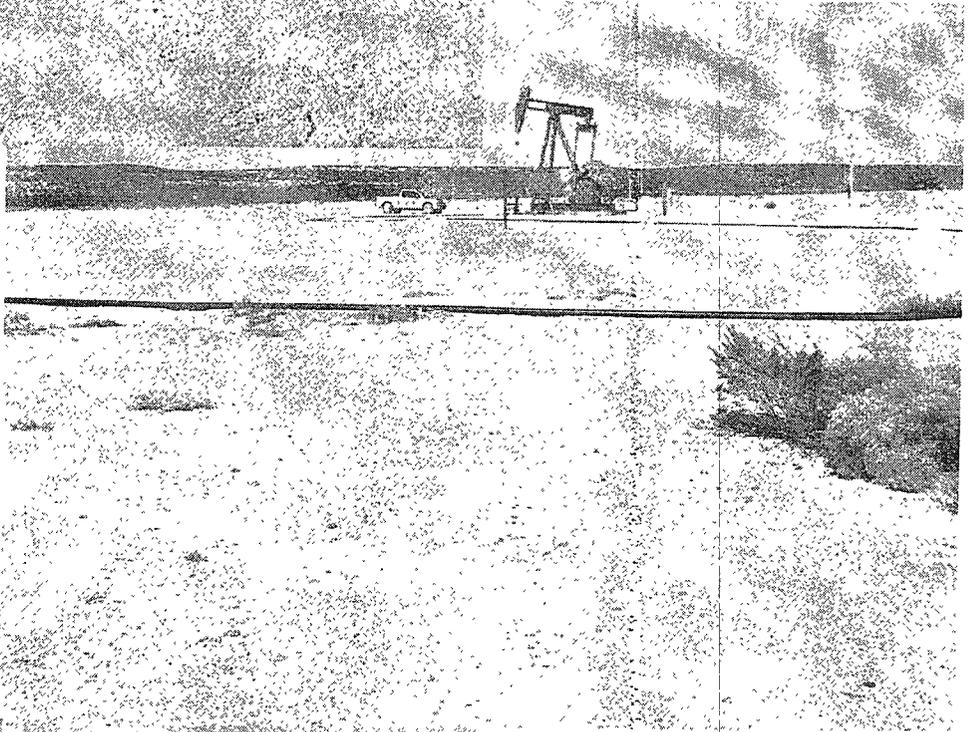
Plate 5  
 Water Depth Contour Map  
 BEPCO, LP  
 Horned Toad 36 State #7

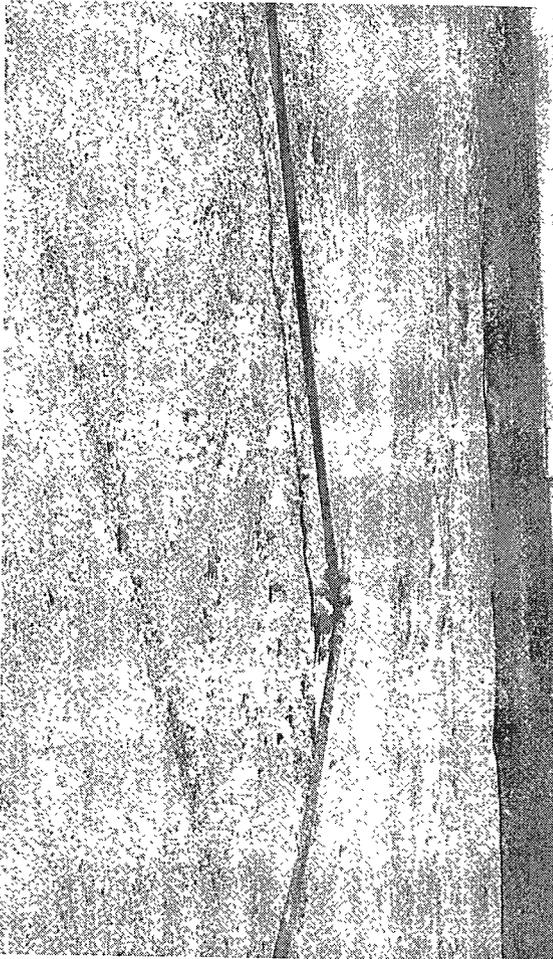
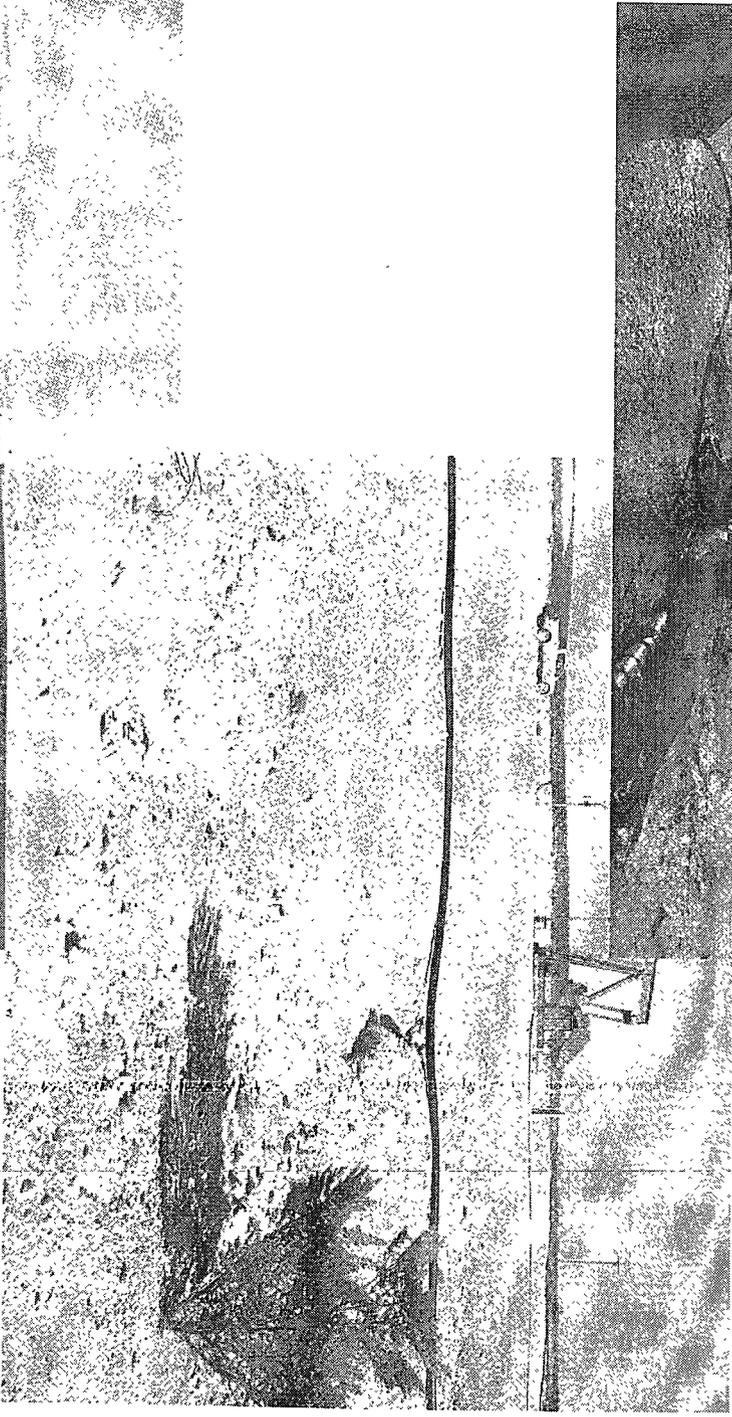
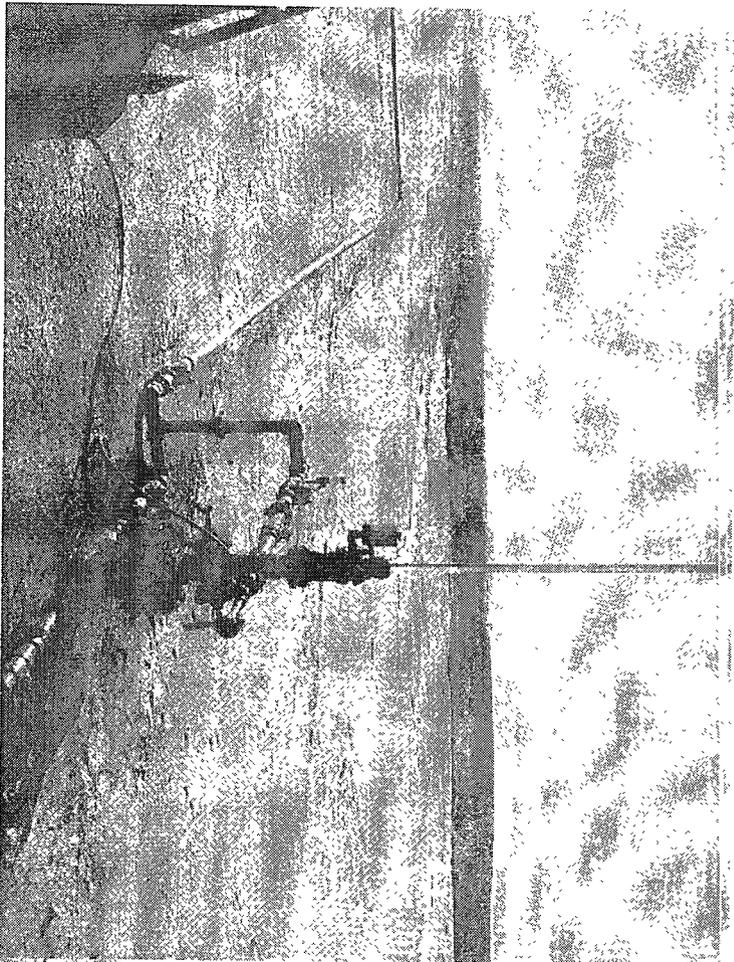
Eddy County, New Mexico  
 UL-G SECTION 36 T24S R29E  
 32° 10.554' N, 103° 56.129' W  
 Elevation: ~3093-ft amsl

Drawing by: John Good  
 October - 2007

Rev:  
 1







<b>BEPCO</b>		Incident Date: 8/27/07		NMOCD Notified: 8/27/07	
SITE: Horned Toad 36 State #7			API No. 30-015-34347		
Company: BEPCO, L.P.					
Street Address:					
Mailing Address: P.O. Box 2760					
City, State, Zip: Midland, TX 79702-2760					
Representative: Ann Moore					
Representative Telephone: 432-683-2277					
Telephone:					
Fluid Volume Released (bbl): > 25		Volume Recovered (bbl): 0		Net Release: > 25	
<i>&gt;25 bbl: Notify NMOCD verbally within 24 hours and submit C-141 within 15 days.  5-25 bbl: Submit Form C-141 within 15 days. (Also applies to unauthorized release of &gt;50 mcf Natural Gas).</i>					
Leak, Spill, or Pit (LSP) Name: Horned Toad 36 State #7					
Source of Contamination: Workover BOP					
Land Owner, i.e. BLM, ST, Fee, Other: State of NM					
LSP Dimensions: ~ Unknown					
LSP Area ~ -ft <sup>2</sup>					
Location of Reference Point (RP):					
Location distance and direction from RP:					
Latitude: North 32 10.554					
Longitude: West 103 56.129					
Elevation above mean sea level (amsl): 3091 feet 942.1 meters					
Distance from North Section Line (feet): 1880					
Distance from East Section Line (feet): 1880					
Location - Unit Letter and 1/4 1/4: UL- G SW 1/4 of NE 1/4					
Location - Section 36					
Location - Township 24S					
Location - Range 29E					
Location - County Eddy					
Surface water body within 1000' radius of site: 1					
Surface water body within 1000' radius of site: 0					
Domestic water wells within 1000' radius of site: 0					
Domestic water wells within 1000' radius of site: 0					
Agricultural water wells within 1000' radius of site: 0					
Agricultural water wells within 1000' radius of site: 0					
Public water supply wells within 1000' radius of site: 0					
Public water supply wells within 1000' radius of site: 0					
Depth (feet) from land surface to Ground Water (DG): > 175					
Depth (feet) of lowest contamination (DC): 5					
Depth (feet) to Ground Water (DG - DC = DtGW): ~ 170					
<b>1. Ground Water</b>		<b>2. Wellhead Protection Area</b>		<b>3. Distance to Surface Water</b>	
If Depth to GW <50-feet: 20 points		If <1000' from water source, or, <200' from private domestic water source: 20 points		<200 horizontal feet: 20 points	
If Depth to GW 50 to 100-feet: 10 points				200-1000 horizontal feet: 10 points	
If Depth to GW >100-feet: 0 points		If >1000' from water source, or, >200' from private domestic water source: 0 points		>1000 horizontal feet: 0 points	
Ground Water Score: 0		Wellhead Protection Score: 0		Surface Water Score: 20	
Site Ranking (1 + 2 + 3): 20					
<b>Total Site Ranking Score and Acceptable Concentrations</b>					
Parameter	20 or >	10		0	
Benzene <sup>1</sup>	10-ppm	10-ppm		10-ppm	
BTEX <sup>1</sup>	50-ppm	50-ppm		50-ppm	
TPH	100-ppm	1000-ppm		5000-ppm	

**Guye, Gerry, EMNRD**

**From:** Guye, Gerry, EMNRD  
**Sent:** Thursday, October 18, 2007 8:17 AM  
**To:** 'Moore, Ann'  
**Subject:** Horned Toad 36 St #7

On the first of October we sent you a e-mail requesting a remediation workplan as required by the OCD Guidelines for Releases and Spills.

To date I have not received the plan which was to be submitted prior to October 12, 2007.

To preclude further enforcement action please submit this plan by October 25, 2007.

***Gerry Guye***

**Compliance Officer**

**NMDCO - Artesia**

**Office (505)748-1283x105**

**Mobile (505)626-0843**

**E-Mail: [gerry.guye@state.nm.us](mailto:gerry.guye@state.nm.us)**

**Guye, Gerry, EMNRD**

**From:** Bratcher, Mike, EMNRD  
**Sent:** Friday, October 26, 2007 1:37 PM  
**To:** Guye, Gerry, EMNRD  
**Subject:** FW: BEPCO Horned Toad 36

Gerry,

This is for the Horned Toad 36 St 007 Blow-out release.

**From:** Bratcher, Mike, EMNRD  
**Sent:** Friday, October 26, 2007 1:34 PM  
**To:** 'Jcgood4614@aol.com'  
**Subject:** RE: BEPCO Horned Toad 36

John,

Please proceed with the delineation process. I believe BEPCO is past due on submitting a remediation workplan for this release.

Mike Bratcher  
NMOCD District 2

**From:** Jcgood4614@aol.com [mailto:Jcgood4614@aol.com]  
**Sent:** Thursday, October 25, 2007 2:20 PM  
**To:** Bratcher, Mike, EMNRD  
**Subject:** BEPCO Horned Toad 36

Mike:

How about an email approval to proceed with the delineation of this site?

JG

See what's new at [AOL.com](http://AOL.com) and [Make AOL Your Homepage](#).

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