

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-101  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

<sup>1</sup> Operator Name and Address. Enron Oil & Gas Company P. O. Box 2267 Midland, TX 79702		<sup>1</sup> OGRID Number 7377
		<sup>1</sup> API Number 30 - 025 - 34357
<sup>4</sup> Property Code 23135	<sup>5</sup> Property Name Hunt "23"	<sup>6</sup> Well No. 1

<sup>7</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	23	23S	37E		330	South	1950	West	Lea

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>9</sup> Proposed Pool 1 Teague Ellenburger	<sup>10</sup> Proposed Pool 2
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<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code O	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation 3261
<sup>16</sup> Multiple	<sup>17</sup> Proposed Depth 11300	<sup>18</sup> Formation Ellenburger	<sup>19</sup> Contractor	<sup>20</sup> Spud Date 12/30/97

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
14 3/4	11 3/4	42#H-40 A ST&C	450	250	Surface
11	8 5/8	32# J55 LT&C	4200	1100	Surface
7 7/8	5 1/2	17# S95 & N80	11300	735	7000
		LT&C			

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

11 3/4" Surface Casing: Cement to surface w/250 sx Class C+2% CaCl<sub>2</sub>+1/2# sx flocele  
8 5/8" Intermediate: Cement to surface with 800 sx Premium Plus lite+15#/sx salt  
+ 1/2# /sx flocele and 300 sx CL C+2% CaCl<sub>2</sub>  
5 1/2" Production Casing: Cement w/735 sx 50/50 Cl H/Poz+2% gel + .4% CF-14,  
.1% Diacel LWL. This cement slurry is designed to bring  
TOC to 7000'

BOP Diagram attached

Permit Expires 1 Year From Approval  
Date Unless Drilling Underway

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:

Title:

Date:

12/23/97

Phone:

(915) 694-8228

OIL CONSERVATION DIVISION

Approved by: ORIGINAL SIGNED BY CHRIS WILLIAMS

Title: DISTRICT I SUPERVISOR

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐



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OIL CONSERVATION DIVISION  
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Form C-102  
Revised February 21, 1994  
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State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-34357	<sup>2</sup> Pool Code 58520	<sup>3</sup> Pool Name <i>Teague</i> East Towler Ellenburger
<sup>4</sup> Property Code 23135	<sup>5</sup> Property Name HUNT "23" WELL	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 7377	<sup>8</sup> Operator Name ENRON OIL AND GAS COMPANY	<sup>9</sup> Elevation 3261

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	23	23-S	37-E		330	SOUTH	1950	WEST	LEA

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

<sup>12</sup> Dedicated Acres 40	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<sup>16</sup>				<sup>17</sup> OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>  <i>Linda Johnston</i> Signature Linda Johnston Printed Name Agent Title 12/23/97 Date
				<sup>18</sup> SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to best of my belief.</i>  DECEMBER 22, 1997 Date of Survey Signature and Seal of Professional Land Surveyor: <i>Earl Foote</i> 8278 Certificate Number 8278
	Y:468900 X:870193 LAT: 32°17'00.3849" LONG:103°08'07.7279"			
1950'	330'			



# DRILLING PROGRAM

ENRON OIL & GAS COMPANY

Hunt "23" Well No. 1

330 FSL & 1950 FWL

SEC. 23, T23S, R37E

LEA COUNTY, NM

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	850'
Bone Spring	6700'
Wolfcamp	8600'
Ellenburger	11100
TD	11300'

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

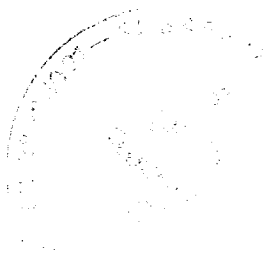
Upper Permian Sands 100'	Fresh Water
Upper Penn	Gas

4. CASING PROGRAM:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Casing</u>	<u>Weight Grade Jt. Cond. Type</u>
14 3/4"	0-450'	11 3/4"	42# H-40 A ST&C
11"	0-4200'	8 5/8"	32# J-55 LT&C
7 7/8"	700-11300	5 1/2"	17# N-80 LTC
			17# S-95 LTC

Cementing Program:

11 3/4" Surface Casing:	Cement to surface with 250 sx Class C+2% CaCl <sub>2</sub> + 1/4#/sx flocele
8 5/8" Intermediate:	Cement to surface with 800 sx Premium Plus lite + 15#/sx Salt + 1/4#/sx Flocele and 300 sx CL C + 2% CaCl <sub>2</sub> .
5 1/2" Production Casing:	Cement with 735 sx 50/50 sx CL H/Poz+2% gel + 4% CF-14, .1% Diacel LWL. This cement slurry is designed to bring TOC to 7500'.



# DRILLING PROGRAM

## ENRON OIL & GAS COMPANY

Hunt "23" Well No. 1  
330 FSL & 1950 FWL  
SEC. 23, T23S, R37E  
LEA COUNTY, NM

### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (5000 psi WP) preventer and an annular preventer (5000 psi WP). Units will be hydraulically operated and the ram-type will be equipped with blind rams on top and drill pipe rams on bottom. All will be installed on the 11 3/4" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 600 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000 psi and the annular to 70% of rated working pressure (3500 psi).

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 4" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 5000 psi WP rating.

### 6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

The well will be drilled to TD with a combination of brine, cut brine, and polymer/KCL mud system. The applicable depths and properties of this system are as follows:

<u>Depth</u>	<u>Type</u>	<u>Wt (ppg)</u>	<u>Viscosity (sec)</u>	<u>Waterloss (cc)</u>
0-650'	Fresh Water (spud)	8.5	40-45	N.C.
650'-4000'	Brine Water	10.0	30	N.C.
4000'-TD	Cut Brine & Polymer/KCL	8.8-9.2	28	N.C.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

### 7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

(G) A kelly cock will be kept in the frill string at all times.

(H) A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

# **DRILLING PROGRAM**

## **ENRON OIL & GAS COMPANY**

Hunt "23" Well No. 1  
330 FSL & 1950 FWL  
SEC. 23, T23S, R37E  
LEA COUNTY, NM

- (I) A mud logging unit complete with H<sub>2</sub>S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 2000' to TD.

### **8. LOGGING, TESTING AND CORING PROGRAM:**

- (H) The electric logging program will consist of GR-Dual Induction Focused and GR-Compensated Density-Neutron from TD to intermediate casing with a GR-Compensated Neutron run from intermediate casing to surface and Sonic from TD to Intermediate casing.

- (I) Possible side-wall cores based on shows.

### **9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:**

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 175 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 3800 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

### **10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:**

The drilling operation should be finished in approximately one week. If the well is productive, an additional 30-45 days will be required for completion and testing before a decision is made to install permanent facilities.





# **DRILLING PROGRAM**

ENRON OIL & GAS COMPANY  
Hunt "23" Well No. 1  
330 FSL & 1950 FWL  
SEC. 23, T23S, R37E  
LEA COUNTY, NM

## **SURFACE USE AND OPERATIONS PLAN**

### **1. EXISTING ROADS:**

Access to location will be made as shown on Exhibit #2

Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

### **2. PROPOSED ACCESS ROAD:**

1020 Feet of new access road is required.

No turnouts necessary.

No culverts, cattleguards, gates, low-water crossings are necessary.

Surfacing material consists of native caliche to be obtained from the nearest BLM-approved caliche pit. Any additional materials required will be purchased from the dirt contractor.

### **3. LOCATION OF EXISTING WELLS:**

Exhibit #3 shows all existing wells within a one-mile radius of this well.

### **4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:**

There are no existing production facilities. If production is encountered, a temporary facility will be established on the drill pad, and if warranted, a production facility would be built at a later date in the immediate area of the drill pad location. If the well is productive, the flowline would also be located on the drill-pad site and no additional disturbance will occur.

### **5. LOCATION AND TYPE OF WATER SUPPLY:**

Water for drilling will be purchased from commercial sources and transported to the well site over the roads as shown on Exhibit #2.

### **6. PLANS FOR RESTORATION OF THE SURFACE:**

# **DRILLING PROGRAM**

## **ENRON OIL & GAS COMPANY**

Hunt "23" Well No. 1  
330 FSL & 1950 FWL  
SEC. 23, T23S, R37E  
LEA COUNTY, NM

After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Location will be cleaned of all trash and junk to leave the well in an aesthetically pleasing condition as possible.

Any unguarded pits containing fluid will be fenced until they are dry and back filled.

After abandonment of the well, surface restoration will be in accordance with current federal laws and regulations. Location will be cleaned, and the well pad removed to promote vegetation. Reseeding will be as per BLM specifications.

### **7. METHODS OF HANDLING WASTE DISPOSAL:**

A small reserve pit will be utilized. Reserve pit will be evacuated of drilling fluid within 10 days after the well is completed.

Drill cuttings will be encapsulated in plastic and buried two feet below ground level.

Water produced during tests and waste water will be saved and hauled to a disposal well. Oil produced during tests will be in test tanks until sold.

Current laws and regulations pertaining to the disposal of human waste will be complied with.

Trash, waste paper, garbage and junk will be hauled to an approved disposal site in an enclosed trash trailer.

All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

### **8. ANCILLARY FACILITIES:**

No airstrip, campsite, or other facilities will be built.

### **9. WELL SITE LAYOUT:**

Exhibit #4 shows the relative location and dimensions of the well pad.



# DRILLING PROGRAM

ENRON OIL & GAS COMPANY

Hunt "23" Well No. 1

330 FSL & 1950 FWL

SEC. 23, T23S, R37E

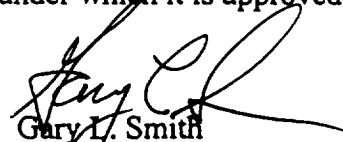
LEA COUNTY, NM

## 10. OTHER INFORMATION:

The area around the well site is grassland and the top soil is duned and sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.

## 11. CERTIFICATION:

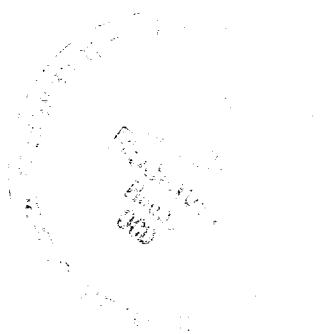
I HEREBY CERTIFY that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Enron Oil & Gas Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.



Gary L. Smith

Division Production Manager

Date: 12/23/97



## **DRILLING PROGRAM**

### **ENRON OIL & GAS COMPANY**

Hunt "23" Well No. 1  
330 FSL & 1950 FWL  
SEC. 23, T23S, R37E  
LEA COUNTY, NM

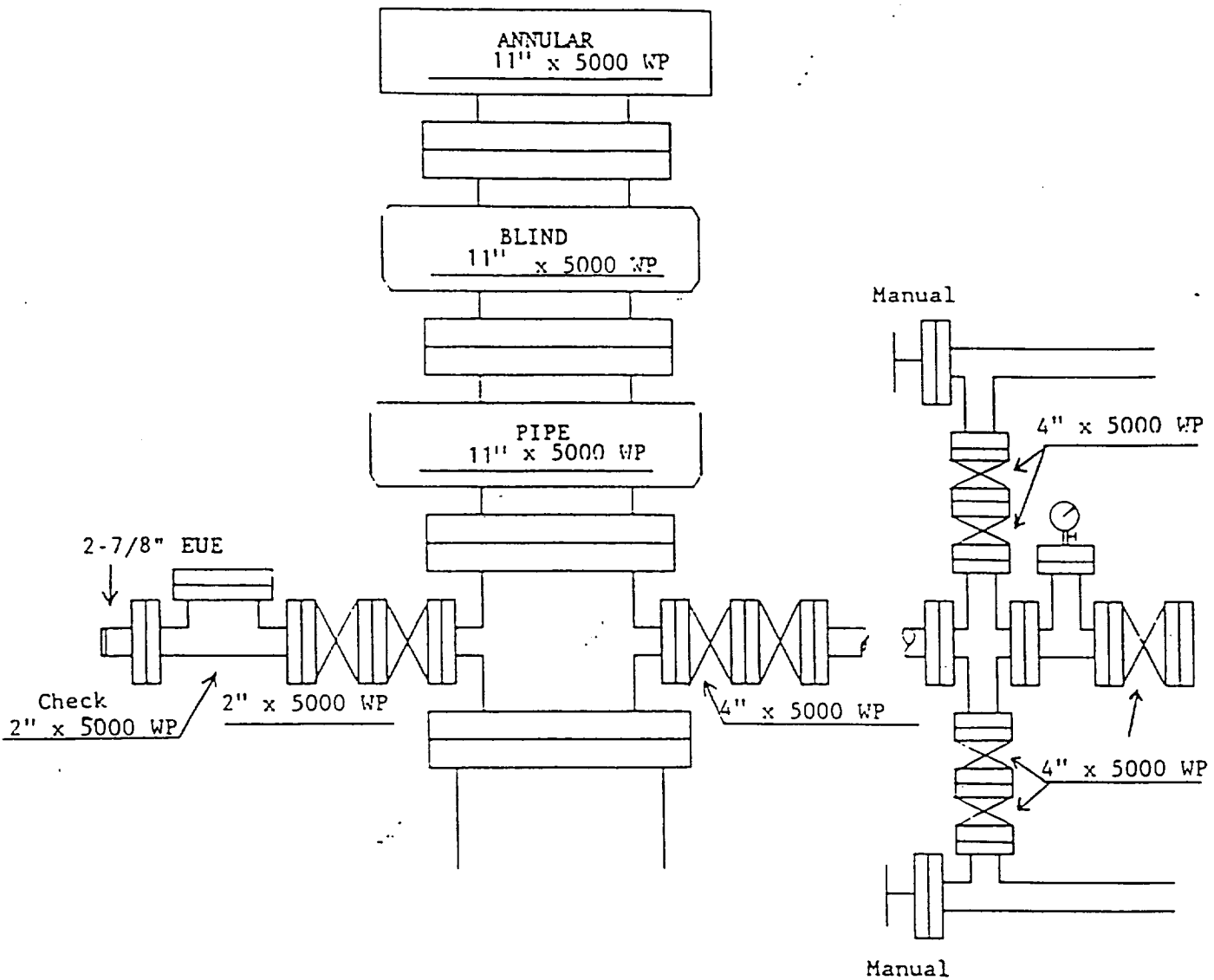
### **ATTACHMENT TO EXHIBIT #1**

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 5000 psi W.P. minimum.
4. All fittings to be flanged
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 5000 psi W.P. minimum.
6. All choke and fill lines to be securely anchored, especially ends of choke lines.
7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
8. Kelly cock on kelly.
9. Extension wrenches and hand wheels to be properly installed.
10. Blow out preventer control to be located as close to driller's position as feasible.
11. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

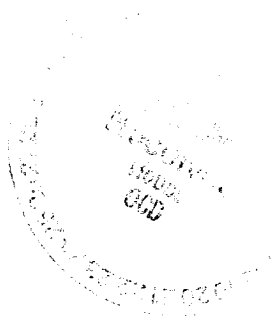
ENRON OIL & GAS COMPANY

Hunt "23" Well No. 1

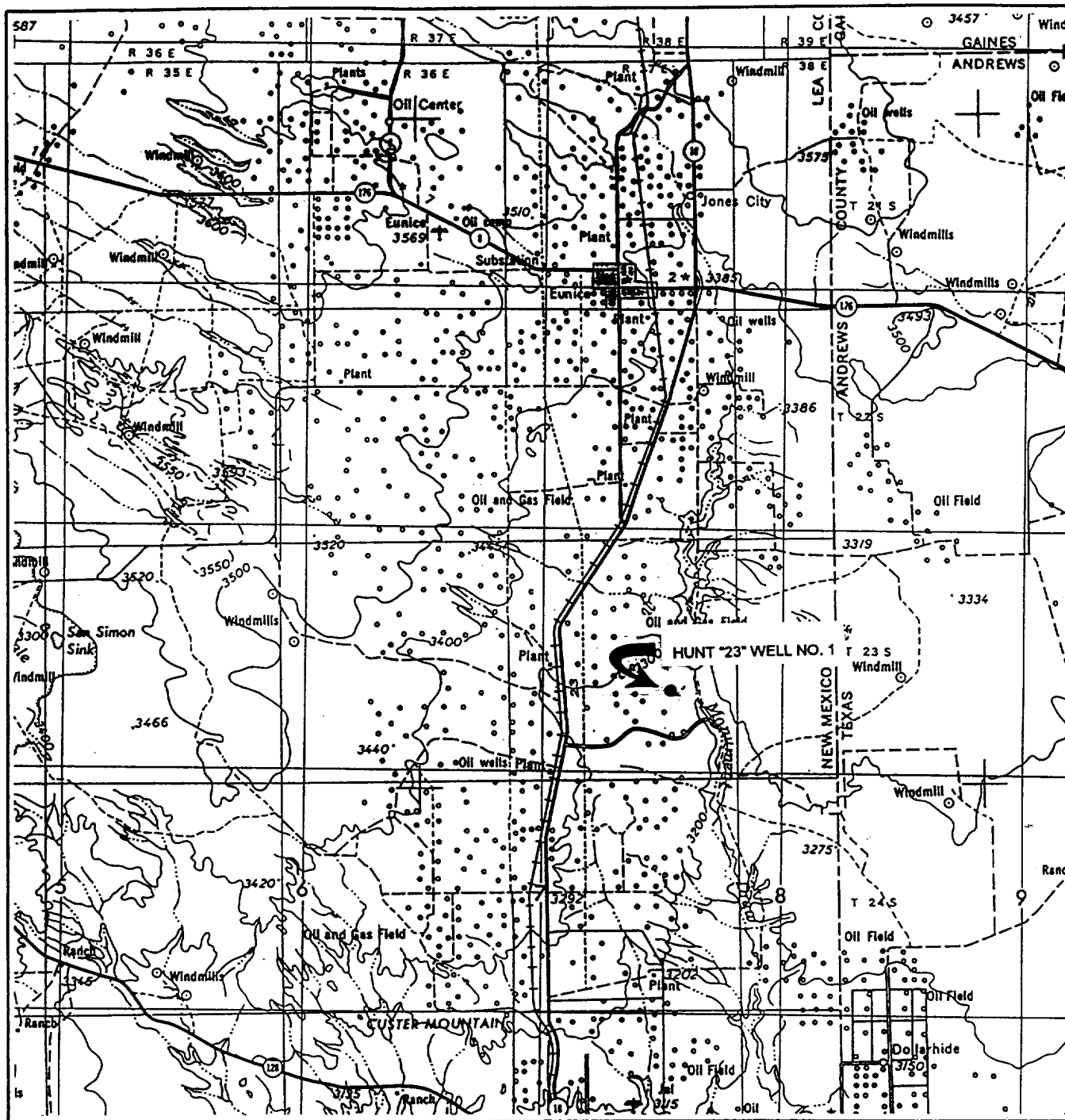
ATTACHMENT I







# VICINITY MAP



SCALE: 1" = 4 MILES

WTC 45115

SEC. 23 TWP. 23-S RGE. 37-E

SURVEY N.M.P.M

COUNTY LEA STATE NM

DESCRIPTION 330' FSL & 1950' FWL

ELEVATION 3261'

OPERATOR ENRON OIL & GAS COMPANY

LEASE HUNT '23' WELL NO. 1

**WEST TEXAS CONSULTANTS, INC.**

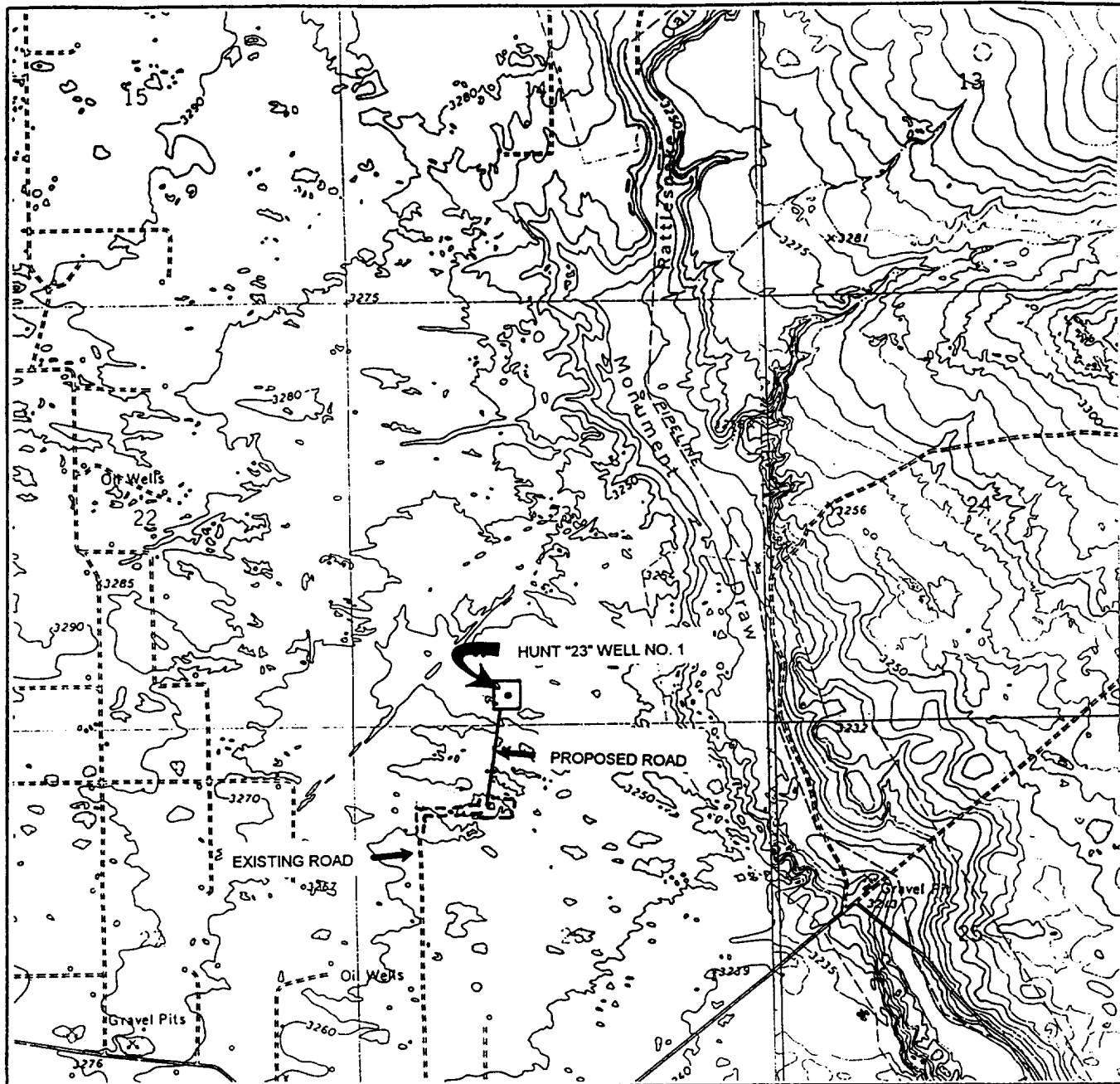
**ENGINEERS-PLANNERS-SURVEYORS**

**MIDLAND, TEXAS**

**915-685-3800**



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

WTC 45115

CONTOUR INTERVAL 10'

SEC. 23 TWP. 23-S RGE. 37-E

SURVEY N.M.P.M

COUNTY LEA STATE NM

DESCRIPTION 330' FSL & 1950' FWL

ELEVATION 3261'

OPERATOR ENRON OIL & GAS COMPANY

LEASE HUNT '23' WELL NO. 1

USGS TOPO MAP EUNICE SE AND RATTLESNAKE  
CANYON, NEW MEXICO

**WEST TEXAS CONSULTANTS, INC.**

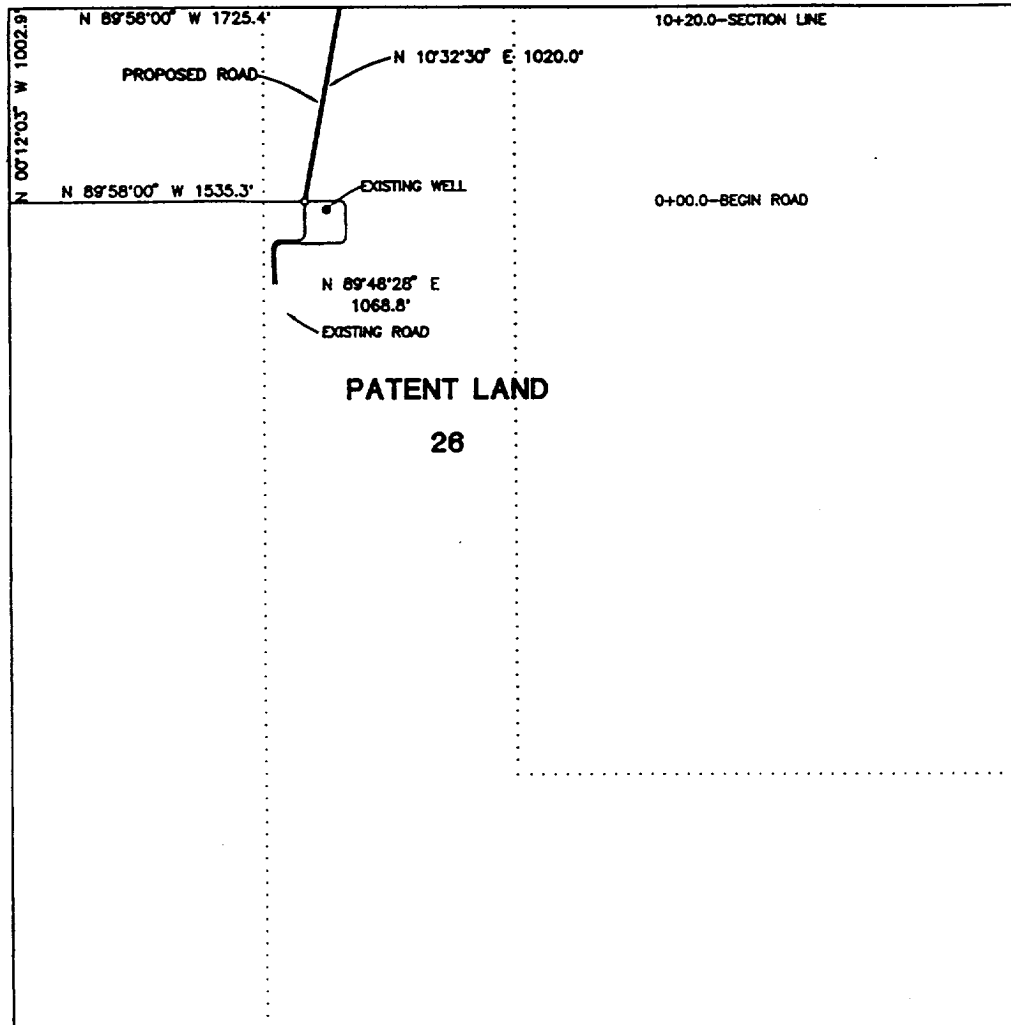
ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800



**SECTION 26, TOWNSHIP 23 SOUTH, RANGE 37 EAST, N.M.P.M.  
LEA COUNTY, NEW MEXICO**



**CENTERLINE DESCRIPTION OF A PROPOSED ROAD:**

**BEGINNING** at the northwest corner of an existing well pad, from which point the northwest corner of Section 26, T-23-S, R-37-E, N.M.P.M., Lea County, New Mexico, bears N 89° 58' 00" W, 1535.3 feet and N 00° 12' 03" W, 1002.9 feet;

**THENCE** N 10° 32' 30" E, with the centerline of proposed road, 1020.0 feet to a point in the north line of Section 26, for the end of this road, from which point the northwest corner of Section 26, bears N 89° 58' 00" W, 1725.4 feet.

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.

*Earl Foote*



Earl Foote  
Registered Professional Surveyor  
New Mexico Certificate No. 8278

**PROPOSED ROAD TO SERVE  
HUNT "23" WELL NO. 1**

**ENRON OIL AND GAS COMPANY**

1020.0 feet of proposed road in  
Section 23, T-23-S, R-37-E, N.M.P.M.,  
Lea County, New Mexico

**WEST TEXAS CONSULTANTS, INC.**

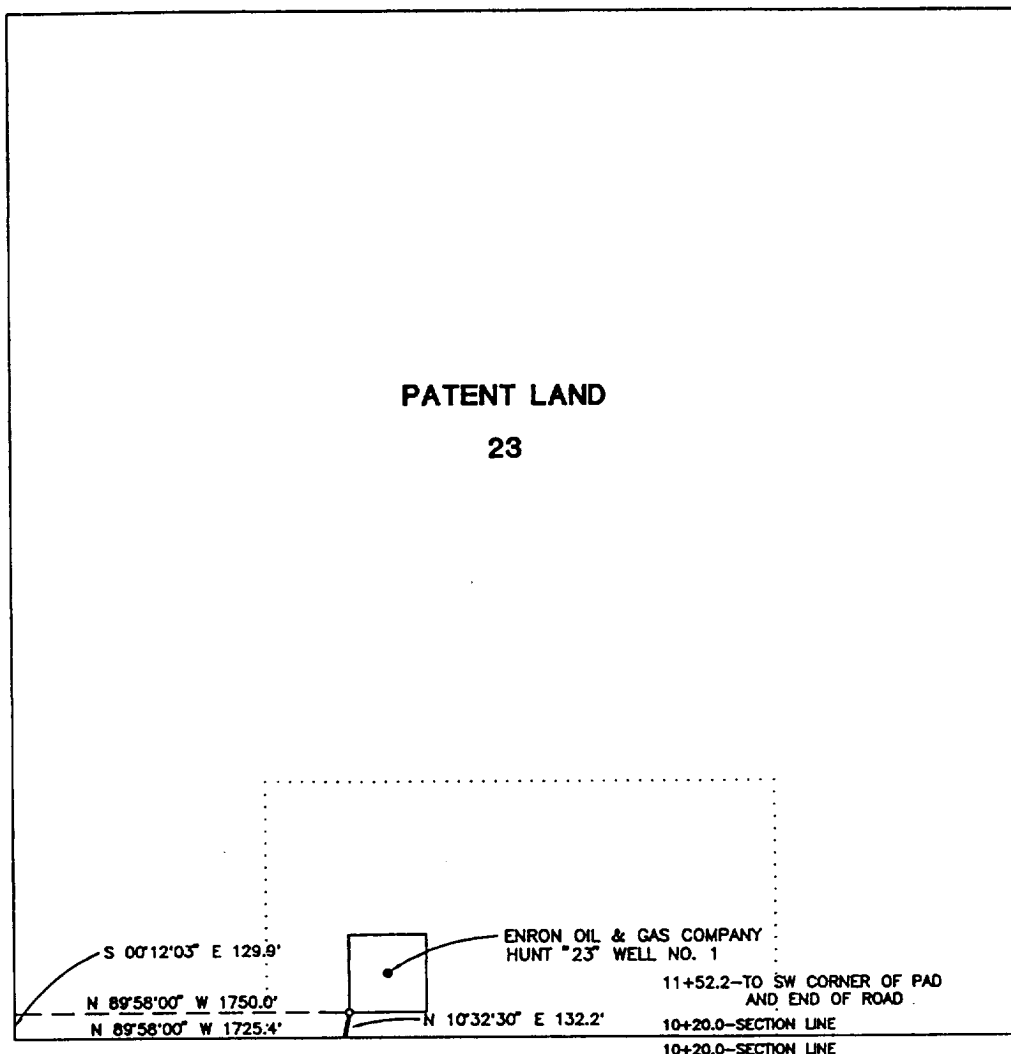
ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

Survey Date: 12-22-97	Date: 12-23-97	Scale: 1" = 1000'
WTC No. 45115	Drawn By: J.L.E.	Sheet 1 of 2



SECTION 23, TOWNSHIP 23 SOUTH, RANGE 37 EAST, N.M.P.M.  
LEA COUNTY, NEW MEXICO

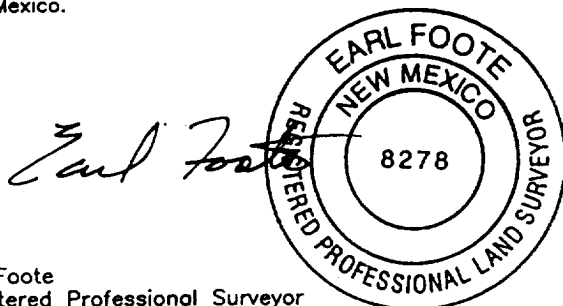


CENTERLINE DESCRIPTION OF A PROPOSED ROAD:

BEGINNING at a point in the south line of Section 23, T-23-S, R-37-E, N.M.P.M., Lea County, New Mexico, from which point the southwest corner of Section 23 bears N 89° 58' 00" W, 1725.4 feet;

THENCE N 10° 32' 30" E, with the centerline of proposed road, 132.2 feet to the southwest corner of a 400' x 400' Well Site for the end of this road, from which point the southwest corner of Section 23 bears N 89° 58' 00" W, 1750.0 feet and S 00° 12' 03" E, 129.9 feet.

I hereby certify that this plot was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.



Earl Foote  
Registered Professional Surveyor  
New Mexico Certificate No. 8278

PROPOSED ROAD TO SERVE  
HUNT "23" WELL NO. 1

ENRON OIL AND GAS COMPANY

132.2 feet of proposed road in  
Section 23, T-23-S, R-37-E, N.M.P.M.,  
Lea County, New Mexico

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

Survey Date: 12-22-97

Date: 12-23-97

Scale: 1" = 1000'

WTC No. 45115

Drawn By: J.L.E.

Sheet 2 of 2



