

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
RECEIVED
OCD - ARTESIA
AMENDED REPORT

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

Operator Name and Address. Enron Oil & Gas Company P. O. Box 2267 Midland, TX 79702		OGRID Number 7377
Property Code 20098	Property Name Sand Tank "36" State Com	API Number 30-015-29985
		Well No. 2

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	36	17S	29E		1700	North	1900	East	Eddy

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
Proposed Pool 1 Sand Tank Morrow					Proposed Pool 2				

Work Type Code N	Well Type Code G	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 3564'
Multiple	Proposed Depth 11700	Formation Morrow	Contractor Unknown	Spud Date 12/30/97

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	450	250	Surface
11	8 5/8	32	4200	1100	Surface
7 7/8	5 1/2	17	11700	735	7500

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.

See attached Drilling Program

BOP Diagram Attached

Post ID-1
2-13-98
APF & Loc

EXPIRY
5-7-99

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name: Linda Johnston

Title: Agent

Date: 12/23/97

Phone (915) 694-8228

OIL CONSERVATION DIVISION

Approved by:

ORIGINAL SIGNATURE OF THE W. GUM

Title:

DISTRICT II SUPERVISOR

Approval Date:

MAR 2 1998

Expiration Date:

3-2-99

Conditions of Approval:

Attached ☐

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State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code	³ Pool Name Sand Tank Morrow
⁴ Property Code	⁵ Property Name SAND TANK "36" STATE COM.	⁶ Well Number 2
⁷ GRID No. 7377	⁸ Operator Name ENRON OIL AND GAS COMPANY	⁹ Elevation 3564

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	36	17-S	29-E		1700	NORTH	1900	EAST	EDDY

¹¹Bottom 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

¹² Dedicated Acres 3.80	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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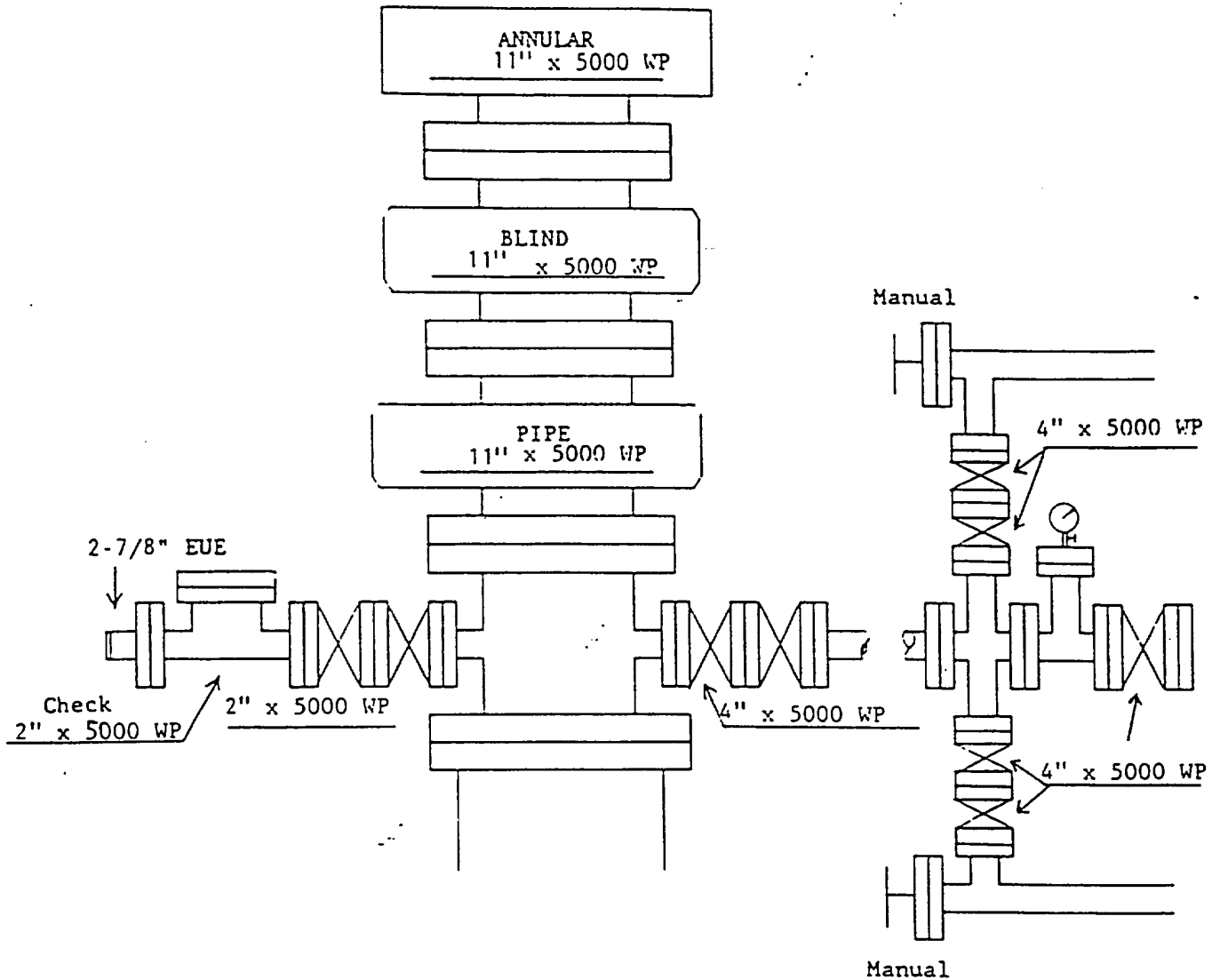
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div>16</div> <p>Y:652513.8 X:594653.2 LAT: 32°47'36.4981" LONG: 104°01'31.1298"</p>	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Linda Johnston</i> Signature Linda Johnston Printed Name Agent Title 12/23/97 Date</p>	
	<div>18 SURVEYOR CERTIFICATION</div> <p>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.</p> <p>DECEMBER 18, 1997 Date of Survey</p> <p>Signature and Seal of Professional Land Surveyor: <i>Earl Foot</i> 8278 Certificate Number</p>	

ENRON OIL & GAS COMPANY

SAND TANK "36" STATE COM. WELL NO. 2

ATTACHMENT I



DRILLING PROGRAM

ENRON OIL & GAS COMPANY
Sand Tank "36" State Com Well No. 2
1700' FNL & 1900' FEL
SEC. 36, T17S, R29E
EDDY COUNTY, NM

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	850'
Bone Spring	4100'
Wolfcamp	8300'
Strawn	10150'
Morrow Clastics	10900'
TD	11700'

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"	0-500'	5 1/2"	17# N-80 BTC
	500-11400	5 1/2"	17# N-80 LTC
	11400-11700	5 1/2"	17# S-95 LTC

Cementing Program:

11 3/4" Surface Casing: Cement to surface with 250 sx Class C+2%
CaCl2 + 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%
CaCl2.

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'.

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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.

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ENRON OIL & GAS COMPANY
Sand Tank "36" State Com Well No. 2
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SEC. 36, T17S, R29E
EDDY COUNTY, NM

- (I) A mud logging unit complete with H₂S 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
Sand Tank "36" State Com Well No. 2
1700' FNL & 1900' FEL
SEC. 36, T17S, R29E
EDDY 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:

1338' 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
Sand Tank "36" State Com Well No. 2
1700' FNL & 1900' FEL
SEC. 36, T17S, R29E
EDDY 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.

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ENRON OIL & GAS COMPANY
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SEC. 36, T17S, R29E
EDDY 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

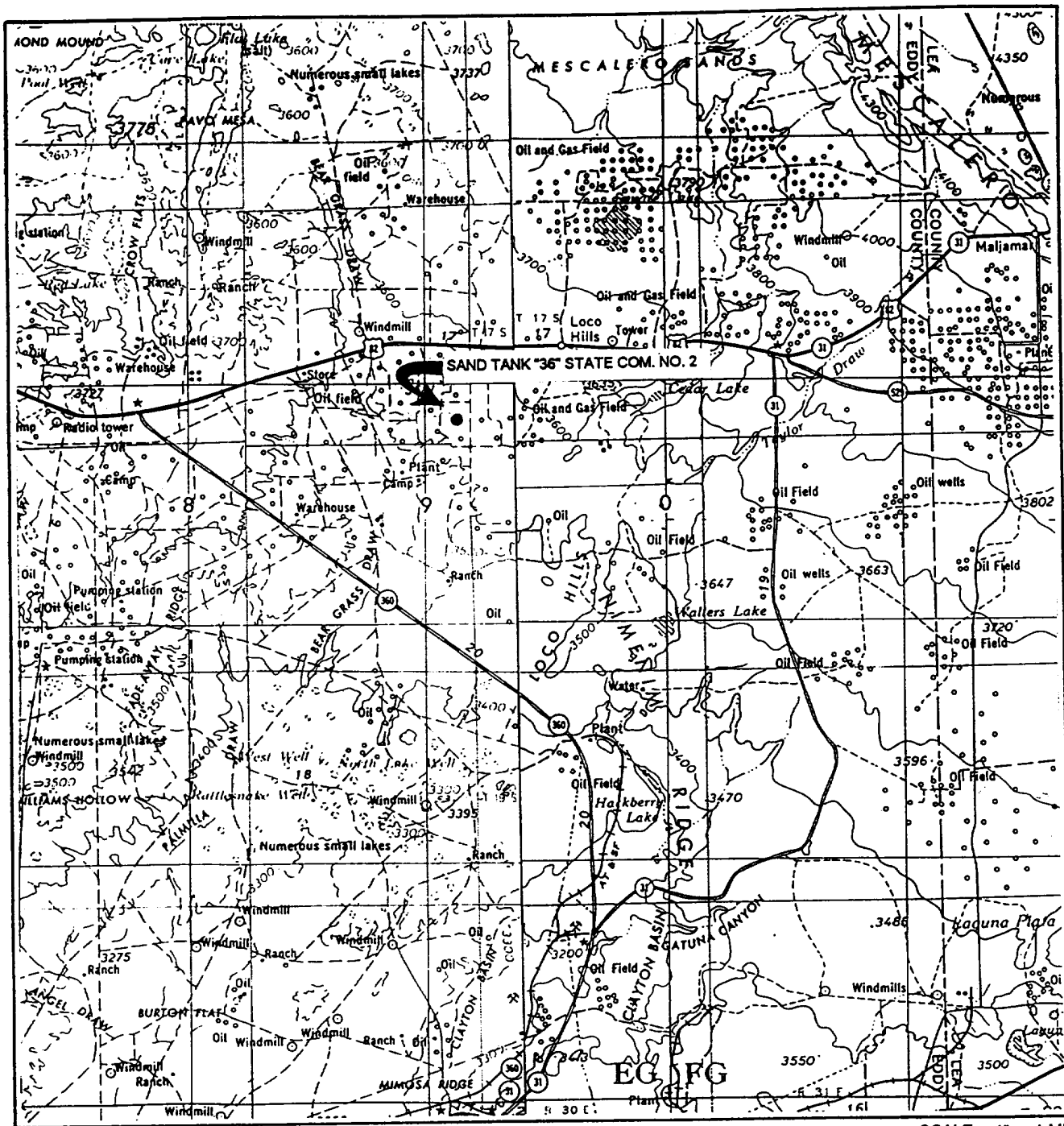
DRILLING PROGRAM

ENRON OIL & GAS COMPANY
Sand Tank "36" State Com Well No. 2
1700' FNL & 1900' FEL
SEC. 36, T17S, R29E
EDDY 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.

✓ VICINITY MAP



SCALE: 1" = 4 MILES

WTC 45113

SEC. 36 TWP. 17-S RGE. 29-E

SURVEY **N.M.P.M**

COUNTY EDDY STATE NM

DESCRIPTION	1700' FNL & 1900' FEL

ELEVATION 3564'

OPERATOR ENRON OIL & GAS COMPANY

LEASE SAND TANK "36" STATE COM. NO. 2

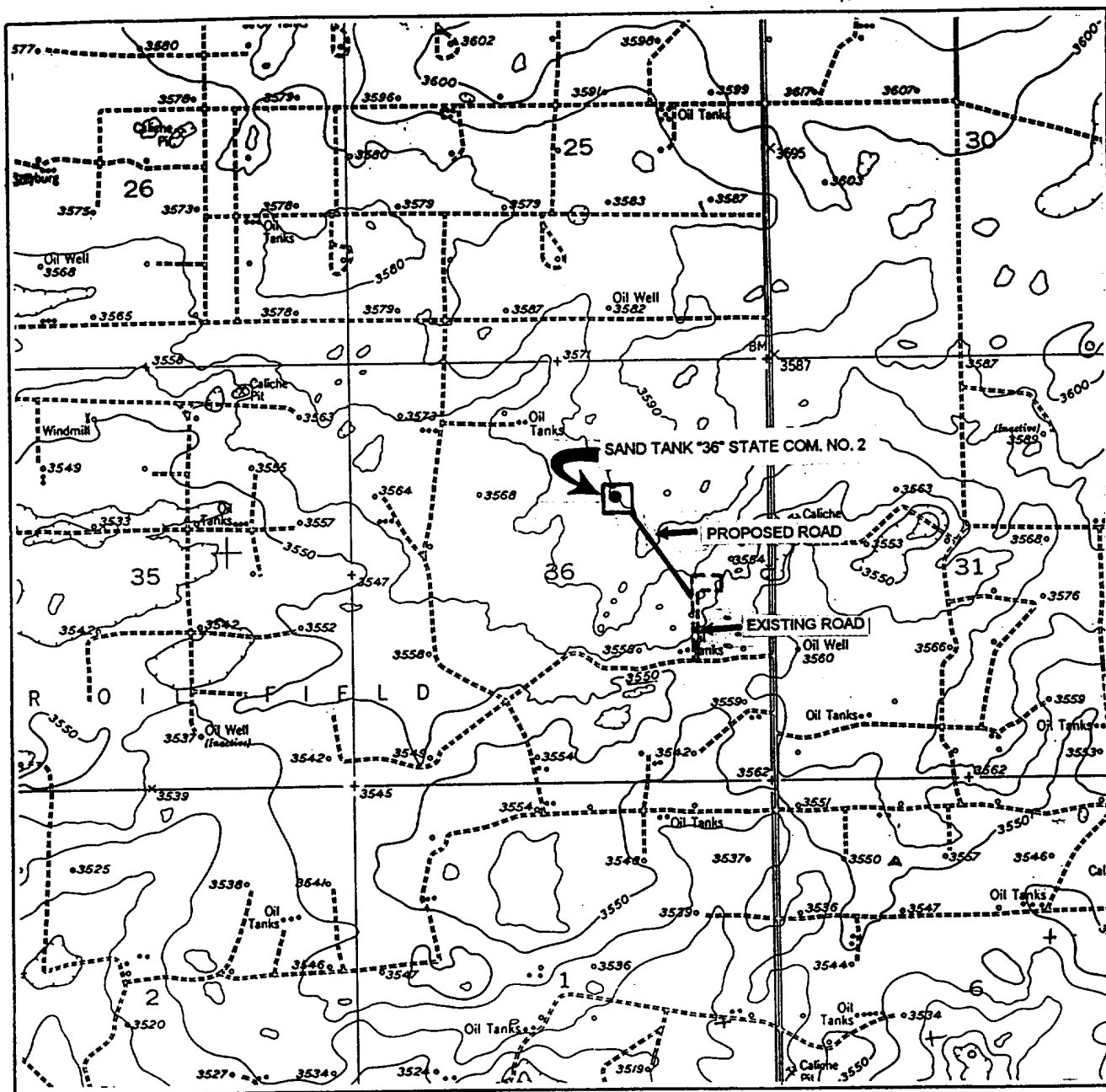
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

WTC 45113

CONTOUR INTERVAL 10'

SEC. 36 TWP. 17-S RGE. 29-E

SURVEY N.M.P.M

COUNTY EDDY STATE NM

DESCRIPTION 1700' FNL & 1900' FEL

ELEVATION 3564'

OPERATOR ENRON OIL & GAS COMPANY

LEASE SAND TANK '36" STATE COM. NO. 2

USGS TOPO MAP RED LAKE SE, NEW MEXICO

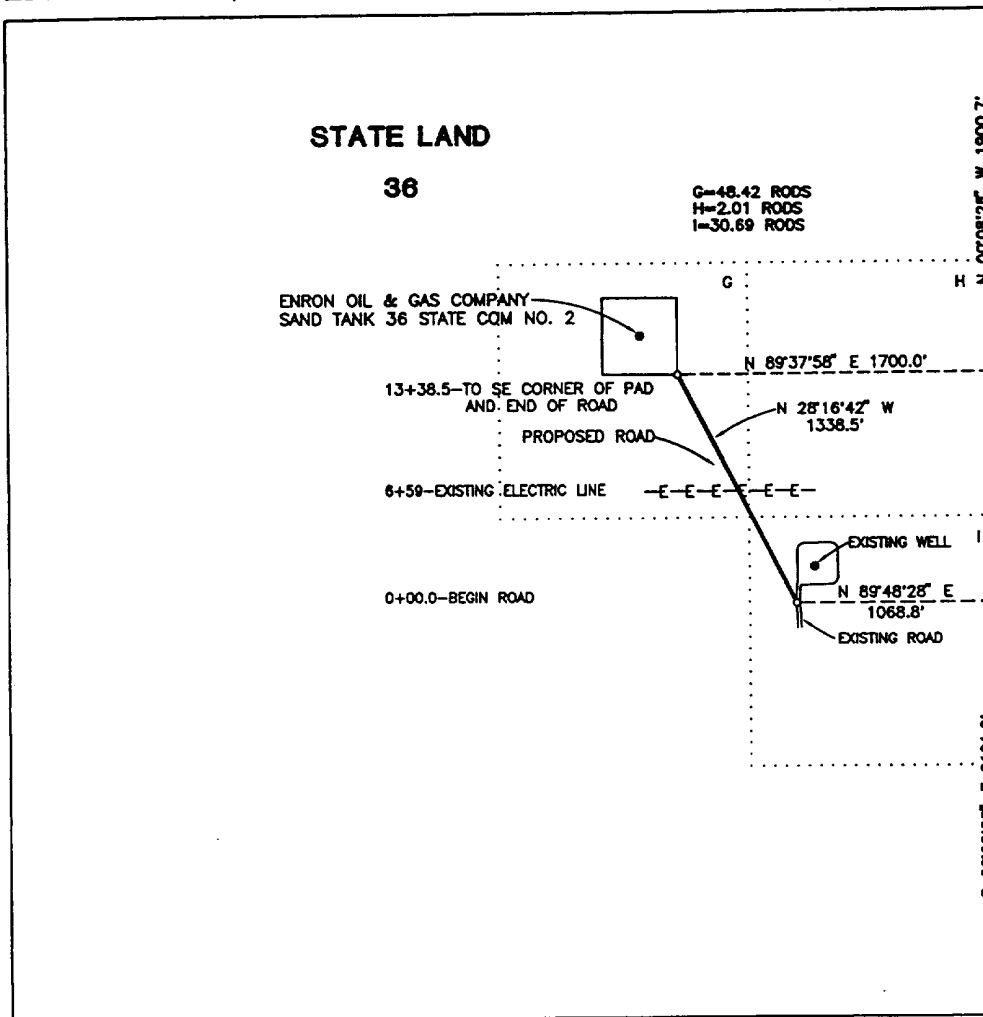
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

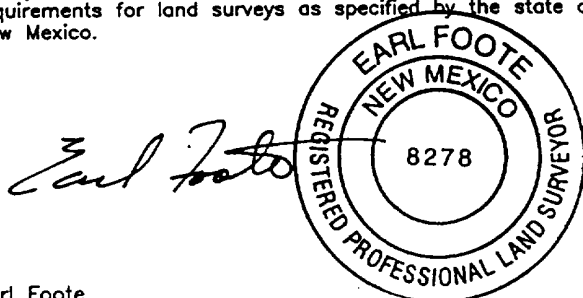
SECTION 36, T SHIP 17 SOUTH, RANGE 29 E N.M.P.M.
EDDY COUNTY, NEW MEXICO



CENTERLINE DESCRIPTION FOR A PROPOSED ROAD:

BEGINNING at a point in an existing road, from which point the southeast corner of Section 36, T-17-S, R-29-E, N.M.P.M., Eddy County, New Mexico, bears N 89° 48' 28" E, 1068.8 feet and S 00° 08' 28" E, 2191.0 feet;
 THENCE N 28° 16' 42" W, with the centerline of proposed road, 1338.5 feet to the southeast corner of a 400' x 400' well site for Enron Oil & Gas Company SAND TANK "36" STATE COM. WELL No. 2, for the end of this road, from which point the northeast corner of Section 36 bears N 89° 37' 58" E, 1700.0 feet and N 00° 08' 28" W, 1900.7 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
Registered Professional Surveyor
New Mexico Certificate No. 8278

**PROPOSED ROAD TO SERVE
SAND TANK "36" STATE COM. No. 2**

ENRON OIL AND GAS COMPANY

1338.5 feet of proposed road in
Section 36, T-17-S, R-29-E, N.M.P.M.,
Eddy County, New Mexico

WEST TEXAS CONSULTANTS, INC.

ENGINEERS—PLANNERS—SURVEYORS

MIDLAND, TEXAS

Survey Date: 12-18-97	Date: 12-22-97	Scale: 1" = 1000'
WTC No. 45113	Drawn By: J.L.E.	Sheet 1 of 1

30-015-29985

OGRIN 7377

PROP 20098

POOL

8-11-99

MULTIPLEX ARMY ACUSTILOG/GAMMA RAY LOG

9,050' - 11,361'

DIGITAL SPECTRLOG

9,050' - 11,359'

COMPENSATED Z-DENSILOG/COMP. NEUTRON LOG
GAMMA RAY LOG / CALIPER LOG

40' - 11,369'

DIRT INDUCTION FOCUSED LOG
GAMMA RAY LOG

3,950' - 11,401'



Geol. Tcps per /B6A

Rustler 1250	Cisco -
Queen 2180	CANYON 9380
Grayburg 2580	STRAWN 9970
San Andres 3000	ATOKA 10460
Livingston Sand 3129	'Daton' 10720
Abe ?	MORROW LS 10820
Wolfcamp 8660	MORROW CLASTICS 10978