District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-101
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

CHF BLM 5 L

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

[1] Operator Name and Address.	[2] OGRID Number
Enron Oil & Gas Company P. O. Box 2267 Midland, TX 79702	7377
	[3] API Number 30 - 015 - 30733

RECEIVED
OCD ARTESIA

[4] Property Code	[5] Property Name	[6] Well No.
23247	STW "2" STATE COM.	1

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	2	18S	29E		1650	North	1650	West	Eddy

[8] 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
F	2	18S	29E		1650	North	1650	West	Eddy

[9] Proposed Pool 1	[10] Proposed Pool 2
~~Graybarg~~ Sand Tank (Morrow) 84872 GAS	

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	R	S	3512'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
	11700	Chester		5/2/98

[21] 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 LT&C	11700	735	7500
				Post ED-1	
				5-8-98	

[22] 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.

TPE & DGC

11 3/4" Surface Casing: Cement to surface w/250 sx Class C+2% CaCl2+¼# sx flocele
8 5/8 Intermediate Casing: Cement to surface w/800 sx Premium Plus lite+15#/sx salt + ¼#/sx flocele and 300 sx CL C+2% CaCl2
WOC 18 Hours TSX
5½" Production Casing: Cement w/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'.

BOP Diagram attached

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

Signature: Linda Johnston
Printed name: Linda Johnston
Title: Agent
4/25/98 (915) 694-8228

OIL CONSERVATION DIVISION

Approved by: Tim W. Gum BGA
Title: District Supervisor
Approval Date: 4-30-98 Expiration Date: 4-30-99

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 Departme

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 ~~Grayburg~~ (Morrow)

[4] Property Code	[5] Property Name	[6] Well Number
	STW "2" STATE COM.	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
7377	ENRON OIL & GAS COMPANY	3512'

[10] Surface Location

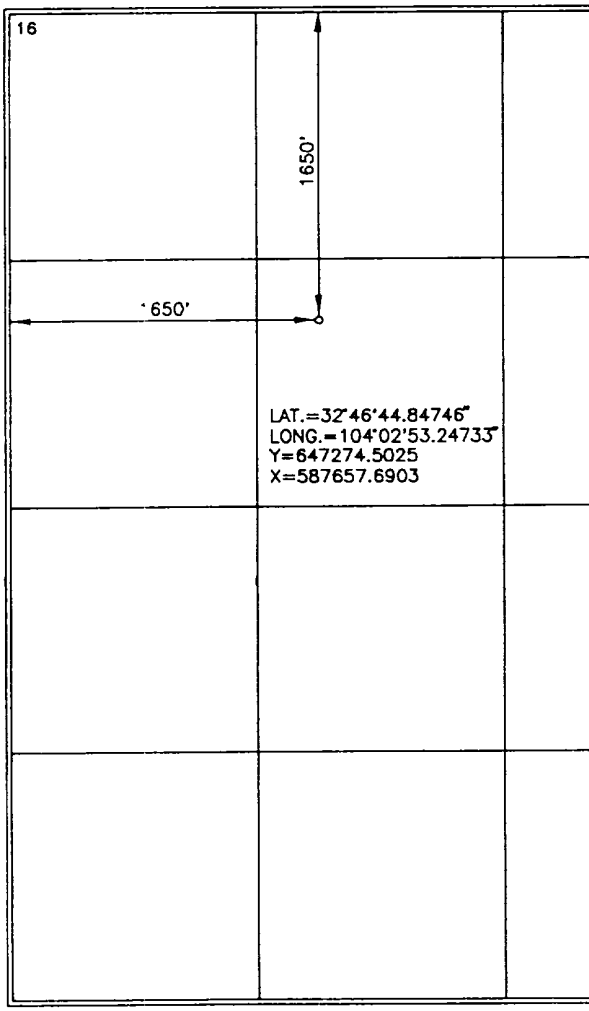
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	2	18-S	29-E		1650	NORTH	1650	WEST	EDDY

[11] 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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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



[17] OPERATOR CERTIFICATION

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

Linda Johnston
Signature

Linda Johnston
Printed Name

Agent
Title

4/28/98
Date

[18] SURVEYOR CERTIFICATION

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.

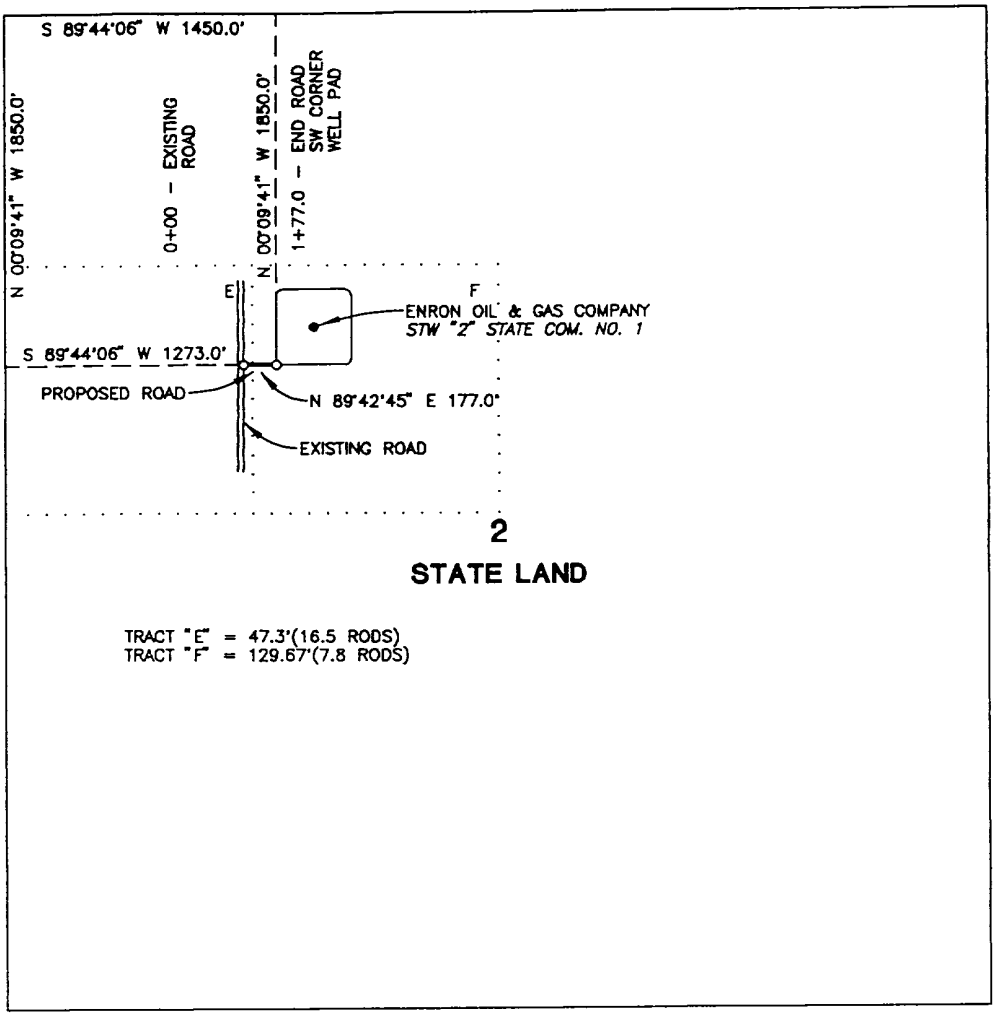
APRIL 7, 1998
Date of Survey

Signature and Seal of Professional Surveyor:

EARL FOOTE NEW MEXICO 8278 REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate Number 8278

SECTION 2, T NSHIP 18 SOUTH, RANGE 29 E , N.M.P.M.
EDDY COUNTY, NEW MEXICO



CENTERLINE DESCRIPTION OF A PROPOSED ROAD:

BEGINNING at a point in an existing road, from which point the northwest corner of Section 2, T-18-S, R-29-E, N.M.P.M., Eddy County, New Mexico bears S 89° 44' 06" W, 1273.0 feet and N 00° 09' 41" W, 1850.0 feet;

THENCE N 89° 42' 45" E, with the centerline of proposed road, 177.0 feet to a point in the southwest corner of a well pad for Enron Oil & Gas Company STW "2" STATE COM. No. 1, for the end of this road, from which point the northwest corner of said Section 2 bears N 00° 09' 41" W, 1850.0 feet and S 89° 44' 06" W, 1450.0 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 NEW MEXICO 8278 REGISTERED PROFESSIONAL LAND SURVEYOR

Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278

PROPOSED ROAD TO SERVE
STW "2" STATE COM. NO. 1

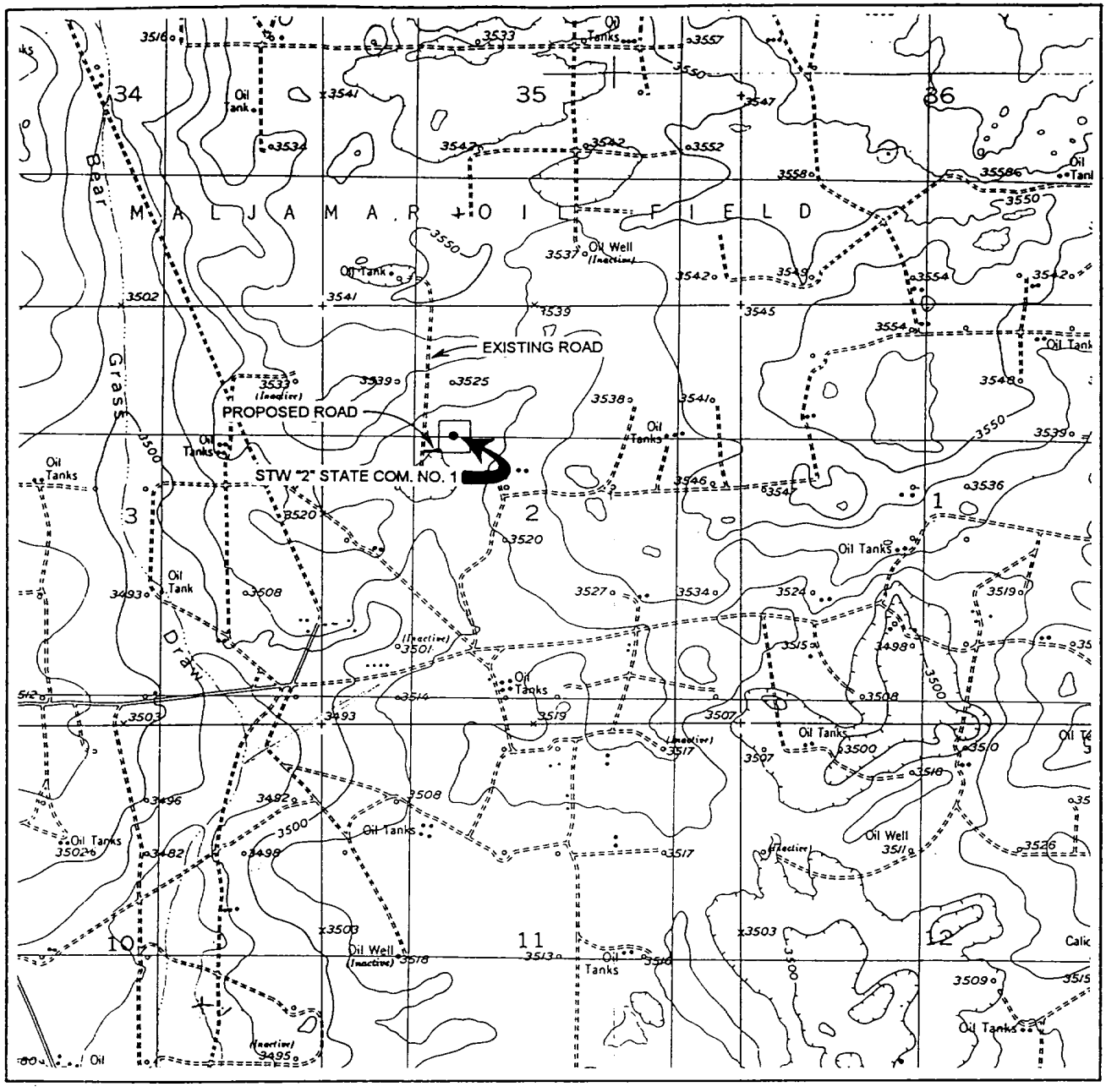
ENRON OIL AND GAS COMPANY

177.0 feet of proposed road in
Section 2, T-18-S, R-29-E, N.M.P.M.,
Eddy County, New Mexico

WEST TEXAS CONSULTANTS, INC.
ENGINEERS–PLANNERS–SURVEYORS MIDLAND, TEXAS

Survey Date: 4–7–98	Date: 4–14–98	Scale: 1" = 1000'
WTC No. 45240	Drawn By: R.S.	Sheet 1 of 1

LOC...ION VERIFICATION M..P



SCALE: 1" = 2000'
WTC 45240

CONTOUR INTERVAL 10 '

SEC. 2 TWP. 18-S RGE. 29-E

SURVEY N.M.P.M

COUNTY EDDY STATE NM

DESCRIPTION 1650' FNL & 1650' FWL

ELEVATION 3512'

OPERATOR ENRON OIL & GAS COMPANY

LEASE STW "2" STATE COM. NO. 1

USGS TOPO MAP RED LAKE SE, NEW MEXICO

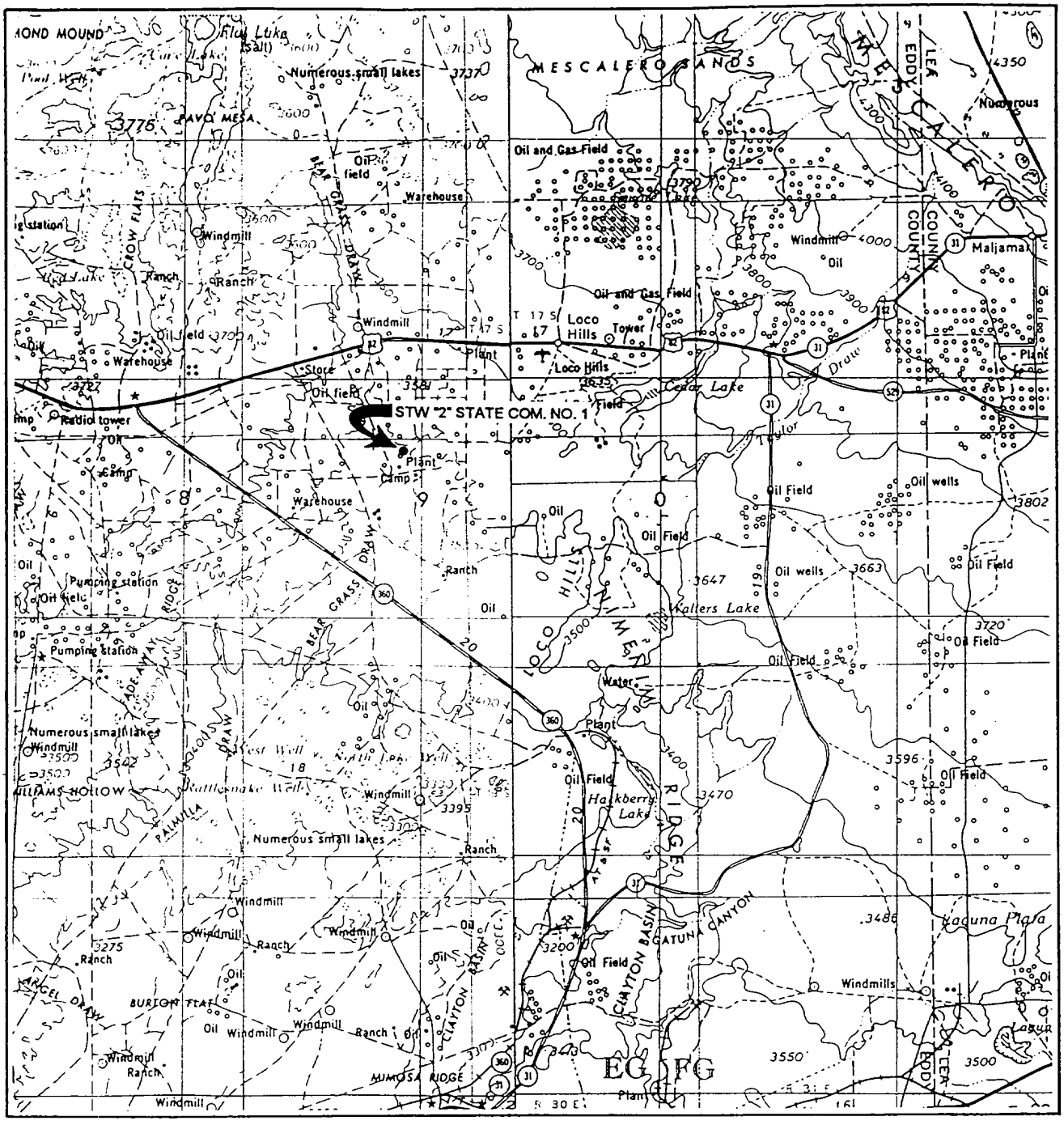
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

VICINITY MAP



SCALE: 1" = 4 MILES

WTC 45240

SEC. 2 TWP. 18-S RGE. 29-E

SURVEY N.M.P.M

COUNTY EDDY STATE NM

DESCRIPTION 1650' FNL & 1650' FWL

ELEVATION 3512'

OPERATOR ENRON OIL & GAS COMPANY

LEASE STW "2" STATE COM. NO. 1

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

DRILLING PROGRAM

ENRON OIL & GAS COMPANY
STW "2" STATE COM NO. 1
1650' FNL & 1650' FWL
SEC. 2, T18S, 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'
Chester	11700'

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

Upper Permian Sands	100'	Fresh Water
Upper Penn		Gas

4. CASING PROGRAM:

Hole Size	Interval	OD Casing	Weight Grade Jt. Cond. Type
14 ¾"	0-450'	11 ¾"	42# H-40 A ST&C
11"	0-4200'	8 5/8"	32# J-55 LT&C
7 7/8"	0-500'	5 ½"	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 ¾" Surface Casing: Cement to surface with 250 sx Class C+2% CaCl2 + ¼#/sx flocele

8 5/8" Intermediate: Cement to surface with 800 sx Premium Plus lite + 15#/sx Salt + ¼#/sx Flocele and 300 sx CL C + 2% CaCl2.

5 ½" 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
STW "2" STATE COM NO. 1
1650' FNL & 1650' FWL
SEC. 2, T18S, R29E
EDDY 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 ¾" 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:

Depth	Type	Wt (ppg)	Viscosity (sec)	Waterloss (cc)
0-450'	Fresh Water (spud)	8.5	40-45	N.C.
450'-4200'	Brine Water	10.0	30	N.C.
4200'-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:

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

(B) 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
STW "2" STATE COM NO. 1
1650' FNL & 1650' FWL
SEC. 2, T18S, R29E
EDDY COUNTY, NM

8. LOGGING, TESTING AND CORING PROGRAM:
   (A) 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.

   (B) 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
STW "2" STATE COM NO. 1
1650' FNL & 1650' FWL
SEC. 2, T18S, 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:

177' 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:

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
STW "2" STATE COM NO. 1
1650' FNL & 1650' FWL
SEC. 2, T18S, 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.

W. D. Smeltzer
Drilling Manager

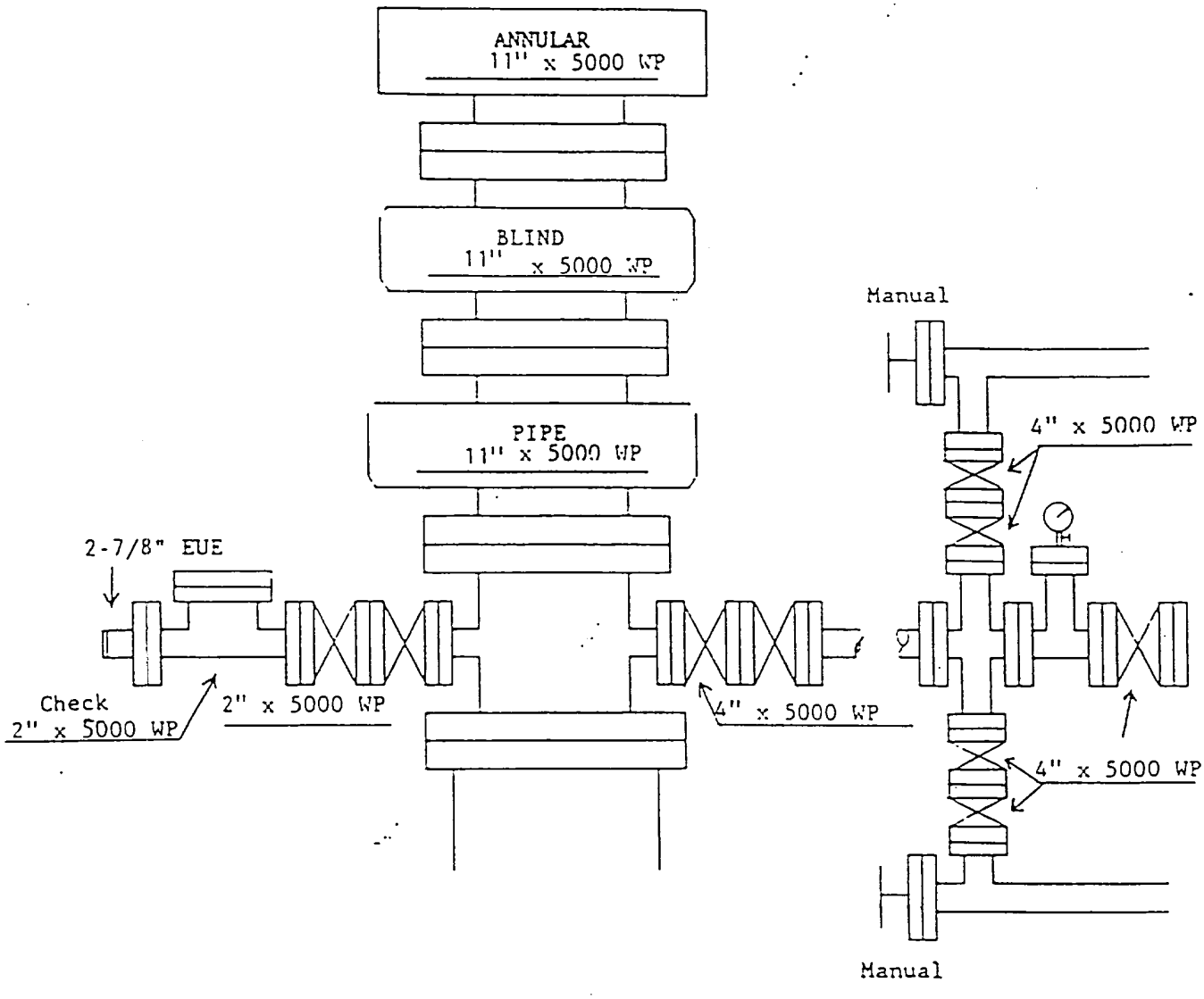
W. D. Smeltzer

Date: 4-27-98

ENRON OIL & GAS COMPANY

STW "2" STATE COM. NO. 1

ATTACHMENT I



DRILLING PROGRAM

ENRON OIL & GAS COMPANY
STW "2" STATE COM NO. 1
1650' FNL & 1650' FWL
SEC. 2, T18S, 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.

30-015-30233

[illegible] 7377

[illegible] 23217

[illegible]

5-5-99

COMP. Z-DENSILOG/CNL/GR/C

0' – 11,410'

DUAL INDUCTION FOCUSED LOG/GR/C

3,818' – 11,410'

MULTIPOLE ARRAY ACOUSTILOG/GR/C

3,898 – 11,450'