

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. OIL CONS. CC MISSION 30-025-32246
P.O. BOX 1990
HOBBS, NEW MEXICO 88240
Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER

SINGLE ZONE ☐

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Enron Oil & Gas Company

3. ADDRESS OF OPERATOR

P. O. Box 2267, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1980' FNL & 1780' FEL

At proposed prod. zone

1980' FNL & 1780' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

25 miles West of Jal, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

660

460

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1572' to #3

1335 to #1

19. PROPOSED DEPTH

12,600'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3399.5' GR

22. APPROX. DATE WORK WILL START*

When Permitted

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14-3/4"	11-3/4"	42# H-40 A ST&C	650'	250 sx CIRCULATED
11"	8-5/8"	& 32# J-55 ST&C	5200'	1100 sx CIRCULATED
7-7/8"	5-1/2"	17# & 17# ST&C	12600'	1200 sx Est TOC to 7500'

SSS, as per telecon
w/ B. Gildon, 9/23/93.

Acreage is dedicated.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Betty Gildon

TITLE Regulatory Analyst

DATE 8/6/93

(This space for Federal or State office use)

PERMIT NO. _____

APPROVAL DATE _____

APPROVED FOR: SDR: RICHARD L. MANNE

TITLE AREA MANAGER

DATE SEP 24 1993

APPROVAL SUBJECT TO:

GENERAL REQUIREMENTS AND

SPECIAL STIPULATIONS

ATTACHED

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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Aug 9 11 22 AM '93
CATTLE & HORSE
AREA OFFICE

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SEP 28 1993

LABS
OFFICE

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

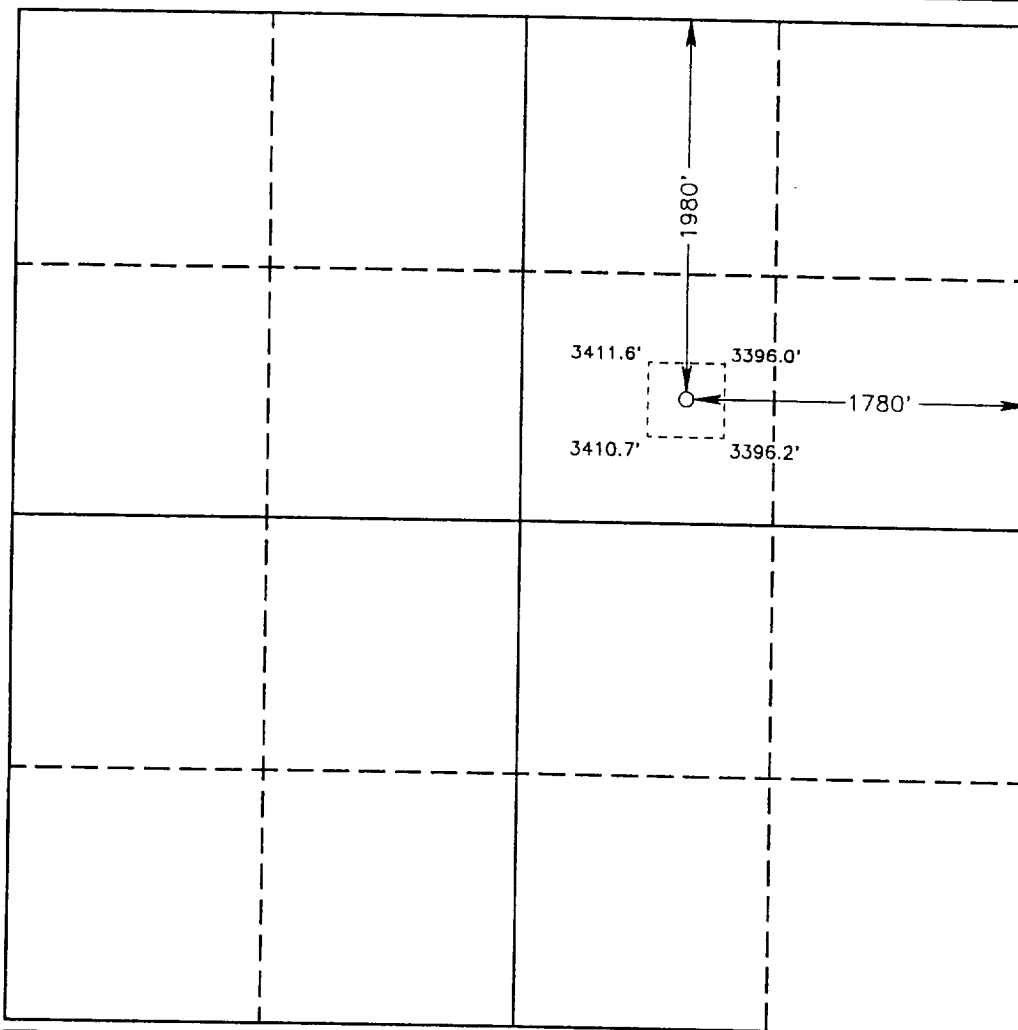
All Distances must be from the outer boundaries of the section

Operator ENRON OIL AND GAS CO.			Lease DIAMOND "7" FEDERAL		Well No. 2
Unit Letter G	Section 7	Township 25 SOUTH	Range 34 EAST	County LEA	
Actual Footage Location of Well:					
1980 feet from the NORTH line and		1780' feet from the EAST line			
Ground Level Elev. 3399.5'	Producing Formation Bone Spring		Pool Red Hills Wildcat	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature

Printed Name

Betty Gildon

Position

Regulatory Analyst

Company

Enron Oil & Gas Company

Date

8/2/93

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 the best of my knowledge and belief.

Date Surveyed

JUNE 16, 1993

Signature & Seal of
Professional Surveyor

GARY L. JONES
NEW MEXICO
7277
Certificate No. 376
JOHN W. WEST
3239
GARY L. JONES, 7977

93-11-1152

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JOHN HENRY
OFFICE

DRILLING PROGRAM

Enron Oil & Gas Company
Diamond "7" Federal, Well No. 2
1980' FNL & 1780' FEL
Sec. 7, T25S, R34E
Lea County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Rustler	850'
Delaware Mt. Group	5,175'
San Andres	9,275'
Bone Spring Pay	12,225'
TD	12,600'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Upper Permian Sands	100'	Fresh Water
3rd Bone Spring Sand	12,225'	Oil

No other formations are expected to give up oil, gas or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 11-3/4" casing at 650' and circulating cement back to surface, and 8-5/8" casing will be set at 5200' with cement circulating back to surface.

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Enron Oil & Gas Company
Diamond "7" Federal, Well No. 2
1980' FNL & 1780' FEL
Sec. 7, T25S, R34E
Lea County, New Mexico

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD csg</u>	<u>Weight Grade Jt. Cond. Type</u>
14-3/4	0- 650'	11-3/4	42# H-40 A ST&C
11	0- 5200'	8-5/8	32# & 32# J-55 ST&C
7-5/8	0- 12600'	5-1/2	PHO 17# 42# & 42# ST&C

SSS

Cementing Program:

- 11-3/4" Surface casing: Cement to surface with 250 sx of Class C + 2% CaCl₂ + 1/4#/sx flocele.
- 8-5/8" Intermediate: Cement to surface with 800 sx of Premium Plus lite + 15#/sx salt + 1/4#/sx Flocele and 300 sx Cl C + 2% CaCl₂
- 5-1/2" Prod casing: Cement with 1200 sx 50/50 Cl H/Poz + 2% gel + .4% CF-14, .1% Diacel LWL. This cement slurry is designed to bring TOC to 7500'.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (3000 psi WP) preventer and an annular preventer (3000 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 1000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000 psi and the annular to 70% of rated working pressure (2100 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 2 valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

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Enron Oil & Gas Company
Diamond "7" Federal, Well No. 2
1980' FNL & 1780' FEL
Sec. 7, T25S, R34E
Lea County, New Mexico

6. Types and Characteristics of the Proposed Mud System:

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

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (sec)</u>	<u>Waterloss (cc)</u>
0-650'	Fresh water (spud)	8.5	40-45	N.C.
650'-5200'	Brine water	10.0	30	N.C.
5200'-TD	Cut Brine	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 drill 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.
- (C) A mud logging unit complete with H₂S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 4500' to TD.

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8. Logging, Testing and Coring Program:

- (A) The electric logging program will consist of GR-Dual Laterolog-MSFL and GR-Compensated Density-Neutron from TD to intermediate casing with a GR-Compensated Neutron ran from intermediate casing to surface.
- (B) Possible side wall cores based on shows.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

The estimated bottom-hole temperature (BHT) at TD is 175 degrees F with an estimated maximum bottom-hole pressure (BHP) of 9400 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.

Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. Anticipated spud date is unknown at the present time. Once drilling has commenced, the drilling operation should be finished in approximately 30 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

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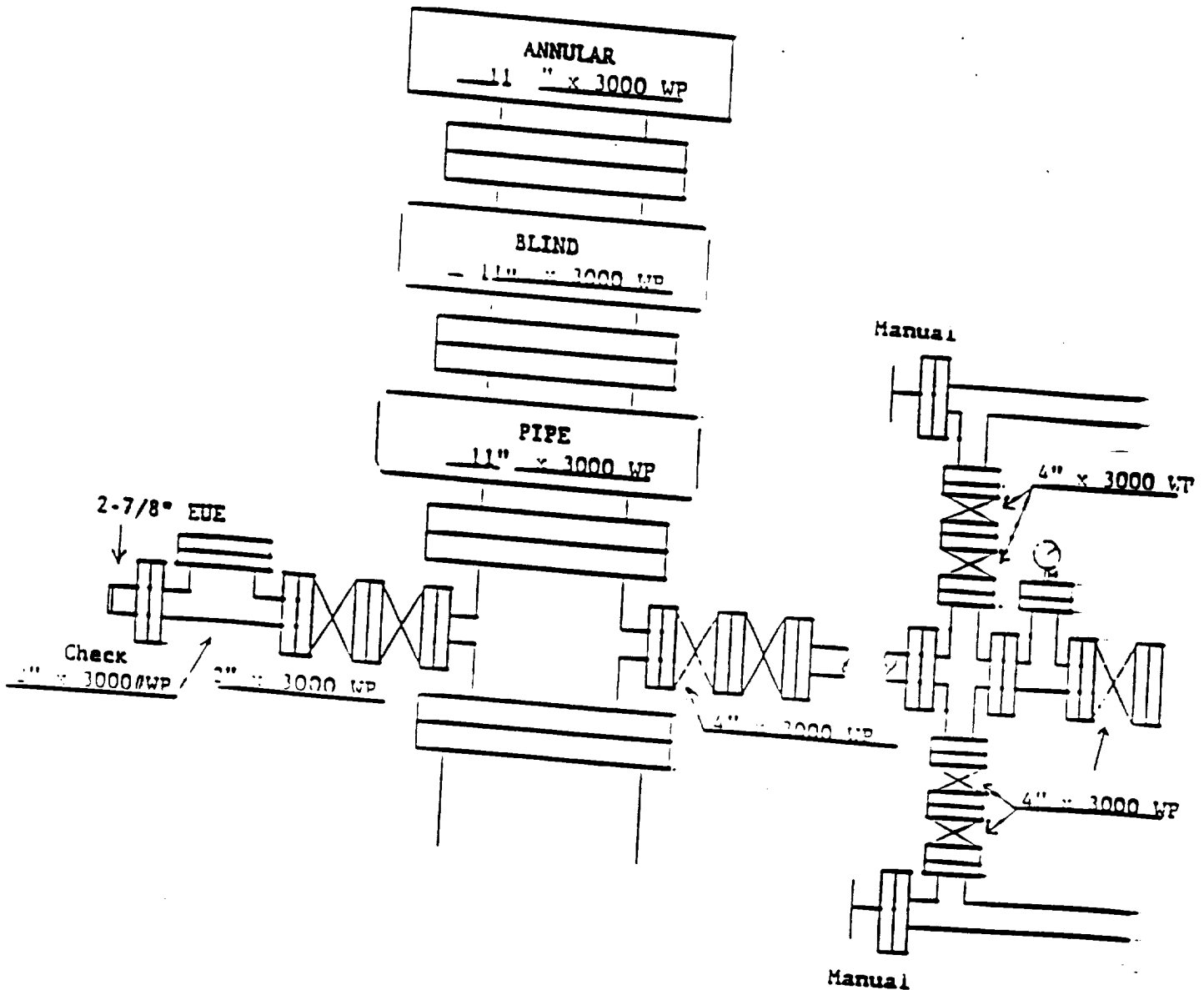
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EXHIBIT 1

ENRON OIL & GAS COMPANY

ATTACHMENT



12-15-93
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