

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. NM 19623	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Enron Oil & Gas Company			7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR P. O. Box 2267, Midland, Texas 79702			8. FARM OR LEASE NAME Vaca 13 Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 660' FNL & 1980' FEL At proposed prod. zone 660' FNL & 1980' FEL <i>Unit B</i>			9. WELL NO. 2	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 29 miles west from Jal			10. FIELD AND POOL, OR WILDCAT Red Hills (Bone Spring)	
13. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 660		16. NO. OF ACRES IN LEASE 1880	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 13, T25S, R33E	
13. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320' to #3		19. PROPOSED DEPTH 12,600'	12. COUNTY OR PARISH Lea	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3356.9' GR		17. NO. OF ACRES ASSIGNED TO THIS WELL 40		
22. APPROX. DATE WORK WILL START* 10/1/93		20. ROTARY OR CABLE TOOLS Rotary		

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	24# 832# J-55 ST&C	5200'	1100 sx CIRCULATED
7-5/8	5-1/2	17# J-55 & N-80 ST&C	12600'	1200 sx Est 100 to 7500

Acres 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.

24. SIGNATURE Betty Gildon TITLE Regulatory Analyst DATE 6/14/93
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
Ron Dunton TITLE **AREA MANAGER** DATE **AUG 10 1993**

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

*See Instructions On Reverse Side

ATTACHED
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.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

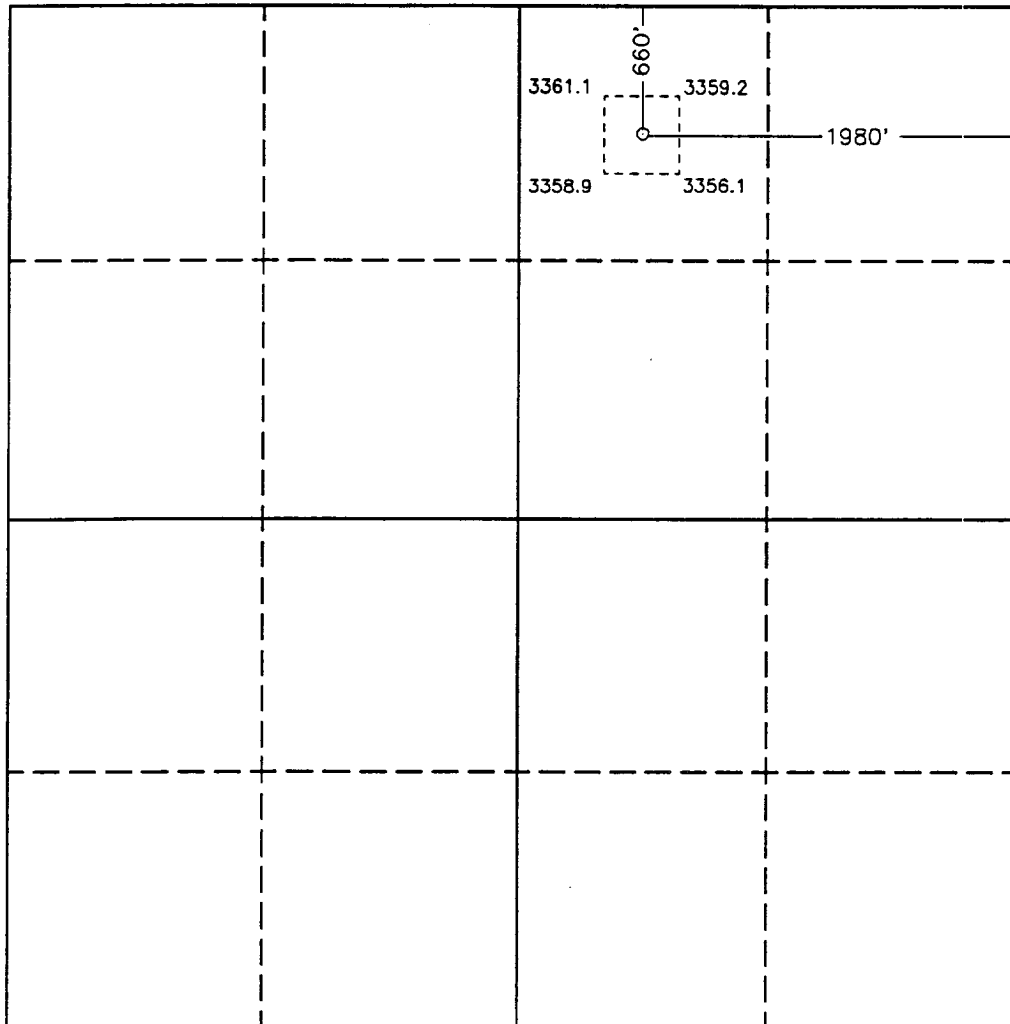
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator ENRON OIL AND GAS CO.			Lease VACA "13" FEDERAL		Well No. 2
Unit Letter B	Section 13	Township 25 SOUTH	Range 33 EAST	NMPM	County LEA
Actual Footage Location of Well: 660 feet from the NORTH line and 1980 feet from the EAST line					
Ground Level Elev. 3356.9	Producing Formation Bone Spring		Pool Red Hills		Dedicated Acreage: 40 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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

5/18/93

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

MAY 2, 1993

Signature & Seal of
Professional Surveyor



Certificate No. JOHN W. WEBB 078

PROFESSIONAL SURVEYOR RONALD J. JENSEN 8238

GARY L. JONES 7977

93-11-0737

DRILLING PROGRAM

Enron Oil & Gas Company
Vaca "13" Federal, Well No. 2
660' FNL & 1980' FEL
Sec. 13, T25S, R33E
Lea County, New Mexico

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Rustler	850'
Delaware Mt. Group	5175'
Bone Spring Lime	9275'
Bone Spring Pay	12225
TD	12600

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

Upper Permian Sands	100'	Fresh Water
3rd Bone Spring Sand	12225'	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 500' and circulating cement back to surface, and 8-5/8" casing will be set at 2100' with cement circulated back to surface.

Enron Oil & Gas Company
Vaca "13" Federal, Well No. 2
660' FNL & 1980' FEL
Sec. 13, T25S, R33E
Lea County, New Mexico

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD csq</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	24# & 32# J-55 LT&C
7-7/8	0-12600'	5-1/2	17# J-55 & N-80 ST&C

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 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 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 2valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

EXHIBIT 1

ENRON OIL & GAS COMPANY

ATTACHMENT

