



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

December 4, 1995

Enron Oil & Gas Company
P. O. Box 2267
Midland, Texas 79702

Attention: Betty Gildon

Administrative Order TX-233

Dear Ms. Gildon:

Reference is made to your request for an exception to the tubing setting requirements as contained in Division Rule 107 (d) (3) for the below-named well.

Pursuant to the authority granted me by Rule 107 (d) (4), you are hereby authorized to make a tubingless completion in the following well:

Well Name and Number: Diamond 18 Federal Well No. 5

Location: Section 18, Township 25 South, Range 34 East, NMPM,
Lea County, New Mexico

Remarks: When well ceases to flow production tubing will be required.

The Division reserves the right to rescind this authority in the event that waste appears to be resulting therefrom.

Sincerely,

A handwritten signature in black ink, appearing to read "William J. LeMay".

William J. LeMay
Director

WJL/RJ/kv

cc: Oil Conservation Division - Hobbs

PVZV2005630122

ENRON Oil & Gas Company

P. O. Box 2267 Midland, Texas 79702 (915) 686-3600

October 23, 1995

Mr. William J. LeMay, Director
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

NEW MEXICO OIL CONSERVATION COMMISSION
RECEIVED
'95 NOV 2 AM

Re: Diamond 18 Federal No. 5
Sec 18, T25S, R34E
Red Hills Field
Lea County, New Mexico

Dear Mr. LeMay:

Enron Oil & Gas respectfully requests your approval to complete and produce the above-referenced well from the Bone Spring formation (perforations 12220 -12248) without the use of production tubing . The referenced well contains the following tubulars:

| <u>CASING</u> | <u>GRADE</u> | <u>DEPTH</u> | <u>TOP OF CEMENT</u> |
|---------------|--------------|--------------|----------------------|
| 11-3/4" | H-40 | 685 | Circulated |
| 8-5/8" | K-55 | 5037 | Circulated |
| 5-1/2" | CF-95 | 12540 | 4600 |

The well was fracture treated via the 5-1/2" production casing and has been allowed to flowback through that casing to achieve faster cleanup and to minimize the risk of formation damage. Our plans are to install 2-7/8" production tubing when the well ceases to flow, which should occur within the first year or two of production.

We believe this "tubingless" completion technique is completely safe and effective for the following reasons:

- The well is in a known producing field
- No corrosive or pressure problems are know to exist
- The well is a single completion
- The 5-1/2" production string has been cemented into the base of the 8-5/8" casing
- The 5-1/2" is very high strength casing
- The stabilized after-frac flowing tubing pressures are low (less than 1,000 psig)
- The technique lowers the cost of the completion, thereby improving the economics of the project

Thank you for your consideration of this request. If you need additional information, please contact me.

Sincerely,

Betty A. Gildon



Regulatory Analyst

cc: NMOCD-HOBBS

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Part of the Enron Group of Energy Companies

CONFIDENTIAL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: February 23, 1995

5. LEASE DESIGNATION AND SERIAL NO.

NM 24490

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

Diamond 18 Federal #5

9. API WELL NO.
30 025 33078

10. FIELD AND POOL OR WILDCAT

Red Hills Bone Spring

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec 18, T25S, R34E

12. COUNTY OR PARISH
Lea

13. STATE
NM

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEPEN PLUG BACK DIFF. EMER. Other _____

2. NAME OF OPERATOR
Enron Oil & Gas Company

3. ADDRESS AND TELEPHONE NO.
P. O. Box 2267, Midland, Tx 79702 (915) 686-3714

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 2130' FSL & 660' FEL
At top prod. interval reported below 2130' FSL & 660' FEL
At total depth 2130' FSL & 660' FEL

14. PERMIT NO. - DATE ISSUED 8-25-95

15. DATE SPUDDED 9-15-95 16. DATE T.D. REACHED 10-3-95 17. DATE COMPL. (Ready to prod.) 10-13-95 18. ELEVATIONS (DP, RKB, RT, GR, ETC.)* 3335' GR 19. ELEV. CASINGHEAD 3335'

20. TOTAL DEPTH, MD & TYD 12540 21. PLUG. BACK T.D., MD & TYD 12388 22. IF MULTIPLE COMPL., HOW MANY* - 23. INTERVALS DRILLED BY - ROTARY TOOLS X CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TYD)* 12220-12248 (3rd Bone Spring) 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN DAC/SL, ZDL/CN/GR 27. WAS WELL CORED No

28. CASING RECORD (Report all strings set in well)

| CASING SIZE/GRADE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | TOP OF CEMENT, CEMENTING RECORD | AMOUNT PULLED |
|-------------------|-----------------|----------------|-----------|---------------------------------|------------------------------|
| 11-3/4 ST&C | 42 | 685 | 14-3/4 | 350 Prem + | Circulated |
| 8-5/8 K-55 ST&C | 32 | 5037 | 11 | 1400 Prem | Circulated |
| 5-1/2 CF-95 | 17 | 12479 | 7-7/8 | 1557 Prem | TOC @ 4600' per Temp Survey. |

29. LINER RECORD

| SIZE | TOP (MD) | BOTTOM (MD) | BACKS CEMENT* | SCREEN (MD) |
|------|----------|-------------|---------------|-------------|
| | | | | |

30. TUBING RECORD

| SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|------|----------------|-----------------|
| None | | |

31. PERFORATION RECORD (Interval, size and number)

12220-12248 (.41" 112)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---------------------|---|
| 12220-12248 | 83,000 gals medallion frac 3000 fluid with 140,000# 20/40 Interprop |

33. PRODUCTION

| DATE FIRST PRODUCTION | | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) | | | | WELL STATUS (Producing or shut-in) | |
|-----------------------|-----------------|--|-------------------------|----------|------------|------------------------------------|---------------|
| 10-19-95 | | Flowing | | | | Producing | |
| DATE OF TEST | HOURS TESTED | CHOKE SIZE | PROD'N. FOR TEST PERIOD | OIL—BBL. | GAS—MCF. | WATER—BBL. | GAS-OIL RATIO |
| 10-21-95 | 24 | 24/64 | → | 245 | 504 | 84 | 2057 |
| FLOW. TUBING PRESS. | CASING PRESSURE | CALCULATED 24-HOUR RATE | OIL—BBL. | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.) | |
| - | 185 | → | | | | 40.0 | |

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold TEST WITNESSED BY

35. LIST OF ATTACHMENTS

Logs

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records
SIGNED Betty Gildon Betty Gildon TITLE Regulatory Analyst DATE 10/23/95

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

38.

GEOLOGIC MARKERS

| FORMATION | TOP | BOTTOM | DESCRIPTION, CONTENTS, ETC. | NAME | TOP | |
|--------------|-------|--------|-----------------------------|-------------|-------------|------------------|
| | | | | | MEAS. DEPTH | TRUE VERT. DEPTH |
| | 0 | 976 | Surface-Redbeds | | | |
| | 976 | 5037 | Salt & Anhy | | | |
| Delaware | 5037 | 7965 | Lime, Sand | Delaware | 5270 | |
| Delaware and | 7965 | 8700 | Lime, Shale, Sand | Bone Spring | 9304 | |
| one Spring | 8700 | 12370 | Lime, Shale | Wolfcamp | 12370 | |
| Wolfcamp | 12370 | 12540 | Shale | | | |