



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

June 25, 1984

HNG Oil Co.
P.O. Box 2267
Midland, Texas 79702

Attention: Betty Gildon

Administrative Order TX-134

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.

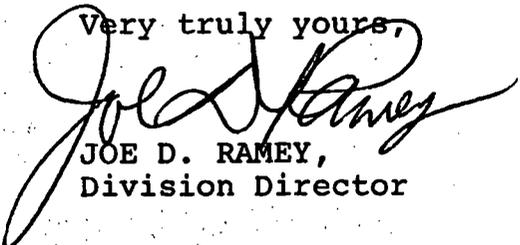
Pursuant to the authority granted me by Rule 107(d)(4), you are hereby authorized to set tubing at 10,278 feet in the following well:

Well Name and Number: Loving 36 State, Well No. 1

Location: Unit N, Section 36, Township 23 South, Range 27 East, Eddy County, New Mexico

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

Very truly yours,


JOE D. RAMEY,
Division Director

JDR/MES/dr

cc: Oil Conservation Division - Artesia

PVZV2005036874



P. O. BOX 2267, MIDLAND, TEXAS 79702 (915) 683-4871

OK

March 6, 1984

Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, NM 87501

Attn: Mr. Dan Nutter

In Re: Loving 36 State, Well No. 1
LG-8597
Sec. 36, T23S, R27E
Eddy County, Texas

Dear Mr. Nutter:

Tubing for the above-named well has been set at 10,278 feet, and casing perforated from 11,409 to 11,456 feet.

This office requests administrative exception to Rule 107d.

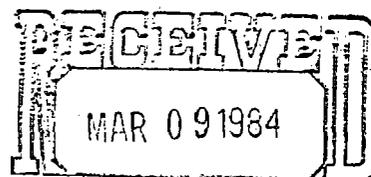
Very truly yours,

HNG OIL COMPANY

Betty Gildon
Regulatory Analyst

bg

enclosures



OIL CONSERVATION DIVISION
SANTA FE



P. O. BOX 2267, MIDLAND, TEXAS 79702 (915) 683-4871

March 6, 1984

Oil Conservation Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

Attn: Mr. Dan Nutter:

In Re: Loving 36 State, Well No. 1
LG-8597
Sec. 36, T23S, R27E
Eddy County, NM

Dear Mr. Nutter:

There are several reasons why we feel that completions utilizing a TIW Polish Bore Receptacle or Insert Seal Assembly is the most advantageous method to complete a well.

- (1) The inside diameter of the seal ssembly is the same as the diameter of the tubing. Therefore, there is no restriction that would reduce the size of Wireline Tools that could be run in the hole.
- (2) The Polish Bore Receptacle has a full bore opening to the liner below it. This allows us to run bridge plugs, retainers, or bits into the liner if necessary.
- (3) The seal assembly - PBR hook-up allows for tubing movement while treating the well. It will withstand higher treating pressures during stimulation than would be possible with most other production packers.
- (4) In most of the wells drilled in this area there are several zones of interest. By having the seal assembly stung into the PBR, the lowest zone can be tested and if non-productive squeezed. The next zone of interest can then be perforated, acidized and tested. All this can be accomplished without pulling the tubing. This can save a considerable amount of time and money.

The Polish Bore Receptacle is run on the top of the liner. The Insert Seal Assembly sets in the tie back sleeve at the top of the liner.

We feel that this Packer system not only saves us a considerable amount of time and money, but also is the most reliable Packer system available. Of the several hundred wells in which HNG Oil Company has utilized this system over the past years, we have had very few failures. If you have any questions, please feel free to give me a call.

Very truly yours,

George M. Hover
George M. Hover
Completion Engineer

GMH/bg

| | |
|------------------------|--|
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| LAND OFFICE | |
| OPERATOR | |

Form C-105
Revised 11-1-83

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease
State Fee

5. State Oil & Gas Lease No.
LG-8597

1a. TYPE OF WELL
OIL WELL GAS WELL DRY OTHER _____

b. TYPE OF COMPLETION
NEW WELL WORK OVER DEEPEN PLUG BACK DIFF. RESVR. OTHER _____

7. Unit Agreement Name

8. Farm or Lease Name
Loving 36 State

9. Well No.
1

10. Field and Pool, or Wildcat
Black River Atoka

2. Name of Operator
HNG OIL COMPANY

3. Address of Operator
P. O. Box 2267, Midland, Texas 79702

4. Location of Well
UNIT LETTER **N** LOCATED **660** FEET FROM THE **south** LINE AND **2070** FEET FROM THE **west** LINE OF SEC. **36** TWP. **23S** RGE. **27E** NMPM

12. County
Eddy

15. Date Spudded **1-9-83** 16. Date T.D. Reached **3-6-83** 17. Date Compl. (Ready to Prod.) **3-1-83** 18. Elevations (DF, RKB, RT, GR, etc.) **3121.4' GR** 19. Elev. Casinghead **3121.4'**

20. Total Depth **12,820** 21. Plug Back T.D. **11,670** 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
11,409' to 11,456' (Atoka)

25. Was Directional Survey Made
No

26. Type Electric and Other Logs Run **CNL/FDC/EPT, Composite of Dual Laterolog, Micro-SFL and Dual Induction, compensated Neutron-Formation Density and Electromagnetic** 27. Was Well Cored
No

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

| CASING SIZE | WEIGHT LB./FT. | DEPTH SET | HOLE SIZE | CEMENTING RECORD | AMOUNT FULLED |
|-------------|----------------|-----------|-----------|--|---------------|
| 13-3/8" | 48# | 535' | 17-1/2" | 300 HLW & 200 C1 C Cemented annulus thru 1" with 400 C1 C | Circulated |
| 9-5/8" | 36# | 2260' | 12-1/4" | 1050 HLW & 450 C1 C | Circulated |
| 7" | 23# | 10500' | 8-1/2" | 850 TLW & 525 C1 H | - |

29. LINER RECORD 30. TUBING RECORD

| SIZE | TOP | BOTTOM | SACKS CEMENT | SCREEN | SIZE | DEPTH SET | PACKER SET |
|--------|---------|---------|--------------|--------|--------|------------|-------------|
| 4-1/2" | 10,243' | 12,818' | 400 | - | 2-3/8" | 10,278 MWL | ISA 10,278' |

31. Perforation Record (Interval, size and number)

12,106 to 12,386 (.35" 15)
12,610 to 12,658 (.35" 12)
11,409 to 11,456 (.25" 18)

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

| DEPTH INTERVAL | AMOUNT AND KIND MATERIAL USED |
|----------------|---|
| 12106 - 12386 | sq. w/75 sxX C1 H |
| 12610 - 12658 | Cmt ret at 12520 sq. w/35 C1 H leaving 25' cement on top. |
| 11409 - 11456 | None |

33. PRODUCTION

Date First Production **3-1-84** Production Method (Flowing, gas lift, pumping - Size and type pump) **Flowing** Well Status (Prod. or Shut-in) **Shut-in**

Date of Test **3-2-84** Hours Tested **24** Choke Size **13/64"** Prod'n. Per Test Period **1** Oil - Bbl. **1** Gas - MCF **2000** Water - Bbl. **1** Gas-Oil Ratio **2000**

Flow Tubing Press. **2750** Casing Pressure **Sealed** Calculated 24-Hour Rate **1** Oil - Bbl. **1** Gas - MCF **2000** Water - Bbl. **1** Oil Gravity - API (Corr.) **48.0**

34. Disposition of Gas (Sold, used for fuel, vented, etc.) **Vented** Test Witnessed By _____

35. List of Attachments
Logs

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

SIGNED Betty Seldon TITLE Regulatory Analyst DATE 3/6/84
Betty Seldon

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

| | | | | |
|--------------------------|--------------------------|-------------|-----------------------------|------------------------|
| T. Anhy _____ | T. Canyon _____ | Cherry 3110 | T. Ojo Alamo _____ | T. Penn. "B" _____ |
| T. Salt _____ | T. Strawn _____ | 11172 | T. Kirtland-Fruitland _____ | T. Penn. "C" _____ |
| B. Salt _____ | T. Atoka _____ | 11384 | T. Pictured Cliffs _____ | T. Penn. "D" _____ |
| T. Yates _____ | T. Miss _____ | | T. Cliff House _____ | T. Leadville _____ |
| T. 7 Rivers _____ | T. Devonian _____ | | T. Menefee _____ | T. Madison _____ |
| T. Queen _____ | T. Silurian _____ | | T. Point Lookout _____ | T. Elbert _____ |
| T. Grayburg _____ | T. Montoya _____ | | T. Mancos _____ | T. McCracken _____ |
| T. San Andres _____ | T. Simpson _____ | | T. Gallup _____ | T. Ignacio Qtzte _____ |
| T. Glorieta _____ | T. McKee _____ | | Base Greenhorn _____ | T. Granite _____ |
| T. Paddock _____ | T. Ellenburger _____ | | T. Dakota _____ | T. _____ |
| T. Blinebry _____ | T. Gr. Wash _____ | | T. Morrison _____ | T. _____ |
| T. Tubb _____ | T. Granite _____ | | T. Todilto _____ | T. _____ |
| T. Drinkard _____ | T. Delaware Sand _____ | 2320 | T. Entrada _____ | T. _____ |
| T. Abo _____ | T. Bone Springs _____ | 5880 | T. Wingate _____ | T. _____ |
| T. Wolfcamp _____ | T. Morrow Lime _____ | 11951 | T. Chinle _____ | T. _____ |
| T. Penn. _____ | T. Morrow Clastics _____ | 12138 | T. Permian _____ | T. _____ |
| T. Cisco (Bough C) _____ | T. _____ | | T. Penn. "A" _____ | T. _____ |

OIL OR GAS SANDS OR ZONES

| | |
|---|----------------------------|
| No. 1, from <u>Morrow 12106</u> to <u>12658</u> | No. 4, from _____ to _____ |
| No. 2, from <u>Atoka 11409</u> to <u>11456</u> | No. 5, from _____ to _____ |
| No. 3, from _____ to _____ | No. 6, from _____ to _____ |

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

| |
|--|
| No. 1, from <u>None</u> to _____ feet. |
| No. 2, from _____ to _____ feet. |
| No. 3, from _____ to _____ feet. |
| No. 4, from _____ to _____ feet. |

FORMATION RECORD (Attach additional sheets if necessary)

| From | To | Thickness in Feet | Formation | From | To | Thickness in Feet | Formation |
|-------|-------|-------------------|--------------------------|------|----|-------------------|-----------|
| 0 | 1007 | 1007 | Anhy | | | | |
| 1007 | 2026 | 1019 | Anhy, Sand | | | | |
| 2026 | 3055 | 1029 | Anhy, Salt | | | | |
| 3055 | 6279 | 3224 | Sand, Shale | | | | |
| 6279 | 7549 | 1270 | Sand, Shale, Lime | | | | |
| 7549 | 8422 | 873 | 100% Lime | | | | |
| 8422 | 9808 | 1386 | Shale, Lime, Sand | | | | |
| 9808 | 11413 | 1605 | Shale, Lime | | | | |
| 11413 | 11448 | 35 | Sand, Shale, Lime | | | | |
| 11448 | 11732 | 284 | Shale, Lime | | | | |
| 11732 | 11824 | 92 | Lime Chert | | | | |
| 11824 | 12080 | 256 | Shale, Lime | | | | |
| 12080 | 12102 | 22 | Lime, Chert | | | | |
| 12102 | 12267 | 165 | Shale, Lime, Chert, Sand | | | | |
| 12267 | 12626 | 359 | Shale, Sand | | | | |
| 12626 | 12816 | 190 | Shale, Sand, lime | | | | |
| 12816 | 12820 | 4 | 100% Shale | | | | |

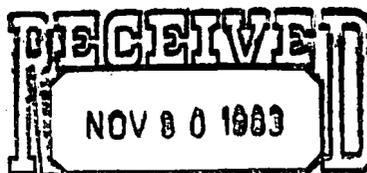


STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
ARTESIA DISTRICT OFFICE
November 28, 1983

TONEY ANAYA
GOVERNOR

P.O. DRAWER DD
ARTESIA, NEW MEXICO 88210
(505) 748-1283



OIL CONSERVATION DIVISION
SANTA FE

HNG Oil Company
P.O. Box 2267
Midland, Texas 79702

Re: Loving 1 State
#2-N-1-24-27
Black River Morrow

Gentlemen:

Regarding your C-104 dated July 11, 1983, on the above captioned well, we have received a Notice of Connect from Transwestern Pipeline Company for the well.

However, we cannot approve your C-104 until you apply for and receive tubing exceptions as per Rule 107, Paragraph d. Sections (2) and (3).

Once the tubing exceptions have been approved, we will approve your C-104 and distribute the approved copies.

Very truly yours,

Leslie A. Clements
Supervisor District II

LAC/pw

XC: Santa Fe