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

March 10, 1984

HNG OIL COMPANY
P.O. Box 2267
Midland, Texas 79702

Attention: George M. Hover

Administrative Order TX-116

Gentlemen:

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 12,975 feet in the following well:

Well Name and Number: Vaca Ridge 4 Fed. Com., Well No. 1

Location: 660' FNL & 1980' FWL, Section 4, T-25-S, R-34-E, NMPM
Lea 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/GPQ/MK

cc: Oil Conservation Division - Hobbs
Well file
Bureau of Land Management - Roswell

pVZV2005031253

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

February 24, 1984

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

Attn: Mr. Dan Nutter

In Re: Vaca Ridge 4 Fed. Com., Well No. 1
Section 4, T25S, R34E,
Lea County, NM
NM 16139

Dear Mr. Nutter:

Tubing for the above-named well has been set at 12,975 feet and casing perforated from 14,942 feet to 15,018 feet.

This office requests administrative exception to Rule 107d.

Very truly yours,

HNG OIL COMPANY

Betty Gildon

Betty Gildon
Regulatory Analyst

bg

enclosures

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

February 24, 1984

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

Attn: Mr. Dan Nutter:

In Re: Vaca Ridge 4 Fed. Com., Well No. 1
Sec. 4, T25S, R34E,
Lea County, NM - NM 16139

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

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

RECEIVED
FEB 28 1984
OIL CONSERVATION DIVISION
SANTA FE

5. LEASE DESIGNATION AND SERIAL NO.: NM 16139

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL XX DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL X WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

8. FARM OR LEASE NAME: Vaca Ridge 4 Fed. Com.

2. NAME OF OPERATOR: HNG OIL COMPANY

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: P. O. Box 2267, Midland, Texas 79702

10. FIELD AND POOL, OR WILDCAT: Pitchfork Ranch (Morrow)

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 660' FNL & 1980' FWL
At top prod. interval reported below
At total depth: Same

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 4, T25S, R34E

Same

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
-	11-16-83	Lea	NM

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
12-17-83	2-11-84	2-20-84	3373' GR	3373'

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
15,160'	15,102'		→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 14,942' - 15,018' (Morrow)

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Comp. Neutron-Form Density and Composite of Dual Laterolog and DUAL Ind

27. WAS WELL CORED: No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	61#	595'	17-1/2"	265 HLC & 250 Cl C	Circulated
9-5/8"	36# & 40#	5228'	12-1/4"	2000 HLC & 475 Cl C	Circulated
7"	26#	13300'	8-3/4"	775 TLW & 400 Cl H	-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
4-1/2"	12,975'	15,160'	425	-

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	12,975'	12,975'

31. PERFORATION RECORD (*Interval, size and number*): 14,942' - 15,018' (.35" 22)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
14942 - 15018	None

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
2-20-84	Flowing	Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
2-20-84	24	22/64"	→	11	4100	0	373

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
4650	Sealed	→				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 foregoing and attached information is complete and correct as determined from all available records

SIGNED Betty Gildon (Betty Gildon) TITLE Regulatory Analyst DATE 2/24/84

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Rustler	0	1350	Surface Rock
	1350	4110	Anhy, Salt
Delaware Mt. Group	4110	6075	Anhy, Lime, Dolomite
Cherry Canyon	6075	8797	100% Sand
Leonard & Bone Spgs.	8797	11551	Lime, Sand, Shale
Wolfcamp	11551	13140	Lime, Chert, Shale, Sand
Strawn & Atoka	13140	13876	100% Shale
Morrow	13876	14210	Lime, Shale, Sand, Chert
	14210	15160	Lime, Shale, Sand

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Rustler	1045	
Delaware Mt. Grp.	5295	
Cherry Canyon	6274	
C. Canyon Mrkr.	6502	
Leonard	9032	
Bone Springs Lime	9186	
1st B. Spgs. Sd.	10200	
Wolfcamp	12300	
Strawn	13606	
Atoka	13746	
Atoka Reef	13814	
Morrow Lime	14136	
Morrow Clastics	14396	

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