



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONY 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-139

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.

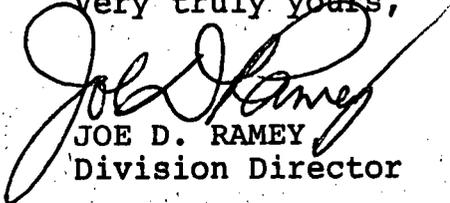
Pursuant to the authority granted me by Rule 107(d) (4), you are hereby authorized to set tubing at 14,621 feet in the following well:

Well Name and Number: Vaca 13 Federal, Well No. 1

Location: Unit C, Sec. 13, T-25S, R-33E, Lea County, NM

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/dp

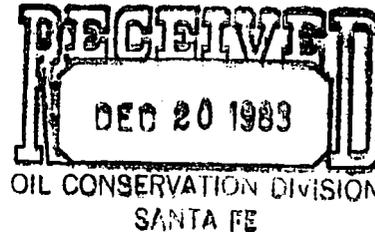
cc: Oil Conservation Division - Hobbs

PVZV2005037259



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

December 14, 1983



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

Attn: Mr. Dan Nutter

In Re: Vaca 13 Federal, Well No. 1
NM 19623
Sec. 13, T25S, R33E
Lea County, NM

Dear Mr. Nutter:

Tubing for the above-named well has been set at 14,621 feet, and casing perforated from 15,264 to 15,270 feet.

This office requests administrative exception to Rule 107d.

Very truly yours,

HNG OIL COMPANY

Betty Gildon
Regulatory Analyst

bg

enclosures

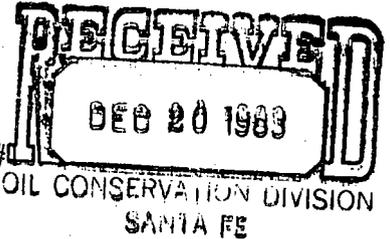


P. O. BOX 2267, MIDLAND, TEXAS 79702 (915) 683-4871

December 14, 1983

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

Re: Vaca 13 Federal, #
NM 19623
Lea County, NM



Attn: Mr. Dan Nutter:

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

**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 *

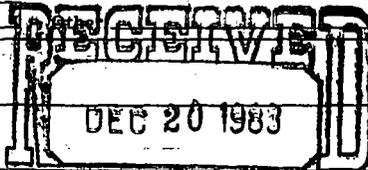
1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

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

2. NAME OF OPERATOR
HNG OIL COMPANY

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

4. LOCATION OF WELL (Report location clearly and in accordance with instructions on reverse side)
At surface 660' FNL & 1880' FWL
At top prod. interval reported below
At total depth Same
Same



14. PERMIT NO. _____ DATE ISSUED 7-15-83
12. COUNTY OR PARISH Lea 13. STATE NM

15. DATE SPUDDED 8-5-83 16. DATE T.D. REACHED 11-10-83 17. DATE COMPL. (Ready to prod.) 11-23-83
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 3360.6' GR 19. ELEV. CASINGHEAD 3360.6'

20. TOTAL DEPTH, MD & TVD 15,948' 21. PLUG, BACK T.D., MD & TVD 15,375'
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 TVD)*
15,264 - 15,270 (Morrow)
25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN BHC Sonic, Repeat Formation Tester, Comp. Neutron Litho Density, Composite of Dual Laterolog and Dual Induction
27. WAS WELL CORED No

30. 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"	48#	624'	17-1/2"	265 Pacesetter Lite & 250	C1 C Circ.
9-5/8"	36# & 40#	5050'	12-1/4"	2000 Lite C & 475 C1 C	Circ.
7"	26#	13500'	8-3/4"	775 Lite & 475 C1 H	-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
5-1/2"	13,185'	14,950'	200 C1 H	-
3-1/2"	14,613'	15,946'	150 C1 H	-

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	14,621'	14,621'

31. PERFORATION RECORD (Interval, size and number)

15,493' - 15,546'	(.25" 15)
15,264' - 15,270'	(.30" 7)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
15493-15546	CIBP at 15400 " 25' cement on to
15264 - 15270	4000 Gals 7-1/2% BC Morrow Flow acid

33. PRODUCTION

DATE FIRST PRODUCTION 12-1-83 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing WELL STATUS (Producing or shut-in) Shut-in

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
12-2-83	24	24/64"	→	0	1400	10	0

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
4100	Sealed	→				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 12/15/83

*(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.
	0	1880	100% Anhy
	1880	3832	Anhy, Salt
	3832	4240	100% Anhy
	4240	4938	Anhy, Dolo
Delaware	4938	5644	100% Anhy
Cherry Canyon,	5644	11400	Sand, Shale, Lime
Leonard, Bone Sp.	11400	11900	100% Shale
	11900	12348	Shale, Lime
Wolfcamp	12348	12792	100% Shale
	12792	13212	Shale, Lime
	13212	13500	100% Shale
	13500	13651	Shale, Lime
	13651	13750	100% Shale
	13750	14124	Shale, Lime
Strawn	14124	14193	100% Shale
Atoka	14193	14337	Shale, Lime, Chert
	14337	14419	100% Shale
Morrow	14419	14952	Shale, Lime
	14952	14955	100% Lime
	14955	14987	Lime, Shale,
	14987	15016	100% Lime
	15016	15465	Lime, Shale, Chert, Sand
	15465	15540	100% Shale
	15540	15671	Lime, Sh, Sd.
	15671	15798	100% Shale
	15798	15902	Shale, Lime, Chert, Sand
	15902	15935	100% Shale
	15935	15948	Shale, Lime

38.

GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Delaware	5172	
Cherry Canyon	6214	
C. Canyon Krkr	6460	
Leonard	9120	
Bone Springs	9274	
Wolfcamp	12460	
Strawn	14130	
Atoka	14272	
Morrow Lime	14700	
Morrow Clastics	14945	