STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

October 24, 1986

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

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

Attention: Betty Gildon

Administrative Order TX-167

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 13,071 feet in the following well:

Well Name and Number: Diamond 5 Federal, Well No. 3

Location: Unit C, Sec. 5, 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,

R. L. STAMETS,
Division Director

RLS/MES/h

cc: Oil Conservation Division - Hobbs

pVZV2005137171

hng Oil Company
P.O. BOX 2267, MIDLAND, TEXAS 79702 (915) 686-3600

October 2, 1986

Oil Conservation Division
P. O. Box 2088
State Land Office Bldg.
Santa Fe, NM 87501

Attn: Mr. R. L. Stamets
Division Director

In Re: Diamond 5 Federal, Well No. 3
660' FNL & 2230' FWL of Section 5, T25S, R34E (c)
Lea County, New Mexico
NM 14497

Dear Mr. Stamets:

Tubing for the above-named well has been set at 13,071 feet, and casing perforated from 13,961 to 13,969 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) 686-3600

October 2, 1986

Oil Conservation Division
P. O. Box 2088
State Land Office Bldg.
Santa Fe, New Mexico 87501

Attn: Mr. R. L. Stamets
Division Director

Re: Diamond 5 Federal, Well No. 3

Dear Mr. Stamets:

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

1. The inside diameter of the seal assembly 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
Petroleum Engineer III

GMH/bg

Form 3160-4
(November 1983)
(formerly 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NM 14497

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

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

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

8. FARM OR LEASE NAME: Diamond 5 Federal

2. NAME OF OPERATOR: HNG OIL COMPANY

9. WELL NO.: 3

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

10. FIELD AND POOL, OR WILDCAT: Pitchfork Ranch /Atoka/

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 660' FNL & 2230' FWL of Sec. 5
At top prod. interval reported below: Same
At total depth: Same

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 5, T25S, R34E

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
	7/28/86	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
8/7/86	9/16/86	9/23/86	3412.4' GR	3412.4'

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
14,100'	14,029'		→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 13961 - 13969 (Atoka)

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Comp. Neutron-Litho Density

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
11-3/4"	42#	637'	15-1/4"	250 DLW & 165 C1 C	Circulated
8-5/8"	28 & 24#	5170'	10-5/8"	1350 DLW & 275 C1 C	Circulated
5-1/2"	17 & 20#	13350'	7-7/8"	950 DLW & 450 C1 H	-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
3-1/2"	13024'	14100'	110 C1 H	-

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-7/8"	13071	PBR 13071

31. PERFORATION RECORD (*Interval, size and number*): 13961 - 13969 (.41" 16) 2 spf

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
13961-13969	250 gal spot acid

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
9/22/86	Flowing	SI

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9/23/86	24	12/64"		48	2300	0	47,917

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
4000	sealed					49.0

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*): vented

TEST WITNESSED BY:

35. LIST OF ATTACHMENTS: log

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 10/2/86

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

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.

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	637	Red Beds
	637	2430	Anhy
Delaware	2430	5500	Salt, Anhy
Delaware, Cherry Can	5500	6545	Anhy, Sand
Cherry Canyon	6545	8050	Lime, Sand
CC & Bone Springs	8050	9985	Lime, Shale, Sand
Bone Spgs, Wlfcp.	9985	13010	Lime, Shale
Wolfcamp	13010	13537	Shale
Wlfcp,Strawn,Atoka	13537	13825	Lime, Shale
Atoka	13825	13962	Lime, Shale, Chert
Atoka & Morrow	13962	14100	Lime, Shale

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Delaware	5254	
Cherry Canyon	6244	
Bone Springs	9207	
Wolfcamp	12320	
Strawn	13670	
Atoka	13818	
Morrow Lime	14200	
Morrow Clastics	14464	

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

TONEY ANAYA
GOVERNOR

RECEIVED
OCT - 9 1986
OIL CONSERVATION DIVISION
SANTA FE

October 8, 1986

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:
MC _____
DHC _____
NSL _____
NSP _____
SWD _____
WFX _____
PMX _____

TX X

Gentlemen:

I have examined the application for the:

HNG Oil Company | Diamond 5 Federal #3-F | 5-25-34
Operator | Lease & Well No. | Unit | S-T-R

and my recommendations are as follows:

OK -- Jerry Sexton

Yours very truly,

Jerry Sexton
Supervisor, District 1

/mc