

ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
P. O. BOX 2088
Santa Fe, New Mexico 87501

July 5, 1983

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

Attention: Betty A. Gildon, Regulatory Analyst

Administrative Order TX-109

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.

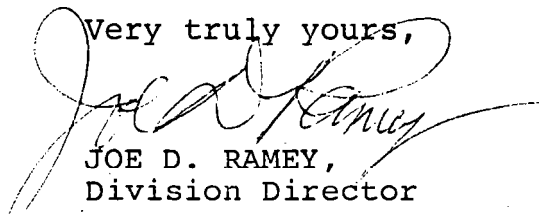
Pursuant to the authority granted me by Rule 107(d)(4), you are hereby authorized to set tubing at 13,013 feet in the following well:

Well Name and Number: Diamond 5 Federal Well No. 1

Location: NE/4 NW/4, Sec. 5, T-25-S, R-34-E, NMPM,
Lea County

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/RLS/h

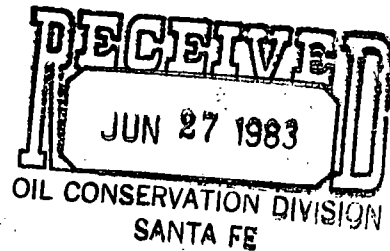
cc: Oil Conservation Division - Hobbs
Well File
Minerals Management Service - Roswell

PVZV2005029811



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

June 16, 1983



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

Attn: Mr. Joe D. Ramey
Secretary Director

In Re: Diamond 5 Federal, Well No. 1, located 660' FNL
& 1980' FWL, Center (NE NW) Sec. 5, T25S, R34E,
Lea County, NM

Dear Mr. Ramey:

Please find enclosed copy of a letter to Mr. Dan Nutter dated
June 16, 1983, requesting an exception to the tubing-setting
requirements contained in Division Rule 107(d).

To avoid delay in placing this well on stream, temporary
approval of the above-named exception is requested.

Your early attention is appreciated.

Very truly yours,

HNG OIL COMPANY

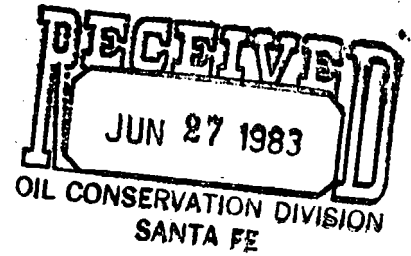
Betty A. Gildon
Regulatory Clerk

bg

enclosures



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



June 16, 1983

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

Attn: Mr. Dan Nutter

In Re: Diamond 5 Federal, Well No. 1 located 660' FNL
& 1980' FWL, Center (NE NW) Sec. 5, T25S, R34E,
Lea County, NM.

Dear Mr. Nutter:

Tubing for the above-named well has been set at 13,013 feet,
and casing perforated from 15,051 to 15,131 feet.

This office request administrative exception to Rule 107d.

Very truly yours,

HNG OIL COMPANY

A handwritten signature in cursive script that reads "Betty Gildon".

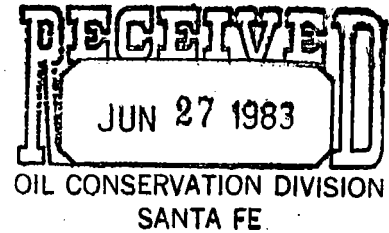
Betty Gildon
Regulatory Analyst

bg

enclosures



P. O. BOX 2267, MIDLAND, TEXAS 79702 (915) 683-4871
June 16, 1983



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

Attn: Mr. Dan Nutter:

In Re: Diamond 5 Federal, Well No. 1
660' FNL & 1980' FWL
Center (NE NW) Sec. 5, T25S, R34E
Lea 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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL <input type="checkbox"/>	GAS WELL <input checked="" type="checkbox"/>	DRY <input type="checkbox"/>	Other <input type="checkbox"/>		
b. TYPE OF COMPLETION:		NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DIFF. RESVR. <input type="checkbox"/>	Other <input type="checkbox"/>
2. NAME OF OPERATOR HNG OIL COMPANY						5. LEASE DESIGNATION AND SERIAL NO. NM 14497	
3. ADDRESS OF OPERATOR Box 2267, Midland, Texas 79702						6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 660' FNL & 1980' FWL - Center (NE NW) Sec. 5: At top prod. interval reported below Same At total depth Same						7. UNIT AGREEMENT NAME	
14. PERMIT NO. DATE ISSUED 2-9-83						8. FARM OR LEASE NAME Diamond 5 Federal	
15. DATE SPUDDED 3-26-83						9. WELL NO. 1	
16. DATE T.D. REACHED 6-4-83						10. FIELD AND POOL, OR WILDCAT Pitchfork Ranch Morrow	
17. DATE COMPL. (Ready to prod.) 6-13-83						11. SEC. T. R. M., OR BLOCK AND SURVEY OR AREA Sec. 5, T25S, R34E	
18. ELEVATIONS (DF, REB, RT, GR, ETC.)* 3410.8' GR						12. COUNTY OR PARISH Lea	
19. ELEV. CASINGHEAD 3410.8'						13. STATE NM	
20. TOTAL DEPTH, MD & TVD 15,300'						21. PLUG, BACK T.D., MD & TVD 15,250'	
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)* 15,051' - 15,131' (Morrow)						25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN Compensated Neutron-Litho Density, Composite of Dual Laterolog and Dual						27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well) / Induction							
CASINO SIZE		WEIGHT, LB./FT.		DEPTH SET (MD)		HOLE SIZE	
13-3/8"		48#		600'		17-1/2"	
9-5/8"		36#		5150'		12-1/4"	
7"		26#		13385'		8-3/4"	
CEMENTING RECORD		AMOUNT PULLED					
250 Pacesetter Lite C & 250		0 C1 C Circ.					
350 Pacesetter Lite & 475		C1 C Circ.					
750 Pacesetter Lite & 325		C1 H					
29. LINER RECORD							
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*	
4-1/2"		13012'		15300'		600 C1 H	
SCREEN (MD)		TUBING RECORD					
-		SIZE		DEPTH SET (MD)		PACKER SET (MD)	
-		2-7/8"		13013'		MWL SA at 13013'	
31. PERFORATION RECORD (Interval, size and number)							
15051		15131		(44" 18)			
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.							
DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED					
15051-15131		3500 gals 7.5% Morflow BC Acid					
33. PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
6-13-83		Flowing				Shut in	
DATE OF TEST		HOURS TESTED		CHOKE SIZE		PROD'N. FOR TEST PERIOD	
6-14-83		24		Automatic		0	
OIL—BBL.		GAS—MCF.		WATER—BBL.		GAS-OIL RATIO	
0		3300		7		0	
FLOW. TUBING PRESS.		CASING PRESSURE		CALCULATED 24-HOUR RATE		OIL GRAVITY-API (CORR.)	
4550		Sealed		-		-	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)						TEST WITNESSED BY	
Vented							
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		TITLE				DATE	
Betty G. Gordon		Regulatory Analyst				6/22/83	

*(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	600	Redbeds, Anhy
	600	2845	100% Anhy
	2845	4020	Anhy, Salt
	4020	4370	100% Anhy
	4370	5055	Anhy, Dolo, Lime
Delaware	5055	5300	100% Anhy
Delaware & Cherry Can	5300	6410	Lime, Anhy
	6410	7220	100% Sand
	7220	8520	Shale, Lime, Sand
	8520	8820	100% Sand
Bone Springs	8820	9780	Shale, Sand, Lime
	9780	11045	Lime, Shale
Wolfcamp	11045	13335	Lime, Shale, Sand
	13335	13609	100% Shale
Strawn	13609	13825	Shale, Lime
Atoka	13825	14200	Lime, Chert, Shale
Morrow Lime	14200	14240	Shale, Lime, Coal
	14240	14345	Shale, Lime, Chert
Morrow Clastics	14345	14870	Lime, Sand, Chert, Shale
	14870	15052	Sand, Shale, Lime
	15052	15096	100% Shale
	15096	15145	Sand, Shale
	15145	15181	100% Sand
	15181	15255	Sand, Shale
	15255	15300	100% Shale

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Delaware	5264	
Cherry Canyon	6254	
Bone Springs	9217	
Wolfcamp	12330	
Strawn	13680	
Atoka	13828	
Morrow Lime	14210	
Morrow Clastics	14474	