

N. M. GEOLOGICAL SURVEY
P. O. BOX 1000
HOBBS, NEW MEXICO 88240
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☐ DEEPEN ☐ PLUG BACK ☒

b. TYPE OF WELL
OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
Grace Petroleum Corporation

3. ADDRESS OF OPERATOR
P. O. Drawer 2358, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 660' FSL & 760' FEL
At proposed prod. zone Atoka 1194' FSL & 1659' FWL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
1-1/2 miles Southeast of Halfway, New Mexico

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. Surface 660' BH 1194'
(Also to nearest drlg. unit line, if any)

16. NO. OF ACRES IN LEASE
480

17. NO. OF ACRES ASSIGNED TO THIS WELL
320

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED OR APPLIED FOR, ON THIS LEASE, FT. None - This formation P.B. 13960'

19. PROPOSED DEPTH
P.B. 13960'

20. ROTARY OR CABLE TOOLS
NA

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3587' GR, 3606' KB

22. APPROX. DATE WORK WILL START*
1-6-86

5. LEASE DESIGNATION AND SERIAL NO.
*NM 15907

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
-

7. UNIT AGREEMENT NAME
-

8. FARM OR LEASE NAME
Felmont Federal *Com*

9. WELL NO.
2

10. FIELD AND POOL, OR WILDCAT
Undesignated (Atoka)

11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA
Sec. 25, T-20-S, R-32-E

12. COUNTY OR PARISH
Lea

13. STATE
New Mexico

23. Actual ~~PROPOSED~~ CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20"	94#	1208'	2210 sx. (Circ.)
17 1/2"	13-3/8"	61#	2776'	1730 sx. Calc. Surface
12 3/4"	9-5/8"	40#	5210'	1st stage 825 sx, 2nd stage 975 sx circ
8 1/2"	5-1/2"	17#	14387'	1350 sx.

*Surface location is on Fee acreage at location shown above.

It is proposed to P.B. from the uneconomical Morrow zone and complete in the Atoka as follows:

1. MIRUPU, load w/9.5# BW (fluid in hole). Release J latch seal from Pkr. @ 13864'.
2. Remove Christmas tree & install 5000 PSIG Hydraulic BOP w/controls. Pressure test to 5000 PSIG. Circulate hole w/10# BW w/2% KCL & POH. Retrieve Pkr.
3. Set C.I.B.P. on W.L. @ 13,980'. Dump 20-35' of cement on top of plug.
4. Perforate 5 1/2" casing in the Atoka from 13360' to 13370' w/1 JSPF (11 holes).
5. Spot 250 gals. of inhibited acetic acid over perfs.
6. Set Otis 5 1/2" Permatrieve Pkr. w/expendable plug @ approx. 13,266' on W.L.
7. Run 2-7/8" tubing w/seal assembly & QSTD w/Nipple; test in hole to 9000 PSIG.
8. Remove BOP, install Christmas tree and test to 5000 PSIG. Pressure annulus to 1500 PSIG.
9. Displace acid into perfs. Swab well & evaluate.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED *Buddy Knight* TITLE District Operations Manager DATE 12-6-85

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY TITLE DATE 12-13-85

CONDITIONS OF APPROVAL, IF ANY:

Subject to
Like Approval
by State

NSL 2191 Atoka 42 Sec 25

*See Instructions On Reverse Side

RECEIVED
DEC 16 1985
O.C.D.
HOBBS OFFICE