

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐
NOV 17 1976

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

2. NAME OF OPERATOR
Hanagan Petroleum Corporation, ARTESIA, OFFICE

3. ADDRESS OF OPERATOR
P. O. Box 1737, Roswell, New Mexico 83201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 510' FNL & 2180' FEL
At proposed prod. zone 510' FNL & 2180' FEL

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 510'

16. NO. OF ACRES IN LEASE 720

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

19. PROPOSED DEPTH 11,400'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3416 GR Surface Formation: Tansil (Perm.)

22. APPROX. DATE WORK WILL START* 11/25/76

PROPOSED CASING AND CEMENTING PROGRAM					Est. 60 days operations
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	
20"	New 16" H-40	65# @ 250' cmt.	w/250 sx Class "C" 2% CaCl - circ.		
14 3/4 + 12 1/4"	New 9 5/8" K55 36#	@ 2400' cmt.	w/750 sx Howco	light, flocel, gilson, 2% CaCl +	
8 1/2"	New 5 1/2" N80	17 & 20# @ 11,400'	w/450 sx Class "H" w/halide 9 & KCL	150 sx Class "C" neat 2% CaCl, cir	

Est. Tops:

Capitan Rf. 650
Base Rf. 2150
Bone Springs 4550
Wolfcamp 8300
Canyon 9800
Strawn 10300
Atoka 10750
Morrow 11100
B/Morrow 11400

Use 10"-1500 Series BOP & Hydrill (see attachment), test pipe rams & hydrill daily, blind rams on trips. Install pit leveller, flow sensor, & gas separator (also yellow jacket) @ top Wolfcamp @ 8300'. Drill w/fresh wtr. & native mud from surf. to 8750', then mud-up w/fresh wtr. low solid mud to T.D. (8.8 to 9.5# wt. sufficient to control anticipated bottomhole press.). No abnormal high pressures or hydrogen sulphide gas anticipated. Possible productive zones drillstem tested, no coring, & electric logs run at total depth. Possible shallow wtr. 350' to 500', reef wtr. 650' to possibly base reef @ 2150'. Anticipated gas zone in Morrow 11100' to 11400', no other minerals expected.

Gas not dedicated

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 Hugh C. Hanagan TITLE Vice-President DATE October 21, 1976

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY
CONDITIONS 1976 NOVAL IF ANY:

TITLE
TERMINATIONS
WITHIN 3 MONTHS.

DATE

EXPIRES FEB 15 1977
DECLARED WATER BASIN
16"
9 1/2"
NOTIFY USER IN SUFFICIENT TIME TO
WITNESS CEMENTING THE 970' CASING.
See Instructions On Reverse Side
C. CASING MUST BE CIRCULATED