

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 ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒OTHER ☐SINGLE
ZONE ☐MULTI
ZONE ☒

2. NAME OF OPERATOR

Hanagan Petroleum Corporation ✓

3. ADDRESS OF OPERATOR

P.O. Box 1737, Roswell, New Mexico 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements*)

At surface

660' FNL & 1980' FWL

At proposed prod. zone

660' FNL & 1980' FWL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

3/4 mile West Carlsbad, N.M.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.3/4 mile
P&A

16. NO. OF ACRES ASSIGNED

720

19. PROPOSED DEPTH

11,400'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary (MORANCO DRLG.)

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3338 GR

Surface Formation: Tansill (Perm.)

22. APPROX. DATE WORK WILL START*

12/10/78

23.

PROPOSED CASING AND CEMENTING PROGRAM

Est. 60 days operations

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	13-3/8 new	48# H-40	#250' w/100 sx.	Howco light + 150 sx. Class "C" cir
12 1/4 & 11	8-5/8 new	24 & 32# K-55	2400' w/750 sx.	" " " 150 " " " " cir
7-7/8	4 1/2 new	11.6 & 13.5# N-80	11400' w/450	sx. Class "H"

Est. Fm. Tops:

Capitan Rf. 600
Base Rf. 2175
B.S. Line 4625
3rd BS Sd. 7925
Wolfcamp 8300
Strawn Lm. 9800
Atoka 10275
Morrow 10750
B/Morrow 11150

*On 13-3/8" conductor, plan drill 50' below base of shallow loss circ. zone or to 250' if no loss circ. encountered.
Plan use 10"-1500 Series BOP & Hydrill, test pipe rams & hydrill daily, blind rams on trip. Will install pit leveller, flow sensor, drlg. head, adj. choke (also yellow jacket) @ top Wolfcamp est. @ 8300'. Drill w/fresh wtr. & native mud surf. to 8500', KCL wtr. (2 to 3 % KCL), 9.0 to 9.3 # wt., 20 water loss to 10600', 5% KCL, 9.3 to 9.6 wt., 10 or less water loss 10600' to TD, sufficient weight control BHP. No abnormal pressures or hydrogen sulfide gas anticipated. Possible productive zones tested, no coring, electric logs run to TD. Wtr. anticipated in Capitan Rf., gas in Morrow, no other minerals expected.

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 E. Hanagan

TITLE

Vice President

DATE

10/23/78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

11-20-78

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

See attached (FIGURE 1) for BOP Equipment description

*See Instructions On Reverse Side