Form 9-331 C
(May 1963)

N. M. O. C. C. COPY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-21095

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Perry R. Bass

3. ADDRESS OF OPERATOR: P. O. Box 1178, Monahans, Texas 79756

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FN& 1980' FE lines of Sec 10, Unit letter G
At proposed prod. zone: same

5. LEASE DESIGNATION AND SERIAL NO.: LC 061616-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Poker Lake

8. FARM OR LEASE NAME: Poker Lake Unit

9. WELL NO.: 42

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 10, T-25-S, R-30-E

12. COUNTY OR PARISH: Eddy

13. STATE: N. Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 25 miles SE of Carlsbad, N. Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1980'

16. NO. OF ACRES IN LEASE: 2480.84

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.: 4½ miles NW

19. PROPOSED DEPTH: 16000

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): est 3305 GL 3336 KB

22. APPROX. DATE WORK WILL START*: Immediately after approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26	20	94	570	suff. to fill to surface
17½	13 3/8	48-54.5-61-68	4000	Suff. to fill to surface
12¼	9 5/8	40-43.5	11100	Suff. to fill to surface
8½	* 7 5/8	39	10900-14500	Suff. to circ liner annulus
6½	* 5"	18	14200-16000	Suff. to circ liner annulus

Note: See attached drilling prognosis for complete details

* liner

RECEIVED
FEB 4 1974
U. S. G. C.
ARTESIA, OFFICE

RECEIVED
JAN 29 1974
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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 [signature] TITLE Division Waterflood Eng. DATE January 24, 1974

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE FEB 1 1974

APPROVED BY [signature] TITLE DISTRICT ENGINEER DATE _____

CONDITIONS OF APPROVAL, IF ANY:

SEE ATTACHED DEEP WELL CONDITIONS
6-27-73

*See Instructions On Reverse Side

NE[illegible] NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

PERRY R. BASS			POKER LAKE UNIT	42
G	10	25 SOUTH	30 EAST	EDDY
1980 feet from the	NORTH	1980 feet from the	EAST	
Ground Level Elev. 3303.1				

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

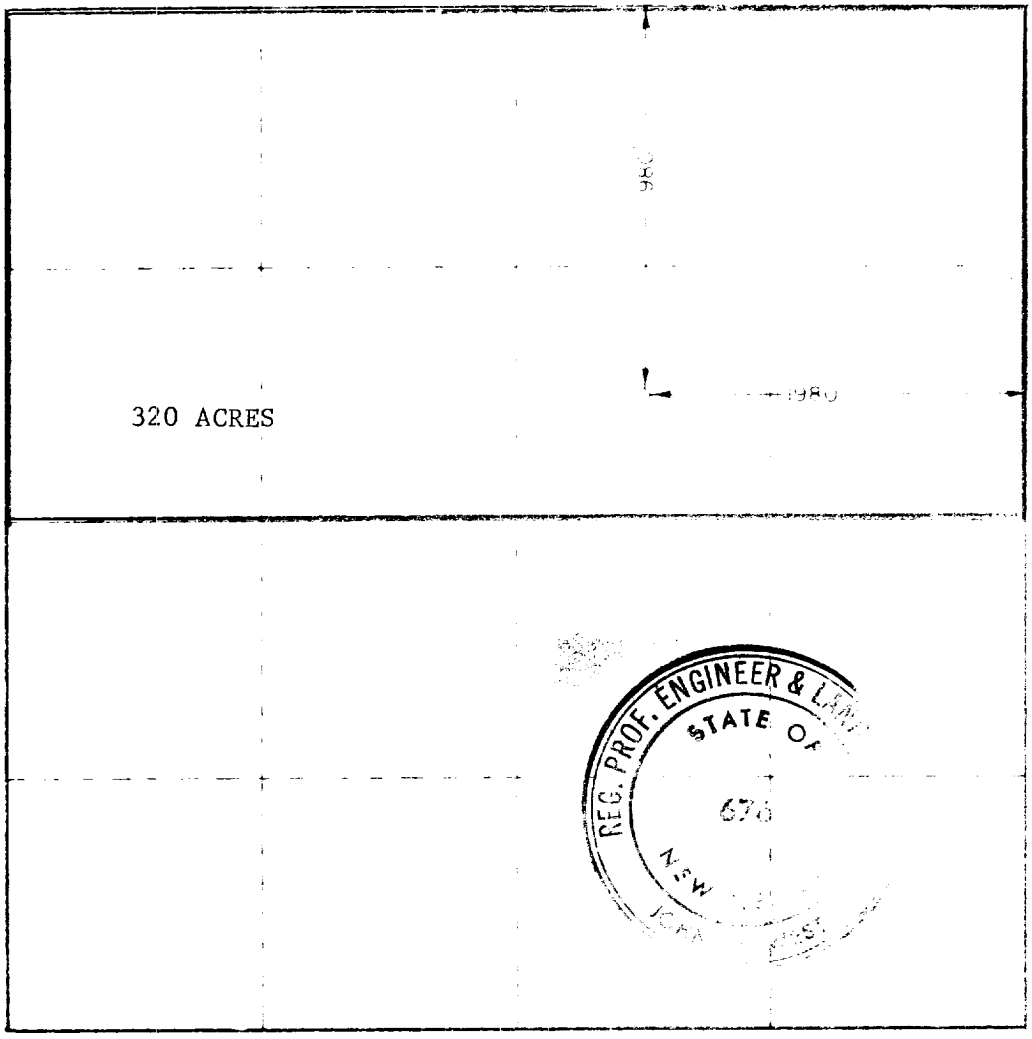
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization agreement or otherwise? [illegible]

Yes [illegible] No [illegible] If answer is "yes" type of consolidation [illegible]

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) [illegible]

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Jon R. Cook

Name

EXPLOITATION ENGINEER

Position

BASS ENTERPRISES PRODUCTION CO.

Company

1-29-74

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

RECEIVED
JAN 29 1974
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Date Surveyed

January 21, 1974

Registered Professional Engineer and/or Land Surveyor

Certificate No. 676

REG. PROF. ENGINEER & LAND SURVEYOR
STATE OF NEW MEXICO
676

330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500

PROPOSED DRILLING AND COMPLETION PROCEDURE

PERRY R. BASS

Poker Lake Unit #42

Location: 1980' FN & EL of Sec 10, T25S, R30E, Eddy County, New Mexico.

Elevation: Est 3305 GL

Proposed Total Depth: 16000' (maximum anticipated)

Drilling Method: Rotary tools

Casing Program:

General Specifications for Cementing Casing:

(1) Run casing at the slowest practical rate.
(2) Support about 10% of the string weight by resting it against the bottom of the hole while cementing, to minimize the chances of parting the string by pressure surges.
(3) Circulate the volume of the casing before cementing the string.
(4) Check the cement pumping time in the laboratory several days before the job, using water that will actually be used to mix the cement.
(5) Pump at least 20 bbls of water ahead of the cement.
(6) Leave the tub full of cement at the end of the mixing operation, to eliminate having water under the top wiper plug.
(7) When the plug is bumped, release all pressure to zero.

(A) Conductor Casing:
30" OD conductor casing is to be set in 36" hole approximately 20' below ground level, and cemented with ready mix concrete. This casing is to be set before moving in the rig and extended upward to the height desired after moving in the rig.

(B) Surface Casing:
20" OD 94 lb per ft., H-40 casing is to be set in 26" hole approximately 570' below ground level. Casing setting is anticipated as follows:

PERRY R. BASS
POKER LAKE UNIT #41
PROPOSED DRILLING AND COMPLETION PROCEDURE

Casing Program: (cont'd)

(B) Surface Casing: (cont'd)

No. Jts.	Description	Thds Off Length	From	To
---	Rotary correction	34	0	34
---	20" OD 94#/ft H-40 ST&C 8rd thd csg	532	34 .	566
---	20" OD baffle collar with plugging & sealing valve for cementing thru drill pipe	2	566	568
---	20" OD float shoe	2	568	570

The shoe must have lateral exits for cement, as it is intended that part of the weight of the casing string be rested against the bottom of the hole. API modified thread lubricant is to be used on the threads. The bottom three joints are to be welded, and sealed with HowcoWeld "A" . Casing is to be cemented with an estimated 650 sx Halliburton light (mixed at 12.5 PPG, yield factor 1.80 cf/sk, 9.9 gallons water per sack) followed by 200 sx class "C" with 2% $CaCl_2$ (mixed at 14.8 PPG, yield factor 1.34 cf/sk.,6.3 gallons water per sk.). So that the volume of cement required may be supplied within fairly close limits, it is recommended that this string of casing be cemented through drill pipe that will be in service at the time the 26" hole is made. By inserting a "stringer" into the baffle collar, the cement can be placed through the drill pipe, and enough cement can be mixed to bring clean Halliburton light returns to the surface before starting to mix the class "C" cement. In some instances, the cement level in the annulus has fallen after the cememt has been placed, and the annulus must then be filled by running 1" tubing into the annulus to the cement top, and cementing to the surface. WOC time 24 hrs. Pressure test to 600 psig for 30 minutes. A caliper survey is to be run to help determine the correct cement volume. After WOC time, the casing is to be cut off at the proper level for the well head plan and the levelling plate is to be installed, welded, and the weld is to be tested. Next, the slip-on type housing is to be installed and simultaneously welded on the inside and outside by two welders. After this welding has been tested, the collar is to be filled with ready-mix concrete to the base of the levelling plate

PERRY R. BASS
POKER LAKE UNIT #42
PROPOSED DRILLING AND COMPLETION PROCEDURE

Casing Program: (cont'd)

(C) Salt Protection Casing:
13 3/8" OD casing is to be set in 17½" hole at approximately 3800'. Casing setting is anticipated as follows:

Description	Thds Off Length	From	To
Rotary correction	33	0	33
13 3/8" OD 54.5#/ft K-55 ST&C csg	717	33	750
13 3/8" OD 48#/ft H-40 ST&C csg	350	750	1100
13 3/8" OD 54.5#/ft K-55 ST&C csg	700	1100	1800
13 3/8" OD 61#/ft K-55 ST&C csg	700	1800	2500
13 3/8" OD 68#/ft K-55 ST&C csg	1460	2500	3960
Float collar	2	3960	3962
13 3/8" OD 68#/ft K-55 ST&C csg	36	3962	3998
Float shoe	2	3998	4000

The casing shoe must be equipped with lateral exits for cement, as it is intended that part of the weight of the casing string be rested on bottom. API modified thread lubricant is to be used on the threads. The couplings on the bottom three joints are to be welded. A caliper survey is to be run to assist in calculating cement volumes. If a loss of circulation occurs while drilling below the 20" OD casing to the 13 3/8" OD casing point; cementing will be done in two stages with DV tool at 1750'.
First: 13 3/8" OD casing is to be cemented with an estimated 2000 sx Halliburton light with 18# salt/sx and ¼# flocele per sx (mixed at 12.6 PPG, yield factor 2.1 cf/sx, 11.0 gal water per sack) followed by 200 sx class "C" (mixed at 14.8 PPG, yield factor 1.32 cf/sx, 6.3 gals water per sx).
Second: 2100 sx Halliburton light containing ¼# flocele/sx followed by 200 sx class "C". Cement is to be circulated to the surface. A WOC time of 24 hrs will be observed. Pressure test to 1000 psi for 30 min.

(D) Protection Casing:
9 5/8" OD casing is to be set in 12¼" hole at approximately 11,100' (Upper Wolfcamp). Casing setting is anticipated as follows:

PERRY R. BASS
POKER LAKE UNIT #42
PROPOSED DRILLING AND COMPLETION PROCEDURE

Casing Program: (cont'd)

(D) Protection Casing: (cont'd)

No. Jts.	Description	Thds Off Length	From	To
---	Rotary correction	27	0	27
7	9 5/8" OD 40#/ft N-80 buttress	263	27	290
88	9 5/8" OD 40#/ft N-80 LT&C	3510	290	3800
---	Halliburton DV tool	3	3800	3803
30	9 5/8" OD 40#/ft N-80 LT&C	1190	3803	4993
38	9 5/8" OD 43.5#/ft N-80 LT&C	1507	4993	6500
---	Halliburton DV tool	3	6500	6503
5	9 5/8" OD 43.5#/ft N-80 LT&C	193	6503	6696
107	9 5/8" OD 43.5#/ft S-95 LT&C	4360	6696	11056
---	Halliburton float collar	2	11056	11058
1	9 5/8" OD 43.5#/ft S-95 LT&C	40	11058	11098
---	Halliburton float shoe	2	11098	11100

All 9 5/8" OD casing is to be inspected using a combination mechanical-optical and magnetic particle inspection-full length.

The bottom three joints are to be sealed with HOWCO-weld, welded and modified thread lubricant is to be used on the casing threads.

Prior to running the 9 5/8" OD casing, a caliper survey is to be made to determine the actual cement volumes required. Cementing will be done in three stages as follows:

First Stage: Est 1850 sx Halliburton light with 0.4% HR-4 (mixed at 12.3 PPG, yield factor 1.91 cf/sx, 10.7 gals water/sx) followed by 500 sx class "H" with 0.75% CFR-2 and 3# Kcl/sx (mixed at 15.7 PPG, yield factor 1.23 cf/sx, 5.6 gals water/sx). WOC 12 hrs.

Second Stage: Est 1750 sx Halliburton light with 5# gilsonite and ¼# flocele/sx (mixed at 12.3 PPG, yield factor 1.92 cf/sx, 10.2 gals water/sx) followed by 100 sx class "H" (mixed at 15.6 PPG, yield factor 1.18 cf/sx, 5.2 gals water/sx). WOC 12 hrs.

RECEIVED
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

PERRY R. BASS
POKER LAKE UNIT #42
PROPOSED DRILLING AND COMPLETION PROCEDURE

Casing Program: (cont'd)

(D) Protection Casing: (cont'd)

Third Stage: Est 1250 sx Trinity "Lite-Wate" mixed at 12.4 PPG, yield factor 1.57 cf/sx, 8.6 gals water/sx) followed by 100 sx class "H" (mixed at 15.6 PPG, yield factor 1.18 cf/sx, 5.2 gals water/sx). WOC 24 hrs after last stage cementing is completed.

Prior to and after drilling each DV tool the casing is to be pressure tested to 4000 psi. Prior to drilling the float shoe the casing is to be tested to 4000 psi for 30 min.

(E) 7 5/8" Protection Liner:
The 7 5/8" liner is to be set in 8½" hole at the Top of the Morrow, at an anticipated depth of 14100', the top of the liner is to be hung well above the bottom of the 9 5/8" casing shoe. Liner setting is anticipated as follows:

No Jts.	Description	Thds Off Length	From	To
---	Distance KDB to liner top	10900	0	10900
---	Burns double slip hanger 9 5/8" X 7 5/8" OD with cement groove	4	10900	10904
81	7 5/8" OD 39#/ft J&L 95 Bradford FL-4S thread	3552	10904	14456
---	Float collar (Burns)	2	14456	14458
1	7 5/8" OD 39#/ft J&L 95 Bradford FL-4S thread	40	14458	14498
---	Float shoe (whirler type)(Burns)	2	14498	14500

Prior to running the liner, a caliper survey is to be run to determine the cement volume. After running the liner the hole is to be circulated and conditioned; then the liner is to be hung. The liner is to be cemented with 480 sx (est) of class "H" 1½% CFR-2 and 5# Kcl/sx (mixed at 15.9 PPG, yield factor 1.23 cf/sx, 5.6 gals water/sx). After cementing the liner, the liner setting tools are to be pulled without any attempt to reverse out excess cement on top of the liner. No centralizers are to be run. The bottom two joints are to be sealed with HOWCO-weld. API modified thread dope is to be used.

PERRY R. BASS
POKER LAKE UNIT #42
PROPOSED DRILLING AND COMPLETION PROCEDURE

Casing Program: (cont'd)

(E) 7 5/8" Protection Liner: (cont'd)
The 7 5/8" liner is to be inspected using a mechanical optical and magnetic particle inspection-full length plus rabbited to assure passage of a 6½" bit. A WOC time of 24 hrs will be observed. Prior to drilling the liner shoe, the liner is to be tested to 4000 psi.

(F) 5" Protection Liner:
The 5" liner is to be set at TD (est at 16000') in 6½" hole. The top of the liner is to be hung well above the bottom of the 7 5/8" liner shoe. Liner setting is anticipated as follows:

No. Jts.	Description	Thds Off Length	From	To
---	Distance KDB to liner top	14300	0	14300
---		8	14300	14308
45	5" OD 18#/ft N-80 XL csg	1648	14308	15956
---	Float collar	2	15956	15958
1	5" OD 18#/ft N-80 XL csg	40	15958	15998
---	Float shoe (whirler type)	2	15998	16000

Prior to running the liner a caliper survey is to be run to determine the cement volume. After running the liner, the hole is to be circulated and conditioned then the liner is to be hung. The liner is to be cemented with 250 sx (est) class "H",20% SSA-C, 20% SSA-1, 1% HALAD-14 (mixed at 15.7 PPG, yield factor 1.61 cf/sx, 6.7 gals water/sx). After cementing the liner the liner setting tools are to be pulled without any attempt to reverse out excess cement on top of the liner. No centralizers are to be run. The bottom two joints are to be sealed with HOWCO-weld. API modified thread dope is to be used. The 5" OD liner is to be inspected using mechanical-optical and magnetic particle inspection - full length. A WOC time of 24 hrs will be observed before drilling out above and inside the 5" liner. After drilling out inside the 5" liner it is to be tested to 4000 psi.

PERRY R. BASS
POKER LAKE UNIT #42
PROPOSED DRILLING AND COMPLETION PROCEDURE

Casing Program: (cont'd)

(G) Tubing: 2 7/8" OD 6.50#/ft tubing with ABC modified coupling with a suitable down hole packer is to be used for completion.

(H) General: After setting and cementing the 5" OD liner, a possibility exists that a 7 5/8" tie back string will be set.

Mud Program:

(A) 26" hole (Surface) -- fresh water-gel lime.

(B) 17½" hole (Salt) -- 10.0 PPG salt water.

(C) 12¼" hole (Protection)-- fresh water flosal.

(D) 8½" hole (Protection liner) -- weighted salt water mud, maximum of 13.3 PPG expected to control abnormal pressure zones.

(E) 6½" hole (Protection liner) -- 8.6 to 9.8 PPG controlled (light) weight drilling fluid with 4 to 5% Kcl.

Drill Stem Tests:

A maximum of four drill stem tests are anticipated; however, they will be taken as required by the geological department.

Electric Logs:
BHC-Accoustic, Caliper comp., Density-Neutron, Dipmeter Microlaterolog, Laterolog, GR-Comp. Neutron.

Samples and Drilling Time:

Drilling time is to be recorded by means of a Geolograph or similar device. Samples are to be caught at 10' intervals from surface to total depth.

PERRY R. BASS
POKER LAKE UNIT #42
PROPOSED DRILLING AND COMPLETION PROCEDURE

Estimated Formation Tops:

Elevation	3303 GL
Rustler Anhydrite	800
Salt	1140
Base Salt	3748
Delaware Lime	3956
Delaware Sand	3986
Bone Spring	7736
Wolfcamp	11096
Strawn	13486
Atoka	13665
Morrow	14372
T/Morrow Sand	14780
T/Lower Morrow	15240
B/Morrow Sand	15450
Barnett	15980

Completion:

A well service unit is to be moved in for completion.

Blowout Preventers:

(A) 20"; 2000 psi WP preventers are to be installed and tested to 2000 psi; they are to remain in service until the 13 3/8" casing is set. If a blowout condition occurs, the well is to be turned to the pit when a shut in pressure of 1000 psi (maximum pressure) is reached.

(B) 13 3/8"; 3000 psi WP preventers are to be installed and tested to 3000 psi; they are to remain in service until the 9 5/8" casing is set. If a blowout condition occurs, the well is to be turned to the pit when a shut in pressure of 1500 psi (maximum pressure) is reached.

(C) 9 5/8"; 5000 psi WP preventers; three ram type and one hydril are to be installed and tested to 5000 psi; they are to remain in service until the rig is moved off for completion. If a blowout condition occurs, the well is to be turned to the pit when a shut in pressure of 4000 psi (maximum pressure) is reached.

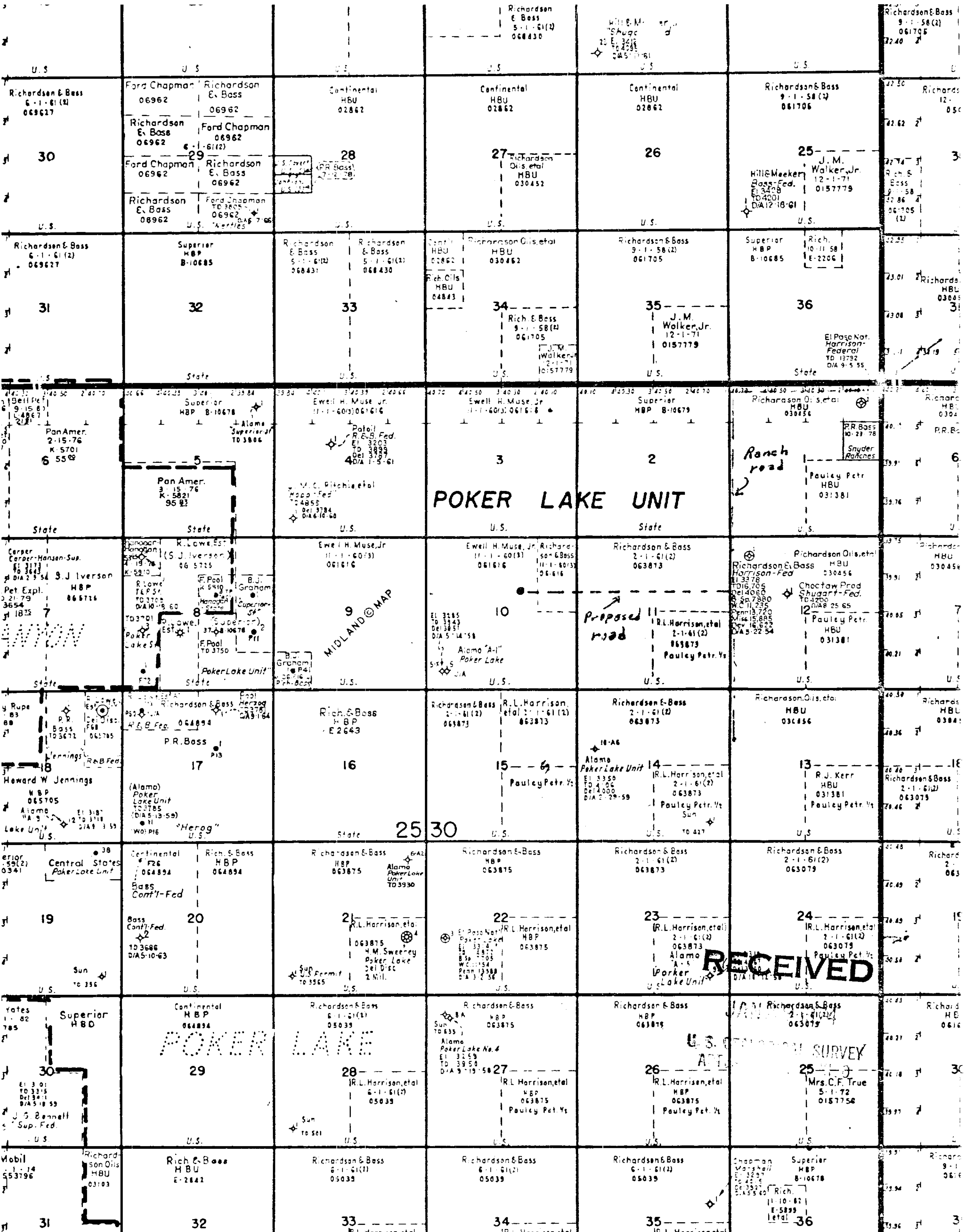
Note: BOP equipment is to be opened and closed on a daily basis with the exception of the blank rams which are to be opened and closed each trip.

ATTACHMENTS:

1. Form 9-331C, application to drill with complete drilling prognosis.
2. Location plat.
3. Plat of location layout.
4. Small scale map of existing roads with proposed access road.
5. Schematic diagram of BOP equipment, manifold, kill-lines, etc.

In addition, please be advised:

1. Mud pits will be of steel.
2. No camp site or air strip is proposed.
3. Tank battery will be located near or adjacent to a corner of the location pad.
4. Water supply will be secured from a previously drilled water well in Sec 12, 1½ miles east of the location.
5. The land surface will be restored to as near original conditions as possible, and to the satisfaction of the U. S. G. S. after drilling and completion operations have ceased.
6. All detrimental waste will be disposed of in accordance with good disposal practices.
7. Well control equipment (see drilling prognosis) with 5000 psi choke manifold. The drill pipe BOP's and Hydril BOP's are to be opened and closed daily. The blank BOP's are to be opened and closed each trip.
8. PVT equipment, flow line sensor, and pump stroke counter are to be utilized while drilling the proposed well.


POKER LAKE UNIT
MIDLAND © MAP
POKER LAKE
RECEIVED
Ranch road
Proposed road
25 30
Richardson & Bass
Ford Chapman
Continental HBU 02862
Superior HBP B-10685
J. M. Walker, Jr. 12-1-71 0157779
Hill & Meeker Bass-Fed.
Richardson Oils, etal HBU 030452
Ewell H. Muse, Jr.
Superior HBP B-10679
Pan Amer. 2-15-76 K-5701
Pan Amer. 3-15-76 K-5821
S. J. Iverson HBP 066736
R. Lowe Est
Pauley Petr HBU 031381
Snyder Ranches
Choctaw Prod Shugart-Fed.
R. L. Harrison, etal
Alamo "A-1" Poker Lake
Howard W. Jennings HBP 065705
P. R. Bass
Rich. & Bass HBP E2643
R. J. Kerr HBU 031381
Central States Poker Lake Unit
Continental
Bass Cont'l-Fed
H. M. Sweeney Poker Lake
Superior HBD
Alamo Poker Lake No. 4
Mrs. C. F. True 5-1-72 0157758
J. G. Bennett Sup. Fed.
Mobil
Rich & Bass HBU E-2642
Chapman Marshall
Superior HBP B-10678
El Paso Nat. Harrison Federal
U.S.
State