Form 9-331 C
(May 1963)

SUBMIT IN PLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

C/SF

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 RE-ENTRY X SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
RALPH NIX OIL, INC.

3. ADDRESS OF OPERATOR
P. O. Box 440, Artesia, New Mexico 88210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
660' FNL and 1980' FWL
At proposed prod. zone

RECEIVED BY
DEC -8 1986
O. C. D.
ARTESIA, OFFICE

5. LEASE DESIGNATION AND SERIAL NO.
NM-14206

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
B&B Federal

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat San Andres

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 12-T19S-R26E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
12 air miles south-southeast of Artesia, New Mexico.

12. COUNTY OR PARISH
Eddy

13. STATE
NM

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

16. NO. OF ACRES IN LEASE
160

17. NO. OF ACRES ASSIGNED TO THIS WELL
40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
-

19. PROPOSED DEPTH
2800'

20. ROTARY OR CABLE TOOLS
Reverse Unit

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3307.5' GL

22. APPROX. DATE WORK WILL START*
ASAP

23.
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5#	326.76'	300 sx C CIRCULATE
11"	8 5/8"	24#	2310.00'	900 sx H CIRCULATE & 300 sx "C"
7 7/8"	5 1/2"	15.5#	2650.00'	250 sx Class "C"

Note: Surface and intermediate casing strings are already cemented into hole.

SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA
BOP SKETCH
SURFACE USE PLAN
RE-ENTRY PROCEDURE

Former: Robert ...
... 2018 ... 3-23-86

RE-ENTRY

***archaeological report on file

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 Ralph Nix Jr. TITLE President DATE 11/24/86

(This space for Federal or State office use)

PERMIT NO. ______ APPROVAL DATE ______

APPROVED BY ______ TITLE ______ DATE 12-4-86
CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

*See Instructions On Reverse Side

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87

Form C-102
Revised 10-1-

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
RALPH NIX OIL, INC.	B & B Federal	1

Unit Letter	Section	Township	Range	County
c	12	19 South	26 East	Eddy

Actual Footage Location of Well:
660 feet from the North line and 1980 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3307.5'	San Andres	Wildcat	40 Acres

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, unitization, force-pooling, etc?

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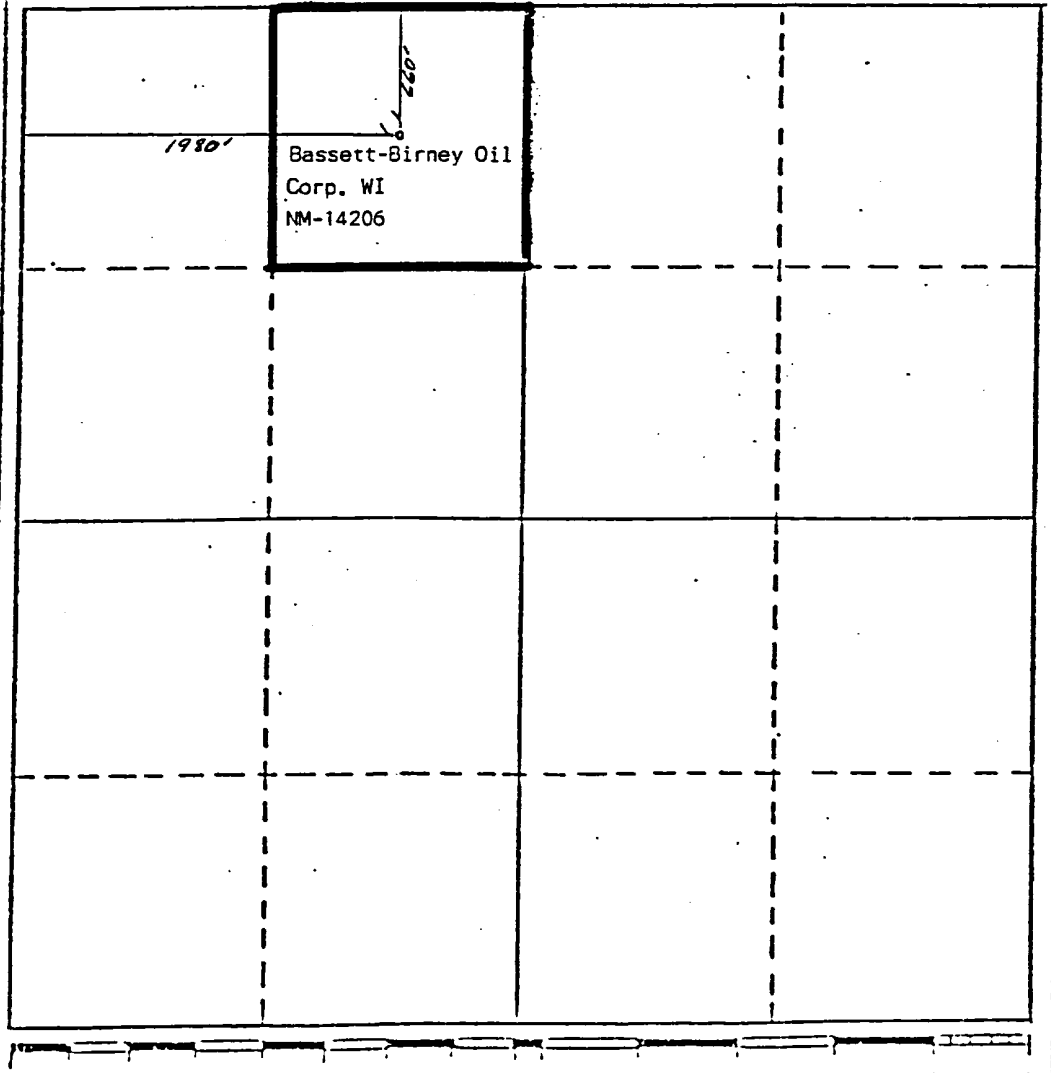
ARTESIA, OFFICE

☐ Yes ☐ No If answer is "yes," type of consolidation _____

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

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 Division.



CERTIFICATION

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

Name: Ralph Nix, Jr.

Position: President

Company: Ralph Nix Oil, Inc.

Date: 11-24-86

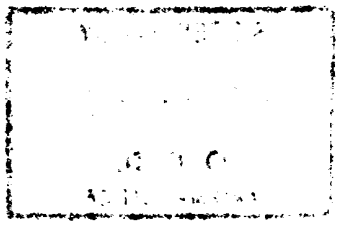
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

SEE ORIGINAL PLAT

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.



SHAFFER MECHANICAL CONTROL GATES

(Patented)

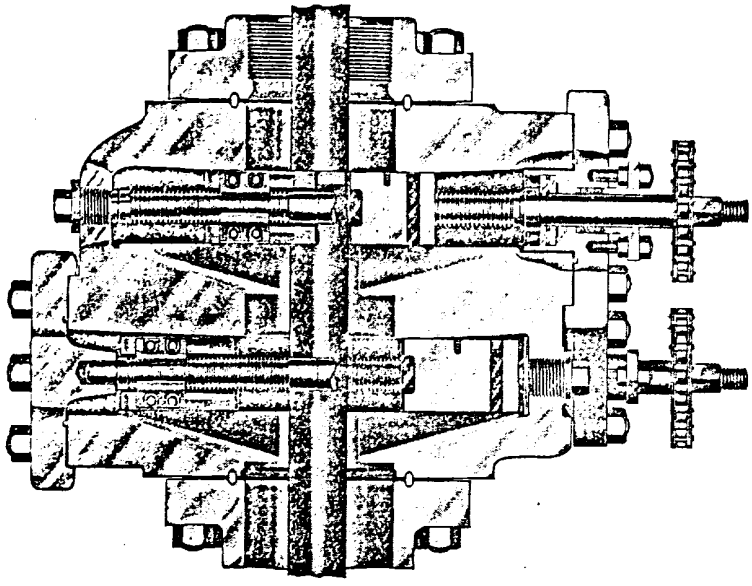


Fig. 84
Shaffer Type 45 Mechanical Double Control Gate—Sectional View

Shaffer Mechanical Control Gates are ideal fo blowout protection on low-budget operations. N only will they close and hold against high w pressures, but their positive screw-thread dri will safely hold these high well pressures i definitely after the rams are closed.

Shaffer Mechanical Control Gates are availab in a wide range of sizes, as shown on the facin page, and are available in a choice of "Singl or "Double" designs. In the "Double" design, t ram compartments are unitized into *one* compa body—the upper compartment equipped wi rams for closing off around the drill string, t lower compartment equipped for closing off ope hole. Or two separate "Single" Gates may b used, similarly equipped—and some operators us three "Singles," or a "Double" and a "Single for stripping couplings through the rams unde pressure, or for closing off around "mixed strings.

IMPORTANT FEATURES

► Shaffer Mechanical Control Gates incorporate many of the features built into Shaffer Hydraulic Blowout Preventers (see pages 4346 and 4347) . . . the Self-Draining Ram Compartments, the "Floating" Ram Design, the way well pressure is used to assist the sealing action, etc. By simply removing *one* end cover, the complete ram assembly can be removed for changing rams—a feature that insures maximum convenience when changing pipe sizes (See Fig. 85).

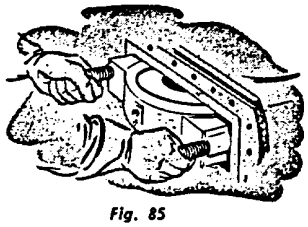


Fig. 85

► A selection of "Single" and "Dual" Air Motor Drives *(write for details)* is available for opening an closing the rams by remote control. Also, shafts wit Universal Joints may be used for mounting hand wheel at a distance from the well head for added protectio when operating the Gates mechanically.

► Type 39 Self-Centering Rams (see page 4351) ar standard equipment for Shaffer Mechanical Contro Gates. However, Type 60 Rams (see pages 434 through 4350) may be installed as an extra-cos option (and may also be installed in Shaffer Mechan ical Gates already in service).

Write for complete details on Shaffer Mechanical Control Gates

ORDERING INSTRUCTIONS

When ordering Shaffer Mechanical Control Gates, specify size and A.P.I. rating (see facing page). When ordering parts, give serial number of Gate. If flanges are ordered, give size, weight and thread (number and form) of casing, as well as A.P.I. flange specifications. When ordering rams, give outside diameter of pipe the rams are to close around.

When ordering for export or remote locations, an ample supply of extra ram rubbers should be ordered. Also, it is advisable to have extra sets of ram blocks with rubbers for the various strings of tubing, drill pipe and casing that will be run. All extra supplies of rubbers (whether or not on ram blocks) should be kept in a dark, dry location to prevent deterioration (especially important in the tropics).

Lists of Recommended Spare Parts are available on request for both domestic and export operations.

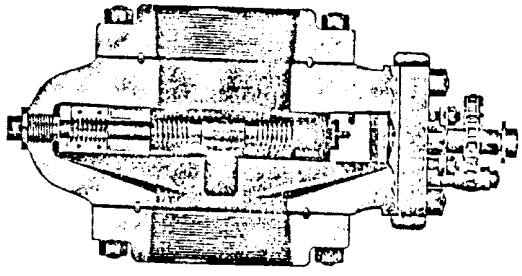


Fig. 86
Sectional View of Shaffer Type 45 Mechanical Single Control Gate

SHAFFER MECHANICAL CONTROL GATES

(Patented)

PARTS FOR TYPE 45 DOUBLE GATES

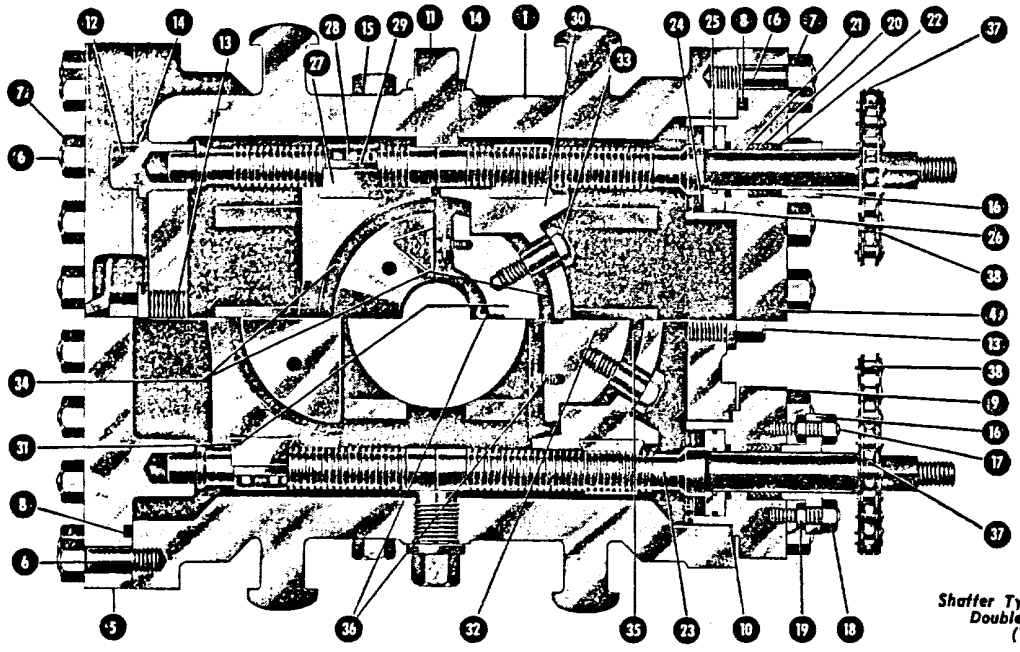


Fig. 87
Shaffer Type 45 Mechanical Double Control Gate (Top View)

Part No.	No. Req'd.	NAME OF PART	Part No.	No. Req'd.	NAME OF PART	Part No.	No. Req'd.	NAME OF PART
1	1	Body	18	8	Stuffing Box Gland Stud Nut	33	8	Ram Block Retracting Screw
2	Varies	Body Flange Stud (Not Shown)	19	8	Stuffing Box Gland Jam Nut	34	1 Set	Ram Rubber—Pipe
3	Varies	Body Flange Stud Nut (Not Shown)	20	4 Sets	Stuffing Box Chevron Packing	35	1 Set	Ram Rubber—Complete Shut-Off
4	1	End Cover—Front	21	4	Bronze Packing Ring—Lower	36	Varies	Ram Rubber Retaining Screw
5	1	End Cover—Rear	22	4	Bronze Packing Ring—Upper	37	4	Sprocket
6	Varies	End Cover & Thrust Plate Stud	23	4	Operating Screw	38	2	Sprocket Chain
7	Varies	End Cover & Thrust Plate Stud Nut	24	4	Thrust Bearing Plate	39	1	Sprocket Chain Tightener—Upper (Not Shown)
8	2	End Cover Hydraulic Packing Gasket	25	4	Thrust Bearing Plate Inner "O" Ring			
9	2	Thrust Plate	26	4	Thrust Bearing Plate Outer "O" Ring	40	1	Sprocket Chain Tightener—Lower (Not Shown)
10	2	Thrust Plate Gasket	27	4 R.H. &4L.H.	Bronze Half Nut	41	1	Sprocket Chain Tightener Cap Screw and Washer—Upper (Not Shown)
11	4	Side Plug	28	16	Ram Clip			
12	2	End Bearing Plug	29	32	Ram Clip Cap Screw	42	2	Sprocket Chain Tightener Cap Screw and Washer—Lower (Not Shown)
13	2	End Center Plug	30	2 Sets	Ram Block Holder			
14	8	End & Side Plug Copper-Asbestos Gasket	31	1 Set	Ram Block—Pipe	43	1	Sprocket Chain Guard (Not Shown)
15	4	Washout Plug	32	1 Set	Ram Block—Complete Shut-Off	44	4	Sprocket Chain Guard Cap Screw with Washer (Not Shown)
16	4	Stuffing Box Gland						
17	8	Stuffing Box Gland Stud						

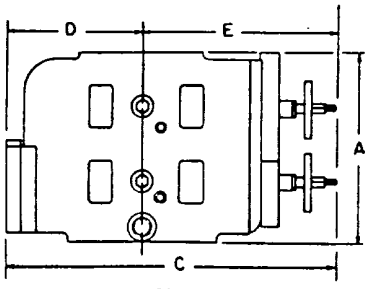


Fig. 88
Dimensional Elevation—Shaffer Type 45 Mechanical Double Control Gate

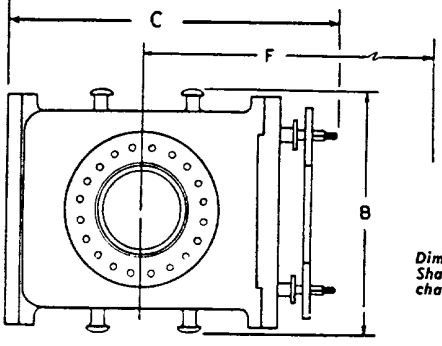


Fig. 89
Dimensional Plan—Shaffer Type 45 Mechanical Double Control Gate

DIMENSIONAL AND ENGINEERING DATA ON SHAFFER TYPE 45 MECHANICAL DOUBLE CONTROL GATES

Size	Max. Service Pressure Rating, PSI	Test Pressure, PSI	Vertical Bore	Approx. Weight, Pounds	Ram Size	A Height	B Width	C Length	D Center To Rear	E Center To Front	F Max. Distance Needed To Change Rams
6"	3,000	6,000	7 1/16"	3,400	C.S.O. Thru 5" O.D.	24¾"	29½"	41"	17¼"	23¾"	59⅛"
8"	3,000	6,000	9"	4,150	C.S.O. Thru 7" O.D.	25¼"	30"	45¼"	19½"	25¾"	65¼"
10"	3,000	6,000	11"	4,900	C.S.O. Thru 8⅝" O.D.	27½"	31½"	48"	21¼"	26¾"	70¼"
10"	5,000	10,000	11"	8,925	C.S.O. Thru 8⅝" O.D.	36"	37"	51½"	23"	28½"	75¼"
12"	3,000	6,000	12¼"	5,870	C.S.O. Thru 10¾" O.D.	28½"	33¼"	52¾"	23¼"	29½"	77"
16"	2,000	3,000	15¼"	8,025	C.S.O. Thru 13⅜" O.D.	31½"	36⅛"	54¾"	24¾"	30"	80"

SUPPLEMENTAL DRILLING DATA

RALPH NIX
B&B FEDERAL WELL NO. 1

1. SURFACE FORMATION: Recent.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Queen	676'
Grayburg	1136'
San Andres	1459

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Oil San Andres

4. PROPOSED CASING AND CEMENTING PROGRAM:

Hole	Casing	Weight	Depth	Cementing
17 1/2"	13 3/8"	54.5#	326.76'	300 sx Class "C"
11"	8 5/8"	24#	2310.00'	900 sx Hal. Lite & 300 sx Class "C"
		ABOVE CASING ALREADY IN HOLE		
7 7/8"	5 1/2"	15.5#	2650.00'	250 sx Class "C"

5. PRESSURE CONTROL EQUIPMENT:

SEE ATTACHED DIAGRAMS.

6. CIRCULATING MEDIUM:

Surface to 2300 feet: Fresh water.

2300 feet to 2800 feet: At 2300' displace hole with 2% KCL water before cleaning out open hole 2310' to 2800'.

7. AUXILIARY EQUIPMENT:

Reverse drilling unit, 8 - 4 1/2: drill collars, 2 7/8" EUE 8RT J-55 work string (2800') and tools.

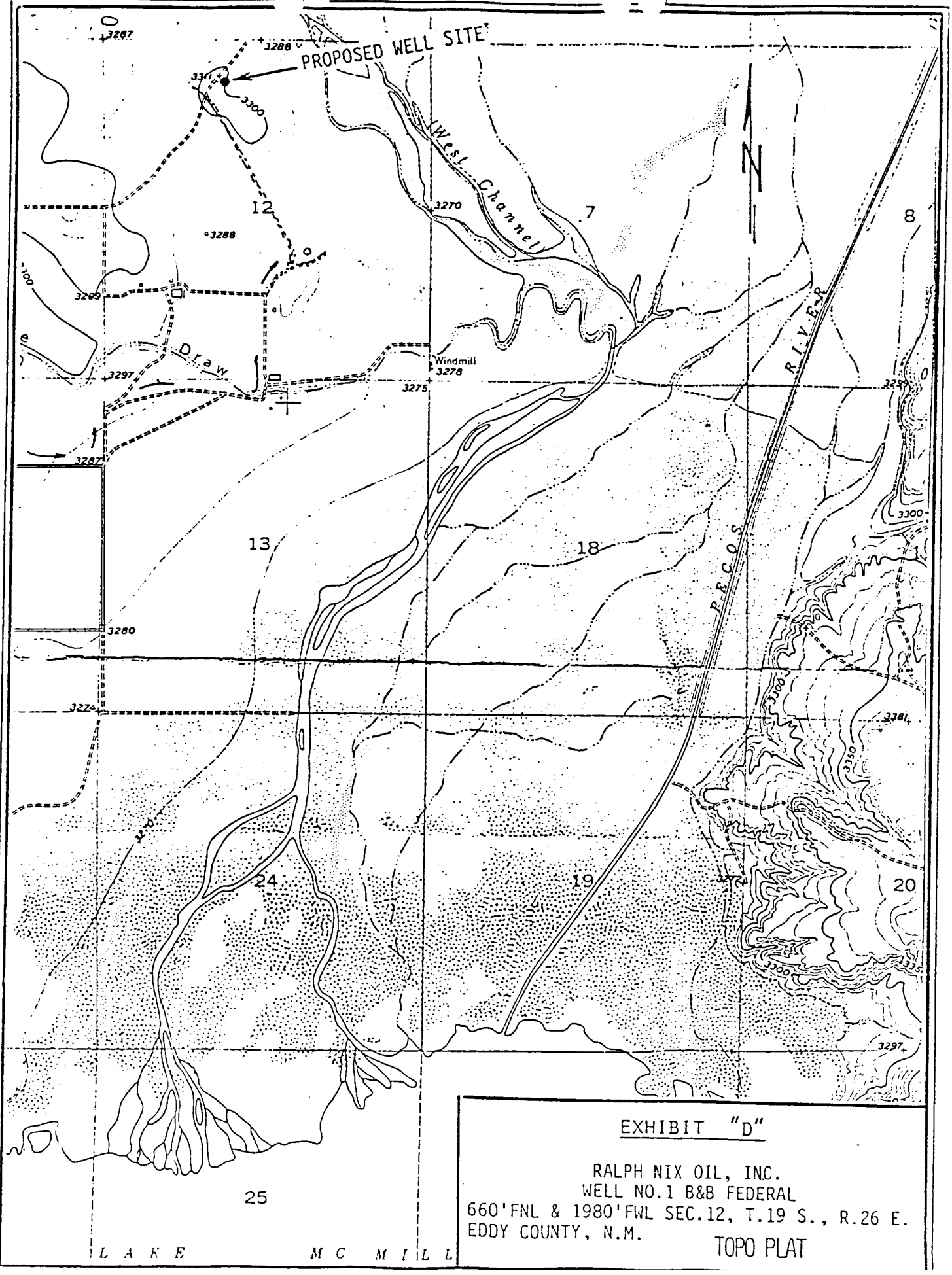


EXHIBIT "D"

RALPH NIX OIL, INC.
WELL NO.1 B&B FEDERAL
660'FNL & 1980'FWL SEC.12, T.19 S., R.26 E.
EDDY COUNTY, N.M.

TOPO PLAT

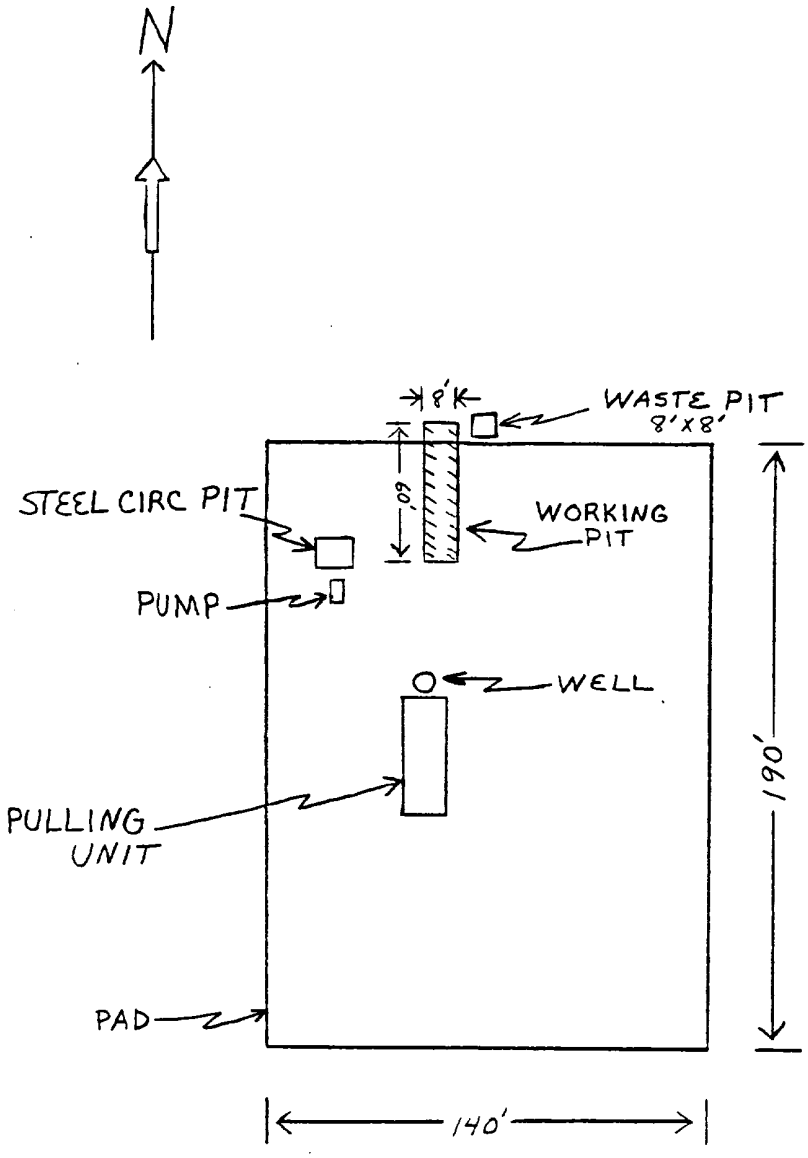


EXHIBIT "C"

RALPH NIX OIL, INC.
B & B FEDERAL NO. 1
660' FNL & 1980' FWL Sec. 12, T19S-R26E, NMPM
EDDY COUNTY, N.M. SCALE: None

Layout for Pulling Unit &
Reverse Drilling Equipment

RALPH NIX-B&B FEDERAL NO. 1
RECOMMENDED RE-ENTRY PROCEDURE

SAN ANDRES COMPLETION

1. Dig out cellar and weld on 8 5/8" bell collar.

2. Install 8 5/8" x 5 1/2" Larkin Figure 75 casing head (or equivalent).

3. Install adapter flange and 10"-900 BOP with 2 7/8" pipe rams top, blind rams on bottom.

4. Set guy line anchors.

5. Move in pulling unit, reverse drilling unit, 8 - 4 1/2" drill collars, 2 7/8" EUE 8RT J-55 work string (2800') and tools.

6. Drill out cement plugs in 8 5/8" casing to 2300' with fresh water. Plugs reported to be :

2 sx	0-50'
35 sx	277-377'
50 sx	2440-2360 - tagged @ 2240'

7. At 2300', displace hole with 2% KCL water before cleaning out open hole 2310' to 2800'.

8. Circulate hole clean, pull out of hole, stand back drill collars.

9. Run in hole with work string open ended to 2800', circulate hole.

10. Spot 50 sx Class "C" with 2% CaCl, 2800' to 2650' mixed 14.8 #/gallon.

11. Pull out of hole. WOC 12 hrs.

12. Run in hole with drill collars and bit to top of cement, dress plug to 2650' minimum or until hard cement is encountered.

13. Circulate hole clean with 2% KCL water, pull out of hole, lay down tubing, drill collars, and bit. Release reverse unit.

14. Run Schlumberger TDT log 2600' to 1200'.

15. Rig up casing tools, change pipe rams in BOP to 5 1/2", clean 5 1/2" casing threads.

16. Run 5 1/2" 15.50 #/ft. J-55 casing to 2650'. "Ruff coat" casing 2300' to 2600' and centralize each joint 2300' to 2600', centralize every joint 1800' to 2200'. Run guide shoe on bottom and float collar one joint above shoe. Dope both collars and pins while running casing.

17. Circulate hole.

18. Cement 5 1/2" casing with 250 sx Class "C" w/2% CaCl mixed 14.8 #/gallon, use top plug only - displace with 2% KCL water. WOC 12 hours. Set slips, cut off, install tubing head.

19. Run temperature survey (est. cmt. top 1000'±),test casing to 1500 psig.

20. Run gamma ray - casing collar log.

21. Perforate 2502' to 2512' per Density-Neutron log depths with 4 jets per foot at 90 degree phasing using 4" cased hole gun.

22. Run completion tubing - 2 3/8" EUE 8RT J-55 with seating nipple open ended to 2600'±. Land tubing, nipple up, Larkin Type "R" tubing head (or equivalent) and christmas tree.

23. Swab test well to recover all load fluid in casing.

24. Swab for production test.

25. Displace hole with oil, pump acid to spot acidize with 2500 gallons 15% NEFE HCL displace with oil. Hold maximum treating pressure to 500 psig on acid.

26. Swab test well; record hourly fluid levels, fluid recovery, oil-cut, and number of swab runs.

27. Re-acidize with 5,000 gallons ±, 15% NEFE acid as indicated by swab test.

28. Recover load water immediately by swabbing.

29. Install pump and rods and place on production.

30. Install tank battery.