Form 9-331 C
(May 1963)

COPY TO O. C. C.

SUBMIT IN TRIPLICATE*
(Other instruction reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-025-26485

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: LC 032233 (a)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: -

7. UNIT AGREEMENT NAME: --

8. FARM OR LEASE NAME: Bowers "A" Federal

9. WELL NO.: 37

10. FIELD AND POOL, OR WILDCAT: Byers Queen

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 30, T 18 S, R 38 E

12. COUNTY OR PARISH: Lea

13. STATE: New Mexico

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

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

2. NAME OF OPERATOR: Exxon Corporation

3. ADDRESS OF OPERATOR: P. O. Box 1600, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FEL and 770' FSL of Section
At proposed prod. zone:

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 2 miles west of Hobbs

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

16. NO. OF ACRES IN LEASE: 300

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: None

19. PROPOSED DEPTH: 4,000'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3,642'Gr

22. APPROX. DATE WORK WILL START*: 9-15-79

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12¼ or 11"	8 5/8"	24#	500'	500 sx
7 7/8"	5 1/2"	14#	3900'	800 sx.

Surface casing will be set at approx. 500' to protect fresh water zones. A stage cementing tool will be placed in the production casing string at the top of the salt section (approx. 1500') to insure that cement is brought to surface.

Mud Program:
0-1500' Fresh Water Spud
500-2500' Brine Water 10#
2500-TD Brine Water and Starch 10#

The gas is not dedicated to a purchaser.

RECEIVED
AUG 30 1979
U. S. GEOLOGICAL SURVEY
HOBBS, 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 Deeon Knipling TITLE Proration Specialist DATE 8-28-79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED AS AMENDED
SEP 24 1979
ACTING DISTRICT ENGINEER

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Exxon Lse. No. _____

State Lse. No. _____

Federal Lse. No. _____

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
Exxon Corporation	Bowers "A" Federal	37

Unit Letter	Section	Township	Range	County
P	30	18 S	38 E	Lea

Actual Footage Location of Well:
770 feet from the South line and 660 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
	Queen	Byers Queen	160 Acres

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

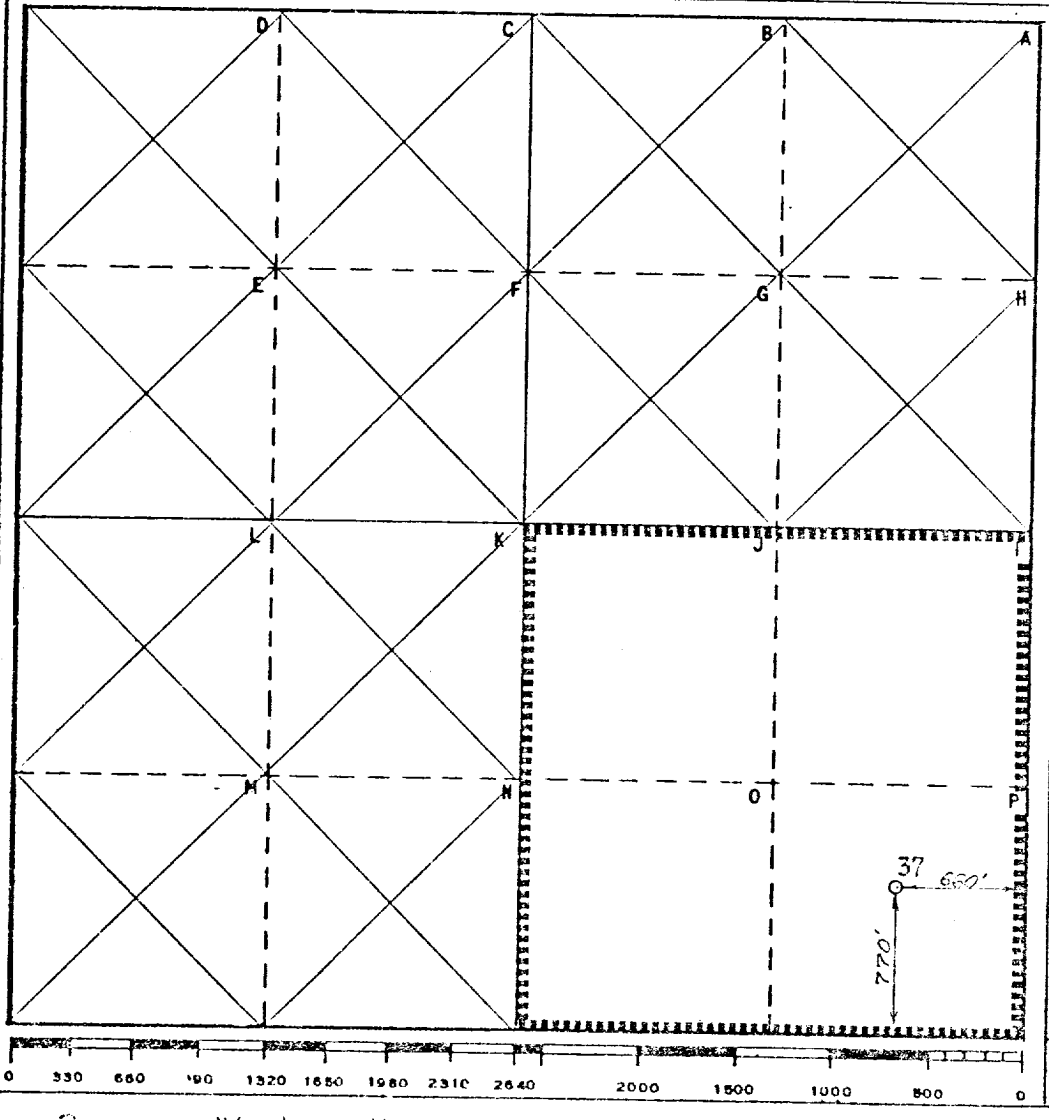
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

☐ 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 Commission.



CERTIFICATION

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

Name: Melba Knipling

Position: Proration Specialist

Company: Exxon Corporation

Box 1600 Midland, Texas

Date: 8-28-79

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.

Date Surveyed: 8-13-79

Registered Professional Engineer and/or Land Surveyor

W. D. Westerfield

Certificate No. 1362

2 Miles West of Hobbs

BOWERS "A" FEDERAL #37
tion 30, T18S, R38E
Lea County, New Mexico

1. The geologic name of the surface formation: Recent

2. The estimated tops of important geologic markers:

Rustler	1450'
Salado	1530'
Yates	2665'
Bowers	3175'
Queen	3565'

3. The estimated depths at which anticipated water, oil, gas, or other mineral bearing formations are expected to occur:

Water	35'
Gas	2665'
Oil	3175'
Gas	3565'

4. Proposed Casing Program:

String	Size	Weight/Grade	Condition	Depth Interval
Surface	8-5/8"	24#/K-55	New or Used	0 - 500'
Production	5-1/2"	14#/K-55	New or Used	0 - 3900'

5. Minimum specifications for pressure control equipment:

a. Wellhead Equipment - Threaded type 2000 psi WP for 8-5/8" x 5-1/2" casing program and 2-3/8" tubing.

b. Blowout Preventers - Refer to attached drawing and list of equipment titled "Type II-B" for description of BOP stack and choke manifold.

c. BOP Control Unit - Unit will be hydraulically operated and have at least 3 control stations.

d. Testing - When installed on the 8-5/8" surface casing the BOP stack will be tested to a low pressure (200 - 300 psi) and to 1500 psi. Casing rams will be tested in like manner when installed prior to running production casing. An operational test of the blowout preventers will be performed on each round trip (but not more than once each day); the annular and pipe ram preventers will be closed on drill pipe, and the blind rams will be closed while pipe is out of the hole.

6. Type and Anticipated Characteristics of Drilling Fluid:

Depth Interval (Feet)	Mud Type	Weight (ppg)	Funnel Visc. (Sec/Qt)	WL (cc)	pH
0 - 500	Fresh water spud mud	-	-	-	--
500 - 2500	Brine	10	28	-	10+
2500 - TD	Brine-Starch	10	30-35	20	10.5+

Not less than 200 barrels of fluid will be maintained in the pits. Weighting material should not be needed.

7. Auxiliary Control Equipment:

a. Kelly Cocks: Upper and lower installed on kelly.

b. Safety Valve: Full opening ball type to fit each type and size of drill pipe in use will be available on rig floor at all times, in open position for stabbing into drill pipe when kelly is not in the string.

c. Trip tank to insure that hole is full and takes proper amount of fluid on trips. Will be used during drilling of production hole.

d. Mud system monitoring equipment and floats at the bit will not be used unless conditions dictate.

8. Testing, Logging, and Completion Programs:

a. Logging: Surface Casing - TD GR/FDC/CNL
1825' - TD DLL/MLL and Spectral Log

b. No cores or DST's are planned.

c. Completion - Formations: Yates 2665 - 3175', Queen 3565 - 3870'

Proposed Completion Procedure: Stimulate zones separately using bridge plug and packer. Treat each zone by acidizing with 1500 gal 15% HCl and foam fracing with 3000 gal 2% KCl water, 310,000 SCF nitrogen, and 20,000# 20-40 sand. See attached well site layout for approximate positioning of completion equipment.

d. Production Method: Run packer on 2-3/8" tubing and set between Queen and Yates perforations. Produce Queen gas up tubing and Yates gas up tubing-casing annulus.

9. Abnormal Pressure or Other Potential Hazards:

a. Yates zone may kick. If flow occurs and does not deplete to a safe level for continued drilling operations, the well will be brought under control by accepted practices.

b. No H_2S problem is expected.

10. It is anticipated that the drilling and completion operations will begin about September 15, 1979 and be finished in approximately 3 weeks.

EI UT PREVENTER SPECIFICATION
EQUIPMENT DESCRIPTION

TYPE II-B

All equipment should be at least 2000 psi WP or higher unless otherwise specified.

1. Rotating BOP.
2. Hydril or Shaffer bag type preventer.
3. Ram type pressure operated blowout preventer with blind rams.
4. Flanged spool with one 4-inch and one 2-inch (minimum) outlet.
5. 2-inch (minimum) flanged plug or gate valve.
6. 2-inch by 2-inch by 2-inch (minimum) flanged tee.

8. 4-inch flanged gate or plug valve.
9. Ram type pressure operated blowout preventer with pipe rams.
10. Flanged type casing head with one side outlet (furnished by Exxon).
11. 2-inch threaded (or flanged) plug or gate valve (furnished by Exxon). Flanged on 5000# WP, threaded on 3000# WP or less.
12. Needle valve (furnished by Exxon).
13. 2-inch nipple (furnished by Exxon).
14. Tapped bull plug (furnished by Exxon).
15. 4-inch flanged spacer spool.
16. 4-inch by 2-inch by 2-inch by 2-inch flanged cross.
17. 2-inch flanged plug or gate valve.
18. 2-inch flanged adjustable choke.
19. 2-inch threaded flange.
20. 2-inch XXH nipple.
21. 2-inch forged steel 90° Ell.
22. Cameron (or equal.) threaded pressure gage.
23. Threaded flange.
24. 6-inch manual or pressure operated gate valve.
35. 2-inch flanged tee.
36. 3-inch (minimum) hose. (Furnished by Exxon).
37. Trip tank. (Furnished by Exxon).
38. 2-inch flanged plug or gate valve.
39. 2-1/2-inch pipe, 300' to pit, anchored.
40. 2-1/2-inch SE valve.
41. 2-1/2-inch line to steel pit or separator.

NOTES:

1. Items 3, 4 and 9 may be replaced with double ram type preventer with side outlets between the rams.

2. The two valves next to the stack on the fill and kill line to be closed unless drill sting is being pulled.

3. Kill line is for emergency use only. This connection shall not be used for filling.

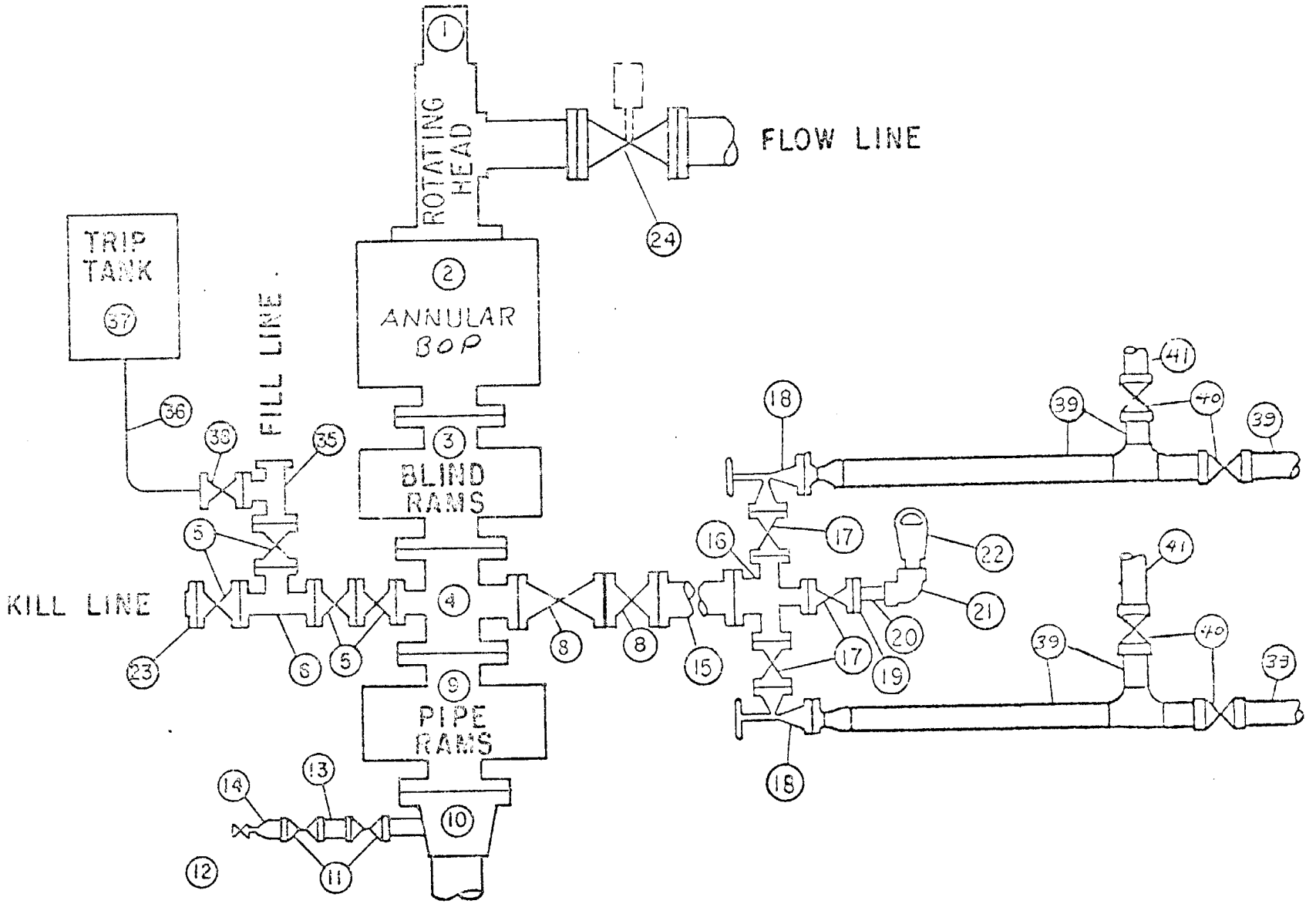
4. Replacement pipe rams and blind rams shall be on location at all times.

5. Only type U, LWS and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.

6. Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi and lower WP BOP stacks.

MIDLAND DRILLING ORGANIZATION

BLOWOUT PREVENTER SPECIFICATION
TYPE II - B



Rev. 11-1-77

SURFACE USE PLAN

Exxon Corporation-Development Well

Bowers "A" Federal #37, Federal Lease No. 032233 (A)
660' FEL and 770' FSL of Section 30, T18S, R38E, Lea County, New Mexico

1. EXISTING ROADS - The existing roads are shown on Exhibit "A" which is a portion of the Hobbs West Quadrangle in relation to the proposed Bowers "A" Federal, Well No. 37.

   From Hobbs go westerly one mile on Highway 180 thence northerly one mile to an intersection with an east-west road. Go west on this road approximately one-half mile then north 660' to the location.

2. PLANNED ROADS - Since this location will be constructed adjacent to an existing road, no new roads will be needed.

   1) Width - no road will be built

   2) Maximum grades - no road will be built

   3) Turnouts - No turnouts will be necessary

   4) Drainage design - None

   5) No culverts will be required

   6) Surfacing material - None

   7) Necessary gates, cattleguards or fence cuts - none

   8) There will be no center-line flagging.

3. LOCATION OF EXISTING WELLS WITHIN ONE MILE RADIUS -

   1) Water wells - There is only one known water well within one mile of the drillsite which is located approximately 1,500 feet north of the location. This will be our water source well and is on the Exxon lease.

   2) Abandoned wells - Several dry holes are within one mile of the drillsite as shown on Exhibit "D".

   3) Temporarily abandoned wells - See Exhibit D

   4) Disposal wells - none

   5) Drilling Wells - none

   6) Producing wells - Shown on Exhibit "D"

7) Shut-in well - none

8) Injection wells - none

9) Monitoring or observation wells for other resources - none

4. TANK BATTERIES, PRODUCTION FACILITIES AND LEASE PIPELINES -

A. Exxon has storage facilities in Sections 29 and 30 together with flow lines and other related equipment as shown on Exhibit "C".

B. In the event of production, new facilities are shown on Exhibit "B"

1) Proposed location and attendant lines by flagging if off of well pad.

2) Dimensions of facilities are shown on Exhibit "B".

3) Production facilities will be constructed on drillsite pad using caliche surface.

4) Equipment and pit will be fenced and flagged to protect livestock, if necessary.

C. Rehabilitation will be done on any disturbed areas no longer needed for operations after completion of the production facilities. This will consist of reshaping the existing surface and seeding as specified.

5. LOCATION AND TYPE OF WATER SUPPLY -

A. Water will be piped from water well located approximately 1500' north of the location. The pipeline will be laid on top of the ground directly between the water well and the drillsite.

B. Water will be transported by pipeline laying on the surface of the ground. No surface will be disturbed.

C. No water well will be drilled.

6. SOURCE OF CONSTRUCTION MATERIALS -

A. Caliche will be obtained from a pit in Section 20 or Section 29, both of which are off of the lease. Both pits are privately owned.

B. No construction materials will be used from Federal lands.

C. Caliche secured from private sources will be used where needed on the road and drillsite.

D. All access roads are shown on Exhibit "A".

7. WASTE DISPOSAL -

A. Drill cuttings will be disposed of in the reserve pit.

B. Drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry.

C. Trash, waste paper, garbage and junk will be burned or buried with a minimum of 24" cover. Waste material will be contained to prevent scattering by wind prior to ultimate disposal.

D. Any produced water will be contained in tanks and be disposed of in an approved manner. Oil produced will be stored in tanks until sold, at which time it will be hauled from location.

E. Current laws and regulations pertaining to disposal of human waste will be complied with.

F. If productive, maintenance waste will be placed in special containers and buried or hauled away periodically.

8. ANCILIARY FACILITIES - No camps, airstrips, et cetera, will be constructed.

9. WELL SITE LAYOUT -

A. Refer to Exhibit "B" for well site layout.

B. Dimensions may vary slightly depending on size of drilling rig available.

C. Terrain at the well site is very flat as shown on Exhibit "B".

D. The pad will be topped with caliche obtained from private sources.

E. The reserve pit will be approximately 150'x150' top width.

F. Frac equipment is shown on Exhibit "B" and consists of nine trucks and two tanks. It will be located in the southeast portion of the drillsite.

10. RESTORATION OF SURFACE -

1) At the time of completion and abandonment of the well, the pits will be backfilled and the entire disturbed area will be sloped to coincide with the adjacent undisturbed area. The top soil will be distributed over the entire disturbed area. Prior to leaving the drillsite upon rig move out and before reshaping any pit that is to remain open for drying will be fenced until backfilling and reshaping can be done.

2) When well is abandoned drill pad and other disturbed areas will be rehabilitated as per BLM recommendations.

3) Any rehabilitation of the drill pad will comply with BLM specifications.

4) Any oil on pits will be removed or otherwise disposed of to USGS and BLM approval.

5) Rehabilitation operations will be completed as soon as practical after abandonment of the well and no later than the Fall after abandonment.

11. OTHER INFORMATION -

A. Terrain - Flat prairie.

B. Soil - Sandy loam.

C. Sparse vegetation - native grasses.

D. There are no ponds, water wells, archaeological, historical or cultural sites in the immediate area. Approximately 300 feet south of the drillsite is an inhabited mobile home.

E. Surface is not used.

F. The drillsite is in an area formerly used by a company camp in which houses, streets and other facilities normally found in a camp existed. The total effect on environment of drilling and producing in this area would be minimal. No known archaeological historical or cultural sites exist in the drillsite area.

G. Surface ownership - the drillsite is located on private lands owned by William C. Grimes, Box 1366, Hobbs, New Mexico.

H. Open Pits - All unattended pits containing mud or other liquids will be fenced.

I. Well sign - Sign identifying and locating well will be maintained at drillsite commencing with the spudding of the well.

12. OPERATOR'S REPRESENTATIVE - Field representative who can be contacted concerning compliance of this Surface Use Plan is:

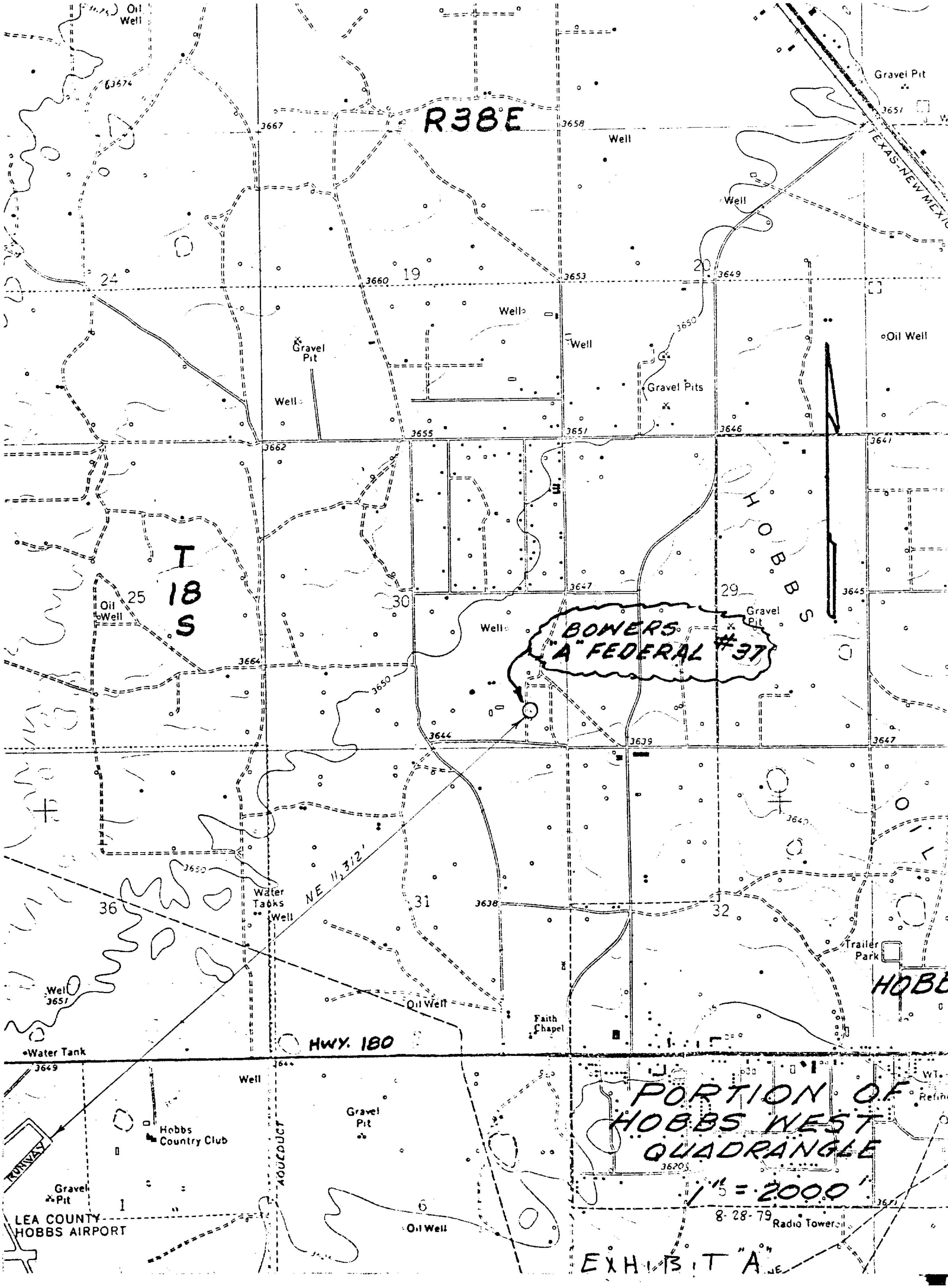
H. G. Davidson
P. O. Box 1600
Midland, Texas 79702
Office Phone: (915) 683-0263
Home Phone: (915) 694-5324

13. CERTIFICATION - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Exxon Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. A copy of this plan will be posted at the well site during the drilling of the well for reference by all contractors and subcontractors.

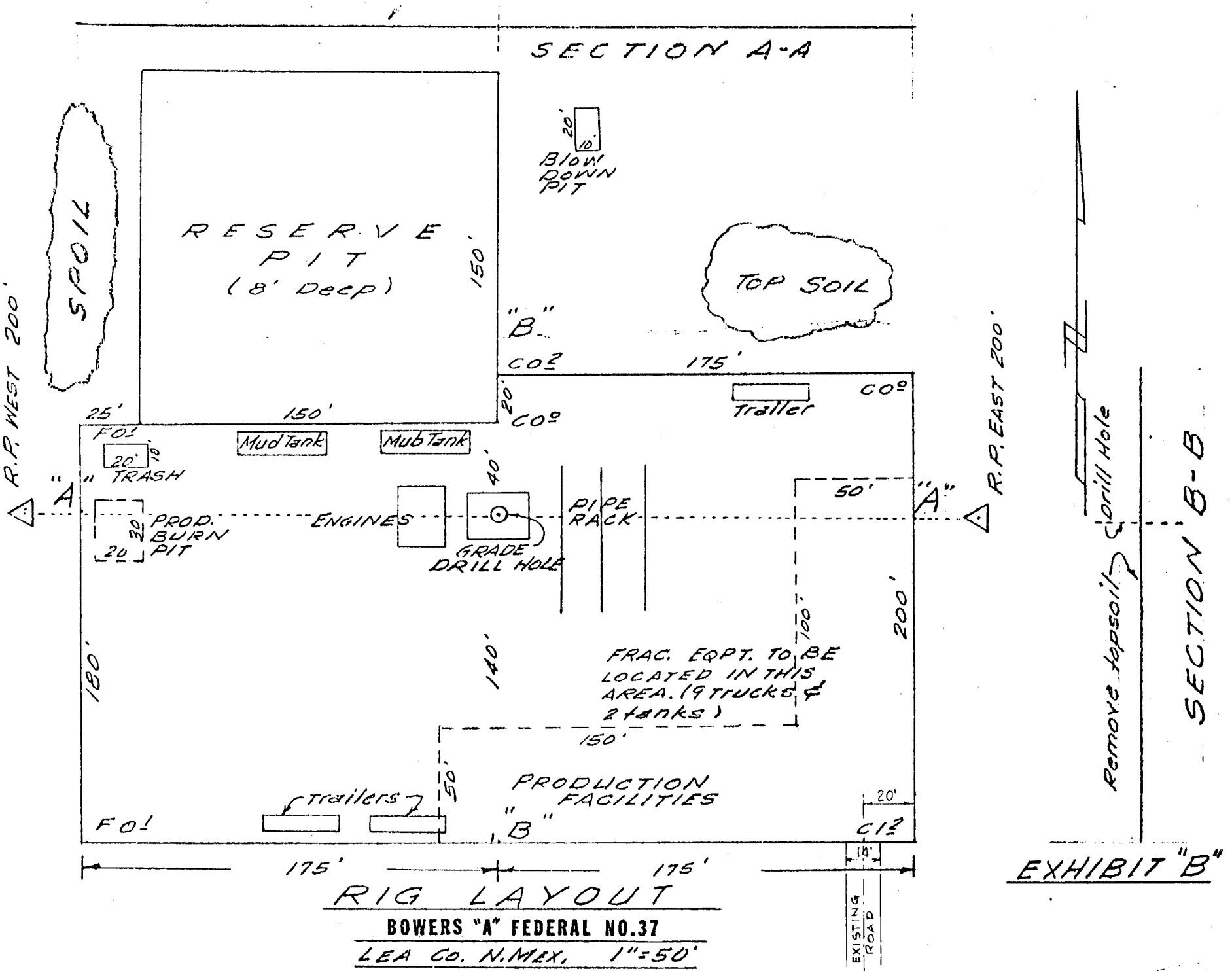
Date 8-28-79

H. G. Davidson
Division Drilling Manager

MK:dc



R38E
T 18 S
BOWERS "A" FEDERAL #37
NE 11,312'
HWY. 180
HOBBS
HOBBS OIL
TEXAS-NEW MEXICO
Gravel Pit
Gravel Pits
Oil Well
Well
Water Tanks
Water Tank
Faith Chapel
Trailer Park
Hobbs Country Club
LEA COUNTY HOBBS AIRPORT
RUNWAY
AQUEDUCT
Radio Tower
Refine
PORTION OF HOBBS WEST QUADRANGLE
1" = 2000'
8-28-79
EXHIBIT "A"



RIG LAYOUT

BOWERS "A" FEDERAL NO.37

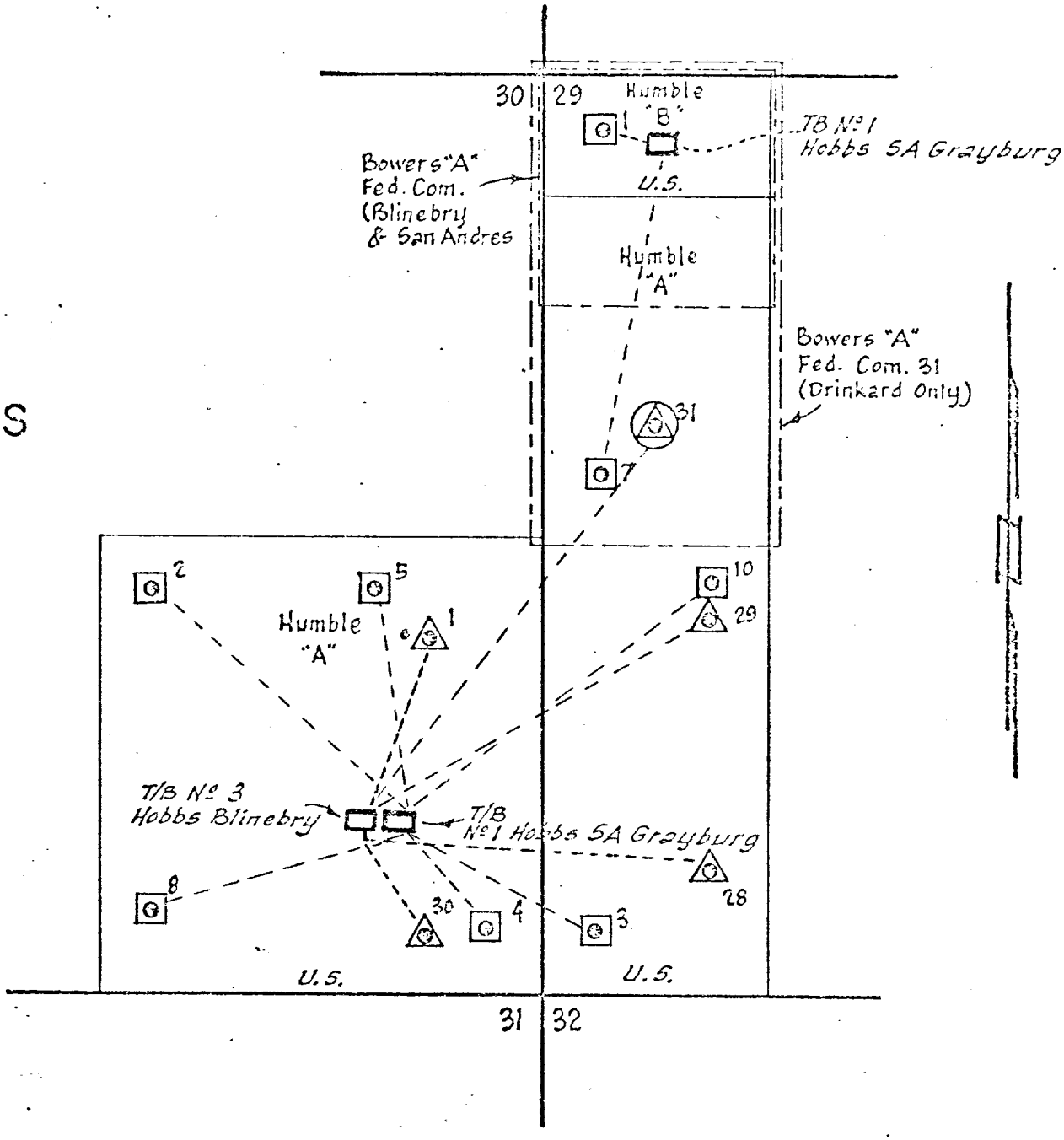
LEA CO. N.MEX. 1"=50'

8-28-79

EXHIBIT "B"

R-38-E

T-18-S



HOBBS BLINEBRY

HOBBS SA GRAYBURG

HOBBS DRINKARD

EXHIBIT "C"

BOWERS "A" & "B" FEDERAL LEASES
TANK BATTERIES
LEA COUNTY, NEW MEXICO

HUMBLE OIL & REFINING COMPANY
SOUTHWEST DIVISION
PRODUCTION DEPARTMENT
Hobbs District

DRAWN C.H.J.	ENGR. SECTION	REVISED 7-25-70	SCALE 1"=1000'	JOB NO.	FILE NO.
CHECKED	APPROVED		DATE 8-15-79		AA-239