Form 9-331 C
(May 1963)

COPY TO O. C. C.

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-28180-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

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

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

8. FARM OR LEASE NAME: Best ~~Federal~~ "32"

2. NAME OF OPERATOR: Marathon Oil Company

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: P.O. Box 2409 Hobbs, NM 88240

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 990' FNL & 1945' FWL of Sec. 32, T-2S, R-32E
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 32, T-2S, R-32E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 10.2 miles N of Elida, New Mexico

12. COUNTY OR PARISH: Roosevelt — 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
625'	160	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
N/R	8000'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): G.R. 4247.3'

22. APPROX. DATE WORK WILL START*: February 15, 1980

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"	48#/ft (H-40)	350'	375 sx
12 1/4"	9 5/8"	40#/ft (K-55)	4000'	1500 sx
7 7/8"	5 1/2"	15.5#/ft (K-55)	7700'	2700 sx

Propose to drill no deeper than 8000'.

All casing will be cemented and tested by approved methods.

Blowout equipment will be 900 series Cameron pipe and blind rams, or equivalent. Remote controls will be located on the derrick floor with closing unit located a minimum of 75' from wellhead.

RECEIVED
JAN 16 1980
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 Michael D Anderson TITLE Production Engineer DATE 1-16-80

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

JAN 28 1980

~~ACTING~~ DISTRICT ENGINEER

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator: Marathon Oil Company	Lease: The [illegible]		Well No. 1
Unit Letter: C	Section: 32	Township: 2 South	Range: 32 East	County: Roosevelt
Actual Footage Location of Well: 1945 feet from the West line and [illegible] feet from the North line			
Ground Level Elev.: 4247.	Producing Formation: Montoya	Pool: Wildcat	Dedicated Acreage: 40

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).

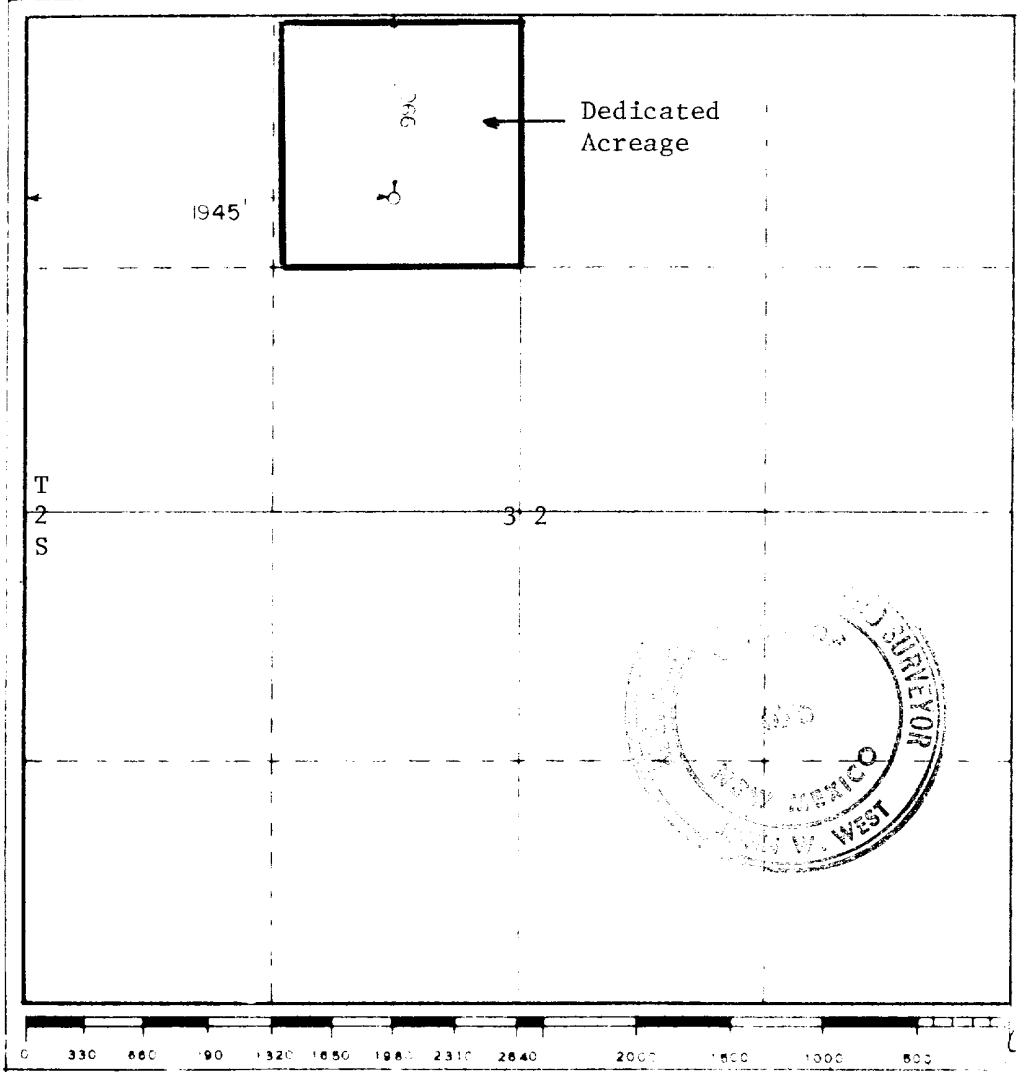
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc.?

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.

R-32E



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

Michael D. Anderson

Michael D. Anderson

Production Engineer

Marathon Oil Company

January 15, 1980

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.

Jan , 1980

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6668
Ronald J. Eidson 3239

Houston Division
Production Operations, U.S. & Canada

Marathon Oil Company

P.O. Box 2409
Hobbs, New Mexico 88240
Telephone 505/393-7106

January 15, 1980

Mr. Ray Stall
U. S. Geological Survey
P.O. Box 1157
Hobbs, NM 88240

Re: Agreement for Compensation and Rehabilitation for Privately Owned Surface Rights for the following well and associated access road.

Marathon Oil Company
Best-Federal "32" Well No. 1
990' FNL & 1945' FWL Sec. 32, T-2S, R-32E
Roosevelt County, New Mexico
Lease - NM - 28180-A

Dear Mr. Stall:

An agreement has been reached for the restoration of the surface disturbance that will occur during drilling and completion operations of the above referenced well between Marathon Oil Company and the surface rights owner.

All access roads and location will be left intact after abandonment of well.

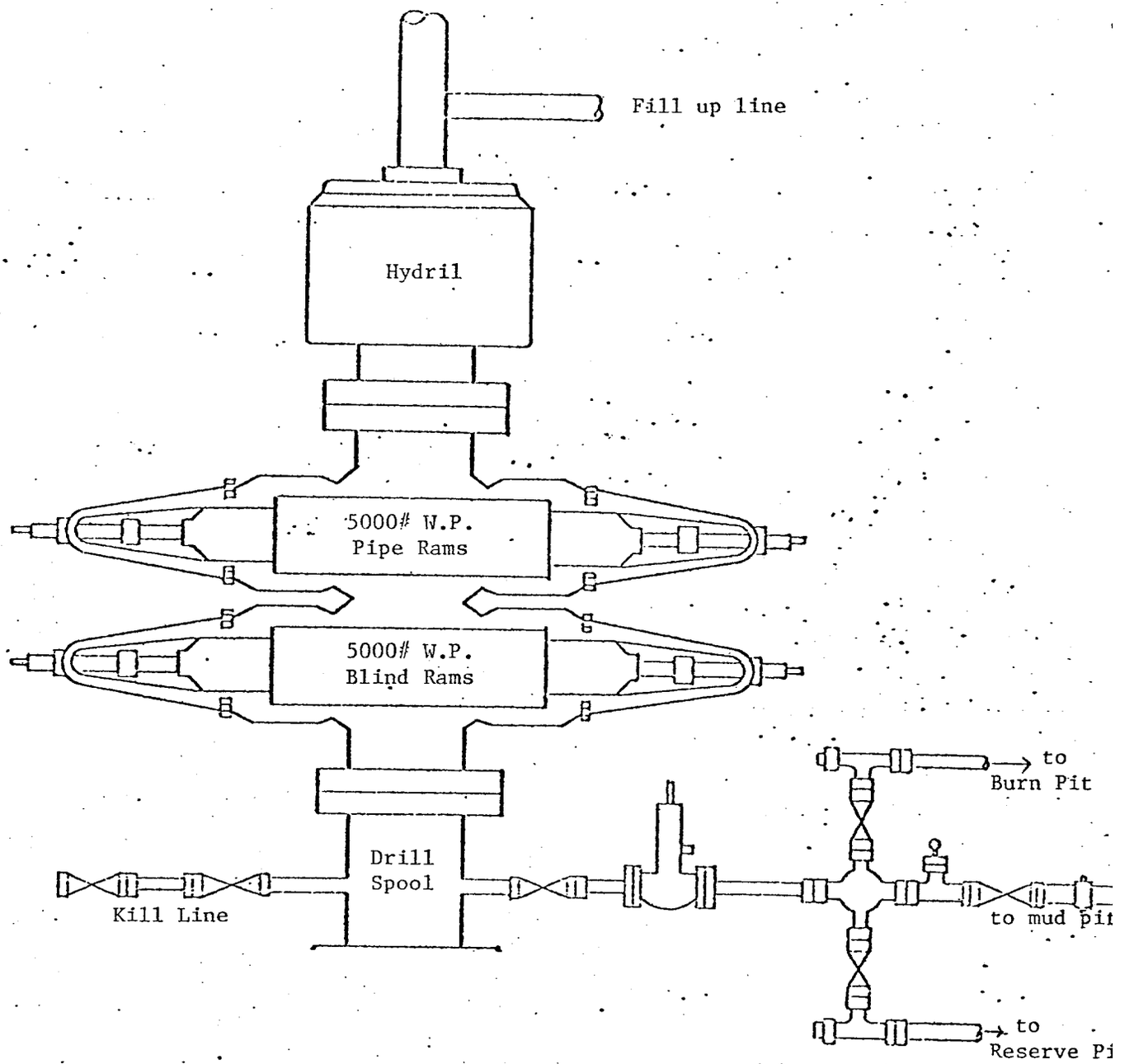
All pits will be allowed to dry out, if necessary, and will then be leveled to as close to the original landscape as possible

The location will be cleaned of all junk and trash and all unnecessary equipment not needed for continued operations will be removed.

These conditions are in accordance with the surface owner's rehabilitation plan and will be complied with by Marathon Oil to the fullest extent.

Michael D Anderson
Signature

1-16-80
Date



Schematic Diagram
Blowout Preventer Hook-up
5000 PSI Working Pressure
Series 900 Flanges or Better

MARATHON OIL COMPANY
Best-Federal "32" Well No. 1
Additional Information to
Comply with NTL-6

1. Geologic Name of Surface Formation:

   Quaternary

2. Estimated Tops of Important Geologic Markers:

Anhydrite	-	1500'
Salt	-	1600'
Base Salt	-	2300'

3. Estimated Depths of Anticipated Water, Oil, or Gas Bearing Formations:

Oguallala (Water)	-	70'
San Andres (Oil)	-	2750'
Wolfcamp (Oil)	-	6300'
Cisco (Oil)	-	6700'
Montoya (Oil)	-	7300'

4. Proposed Casing Program:

   See Attached Application.

5. Blowout Equipment Specifications:

   - 5000 psi working pressure with 10" API flange connections.
   - Blind rams, pipe rams, and choke manifold will be tested to 5000 psi.
   - Hydril will be tested to 3500 psi.
   - Will have both manual and remote controls on pipe and blind rams.
   - Pipe rams will be operated daily and blind rams will be operated every time drill pipe is tripped out of hole.

   (See attached schematic)

6. Proposed Mud Program:

0' - 350'	Fresh water containing gel and lime. Mud wt.: 8.8 - 9.2 ppg; Viscosity: 34 - 36 sec.
350' - 4000'	Fresh water with native solids. Brine additions for hole stability. Mud wt.: 9.0 - 10.1 ppg; Viscosity: 32 - 34 sec.
4000' - 5500'	Brine water with paper for fluid loss. Mud wt.: 9.5 - 10.2 ppg; Viscosity: 28 - 29 sec.
5500' - T.D.	Salt water gel Mud wt.: 10 - 10.2 ppg; Viscosity: 38 - 50 sec. Water Loss: 10cc

7. Auxiliary Equipment:

   A stabbing valve will be kept on the floor to be used when the Kelly is not in the string.

8. Testing, Logging, and Coring Programs:

   A. No cores are anticipated.

B. The logging program is as follows:

Compensated Neutron/Compensated Density	TD - 350
Gamma Ray/Caliper	TD - Surface
Dual Induction/Spherically Focused Log	TD - 350
BHC Sonic/Gamma Ray	TD - 350
Gamma Ray/Casing Collar/Cement Bond Log	TD - Surface

C. Possible Drill Stem Tests:

Wolfcamp Formation
Cisco Formation
Montoya Formation

9. Abnormal Pressures, Temperatures, or Potential Hazards:

None Anticipated.

10. Anticipated starting date is February 15, 1980 with Completion Operations finished by April 5, 1980, barring any unforseen difficulty.

MULTIPOINT SURFACE USE AND OPERATIONS PLAN

Marathon Oil Company
Best-Federal "32" Well No. 1
990' FNL & 1945' FWL Sec. 32, T-2S, R-32E
Roosevelt County, New Mexico
Lease: New Mexico 28180-A

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedure to be followed in rehabilitating the surface after completion of all operations so that a complete appraisal can be made of the environmental effects associated with the proposed operations.

1. EXISTING ROADS

A. Exhibit "A" is a portion of a highway map showing the location of the proposed well as staked. The proposed access route goes twelve miles north of Elida, New Mexico on State highway 330 to the junction of State highway 480. Then procede east along highway 480 2.5 miles. At this point the proposed access road will turn south and go 2.2 miles and procede west approximately 1/8 mile to the proposed location. All roads in the area with the exception of highways 330 and 480 are dirt or farm trail roads and are not capable of carrying heavy loads.

B. Exhibit "B" is a plat showing all existing roads within a three mile radius of the proposed wellsite and all proposed access roads.

2. PLANNED ACCESS ROADS

A. Length and width

The new access roads will be 12 feet wide and total 2.35 miles in length. This new road is labeled and color coded red on exhibits "B" and "C". The centerlines of the proposed roads have been staked and flagged with the stakes being visible from any one to the next.

B. Surfacing material

Six inches of caliche watered, compacted and graded.

C. Maximum grade

Three percent.

D. Turnouts

None required.

E. Drainage design

The new road will have a drop of six inches from the centerline to each edge.

F. Culverts

None required.

G. Cuts and fills

None required.

H. Gates, cattleguards, and fences

One cattleguard located 2.5 miles east of highway 330 on highway 480 will be required.

3. LOCATION OF EXISTING WELLS

A. There are no wells located within a two-mile radius of the proposed well. The nearest well is 2.5 miles southwest of proposed well and is the Leed and Pine McGee Well No. 1 located in Unit O, Sec. 1, T-2S, R-31E, P&A 9-29-72.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

A. There are no existing facilities.

B. In the event of a producible well, the production will be stored on location until such time as deemed appropriate for construction of storage facilities at another site.

5. LOCATION AND TYPE OF WATER SUPPLY

A. Water for drilling will be purchased from Mr. Wendall Best. The water will come from an existing water well located approximately 1100 feet east of the proposed well and will be transported by a temporary flowline to the wellsite.

6. SOURCE OF CONSTRUCTION MATERIALS

A. Caliche for surfacing of roads and pad will be obtained from a new pit to be located in Unit L, Sec. 18, T-2S, R-32E. The pit is on land owned by Mr. Jerry Wood. Location of pit is shown on Exhibit "A".

7. METHODS OF HANDLING WASTE DISPOSAL

A. Drill cuttings will disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the pits until pits are dry.

C. Water produced during tests will be disposed of in the drilling pits or hauled to an approved salt water disposal well.

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

E. Trash, waste paper, garbage, and junk will be buried on a separate trash pit and covered with a minimum of 24" of dirt. Location of trash pit is shown on Exhibit "D".

F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and completion operations.

8. ANCILLARY FACILITIES

A. None required.

9. WELLSITE LAYOUT

A. Exhibit "D" shows the relative locations of pad, mud pits, reserve pit, trash pit, and locations of major rig components.

B. Only minor leveling of wellsite will be required. No significant cuts or fills will be required. The reserve pit will be located east of the well, as staked, in a natural depression.

C. The reserve pit will be plastic lined.

D. The pad, pit area, and access roads have been staked and flagged.

10. PLANS FOR RESTORATION OF SURFACE

A. After finishing drilling and completion operations all equipment and other material not necessary for operations will be removed. Pits will be filled and leveled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.

B. Any unguarded pits containing fluids or trash will be fenced until they are filled or leveled.

C. After abandonment of well, all equipment will be removed and the location will be cleaned. The pad and access road will be left intact as agreed to by Marathon Oil Company and the Surface rights owner.

D. A copy of the Agreement for Compensation and Rehabilitation of Privately Owned Surface Rights is enclosed.

11. OTHER INFORMATION

A. Topography

Gently rolling terrain with slight slope to the south. Approximately 65 feet east of well, as staked, the wind has eroded the overlying layer of sand away and has exposed the underlying caliche layer. This slight depression will be used to locate the mud, trash, reserve, and burn pits during drilling and completion operations.

B. Soil

Fine sand underlain by caliche.

C. Flora and fauna

The vegetative cover consists of native range grasses with an occasional yucca plant and widely separated mesquite. Wildlife in the area includes rabbits, dove, quail, and other inhabitants typical of a semi-arid climate.

D. Ponds and Streams

There are no lakes, ponds, or streams in the area.

E. Residences and structures

The nearest occupied dwelling is a house located two miles northwest of the wellsite. The nearest water well is approximately 1100 feet east of the wellsite.

F. Archeological, historical, or cultural sites

None observed in the area. Archeological Inspection Report is forthcoming.

G. Land use

Grazing with hunting in season.

H. Surface Ownership

Wellsite and all access routes are on privately owned surface.

12. OPERATORS REPRESENTATIVE

Calvin C. Saathoff
P.O. Box 2409
Hobbs, New Mexico 88240

13. CERTIFICATION

I hereby certify that I have inspected the proposed drillsite and access route; that I am familiar with the conditions that 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 Marathon Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Michael D Anderson

Marathon Oil Company
Michael D. Anderson
Production Engineer

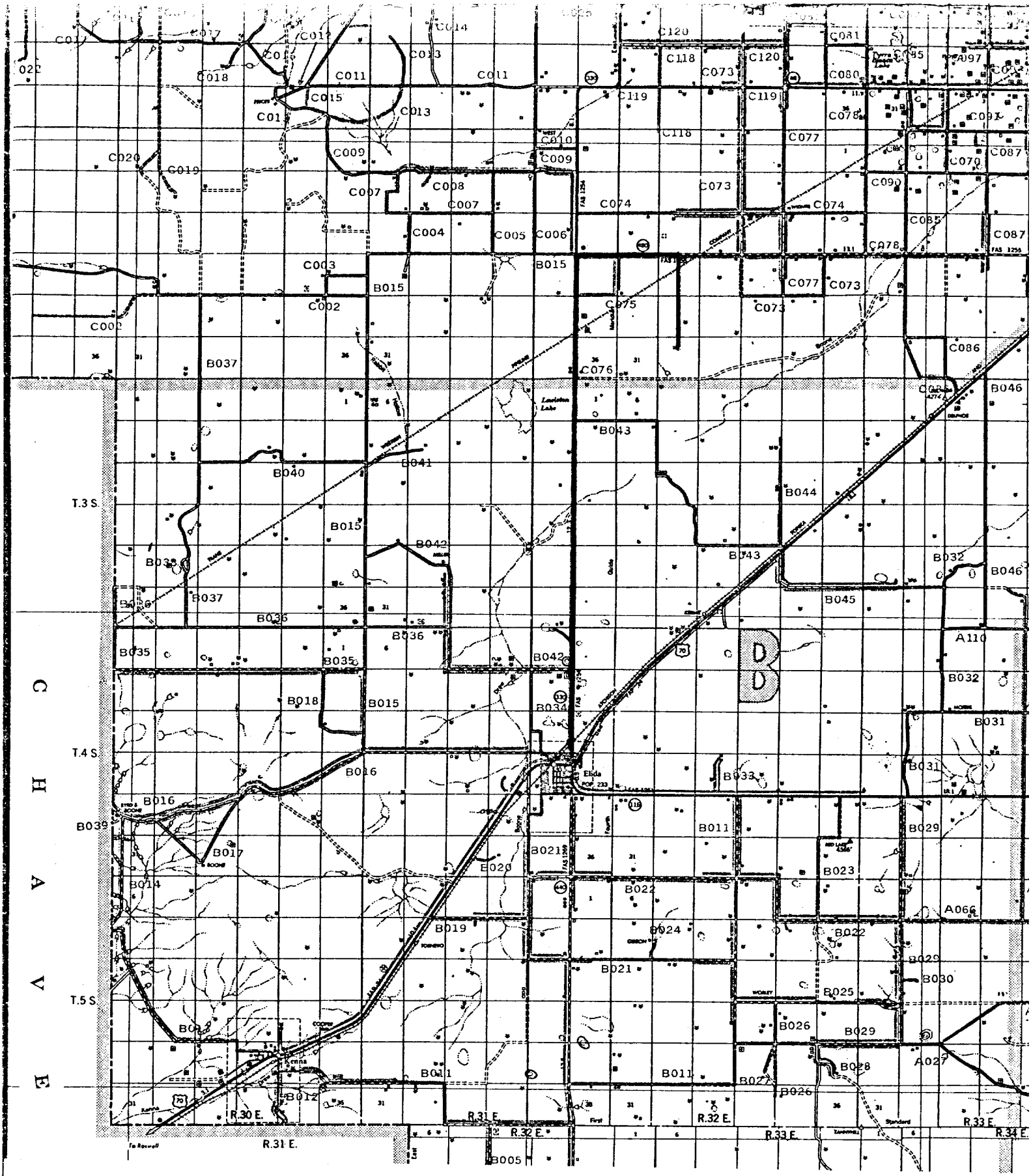


EXHIBIT "A"
PROPOSED ROUTE
MARATHON OIL COMPANY
BEST-FEDERAL "32" WELL NO. 1
990' FNL & 1945' FWL Sec. 32, T-2S, R-32E
Roosevelt County, New Mexico

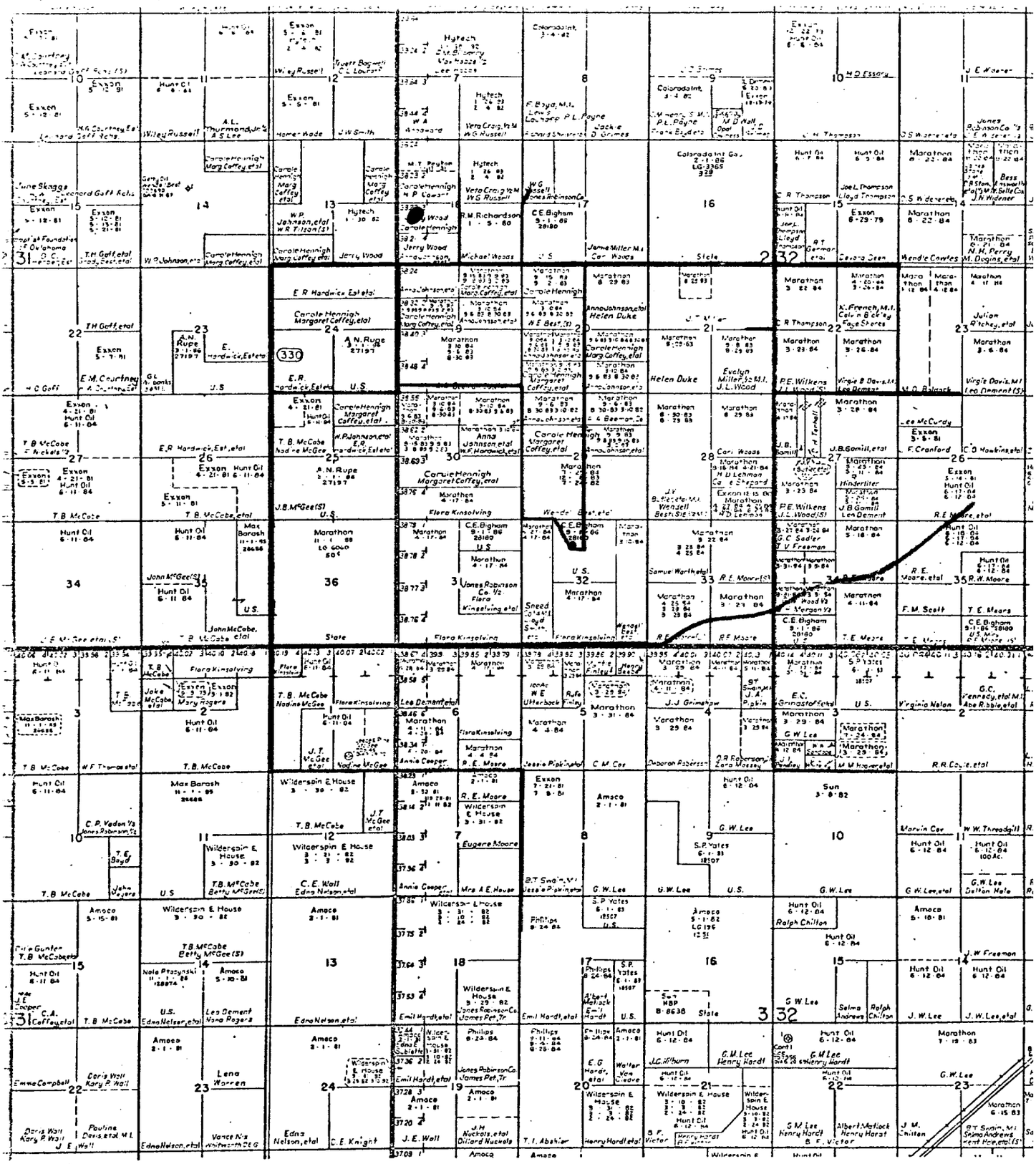


EXHIBIT "B"
Marathon Oil Company
Best-Federal "32" Well No. 1
990' FNL & 1945' FWL, Sec. 32, T-2S, R-32E
Roosevelt County, New Mexico

Scale 1" = 1 mile

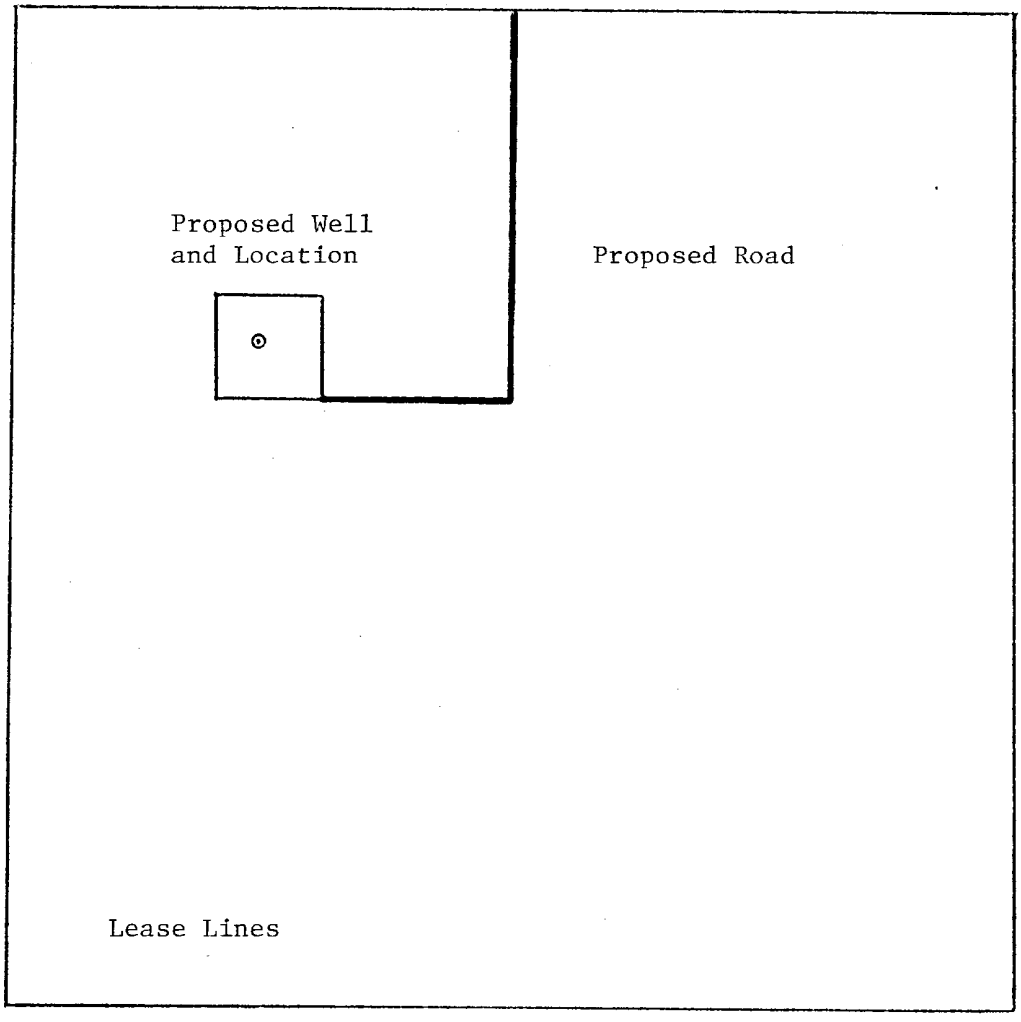


EXHIBIT "C"
Marathon Oil Company
Best-Federal "32" Well No. 1
990' FNL & 1945' FWL Sec. 32, T-2S, R-32E
Roosevelt County, New Mexico

Scale 1" = 500'

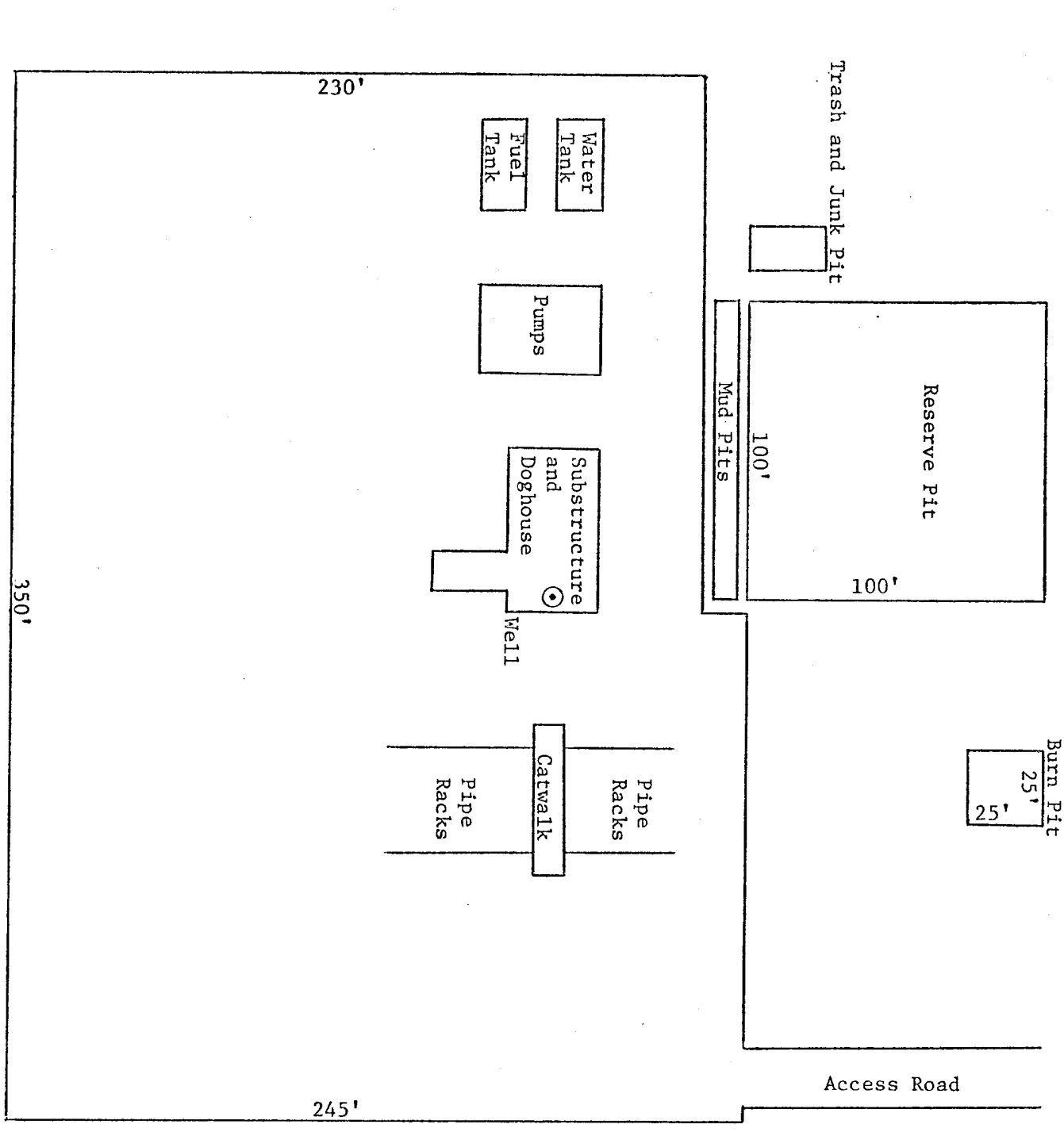


EXHIBIT "D"
Rig Layout
Marathon Oil Company
Best-Federal "32" Well No. 1
990' FNL & 1945' FWL Sec. 32, T-2S, R-32E
Roosevelt County, New Mexico

Scale 1" = 50'