Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructic
reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UN D STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: USA-NM 9563

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

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

7. UNIT AGREEMENT NAME: SRM-1256

8. FARM OR LEASE NAME: TEAS FEDERAL COM.

2. NAME OF OPERATOR: SUN OIL COMPANY

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: P. O. BOX 1861, MIDLAND, TEXAS 79702

10. FIELD AND POOL, OR WILDCAT: Teas-Pennsylvanian

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL, 1980' FWL, Sec. 24, T20S, R-33-E, NMPM
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 24, T-20-S, R-33-E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 32.8 miles southwest of Hobbs, N. M.

12. COUNTY OR PARISH: Lea

13. STATE: N. M.

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
1980'	520	320
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**
-	13,700	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): GR 3635.6

22. APPROX. DATE WORK WILL START*: ASAP - 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
24	20	94	1,200	1475 Sx
17½	13-3/8	54.50 & 61	3,300	3750 Sx
12¼	9-5/8	36 & 40	8,400	1635 Sx
8½	5-1/2	17 & 20	13,700	1075 Sx

- SEE ATTACHED -

GAS Not DEDICATED
NSL-R-5728

90 days after approval

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 James L. Rowe TITLE Regional Manager Conservation DATE April 4, 1978

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

WELL CATION AND ACREAGE DEDICATION F

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

All distances must be from the outer boundaries of the Section

Operator: Sun Oil Co.			Lease: Teas Fed. Com.	Well No.: 1
Unit Letter: F	Section: 24	Township: 20 South	Range: 33 East	County: Lea
Actual Footage Location of Well: 1980 feet from the North line and 1980 feet from the West line				
Ground Level Elev.: 3635.6	Producing Formation: Pennsylvanian	Pool: Teas		Dedicated Acreage: 320 Acres

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

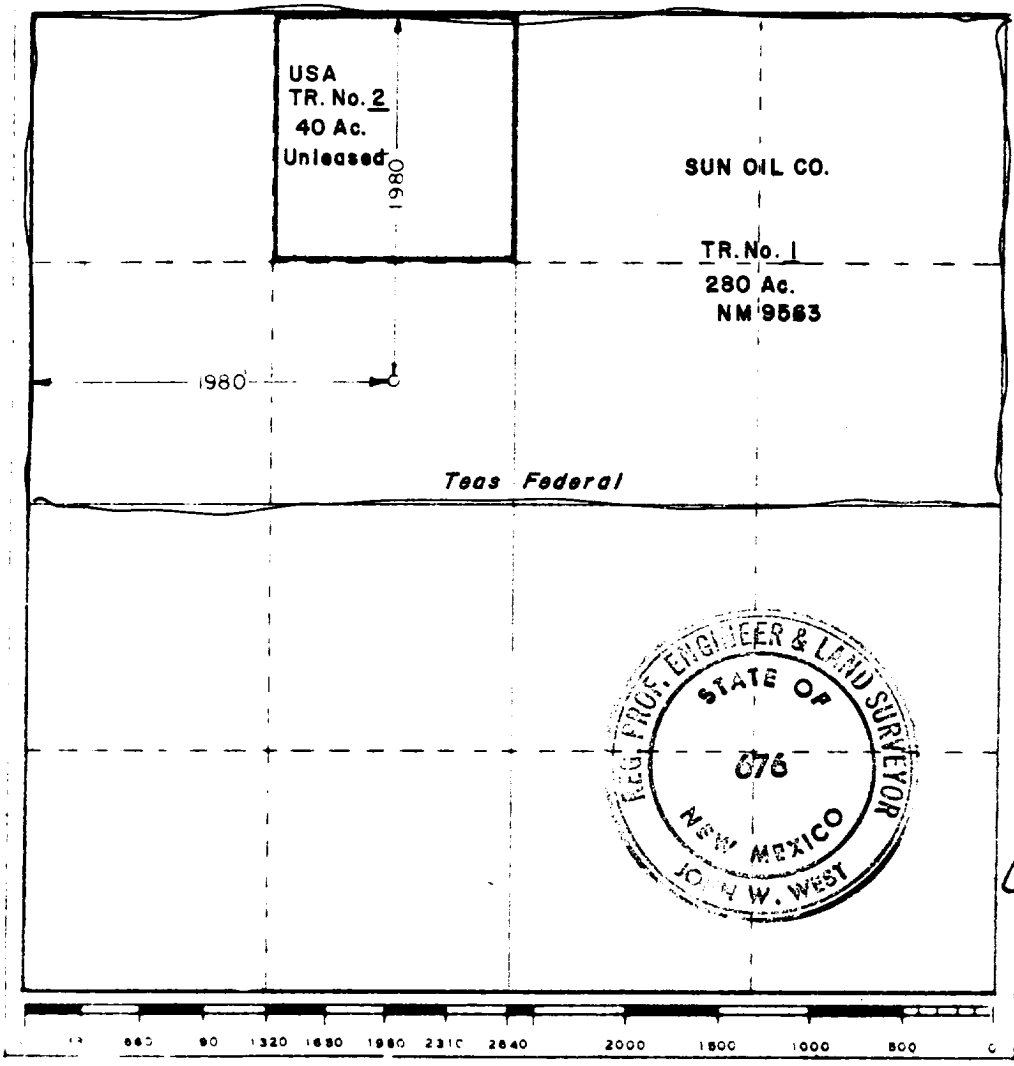
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

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

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: C. C. Dunlap

Position: Regional Drilling Coordinator

Company: SUN OIL COMPANY

Date: April 4, 1978

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: 1/11/78

Registered Professional Engineer and/or Land Surveyor

Certificate No. John W. West 676
Ronald J. Eidson 3239

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

SUN OIL COMPANY
TEAS FEDERAL COM. NO. 1
1980' FNL & 1980' FWL, Sec. 24 T20S-R33E
USA - NEW MEXICO LEASE #9563

1. GEOLOGIC NAME OF SURFACE FORMATION: "QUATERNARY"

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Yates	3311
Bone Spring	8436
Wolfcamp	11074
Strawn	12366
Atoka	12576
U. Morrow	12974
M. Morrow	13254
L. Morrow	13506

3. ANTICIPATED HYDROCARBON BEARING ZONES:

Bone Spring	8436
M. Morrow	13254
L. Morrow	13506

4. CASING PROGRAM:

SIZE	FOOTAGE	GRADE	WT/FT	
20"	1200	H-40	91 lb	New
13-3/8"	2000	K-55	54.50 lb	New
	1300	K-55	61.00 lb	New
	3300			
9-5/8"	5400	S-80	36.00 lb	New
	3000	S-80	40.00 lb	New
	8400			
5-1/2"	1000	N-80	17.00 lb	New
	4500	N-80	20.00 lb	New
	5500			

5-1/2" is liner w/top at 8200', bottom at TD 13,700'

5 & 7. OPERATORS MINIMUM SPECIFICATIONS FOR PRESSURE AND BLOW OUT EQUIPMENT TO BE USED:

After setting the 9-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment

failing to test satisfactorily shall be repaired or replaced. USGS office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.

Pipe rams and the annular-type preventer shall be actuated at least once each 24 hours and the blind rams each time the drill pipe is out of the hole.

Accumulators shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers.

A drill string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.

Blowout prevention drills shall be conducted as necessary to insure that each drilling crew is properly trained to carry out emergency duties.

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp and used until production casing is run and cemented. Monitoring equipment shall consist of the following:

(1) A recording pit level indicator to determine pit volume gains and losses.

(2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.

(3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.

When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.

A copy of these requirements shall be posted on the rig floor or in the dog-house during the drilling of the well.

6. TYPE AND MUD SYSTEM CHARACTERISTICS:

FROM	TO	WT. LBS/GALS	WL	VIS	TYPE MUD
0	1200	8.6 - 9.2	NC	34-36	Frsh Wtr-Gel-Lime
1200	3300	10.0	NC	28	Sat brn - Lime
3300	8400	8.4 - 8.5	NC	28	Frsh wtr - Lime
8400	11000	8.4 - 8.5	NC	28	Frsh wtr - Lime
11000	12500	9.5 - 10.0	NC	28	Brine - Caustic Soda
12500	TD	10.0 - 10.5	±5	34-38	Brine - Polymer

8. Anticipate two drill stem tests will be conducted depending on shows in Bone Spring and Morrow. Such tests to be conducted under established prudent industry practice.

No coring is anticipated.

Schlumberger:

I.	BHC Sonic/GR	3300 - 1200
	GR only	1200 - Surface
II.	BHC Sonic/GR	8400 - 3300
	DILL	8400 - 3300
III.	DLL/RXO	TD - 8400
	CNL-FDC/GR	TD - 8400

9. No abnormal temperatures or hydrogen sulfide gas is expected. Abnormal pressures may be expected through Strawn, Atoka and Morrow formations.

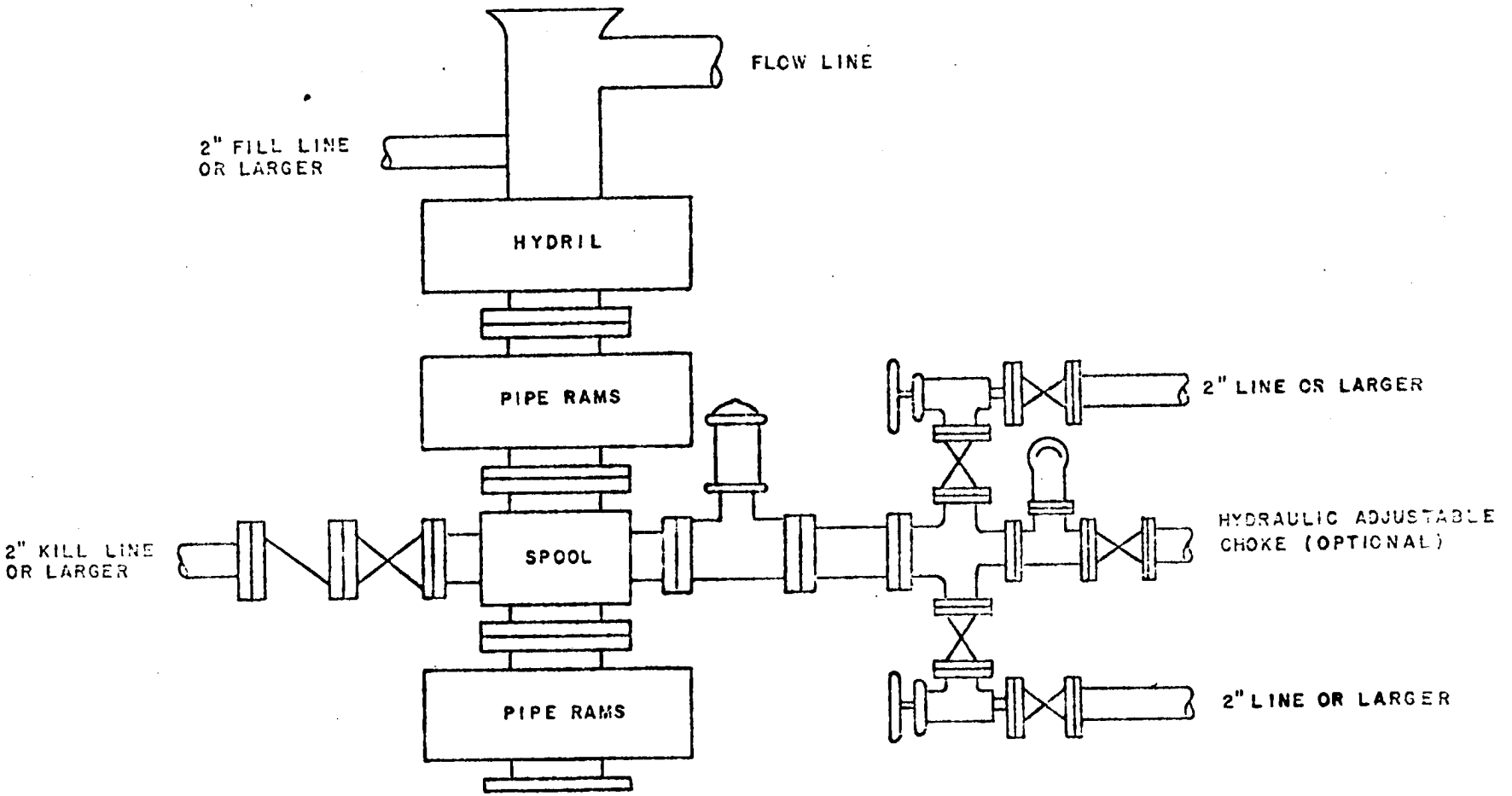
Two similar wells have been drilled in the area:

Sinclair (ARCO) Mahaffey Fed #1, drilled to 14,948' in NW/4 Sec. 14, T20-R33 and is producing.

Cities Service Government "N" #1-Y, drilled to 15,137' in SW/4 Sec. 19, T20-R34 and was P&A'd.

10. Estimated starting date: As soon as possible - subject to approval of permit and data presented herein.

BLOWOUT PREVENTER ARRANGEMENT



SUN OIL COMPANY
TEAS FEDERAL COM. NO. 1
1980' FNL & 1980' FWL , Sec. 24, T20S-R33E
USA - NEW MEXICO LEASE #9563
(WILDCAT WELL)
LEA COUNTY, NEW MEXICO

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the 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 procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS

A. Exhibit A is a portion of a county map showing the proposed well as staked. Directions to location:

From Jct 483 & 62/180 ("Arkansas Jct", 11 miles west of Hobbs) procede 18.6 miles west on Hwy 62/180, turn south on caliche road through cattleguard 0.2 miles, turn east 0.45 mile, turn south 0.65 mile, turn east 0.15 mile, turn south 0.45 mile (cattleguard 0.2 mile south), turn southeast 0.3 mile, turn northeast 0.7 mile (fence at 0.3 mile) to windmill, turn south 0.3 mile to location.

Location is 32.8 miles from Hobbs, and 3.2 miles from Hwy 62/180.

B. Exhibit B is a plat showing all wells within a one-mile radius of the wellsite and the planned access road.

C. A portion of the existing lease roads in Sections 10, 14 and 15 will be repaired as required. This will consist of adding caliche to restore six-inch deep by twelve-foot wide caliche road.

2. PLANNED ACCESS ROADS

A. Length and Width: New road required will be 12-feet wide and approximately 1500-feet long. This new road is labeled and color coded red on Exhibit B. The center line of the proposed new road from the beginning to the wellsite, has been staked and flagged with the stakes being visable from one end to the next.

B. Surface Material: Six inches of caliche, water, compacted and graded.

C. Maximum Grade: Three percent.

D. Turnouts: None required on this short roadway.

E. Drainage Design: New road will be 12-feet wide and crowned for drainage.

F. Culverts: It is anticipated no culverts will be required.

G. Cuts and Fills: None anticipated

H. Gates and Cattleguards: A cattleguard will need to be set on the fenceline between Section 24 and Section 23. (A barbed wire gate is presently in use)

3. LOCATION OF EXISTING WELLS

A. Existing wells within a one-mile radius are shown on Exhibit B.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. If the proposed well is completed and productive, plans are to construct a tank battery on the well pad and no additional surface disturbance will occur.

5. LOCATION AND TYPE OF WATER SUPPLY

A. Fresh water will be produced from water bearing sands underlying the lease if found to be of sufficient quantity and quality for drilling operations. All brine water (and fresh water if necessary) will be purchased and hauled over existing and proposed roads shown on Exhibits A & C.

6. SOURCE OF CONSTRUCTION MATERIALS

A. Caliche for surfacing the road and the well pad will be obtained from an existing pit in SW/4 of NE/4 Section 23, T20S-R33E. Location of the pit is shown in Exhibit B.

7. METHODS OF HANDLING WASTE DISPOSAL

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

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

C. Water produced during test will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

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 in a separate trash pit and covered with a minimum 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. 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/or completion operations.

8. ANCILLARY FACILITIES

A. None required.

9. WELLSITE LAYOUT

A. Exhibit D shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit, and location of major rig components. (If Exhibit D not included - some will be submitted as soon as contractor is selected through bidding.

B. Only minor levelling of the wellsite will be required. No significant cuts or fills will be necessary.

C. The reserve pit will be plastic lined.

D. The pad and pit area.

10. PLANS FOR RESTORATION OF THE SURFACE:

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

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

C. After abandonment of the well, surface restoration will be in accordance with the agreement with the surface owner. Pits will be filled and location will be cleaned. The pit area, well pad, and all unneeded access road will be ripped to promote revegetation. Rehabilitation should be accomplished within 90 days after abandonment. (Alternate if on Federal surface - after abandonment, any special rehabilitation and/or revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible. All pits should be filled and levelled within 90 days after abandonment.)

11. OTHER INFORMATION:

A. Topograhpy: Land surface is undulating to gently rolling and duny. From an elevation of 3635.6 feet at the wellsite.

B. Soil: Soil is a deep fine sand underlain by caliche.

C. Flora and Fauna: The vegetative cover is generally sparse and consists of mesquite, yucca, shinnery oak, sandsage and perenial native range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove, quail, and an occasional antelope.

D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.

E. Residences and Other Structures: The nearest occupied dwellings are houses at the Bingham Ranch approximately six miles west-south-west and at the Smith Ranch approximate five miles north.

F. Archeological, Historical and Cultural Sites: None observed in the area.

G. Land Use: Grazing and hunting in season.

H. Surface Ownership: Wellsite is on Federal surface.

12. OPERATOR'S REPRESENTATIVE:

The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

H. L. Bethancourt
2809 Moss
Midland, Texas 79701
Office Phone: 915--682-8271 or 682-8276
Home Phone: 915--694-0678

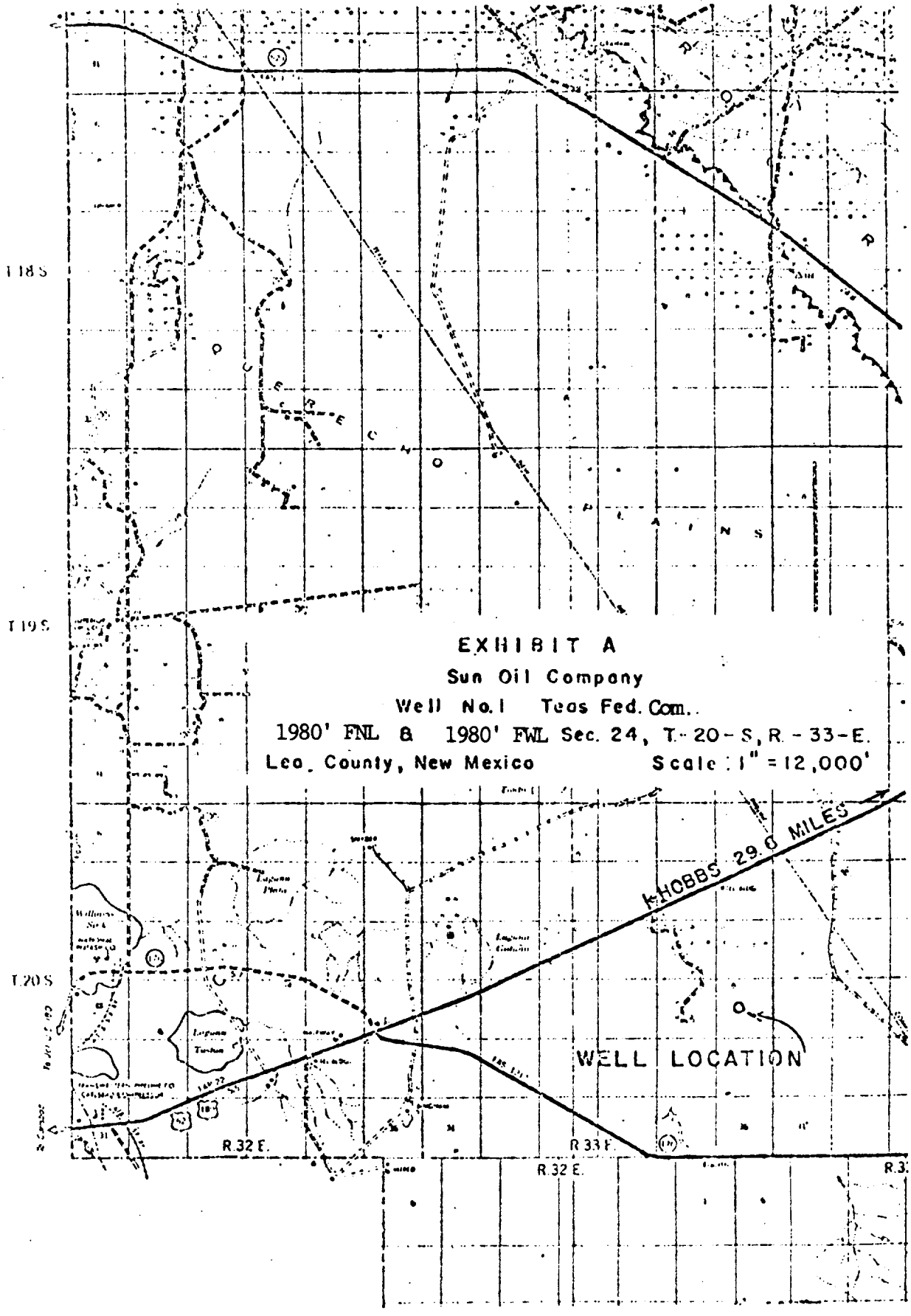
13. CERTIFICATION

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 Sun Oil Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

April 4, 1978
Date

C. C. Dunlap
Name: C. C. Dunlap

Regional Drilling Coordinator
Title


EDDY CO
T 18 S
T 19 S
T 20 S
EXHIBIT A
Sun Oil Company
Well No. 1 Teas Fed. Com.
1980' FNL & 1980' FWL Sec. 24, T-20-S, R-33-E.
Lea County, New Mexico
Scale : 1" = 12,000'
HOBBS 29.6 MILES
WELL LOCATION
R.32 E.
R.33 E.
R.32 E.

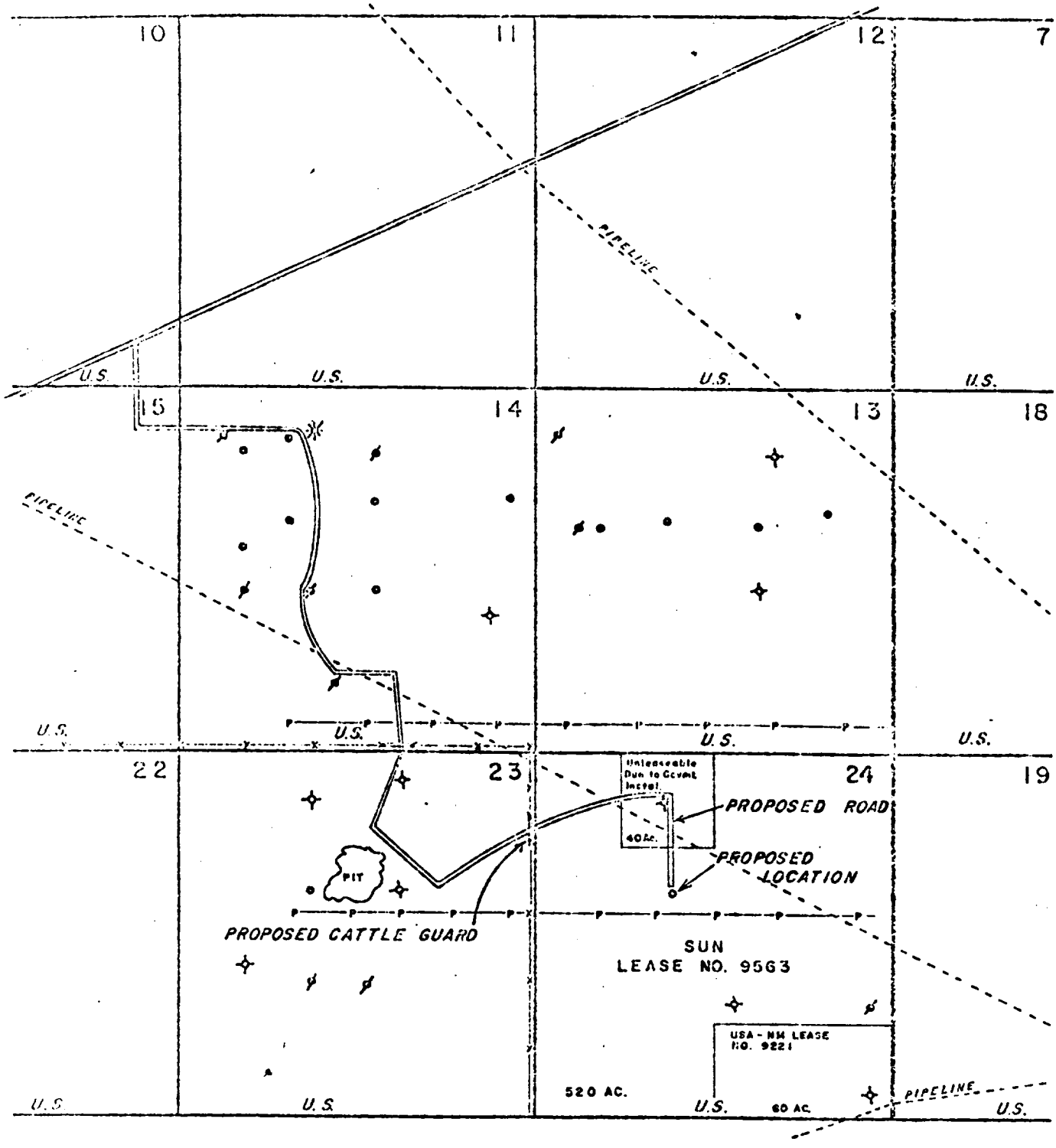


EXHIBIT B

Sun Oil Company

Well No. 1 Teas Fed. Com.

1980' FNL & 1980' FWL Sec. 24, T-20-S, R.-33-E.

Lea County, New Mexico Scale: 1" = 2000'

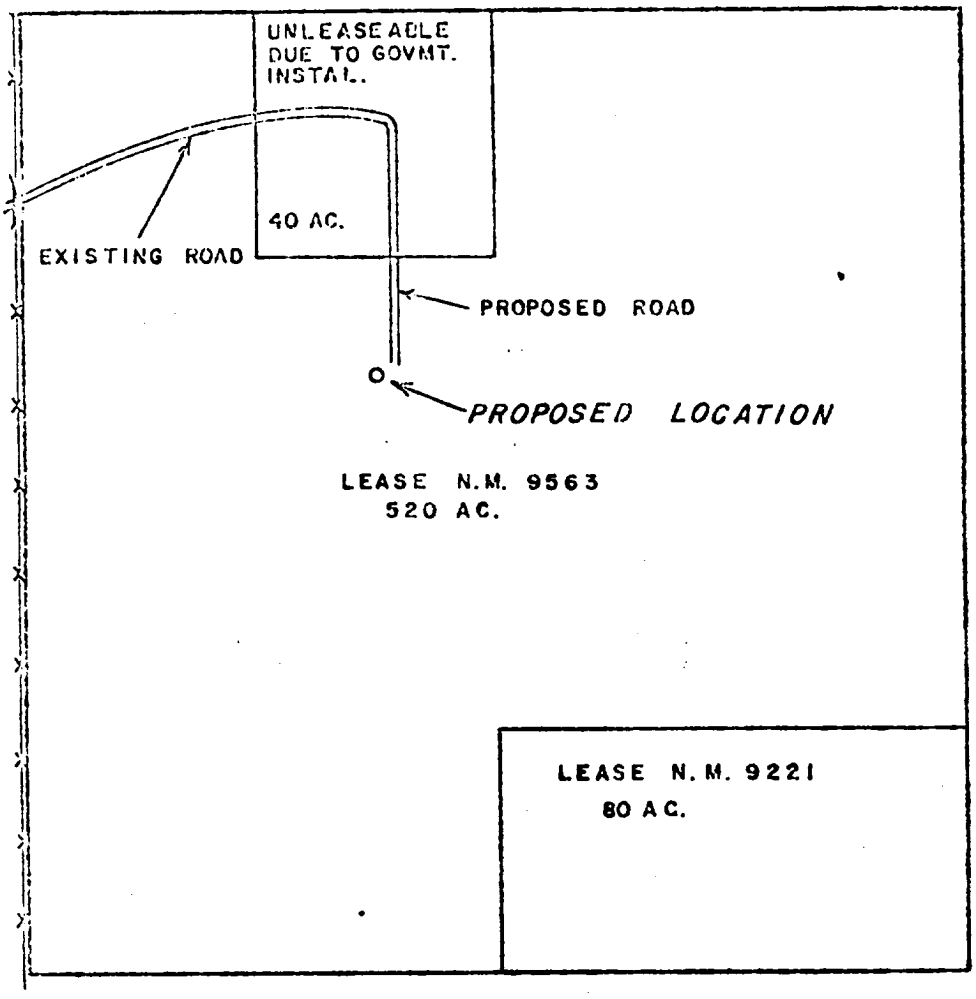


EXHIBIT C

Sun Oil Company

Well No.1 Teas Fed.Com.

1980' FNL & 1980' FWL Sec. 24, T.-20-S., R.-33-E.

Lea County, New Mexico Scale: 1" = 1000'

EXHIBIT D-1

Sun Oil Company

Well No. 1 Teas Fed. Com.

1980' FNL & 1980' FWL Sec. 24, T-20-S., R-33-E.

Lea County, New Mexico No Scale

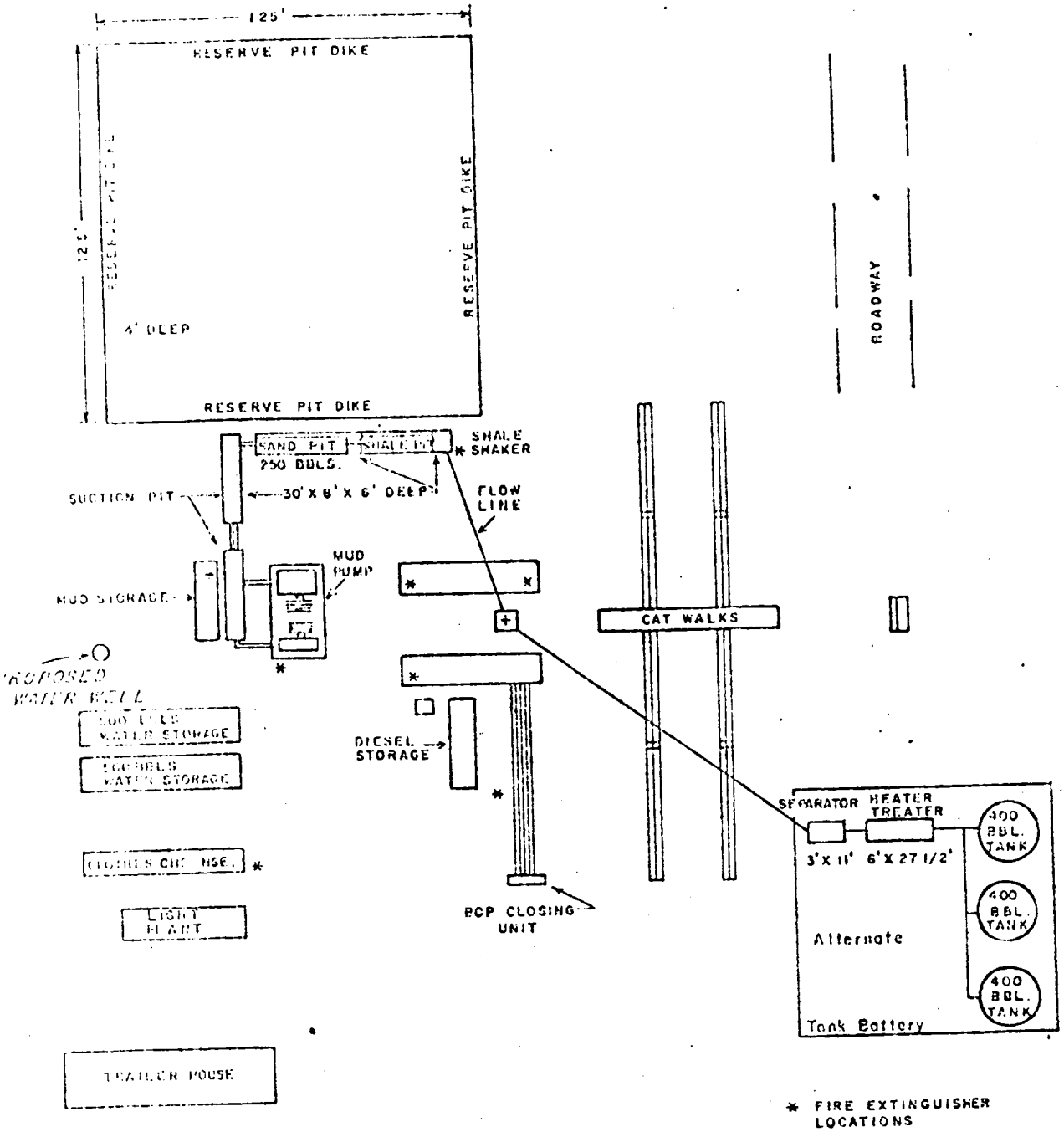


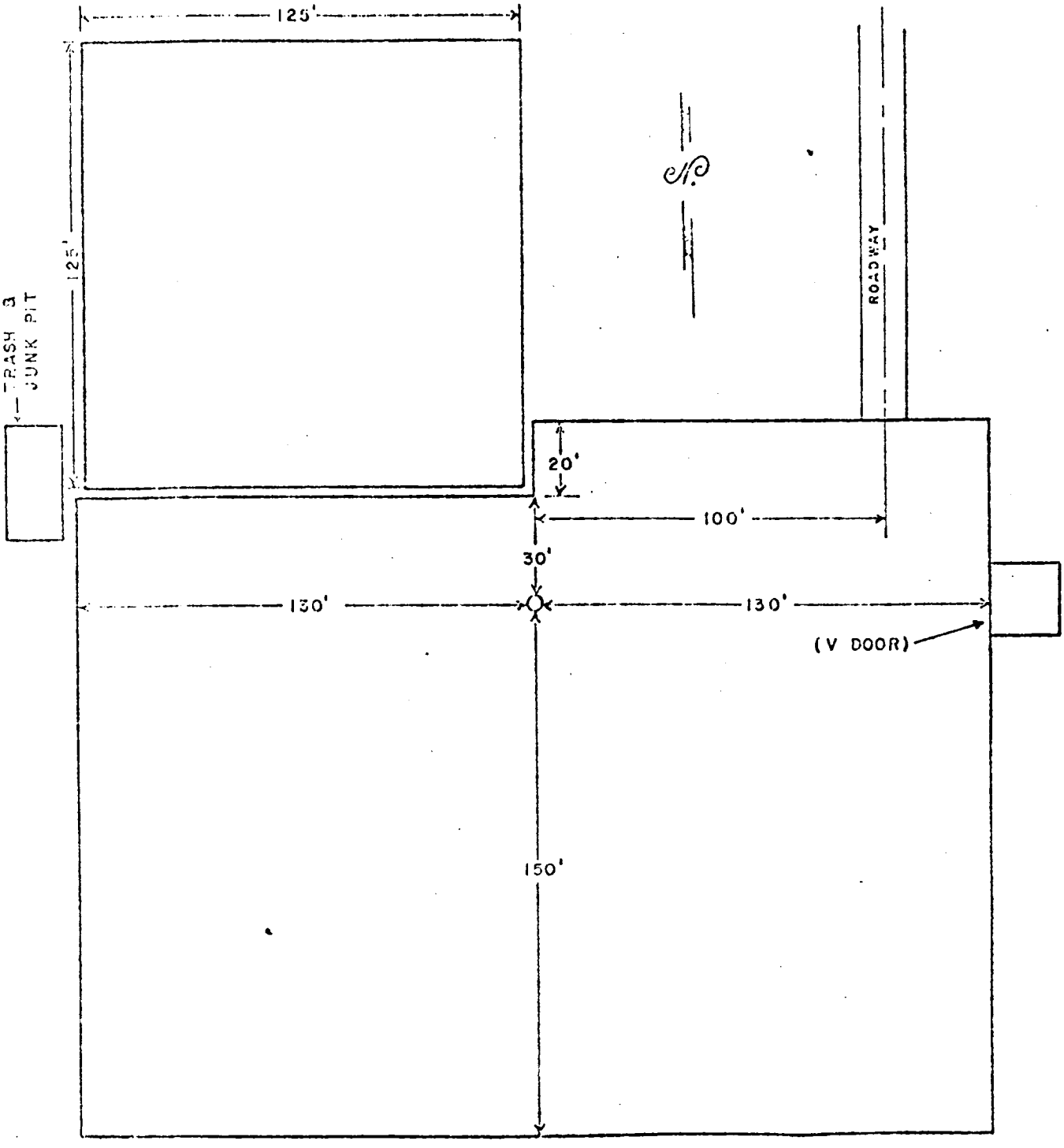
EXHIBIT D-2

Sun Oil Company

Well No. 1 Teas Fed. Com.

1980' FNL & 1980' FWL Sec. 24, T-20-S, R.-33-E.

Lea County, New Mexico Scale: 1" = 40'



Financial Building
230 - 22nd Street East
Saskatoon, Saskatchewan S7K 0E9

noranda

Phone: (306) 664-2291

June 29, 1978

U.S. Geological Survey
Federal Building
P.O.Box 1157
Hobbs, New Mexico 88240
U.S.A.

Gentlemen,

Noranda Exploration, Inc. has been advised of Sun Oil Company's application to drill the Teas Federal Com. Well No. 1, Section 24, T20S, R33E, Lea County, New Mexico.

This is to advise that Noranda Exploration, Inc. has no objection to Sun's application.

Yours truly,

Noranda Mines Limited

J.M. Gordon
General Manager

1978

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MEXI