

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

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

THE SUPERIOR OIL COMPANY

## 3. ADDRESS OF OPERATOR

P. O. BOX 71, CONROE, TEXAS 77301

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)

At surface

1980' FEL &amp; 1980' FNL

At proposed prod. zone

SEC 18 - T24S - R24E

same as above

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

LOCATION 21 MILES NW'LY FROM JAL, NEW MEXICO

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

660'

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

N.A.

## 16. NO. OF ACRES IN LEASE

239.57 acres

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL  
320 acres (North 1/2 Sec 18)

## 19. PROPOSED DEPTH

17,720'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3575.7 Feet G.R.

## 22. APPROX. DATE WORK WILL START\*

July 19, 1977

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
36"	30"	118.65 lbs.	50 ft	as reg to cmt to surface
26"	20"	94 lbs.	600 ft	1519 CF
17-1/2"	13-3/8"	54.5, 61, 68 lbs.	5,400 ft	5815 CF
12-1/4"	10-3/4"	51, 55.5, 60.7#	13,100 ft	754 CF
9-1/2"	7-5/8" Liner	39 lbs.	15,400 ft	715 CF
6-1/2"	5" Liner	23.2 lbs.	17,720 ft	450 CF

The above well will be drilled using accepted and safe practices known to industry using blowout preventers and Hydril for proper well control. The above casing program will be used except that 5" casing will be run only if objective zones are determined to be commercial.

Blowout preventers and Hydril will be installed after setting 20" surface casing, and until total depth is reached. See attachment for BOP detail.

Unless Drilling Operations Have  
Commenced, this drilling approval  
Expires 10-11-77

SEE ATTACHED FOR  
CONDITIONS OF 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

TITLE

Division Drilling Engineer

DATE

June 17, 1977

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

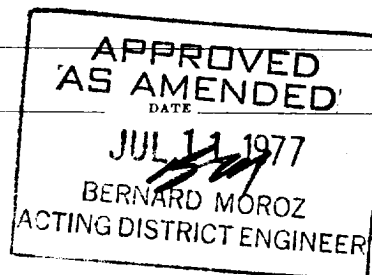
APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

"APPROVAL TO PLUG GRANTED  
WHILE DRILLING AND TESTING."

\*See Instructions On Reverse Side



RECEIVED

JUL 1 1977

GIL CONSERVATION COMIA.  
HOBBS, N. M.

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Date of Filing  
Supersedes G-128  
Effective Date

All distances must be from the nearest corner of the Section.

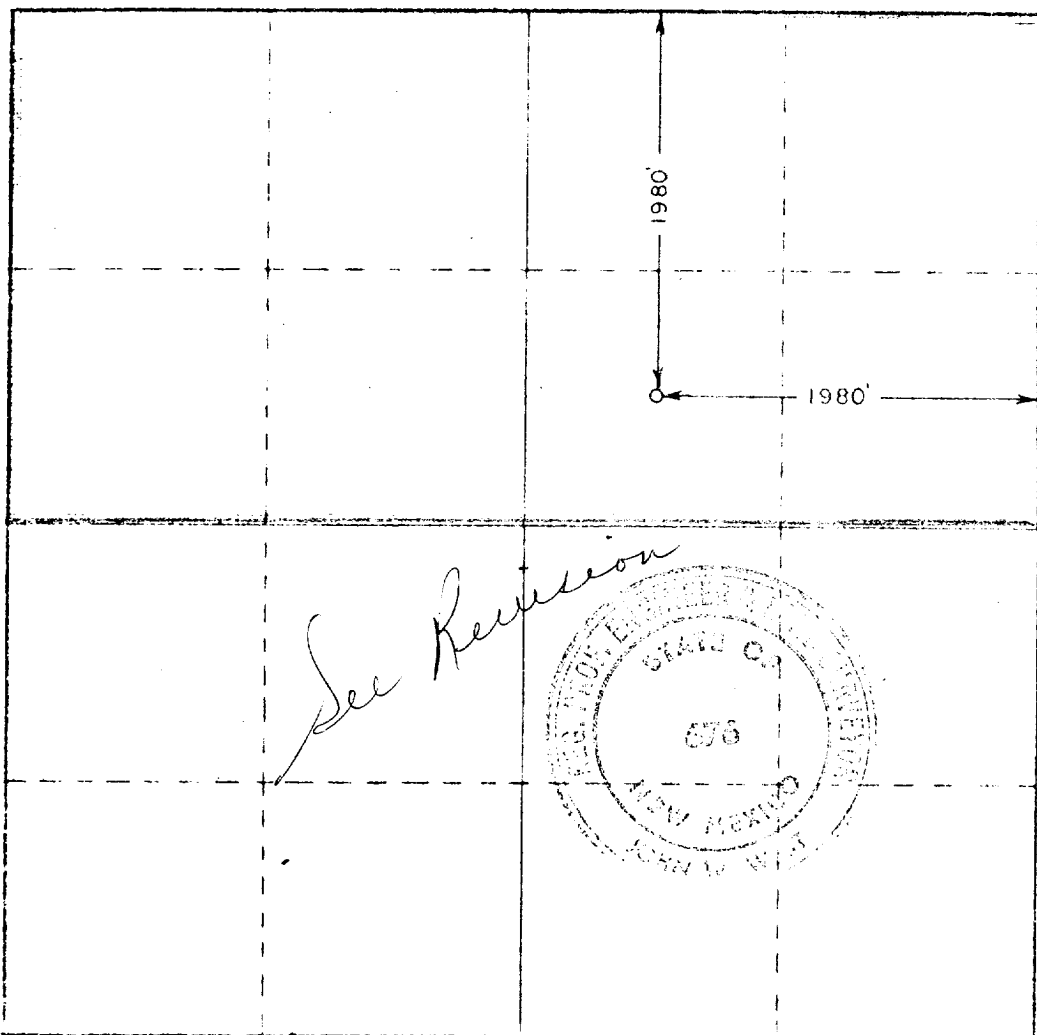
Operator <b>Superior Oil Co.</b>		Lease <b>Government L</b>		Well No. <b>1</b>
Section <b>G</b>	Range <b>18</b>	Township <b>24 South</b>	Meridian <b>34 East</b>	County <b>Lea</b>
Section of True Location of Well:				
<b>1980</b>	feet from the <b>East</b>	line and	<b>1980</b>	feet from the <b>North</b>
Ground Area in Acreage <b>3575.7</b>	Including Dedication <b>FUSSELMAN</b>		Estimated Acreage <b>WILDCAT 32.0</b>	

- Outline the acreage dedicated to the subject well by colored pencil or machine marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 COMMUNITIZATION AGREEMENT

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.

*J. Barwell, Jr.*  
DIV. DRUG ENGINEER  
THE SUPERIOR OIL COMPANY  
6/20/77

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  
**June 9, 1977**

Registered Professional Engineer  
in the State of New Mexico

*John W. West*  
Certification No. **676**

RECEIVED

JUL 1 1977

GIL CONSERVATION COMM.  
HOBBS, N. M.

Attachment to Form 9-331 C  
Application for Permit to Drill

The Superior Oil Company, #1 Government "L"  
1980' FNL and 1980' FEL of Section 18, T-24-S, R-34-E  
Lea County, New Mexico

1. The geologic name of the surface formation is Quaternary wind blown sand on Quaternary caliche.
2. The estimated tops of important geologic markers are shown as follows:

Rustler anhy	1275'	Morrow	14,400'
Delware lime	5370'	Barnett	15,180'
Delware sand	5390'	Mississippian lime	15,430'
Bone Springs	9020'	Woodford	15,770'
Wolfcamp	12,260'	Siluro-Devonian	16,020'
Strawn	13,160'	Fusselman	17,240'
Atoka	13,455'		

3. The estimated depths at which anticipated water, oil, gas or other mineral-bearing formations to be encountered are as follows:

Water Sand:

Tertiary Ogallala Sd	50 - 150'	Delware	5,390'
Triassic Sds	150 - 350'	Bone Spring	9,020'
Salt Section:		Morrow	14,400'
Salado	1425 - 4000'	Siluro-Devonian	16,020'
Anhydrite	4000 - 4450'	Fusselman	17,240'

4. The proposed casing program is as follows:

Conductor - New 30" Grade "B" .375" W.T. set at 50'±

Surface - New 20" 94.0#/ft, H-40, ST&C set at 600'

Intermediate String - New 13-3/8" set at 5400' as follows:

0 - 1000'	54.5#	K-55	Butt
1000 - 1800'	54.5#	S-80	ST&C
1800 - 3800'	61.0#	S-80	ST&C
3800 - 5400'	68.0#	S-80	ST&C

Protection String - New 10-3/4" set at 13,100' as follows:

0 - 5000'	55.5#	AR-95	SL
5000 - 7000'	51.0#	Soo-95	STC
7000 - 10200'	55.5#	S-95	STC
10200 - 13100'	60.7#	S-95	STC

Protection Liner - New 7-5/8" set at 15,400' top at 12,800'±

12,800 - 15,400'	39.0#	S-95	SFJ
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Production Liner - New 5" set at 17,720' top at 15,100'±

15,100 - 17,720'	23.20#	C-75	SFJ & XL
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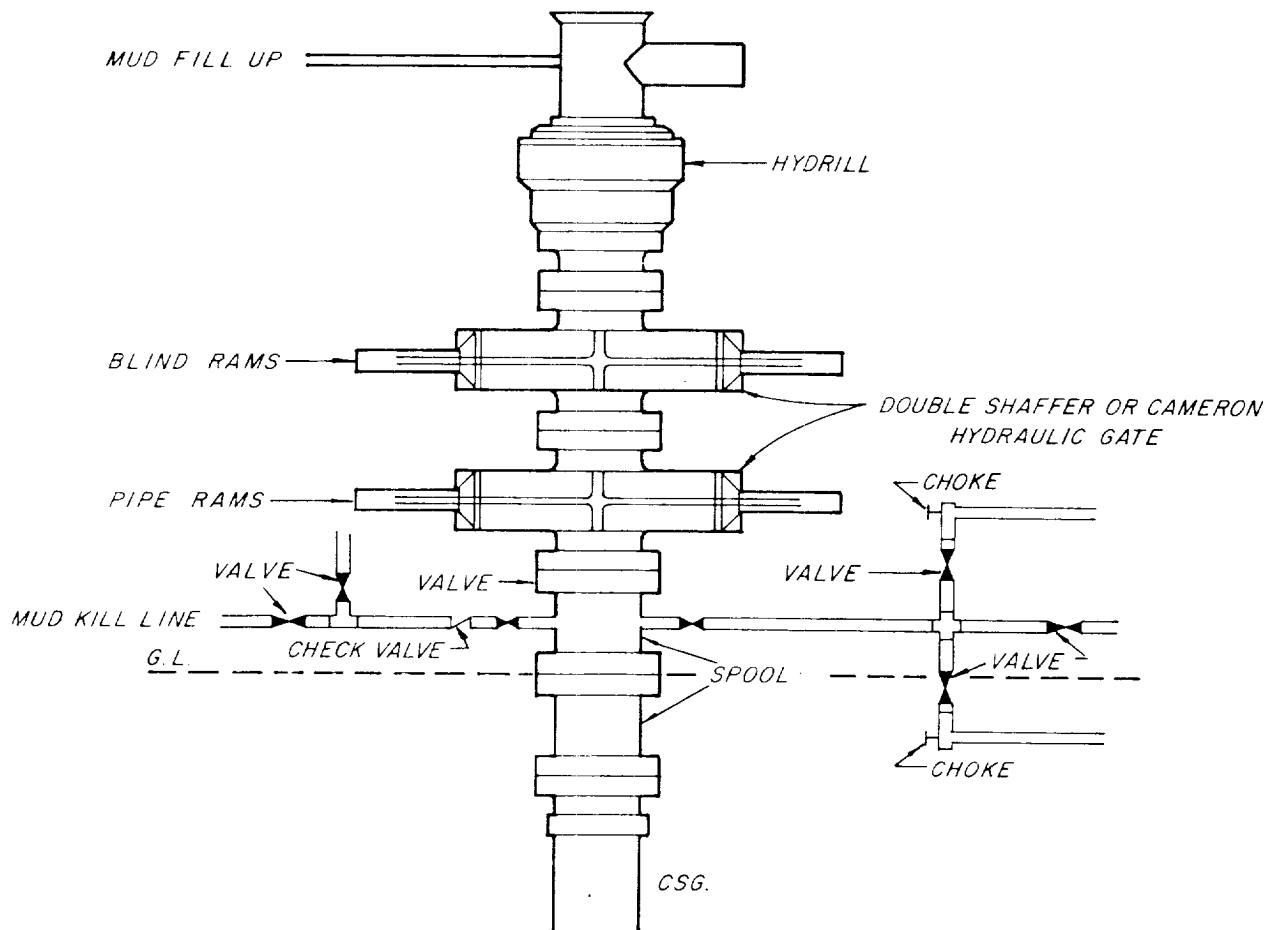
5. Drawings of API Series 900, 1500, 2900 Blowout preventer specifications are attached. Pipe rams and blinds for the Series 900 will be tested to 3000 PSI and Hydril to 2000 PSI for 30 minutes when BOP is installed. Pipe rams and blinds for the Series 1500 will be tested to 5000 PSI and Hydril to 3500 PSI for 30 minutes when BOP is installed. Pipe rams and blinds for the Series 2900 will be tested to 10,000 PSI and Hydril to 7500 PSI for 30 minutes. BOPs will be tested when casing string is set and operated daily for checks.
6. The proposed mud program is follows:
 

0 - 600'	Fresh water spud mud	8.4 - 9.0	PPG
600 - 5,400'	Salt gel or brine mud	9.0 - 10.0	PPG
5,400 - 13,100'	Salt gel mud	9.1 - 9.8	PPG
13,100 - 15,400'	Drld out FW weighted mud	10.0 - 13.5	PPG
15,400 - 17,720'	Drld out w/ FW Low Dens mud	9.2 - 9.6	PPG
7. The auxiliary equipment to be used is:
 

(1) Upper & Lower Kelly Cock	(6) Choke manifold
(2) PVT (Pit Volume Totalizer)	(7) Mud Gas Separator as required
(3) Flo-sho	(8) Grey inside BOP
(4) Mud logging unit for monitoring gas	(9) Drill pipe, safety valve
(5) Degasser	
8. It is proposed to run the following logs:
  1. At 13,100' casing point
    - Compensated Neutron - Formation Density
    - Gamma Ray - Sonic with Gamma Ray to surface
    - Dual Laterlog with Micro SFL
    - Microlaterlog over zones of interest
  2. At 15,450' casing point
    - Logs as on Run 1 plus the dipmeter
  3. At total depth
    - Logs as on Run 2 plus possible velocity survey

Possible Drill Stem Tests:

Delaware	Siluro - Devonian
Bone Spring	Fusselman
Morrow	
9. No abnormal pressures or temperatures are expected and no Hydrogen Sulfide is anticipated to be encountered in this well.
10. The anticipated starting date for this well is July 19, 1977 with a duration of approximately 180 days.

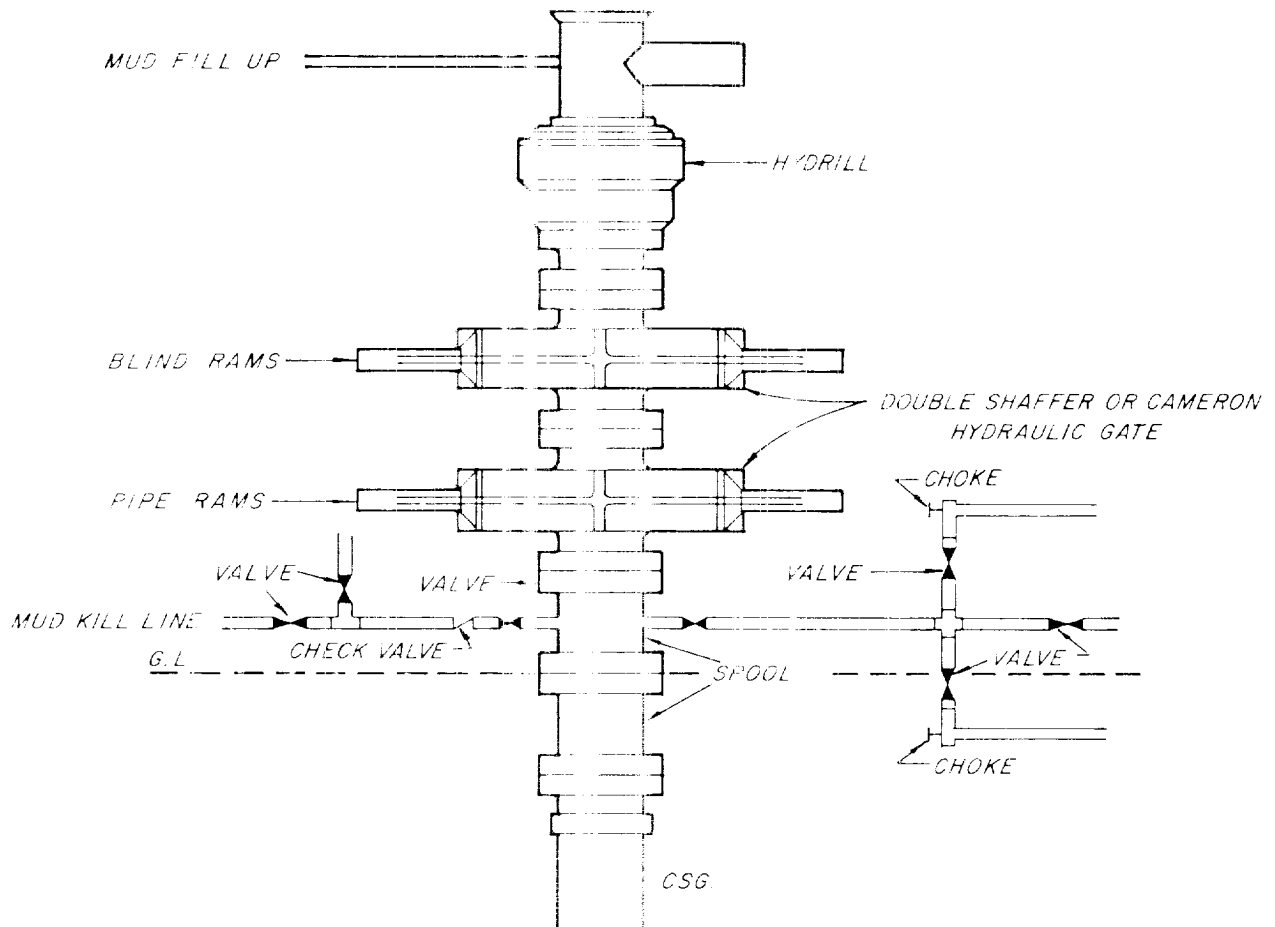


## API SERIES 900

### NOTE:

Manual and Hydraulic controls with closing unit no less than 75' from well head.  
Remote controls on rig floor.

THE SUPERIOR OIL CO.		S
WESTERN DIVISION		
BLOW-OUT PREVENTER SPECIFICATIONS		
B*		DATE



## API SERIES 1500

### NOTE:

Manual and Hydraulic controls with closing unit no less than 75' from well head.  
Remote controls on rig floor.

THE SUPERIOR OIL CO.  
WESTERN DIVISION

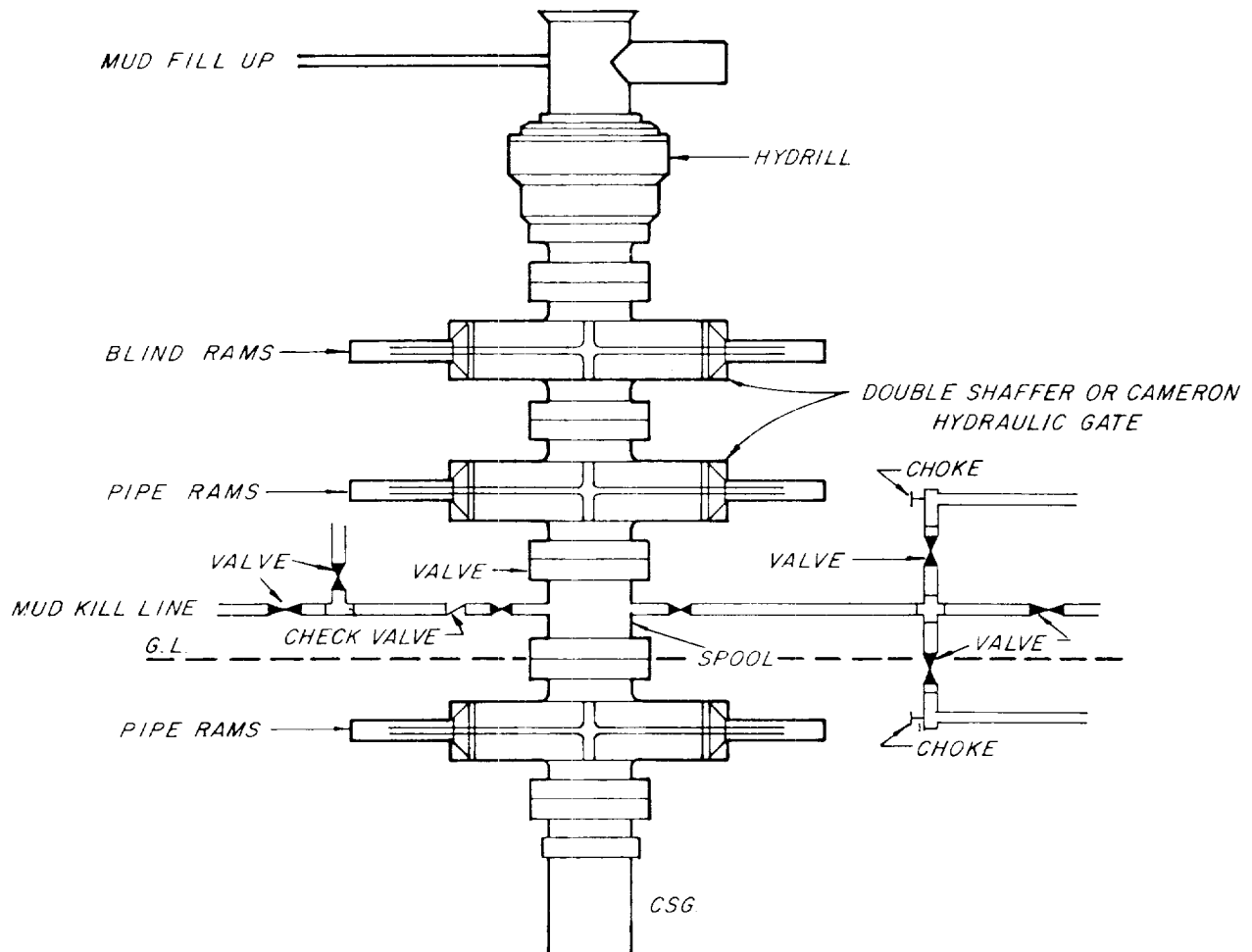


BLOW-OUT PREVENTER  
SPECIFICATIONS

BT

DATE





## API SERIES 2900

### NOTE:

Manual and Hydraulic controls with closing unit no less than 75' from well head.  
Remote controls on rig floor.

THE SUPERIOR OIL CO.		S
WESTERN DIVISION		
BLOW - OUT PREVENTER SPECIFICATIONS		
DATE		

# THE SUPERIOR OIL COMPANY

P. O. BOX 71

CONROE, TEXAS 77301

June 16, 1977

U. S. G. S.  
P. O. Box 1157  
Hobbs, New Mexico 88240

Attention: Mr. A. R. Brown

Re: Government "L" No. 1  
1980' FEL & 1980' FNL  
Section 18, T-24-S, R-34-E  
Lea County, New Mexico  
Lease New Mexico 17446

Gentlemen:

The Multi-Point Surface Use & Operations 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 so that a complete appraisal can be made of the environmental effects associated with the operations.

## 1. Existing Roads:

- A. Exhibit "A" is a portion of a highway map showing the location of the proposed well as staked, thirty-five miles southwest of Eunice and 21 miles west of Jal, New Mexico. Highway 128, an improved road, goes North westerly from Jal, goes west on the South side of Secs 15, 16, 17, 18, T-24-S, R-34-E. On the South side of Sec 18, T-24-S, R-34-E a road, the Delaware Basin Road, heads north bisecting Sec 18. A lease road is proposed to go east approximately 1014' to the wellsite from this bisecting road.
- B. Exhibit "A" is a plat showing all existing roads within a three-mile radius of the wellsite and the planned access road.
- C. Repairs will consist of replacing the eroded caliche surface with a new caliche surface 6 inches deep and 12 feet wide, watered and compacted.

## 2. Planned Access Roads:

- A. Length and Width: New road required will be 15 feet wide and 1,014 feet long. This new road is labeled and color coded red on exhibit "A". The center line of the proposed new road from the beginning to the wellsite, has been staked and flagged with the stakes being visible from anyone to the next.
- B. Maximum Grade: Two percent.
- C. Drainage Design: There will be a 6 inch drop from the center line on each side of the new road.

- D. Location and Size of Culverts & Major Cuts, etc: There will be one culvert (as shown on Exhibit "C") that will be 18" in diameter.
- E. Surfacing Material: Six inches of caliche, water, compacted and graded.
- F. Necessary Gates, Cattleguards, or Fence Cuts: None.
- G. Turnouts: None.

3. Location of Existing Wells:

The location of existing wells in a two-mile radius showing and identifying by color code the following:

- A. Water wells - blue circle
- B. Abandoned wells - crossed out in black
- C. Temporarily abandoned wells - yellow circle
- D. Disposed wells - green circle
- E. Drilling wells - red circle
- F. Producing wells - black circle
- G. Shut-in wells - crossed out in yellow
- H. Injection wells - crossed out in blue

All the above illustrated with codes on Exhibit "B".

4. Location of Existing and/or Proposed Facilities:

- A. There are no existing facilities owned or controlled by lessee/operator.
- B. In the event of production, the new facilities contemplated are labeled, marked and all pertinent information is included on Exhibit "C".

5. Location and Type of Water Supply:

Source of water supply for drilling: Water will be hauled by truck.

6. Source of Construction Materials:

- A. The source of construction materials is shown and marked on Exhibit "A". It is located in SW corner of Sec 32, T-23-S, R-34-E. The caliche pit is located on state land.
- C. The materials source is illustrated on Exhibit "A" are to be used on new road and location pad.

7. Methods for 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 tests 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 of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pit is shown on exhibit "C".
- F. All trash and debris will be buried or removed from the wellsite and land will be restored to original contour within 30 days after finishing drilling and/or completion operations.

8. Ancillary Facilities:

- A. None required.

9. Wellsite Layout:

- A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit and location of major rig components.
- B. Only minor levelling of the wellsite will be required. No significant cuts and fills will be necessary.
- C. The reserve pit will be of an earthen nature.
- D. The pad and pit area has been staked and flagged.

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.

11. Other Information:

- A. Topography: Land surface is undulating to gently rolling and dunny. From an elevation of 3,576 feet at the wellsite, the land surface slopes gently toward the south at about 30 feet per mile.
- 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 perennial 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: There are no occupied dwellings or structures within the general proximity of the wellsite.
- F. Archeological, Historical and Cultural Sites: None observed in the area.
- G. Land Use: Grazing and hunting in season.

12. Operator's Representative:

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

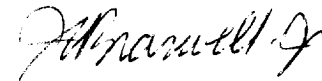
J. A. Bobbitt  
P. O. Box 1210  
Andrews, Texas 79714

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

Very truly yours,

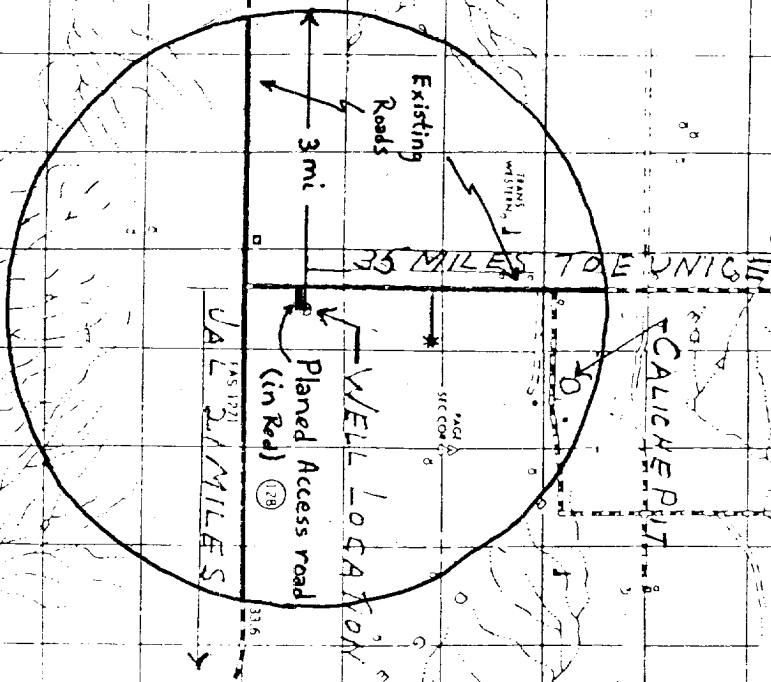
THE SUPERIOR OIL COMPANY



J. C. Braswell  
Division Drilling Engineer

KCR/pjp

Enclosure



# Exhibit "A"

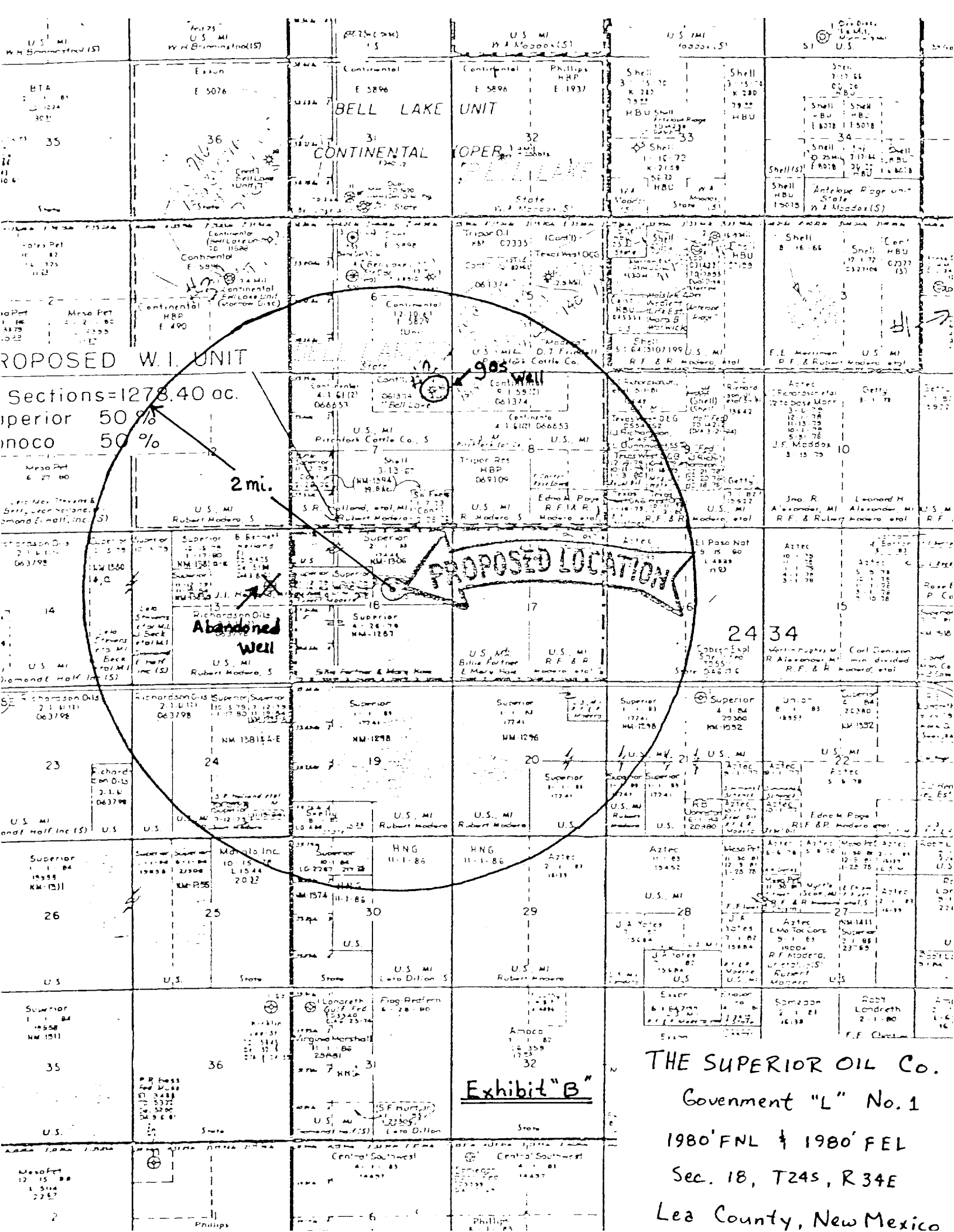
The Superior Oil Co.

Government "L" No. 1

1980' FNL & 1980' FEL

Sec. 18, T24S, R34E

Lee County, New Mexico



GOVERNMENT "L" No. 1  
1980' FNL & 1980' FEL  
SEC. 18, 24S, 34E  
LEA COUNTY, NEW MEXICO

Exhibit "C"

