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NEW MEXICO OIL CONSERVATION COMMISSION

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**JAN 22 1976**

30-015-21724

Form C-101  
Revised 1-1-65

5A. Indicate Type of Lease	
STATE <input checked="" type="checkbox"/>	FEE <input type="checkbox"/>
5. State Oil & Gas Lease No.	
LG 794	

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. Type of Work				7. Unit Agreement Name	
b. Type of Well DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>				8. Farm or Lease Name	
OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>				State CT Com.	
2. Name of Operator Cities Service Oil Company				9. Well No. 1	
3. Address of Operator Box 1919 - Midland, Texas 79701				10. Field and Pool, or Wildcat Undesignated Morrow	
4. Location of Well UNIT LETTER <u>I</u> LOCATED <u>1980</u> FEET FROM THE <u>South</u> LINE AND <u>660</u> FEET FROM THE <u>East</u> LINE OF SEC. <u>16</u> TWP. <u>20S</u> RGE. <u>28E</u> NMPM				12. County Eddy	
21. Elevations (Show whether DF, RT, etc.) 3253' GR				20. Rotary or C.T. Rotary	
21A. Kind & Status Plug. Bond Required/Approved		21. Drilling Contractor Not released		22. Approx. Date Work will start March 1, 1976	

23.

**PROPOSED CASING AND CEMENT PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17-1/2"	13-3/8"	48#	400'	750 sacks	Circulated
12-1/4"	9-5/8"	36#	3000'	1500 sacks	Circulated
8-3/4"	5-1/2"	17 & 20#	11450'	900 sacks	TC @ 8000'

It is proposed to drill this well to a T.D. of 11450' and test the Morrow formation.

The blowout prevention program is as follows:

1. One set of blind rams.
2. One set of drill pipe rams.
3. One Hydril.
4. One rotating head.

APPROVAL VALID  
FOR 90 DAYS UNLESS  
DRILLING COMMENCED,

EXPIRES 4-23-76

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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed E. Spindler Title Region Operation Manager Date January 21, 1976  
(This space for State Use)

APPROVED BY W.A. Gessett TITLE SUPERVISOR, DISTRICT II DATE JAN 23 1976  
CONDITIONS OF APPROVAL, IF ANY:

Notify N.M.O.C. in sufficient  
time to witness cementing  
the 9 5/8" casing

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 <b>Cities Service Oil Company</b>			Lease <b>State "CT" Com.</b>		Well No. <b>1</b>
Unit Letter <b>I</b>	Section <b>16</b>	Township <b>20 South</b>	Range <b>28 East</b>	County <b>Eddy</b>	
Actual Well Location of Well: <b>1980</b> feet from the <b>South</b> line and <b>660</b> feet from the <b>East</b> line					
Ground Level Elev. <b>3252.8</b>	Producing Formation <b>Morrow</b>		Pool <b>Undesignated Morrow</b>		Dedicated Acreage: <b>320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 Unitization

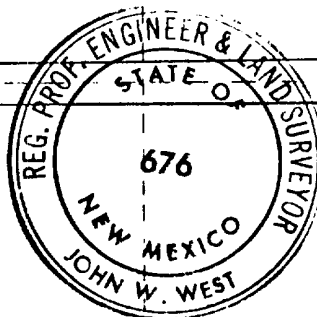
If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

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.

Working interests of the participating companies in this well are as follows:

Cities Service Oil	75.0000%
Maralo, Inc.	25.0000%
	<u>100.0000%</u>

Maralo, Inc.



Cities Service Oil

660'  
1086'  
IG 794

CERTIFICATION

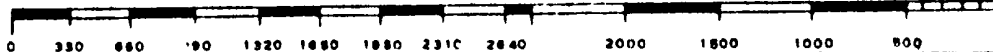
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name E. P. Miller  
Position Region Operation Manager  
Company Cities Service Oil Company  
Date January 21, 1976

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 January 8, 1976  
Registered Professional Engineer and/or Land Surveyor

John W. West  
Certificate No. 676





CITIES SERVICE OIL COMPANY

Box 1919  
Midland, Texas 79701  
Telephone (915) 684-7131

January 21, 1976

**RECEIVED**

New Mexico Oil Conservation Commission  
P. O. Drawer DD  
Artesia, New Mexico 88210

JAN 22 1976

**O. C. C.**  
**ARTESIA, OFFICE**

Gentlemen:

Re: Application for Permit to Drill  
State "CT" No. 1, Eddy County,  
New Mexico

Cities Service Oil Company respectfully requests permission to drill the No. 1 State "CT" located 1980' FSL, 660' FEL, Sec. 16-20S-28E, Eddy County, New Mexico.

In support of this application, the following data is submitted:

1. Form C-101, Application for Permit to Drill.
2. Form C-102, Well Location and Acreage Dedication Plat.
3. County road map showing location of proposed drilling site in relation to surrounding area.
4. Plat showing approximate dimensions of location layout including position of the rig, mud pits, reserve pits, etc.
5. Blowout preventer diagram showing arrangement and components of BOP stack.
6. Schematic diagram showing hook-up of BOP's, choke manifold and mud/gas separator.
7. Schematic diagram of casing program and estimated formation tops.
8. Summary of mud program.

The State "CT" No. 1 is located 1/2 mile west and 1/4 mile north of Cities Service Oil Company's recently drilled Government "AC" No. 1, an Atoka completion.

Application for Permit to Drill State "CT" No. 1

Page No. 2

January 21, 1976

The nearest inhabited dwelling is the home of Mr. A. H. Rains approximately 2-1/2 miles east of our proposed location.

The well is projected to test the Morrow Sands with an anticipated TD of 11,450'. Other shallower zones will be tested as the well is drilled.

If completed as a producer, producing equipment will be set no closer than 150' from the well with tanks set to collect both oil and water which will be trucked to sale or disposal. The gas purchaser will install necessary gas measuring equipment and gas gathering line.

The reserve pit will be lined when it is built. If the well is a producer, the pits will be backfilled, levelled, debris removed and surface equipment fenced. If it is a dry hole, the well will be plugged as per New Mexico Oil Conservation Commission requirements, the pits backfilled and levelled and all debris removed.

The proposed casing program consists of:

13-3/8" casing set at 400' with cement circulated to surface.

9-5/8" casing set at 3000' with cement circulated to surface.

5-1/2" casing set at TD 11,450' and cemented with sufficient volume to fill the annular space from TD to 8000'.

In addition to the blowout preventer equipment shown on the attached plat, the following equipment will be in use before drilling out from under the 9-5/8" intermediate casing:

1. Swaco adjustable choke.
2. Pit volume totalizer.
3. Flow line sensor.
4. Degasser.

Also, prior to drilling out under the 9-5/8", the BOP's and related control equipment will be pressure tested to rated working pressure by Yellow Jacket Tools and Services, Inc.

Please contact me at the above address if further information is needed to properly evaluate this request.

Yours very truly,



E. Y. Wilder  
Region Operations Manager

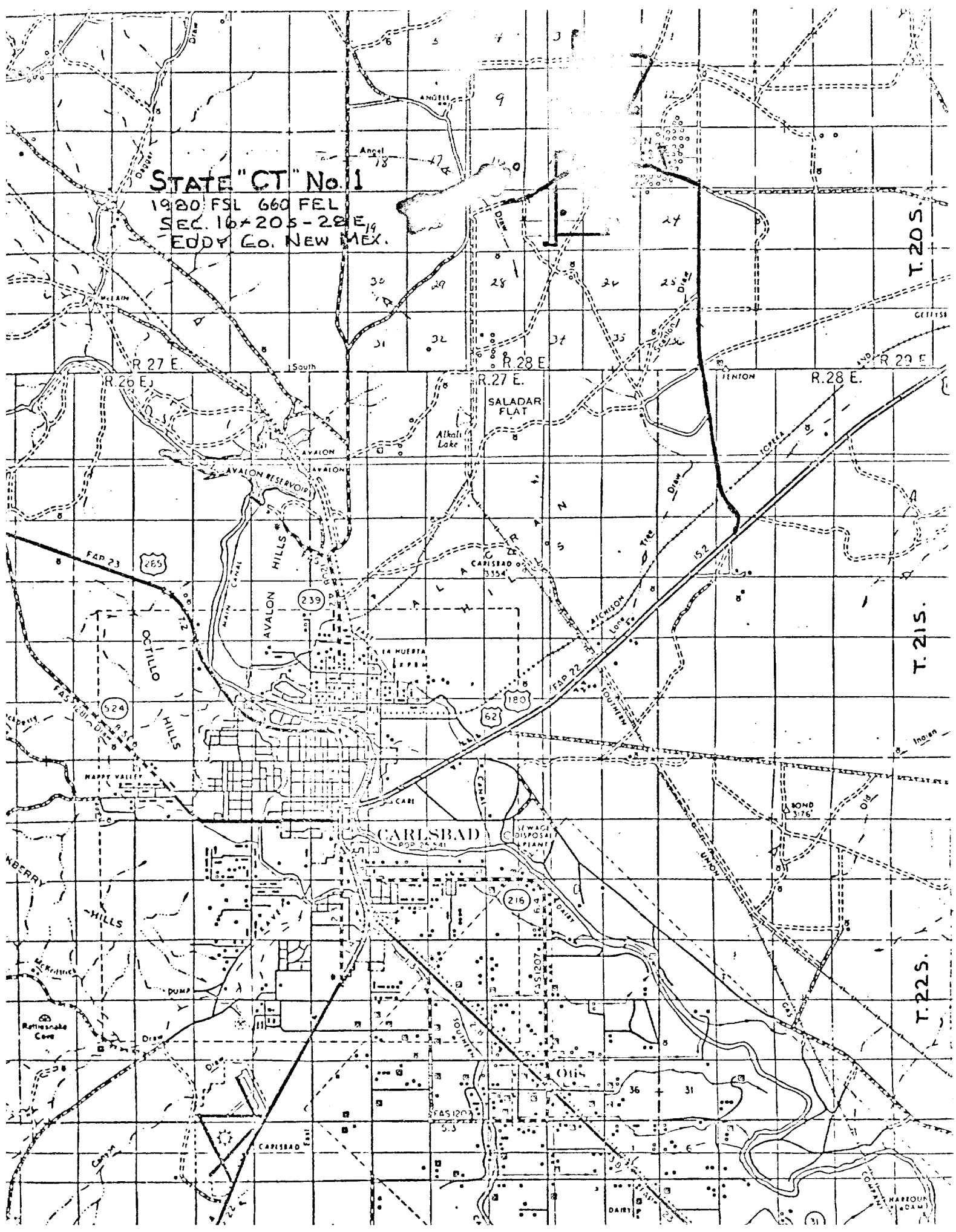
EYW/lis  
Attachment

STATE "CT" No. 1

1980 FSL 660 FEL

SEC. 16+205-28 E

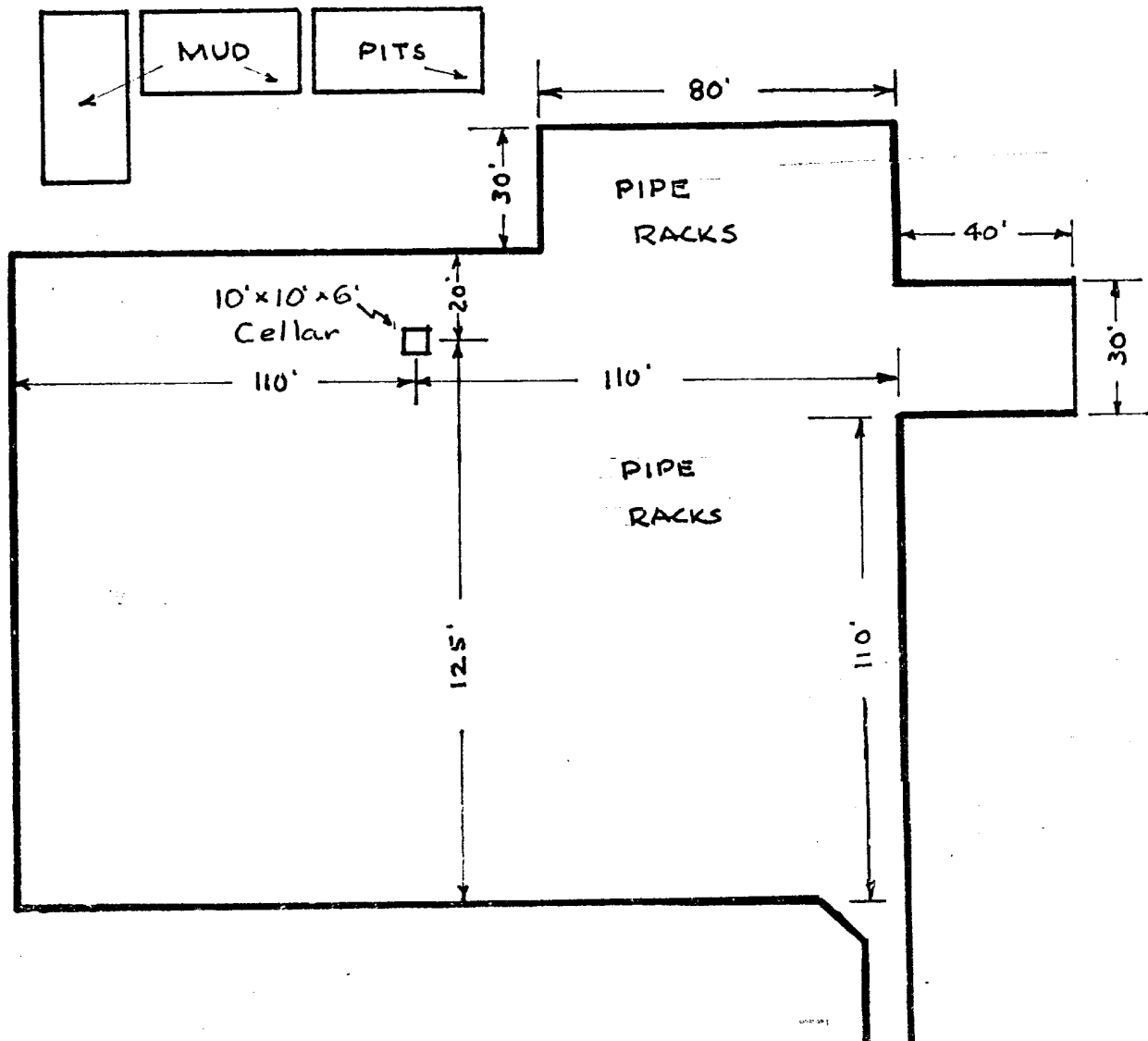
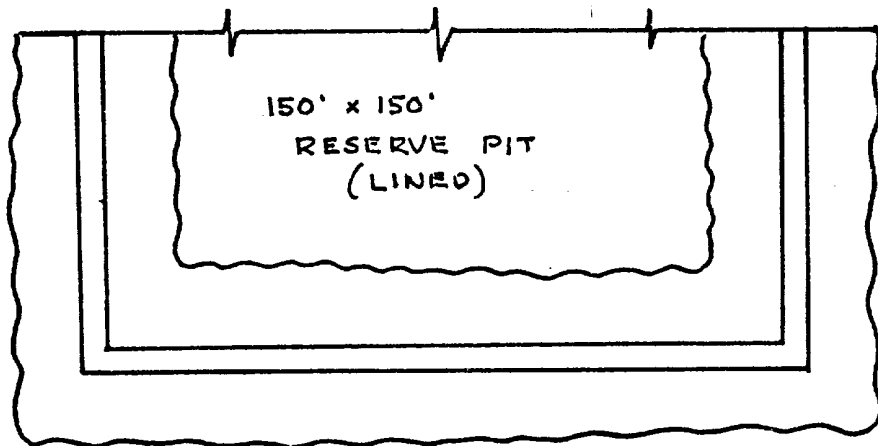
EDDY CO. NEW MEX.



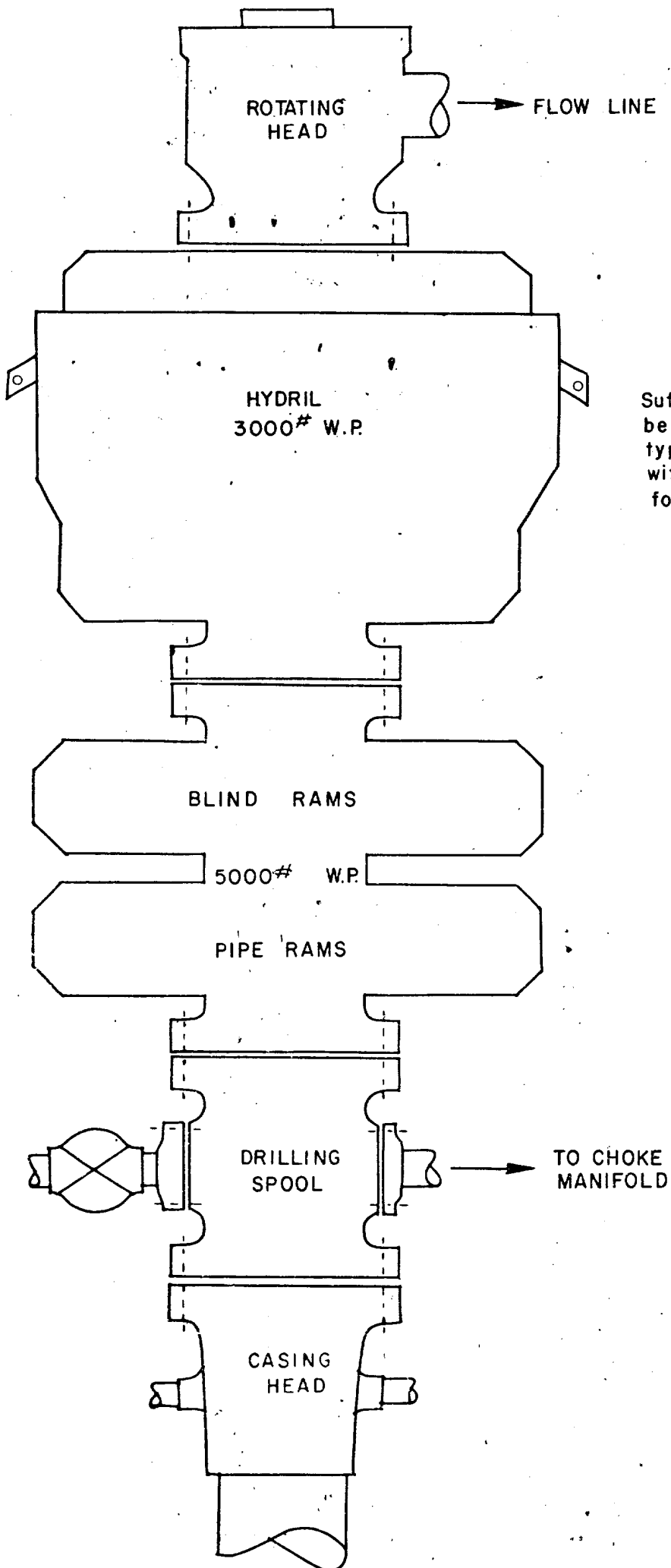
STATE "CT" No. 1  
1980 FSL, 660 FEL, SECTION 16-203-28E.

EDDY COUNTY, NEW MEXICO

— RIG UP WITH V-DOOR TO EAST AND  
RESERVE PIT TO NORTH —



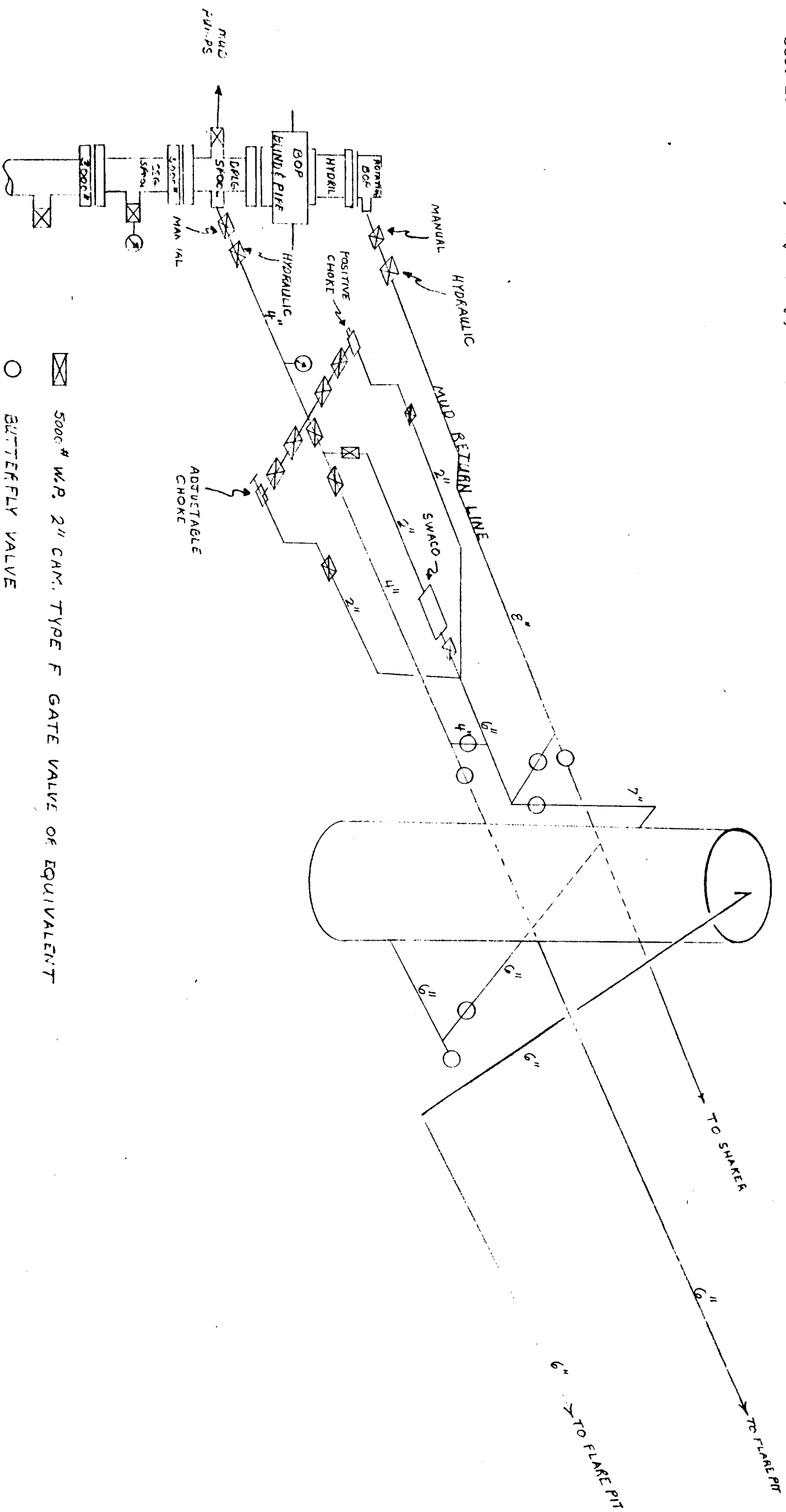
# BLOWOUT PREVENTER DIAGRAM



## CLOSING METHOD

Sufficient accumulator volume shall be available to operate both the bag type preventer and pipe ram preventer with a snap-action through the following steps: close-open-close.

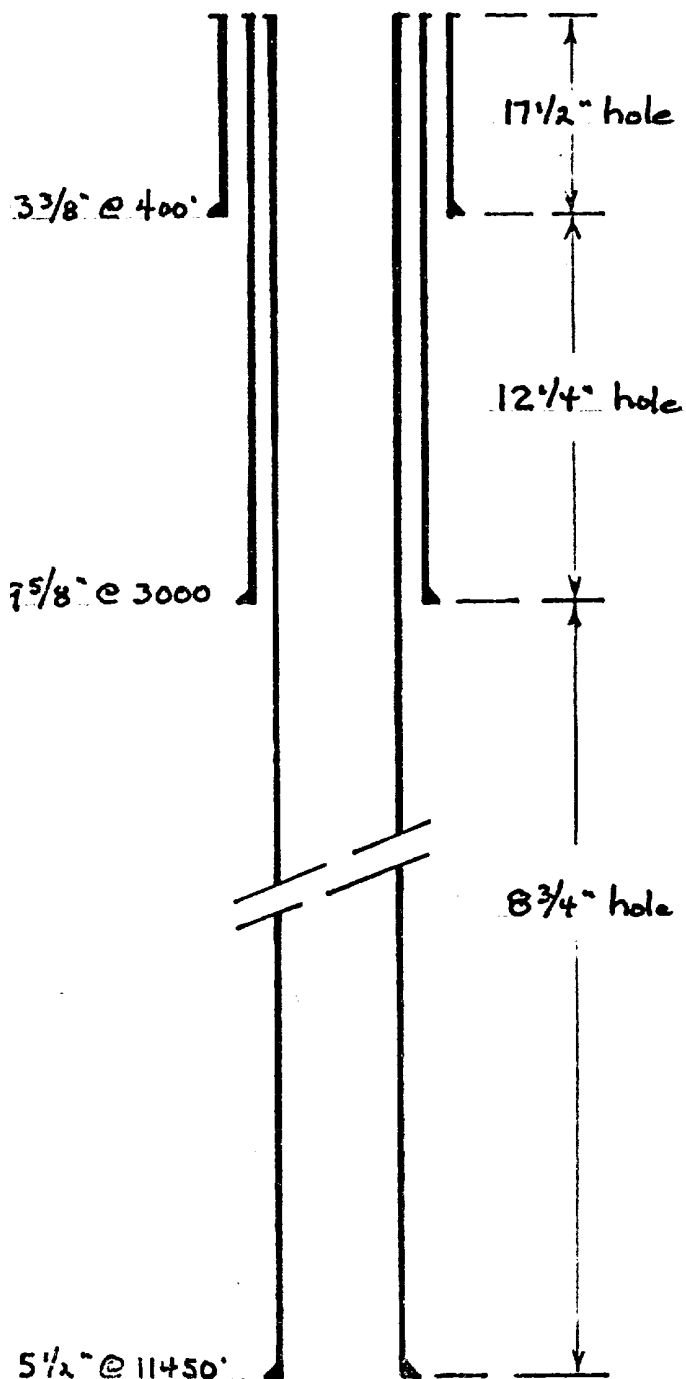
Cities Service Oil Company #1 State CT Com.  
Sec. 16-T20S-R28E, Eddy County, New Mexico



STATE "CT" No. 1  
1980 FSL, 660 FEL, SECTION 16-205-28E.  
EDDY COUNTY, NEW MEXICO

— HOLE SIZE &  
CASING PROGRAM —

— ESTIMATED  
FORMATION TOPS —



—	BONE SPRING	5420'
—	DEAN	7950'
—	WOLFCAMP	8625'
—	STRAWN	9980'
—	ATOKA	10480'
—	MORROW	10730'
—	CHESTER	11300'
—	TOTAL DEPTH	11450'

STATE "CT" NO. 1

1980' FSL 660' FEL Section 16-20S-28E

Eddy Co., New Mexico

Mud Program

0-400'	Drill with fresh water mud. Mud wt. approximately 8.5#/gal., viscosity 30-34. Set 13-3/8" casing at 400'.
400-3000'	Drill with fresh water. If returns are lost and cannot be regained, dry drill to casing depth 3000'. Mud weight 8.5#/gal., viscosity 28-31. Set 9-5/8" casing at 3000'.
3000-8500'	Drill with fresh water. Add caustic for pH control. Mud weight 8.5#/gal., viscosity 28-31.
8500-10500'	Displace fresh water with 10#/gal. brine water at 8500'. Add caustic for pH control. Mud weight 10#/gal., viscosity 28-31.
10500-11450'	Mud up with Morrow protection fluid at 10500'. Maintain mud weight, viscosity and fluid loss as hole conditions dictate. Mud weight approximately 10#/gal., viscosity 34-36, water loss 10 or less. Set 5-1/2" casing at TD 11450'.