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NEW MEXICO OIL CONSERVATION COMMISSION
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30-015-21546

Form C-101
Revised 1-1-65

MAY 20 1975

O. C. C.

APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Unit Agreement No.
b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		8. Firm or Lease Name State OS
c. 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 Willact Undesignated/Morrow
4. Location of Well UNIT LETTER L LOCATED 1980 FEET FROM THE South LINE AND 660 FEET FROM THE West LINE OF SEC. 17 TWP. 21S R2E 27E		17. County Eddy
19. Proposed Depth 11,650'		18A. Formation Morrow
20. Rotary or Rotary		
21. Test and description (whether DI, H, etc.) 3200' GR (Est.)	21A. Kind & Status Plug Bond Required/Approved	21B. Drilling Contractor Not released
		22. Approx. Date Work Will Start July 1, 1975

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"	118#	350'	500	Circulated
12-1/4"	9-5/8"	36#	3000'	1000	Circulated
8-3/4"	5-1/2"	17 & 20#	11650'	750	Est. TO @ 80'

It is proposed to drill this well to a T.D. of 11,650' 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 8-22-75

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW ZONE AND WELL DEPTH. 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 [Signature] Title Region Operation Manager Date May 19, 1975

(This space for State Use)

APPROVED BY [Signature] TITLE SUPERVISOR, DISTRICT II DATE MAY 22 1975

CONDITIONS OF APPROVAL, IF ANY: Cement must be circulated to surface behind 13 3/8" + 9 5/8" casing Notify N.M.O.C.C. in sufficient time to witness cementing 9 7/8"

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

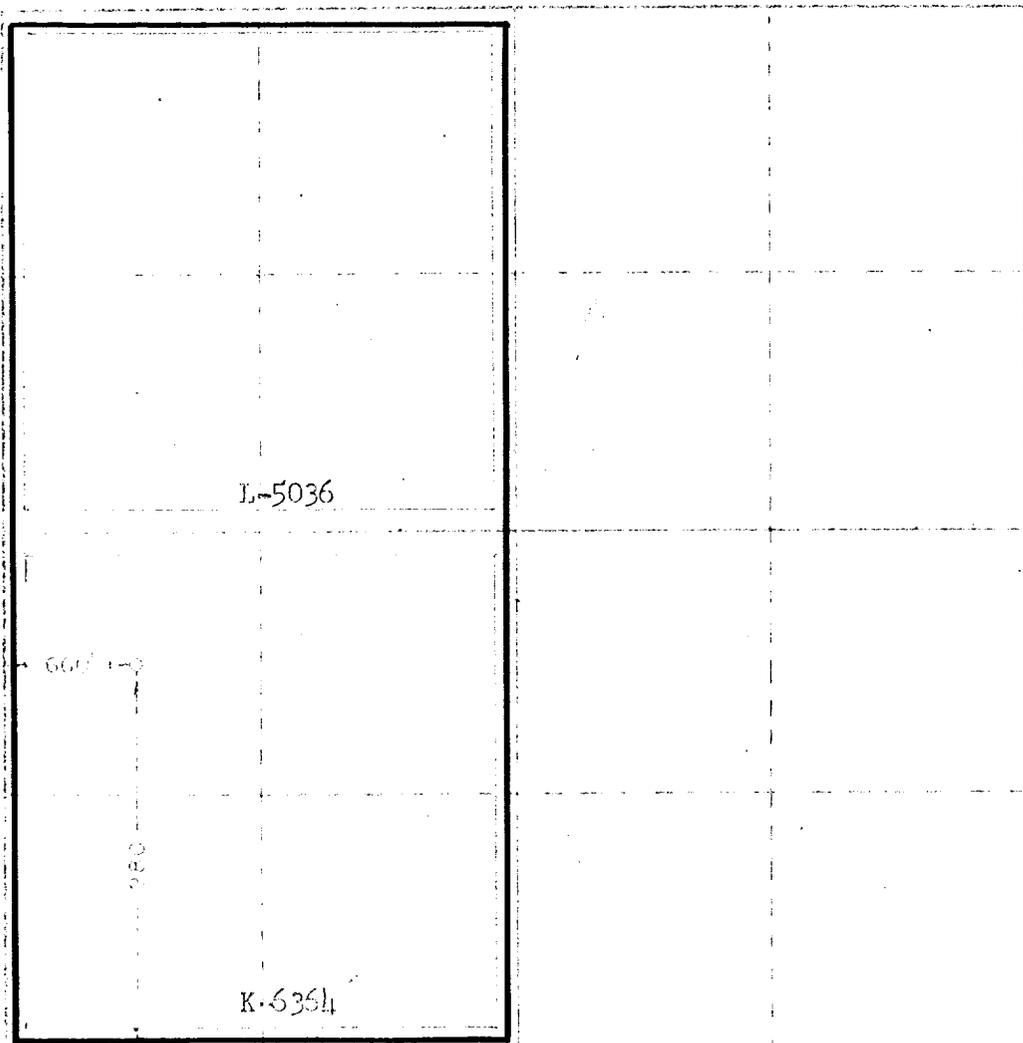
PLAT
NUMBER
DATE

All distances must be from the Outer Box Series of the Section

Cities Service Oil Company		State CS		1	
L	17	21 South	27 East	Eddy	
1000	South	660	West		
3200' Est.	Morrow	Undesignated Morrow	320		

1. Indicate 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 well 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, lease 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.)
 If a lease will be assigned to the well until all interests have been consolidated, the communitization, unitization, lease 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 furnished herein is true and correct to the best of my knowledge and belief.

E. Spurr

Region Operation Manager

Cities Service Oil Company

May 19, 1975

I hereby certify that the well location shown on this plat was plotted from the 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.

May 14, 1975

John W. [Signature]

RECEIVED

MAY 20 1975



CITIES SERVICE OIL COMPANY

O. C. C.
ARTESIA, OFFICE

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

May 19, 1975

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

Gentlemen:

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

Cities Service Oil Company respectfully requests permission to drill the No. 1 State "CS" located 660' FWL, 1980' FSL, Sec. 17-21S-27E, 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. Development plan which includes the following information:
 - a. County road map showing existing roads, proposed access road and location of proposed drilling site in relation to surrounding area.
 - b. Plat showing approximate dimensions of location layout including position of the rig, mud pits, reserve pit, etc.
 - c. Blowout preventer diagram showing arrangement and components of BOP stack.
 - d. Schematic diagram showing hook-up of BOP's, choke manifold and mud/gas separator.
 - e. Schematic diagram of casing program and estimated formation tops.
 - f. Summary of mud program.

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

Page No. 2

May 19, 1975

The State "CS" No. 1 is located one-half mile east of Yates Petroleum Company's No. 2 Avalon-Federal. Projected TD is 11,650'. The primary objective is the Morrow Sand. Secondary objectives are Wolfcamp, Canyon and Strawn.

The reserve pit will be lined when it is built. Upon completion of the well, the pits will be backfilled and levelled and debris removed.

If the well is completed as a producer, production 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 pipeline.

If it is a dry hole, the well will be plugged in accordance with New Mexico Oil Conservation Commission requirements.

The proposed casing program consists of:

13-3/8" casing set at 350' with cement circulated to surface.

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

5-1/2" casing set at TD 11,650' 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.

This well will be drilled in accordance with USGS requirements stated in their Order No. 30 CFR 221.24, 221.36 and 221.37.

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

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

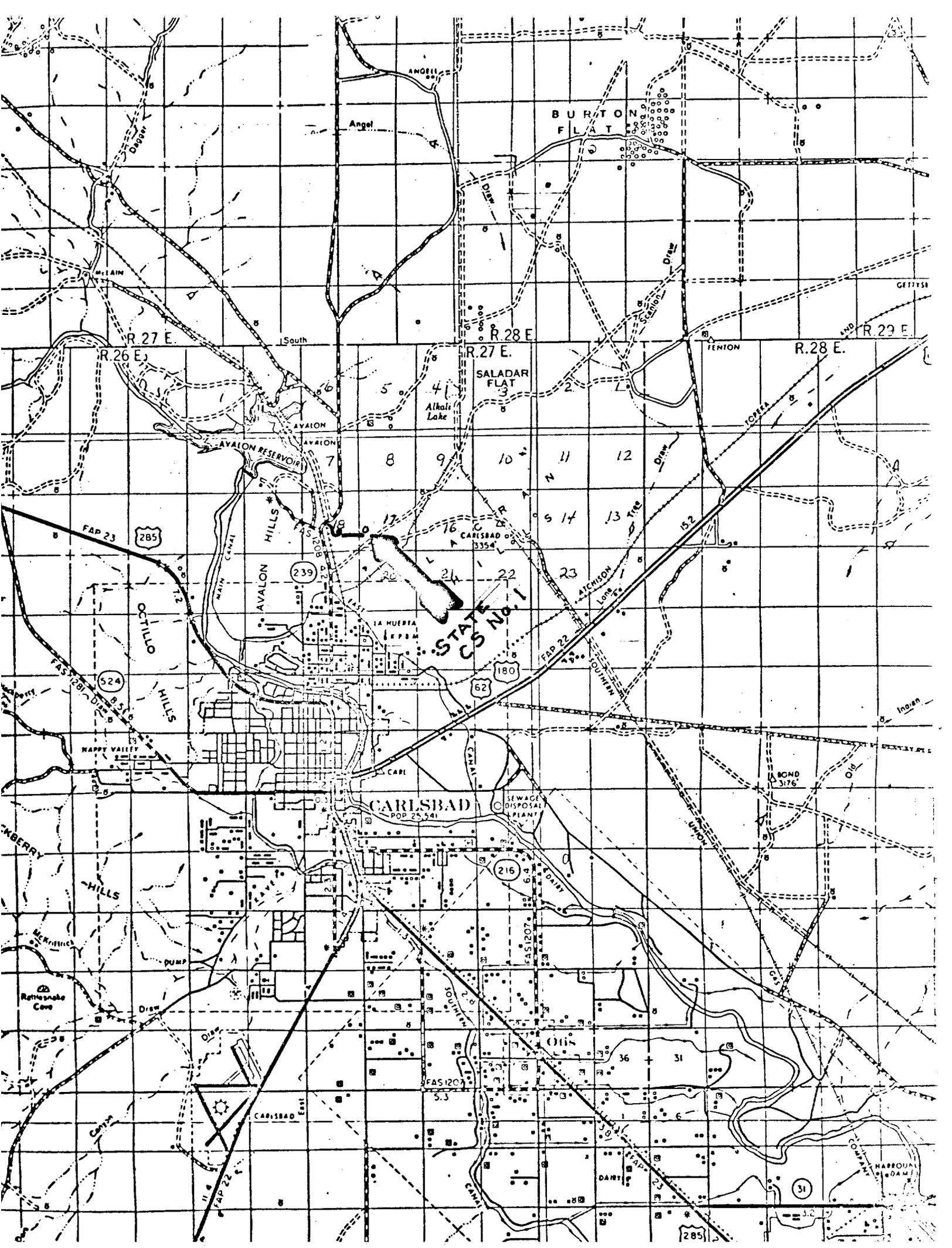
Yours very truly,



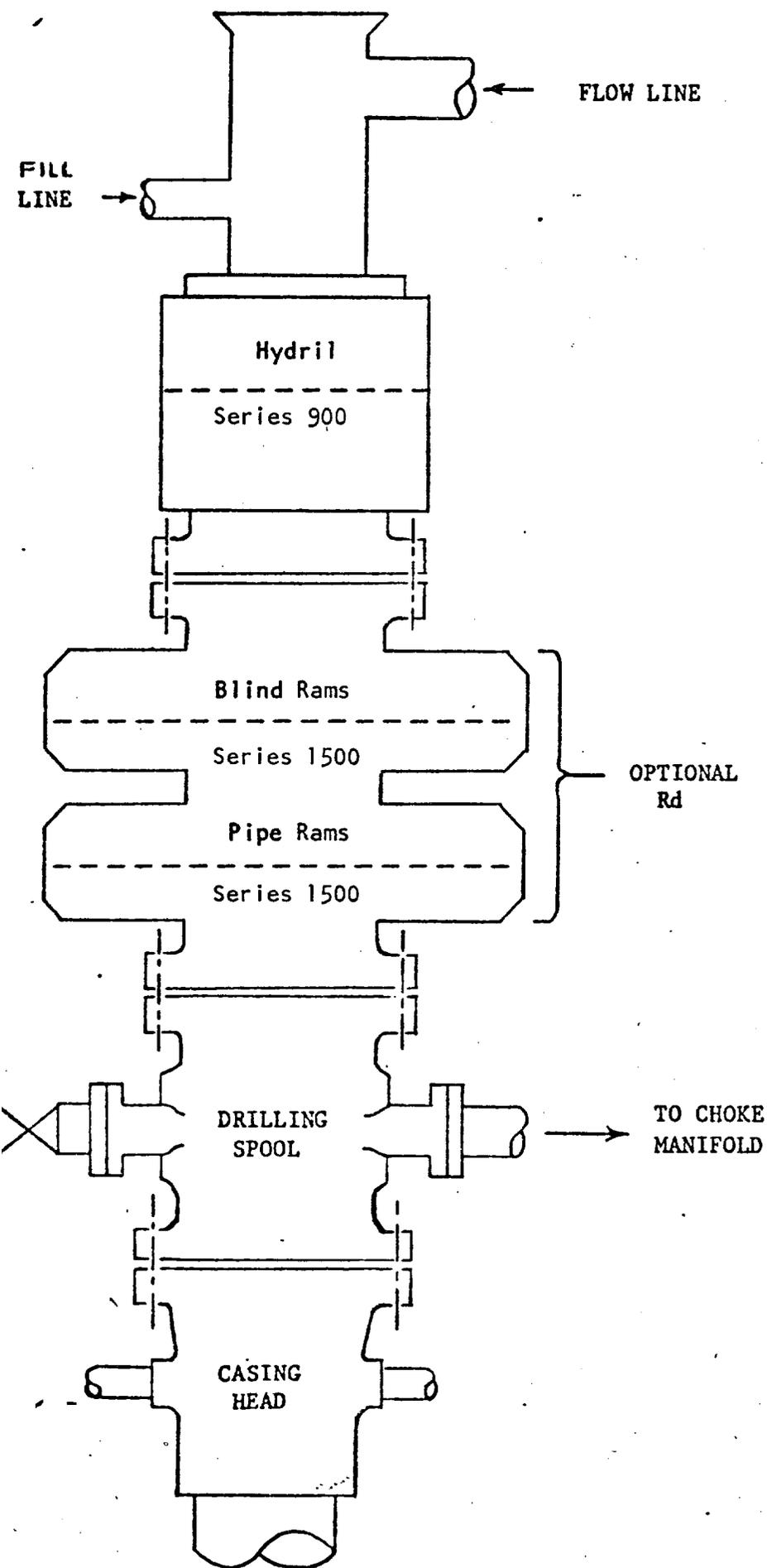
E. Y. Wilder
Region Operations Manager
Southwest Region
E & P Division

EYW/1s

Attachments



BLOWOUT PREVENTER
REQUIREMENTS



CLOSING METHOD

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

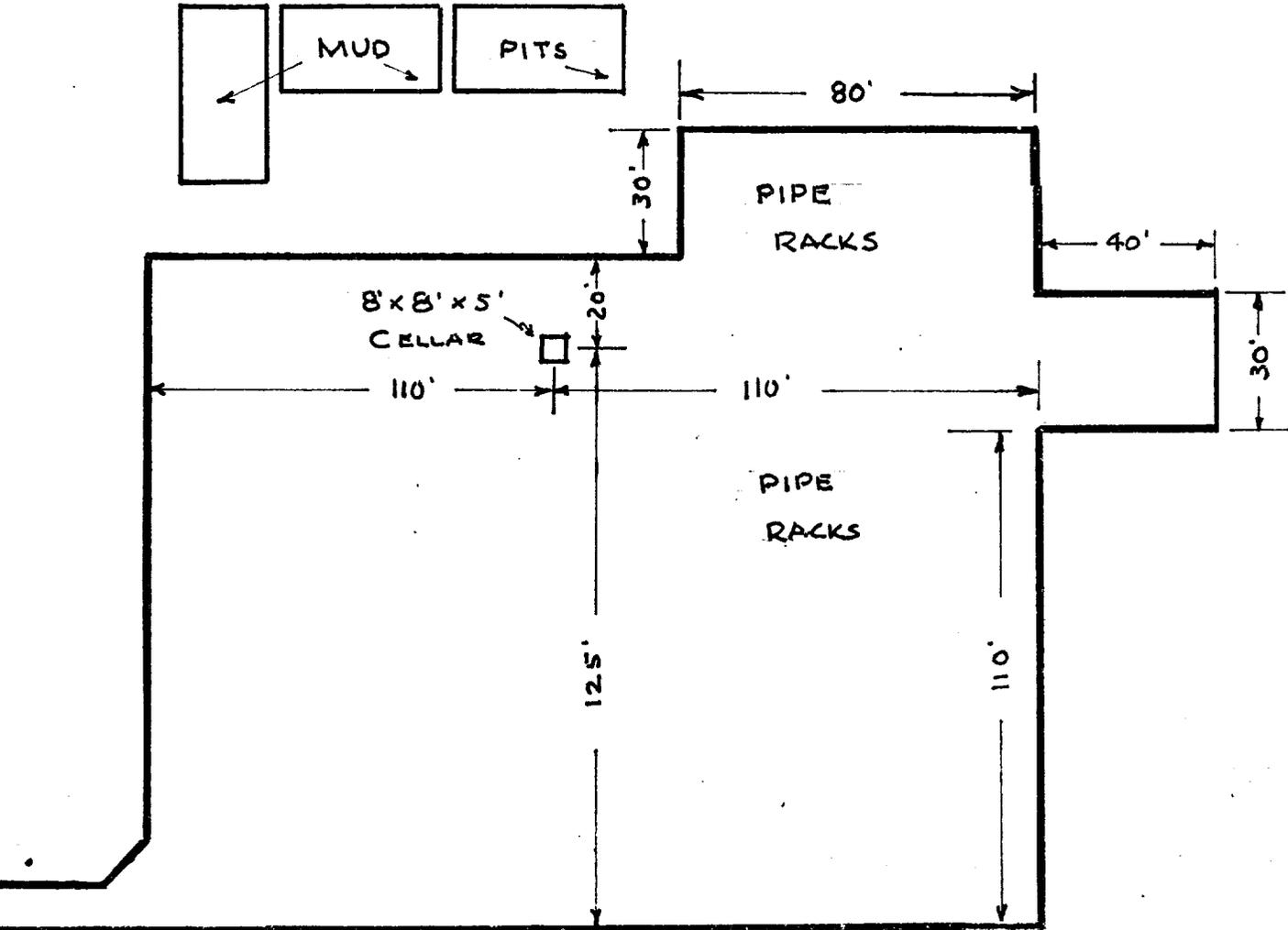
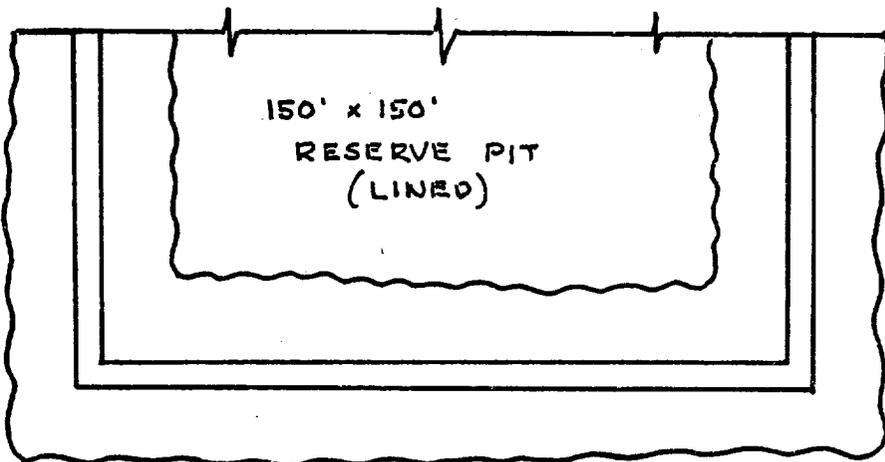
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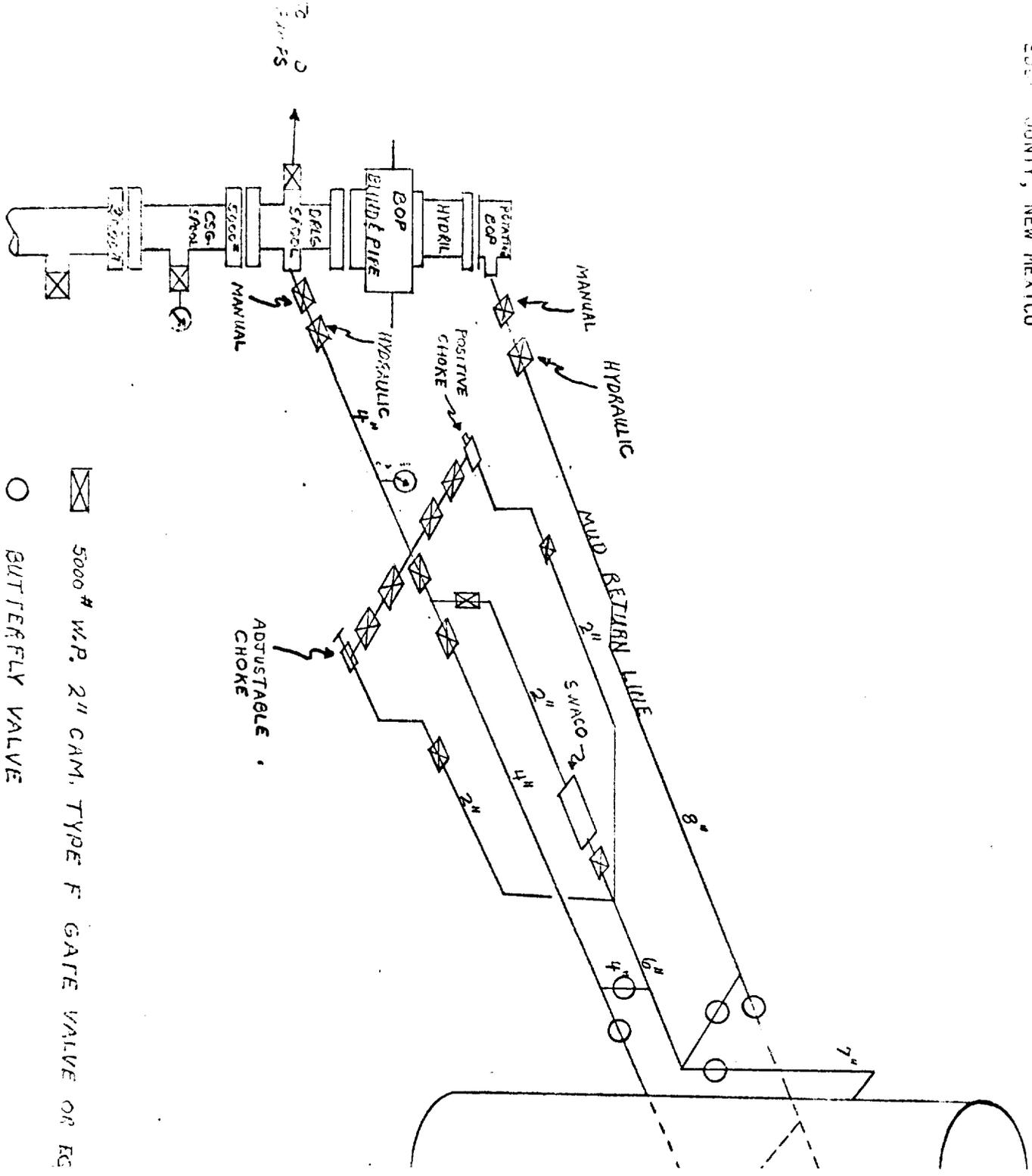
STATE "CS" No. 1

1980 FSL, 660 FWL SEC. 17-21S-27E

EDDY COUNTY NEW MEXICO

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





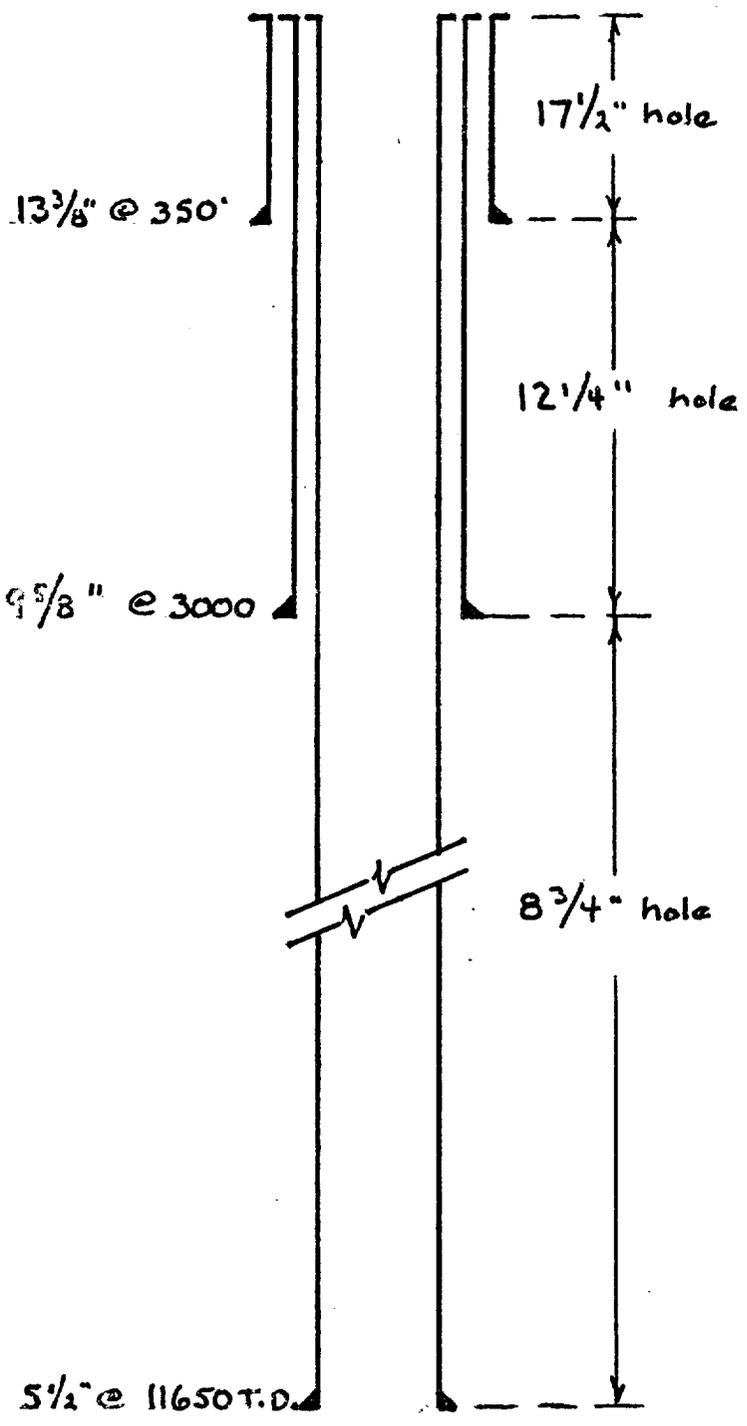
 5000# W.P. 2" CAM, TYPE F GATE VALVE OR FC
 BUTTERFLY VALVE

STATE "CS" No. 1

1980 FSL, 660 FWL SEC. 17-21s-27E
 EDDY COUNTY NEW MEXICO

HOLE SIZE &
 CASING PROGRAM

ESTIMATED
 FORMATION TOPS



- Bone Springs 5200
- Dean 8450
- Wolfcamp 8800
- Canyon 9400
- Strawn 10150
- Morrow 11100
- Chester 11600
- T.D. 11650

STATE "CS" NO. 1

1980' FSL, 660' FWL
Sec. 17-21S-27E
Eddy Co., New Mexico

MUD PROGRAM

0' - 350'	Drill with fresh water mud. Mud wt. approximately 8.5 ppg. Viscosity 30-34.
350' - 3000'	Drill with fresh water. If returns are lost and cannot be regained, dry drill to casing depth of 3000'. Mud wt. 8.5-9.0 ppg. Viscosity 28-31.
3000' - 7000'	Drill with fresh water. Add caustic for pH control. Mud wt 8.5-9.0 ppg. Viscosity 28-31.
7000' - 8800'	Start raising mud weight to approximately 10.0 ppg with potash brine. Viscosity 28-31.
8800' - 9800'	Drill with potash brine. Mud wt 10.0 ppg. Viscosity 28-31.
9800' - 11650'	Mud up with Morrow protection fluid. Maintain mud wt. and fluid loss as hole conditions dictate.