

Copy to 51-
Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

12. TYPE OF WORK			7. UNIT AGREEMENT NAME		
DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>					
b. TYPE OF WELL			8. FARM OR LEASE NAME		
OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>			Government AD		
2. NAME OF OPERATOR			9. WELL NO.		
Cities Service Oil Company			1		
3. ADDRESS OF OPERATOR			10. FIELD AND POOL, OR WILDCAT		
Box 1919 - Midland, Texas 79701			Undes. 1 Moneta Morrow		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA		
At surface			Sec. 21-T21S-R27E		
660' FNL & 1980' FWL of Sec. 21-T21S-R27E, Eddy Co., New Mexico			12. COUNTY OR PARISH		
At proposed prod. zone			Eddy		
Same as above			13. STATE		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*			New Mexico		
3 miles NE of Carlsbad, New Mexico					
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		
660' N		4932 acres	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		
---		11,750'	Rotary		
21. ELEVATIONS (Show whether DF, RT, GR, etc.)			22. APPROX. DATE WORK WILL START*		
3236' GR			April 15, 1975		

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"	L8#	400'	400 sacks (circulated)
12-1/4"	9-5/8"	32 & 35#	3000'	1000 sacks (circulated)
8-3/4"	5-1/2"	17 & 20#	11750'	1000 sacks

It is proposed to drill to a T.D. of 11,750' 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.

R E C E I V E D

APR 15 1975

O. C. C.
ARTESIA, OFFICE

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ARTESIA, 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.

ORIGINAL SIGNED
BY E. V. MULLER

Region Operation Manager

DATE March 6, 1975

(This space for Federal or State office use)

PERMIT NO.

1073 APPROX

APPROVAL DATE

REQUIREMENTS DATED

TITLE

DATE _____

ADDITIONS OR APPROVAL, IF ANY:

ADDITIONS OF THE ROYAL, 11

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[illegible]

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THE

As a result of the above, the following is proposed:

1253

La. 1

OPERATING MONTHS.

DECLARED WATER BASIN

*See Instructions On Reverse Side

NO. OF HOURS AND SUFFICIENT TIME TO
 9 3/4
 NO. OF HOURS AND SUFFICIENT TIME TO CASING.

NO. 17-111-1000 THE 175 CASINO

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-1
Supersedes O-1, 1967
Effective 1-1-75

All distances must be from the outer boundaries of the Section.

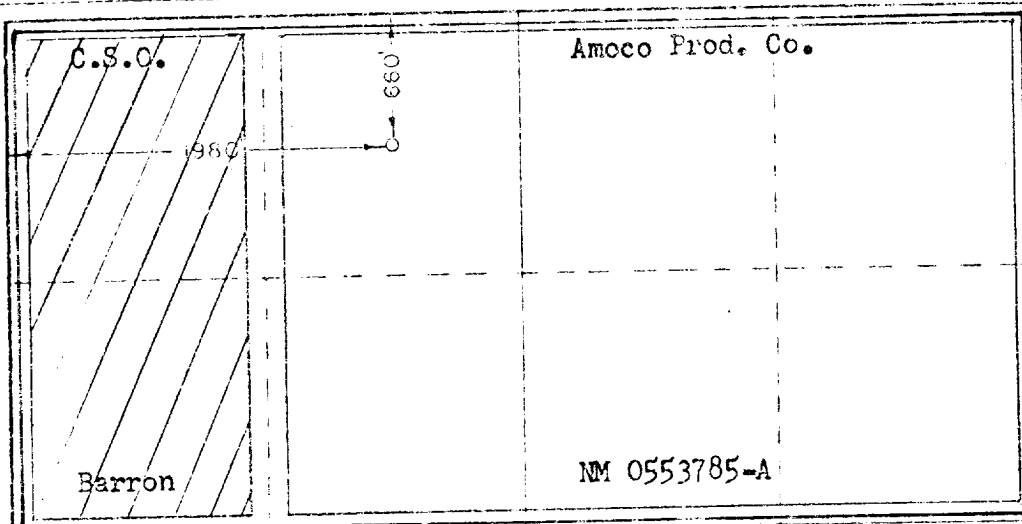
Cities Service Oil Company			Government AD		Well No. 1
C	21	21 South	27 East	Eddy	
660	North		1980	West	
3236.4	Morrow	Undesignated LaHuerta Morrow		320	

- Outline the acreage dedicated to the subject well by colored pencil or hand made 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 Unitization (See reverse side)

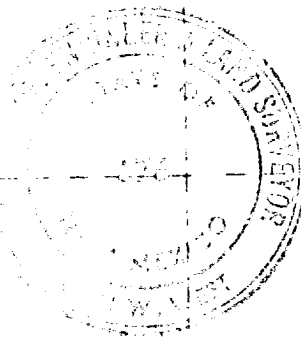
If answer is "no," list the owners and tract descriptions which have actually been consolidated. Use reverse side of this form if necessary.

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.



Unit block consists of 4932 acres. Working interests of participating companies in this well are as follows:

Cities Service Oil	36.69185%
Amoco Production	22.18587%
Amarillo Oil Company	16.63940%
Flag-Redfern Oil Co.	16.63940%
Union Oil Co. of Cal.	4.43026%
Champlin Petrol Co.	1.70661%
Patoil Corporation	1.70661%
	<u>100.00000%</u>



CERTIFICATION

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

ORIGINAL SIGNED
BY E. Y. WILDER

Region Operation Manager

Cities Service Oil Company

March 6, 1975

I hereby certify that the location shown on this plat was plotted from field notes of actual survey by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

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ARTESIA, NEW MEXICO

Date Surveyed

February 28, 1975

Registered Professional Engineer
and Land Surveyor

John W. West

TRACT NO. 3, 4, 5, 7, 10, 14, 21 & 33
 125, 15, 124

Unleased Acreage

PLAT OF UNIT AREA

UNIT AREA

② TRACT NUMBERS

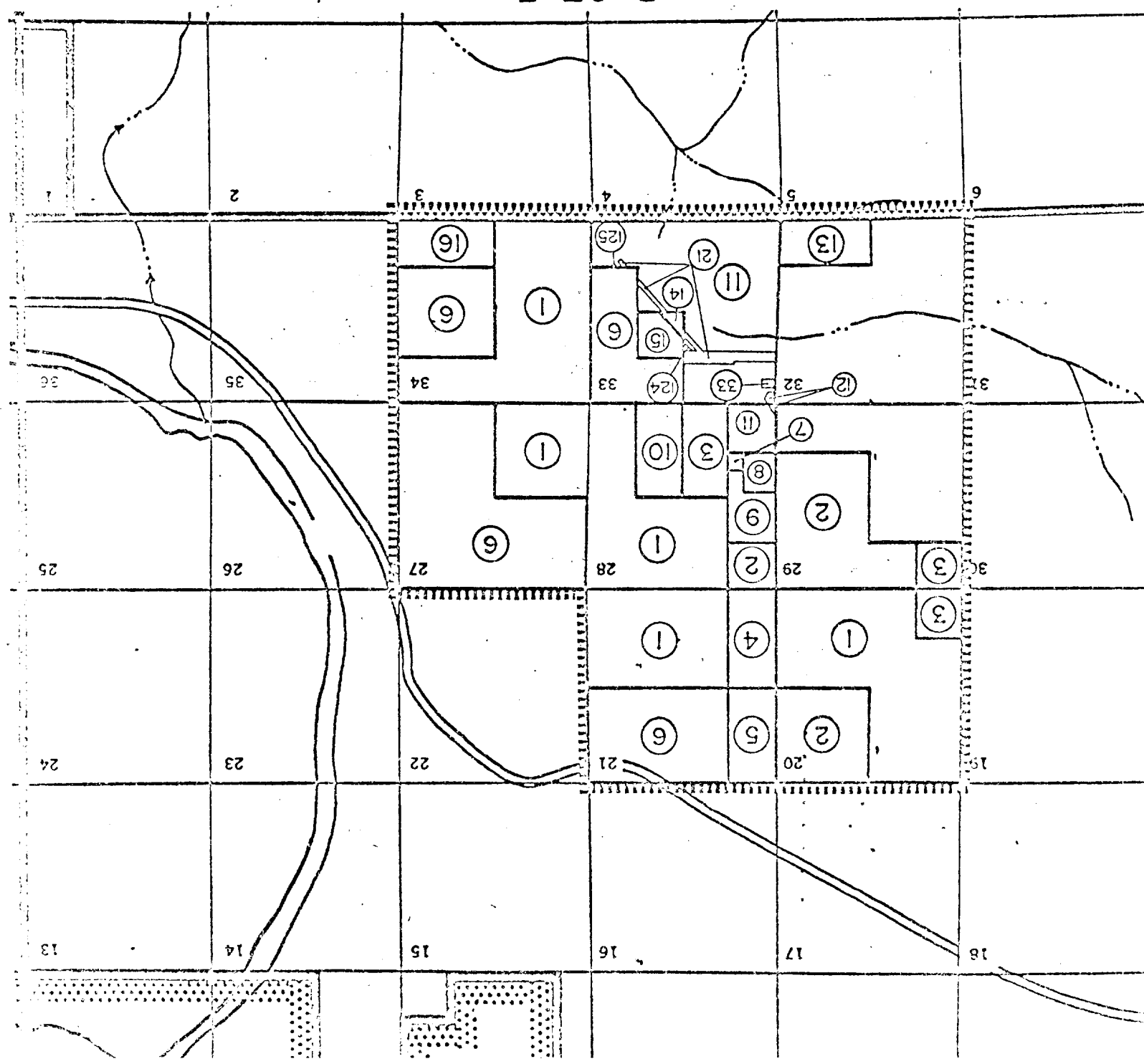
SCALE: 1" = 4000'

J.M. Huber, Pierce & Davis
 Union Oil Co. of California
 Patco Corp.
 Amoco Production Co.
 Cities Service Oil Co.
 EDDY COUNTY, NEW MEXICO
 AGREEMENT DATED SEPT. 22 1972

EXHIBIT "A" PART IV

WORKING INTEREST OWNER
 Amarillo Oil Co., Flag-Redfern Oil Co.

R-27-E





CITIES SERVICE OIL COMPANY

Box 1919
Midland, Texas 79701
Telephone: 915 684-7131

March 6, 1975

United States Department of the Interior
Geological Survey
Artesia, New Mexico 88210

Gentlemen:

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

Cities Service Oil Company respectfully requests permission to drill Well No. 1 on the Government "AD" lease located 660' FNL, 1980' FVL, Section 21-21S-27E, Eddy County, New Mexico.

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

1. Form 9-331C, Application for Permit to Drill.
2. Form C-102, Well Location and Acreage Dedication Plat.
3. General plat of the area showing location in relation to the City of Carlsbad.
4. Plat of Magruder Unit (Cities Service Oil Company - Operator - 36.69185%) showing proposed location in relation to the Unit boundaries.
5. Plat of location layout showing land usage necessary for the drilling pad, mud tanks and reserve pit.
6. Blow out preventer diagram showing arrangement of components of BOP stack.
7. Schematic diagram showing hookup of BOP's, choke manifold and mud/gas separator.
8. Diagram of casing program, hole sizes and estimated formation tops.
9. Summary of mud program.
10. Designation of Operator.

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ARTESIA, NEW MEXICO

Application for Permit to Drill Government "AD" No. 1

March 6, 1975

Page No. 2

The Government "AD" No. 1 location is 1/2 mile north of Cities Service Oil Company's recently completed Elizondo Federal A No. 2-Y, a single completed Morrow producer. Projected TD is 11,750'. The primary objective is the Morrow Sand. Secondary objectives are Wolfcamp, Canyon and Strawn. Access to the location will be an extension 1/2 mile north of the existing road system to Elizondo Federal A No. 2-Y.

The nearest inhabited dwelling is a trailer house one mile SW of the location. This dwelling will present no problem to our operations.

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 USGS requirements.

The proposed casing program consists of:

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

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

5-1/2" set at 11,750' with sufficient cement to fill the annulus from TD to 8500' (above the Wolfcamp).

In addition to the blow out preventer program shown on the attached plat, the following equipment will be installed and in operation before drilling out from under the 9-5/8" casing:

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

Also prior to drilling out from under the 9-5/8", the BOP's and related control equipment will be pressure tested to rated working pressure by an independent testing company.

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U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Application for Permit to Drill Government "AD" No. 1


March 6, 1975

Page No. 3

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

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

Yours very truly,

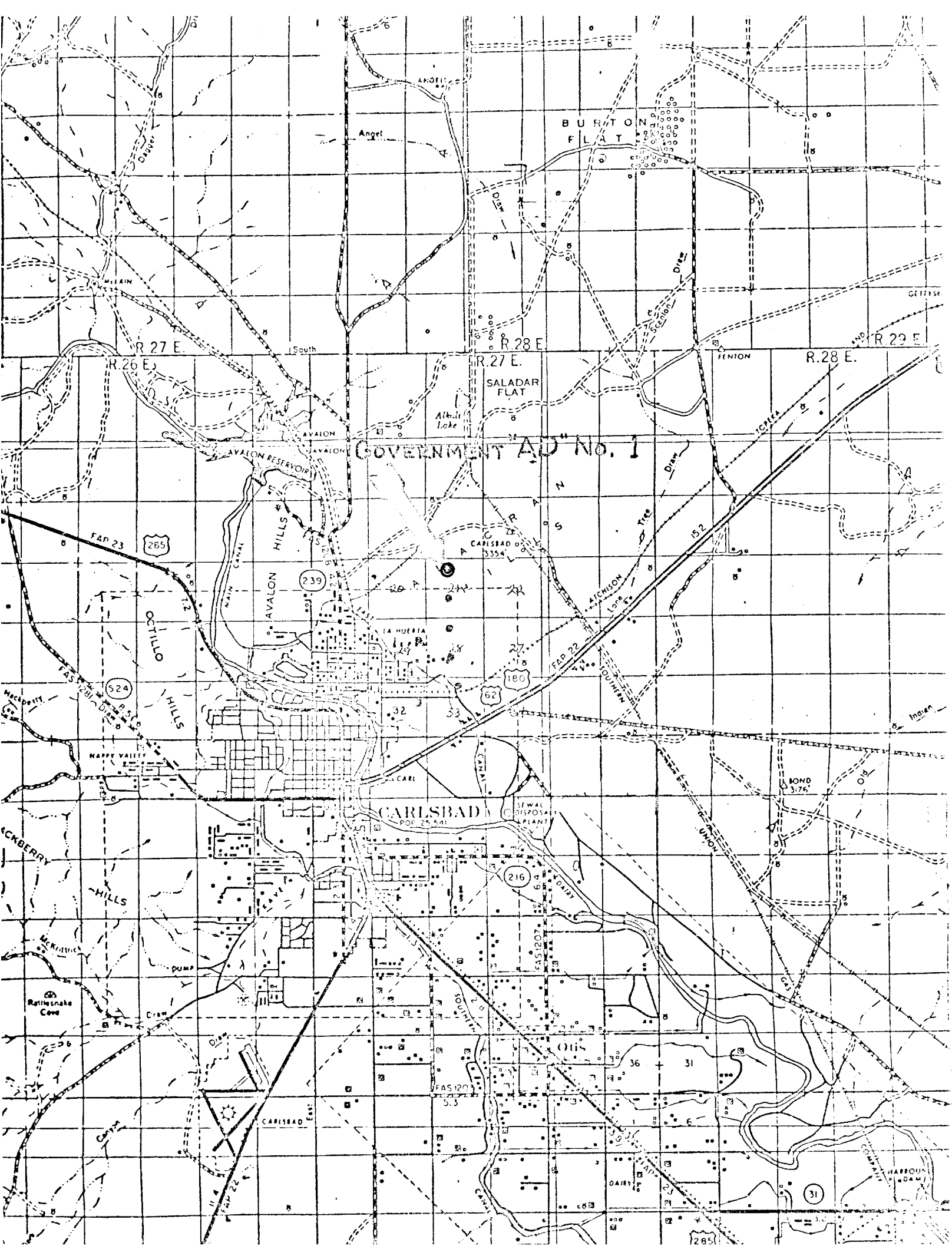


E. Y. Wilder
Region Operations Manager
Southwest Region
E & P Division

EYW/lis

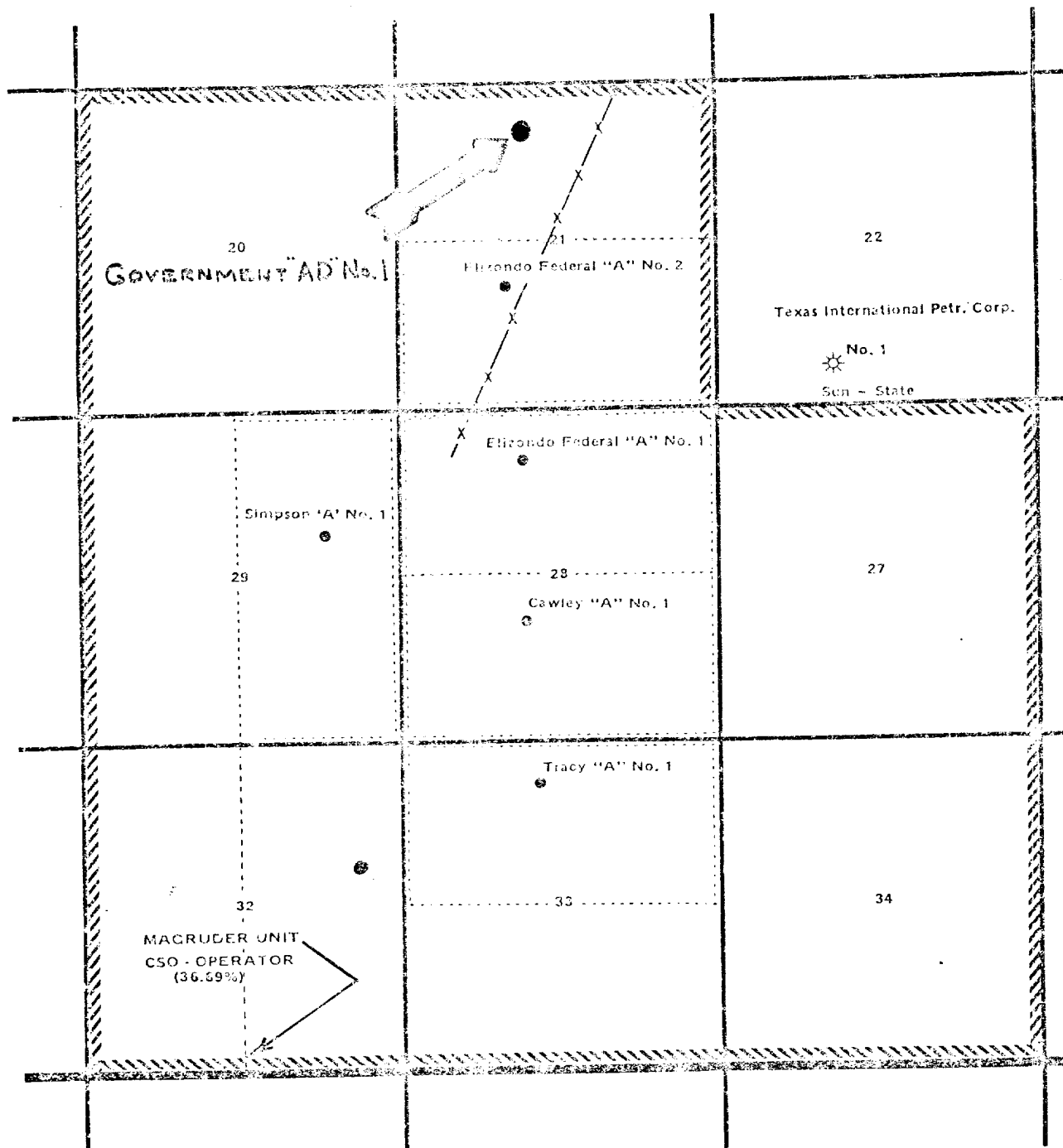
Attachments

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U.S. GEOLOGICAL SURVEY
ALBUQUERQUE, NEW MEXICO



660' FWL, 1980' FWL, SECTION 21-21S.-27E.
EDDY COUNTY, NEW MEXICO

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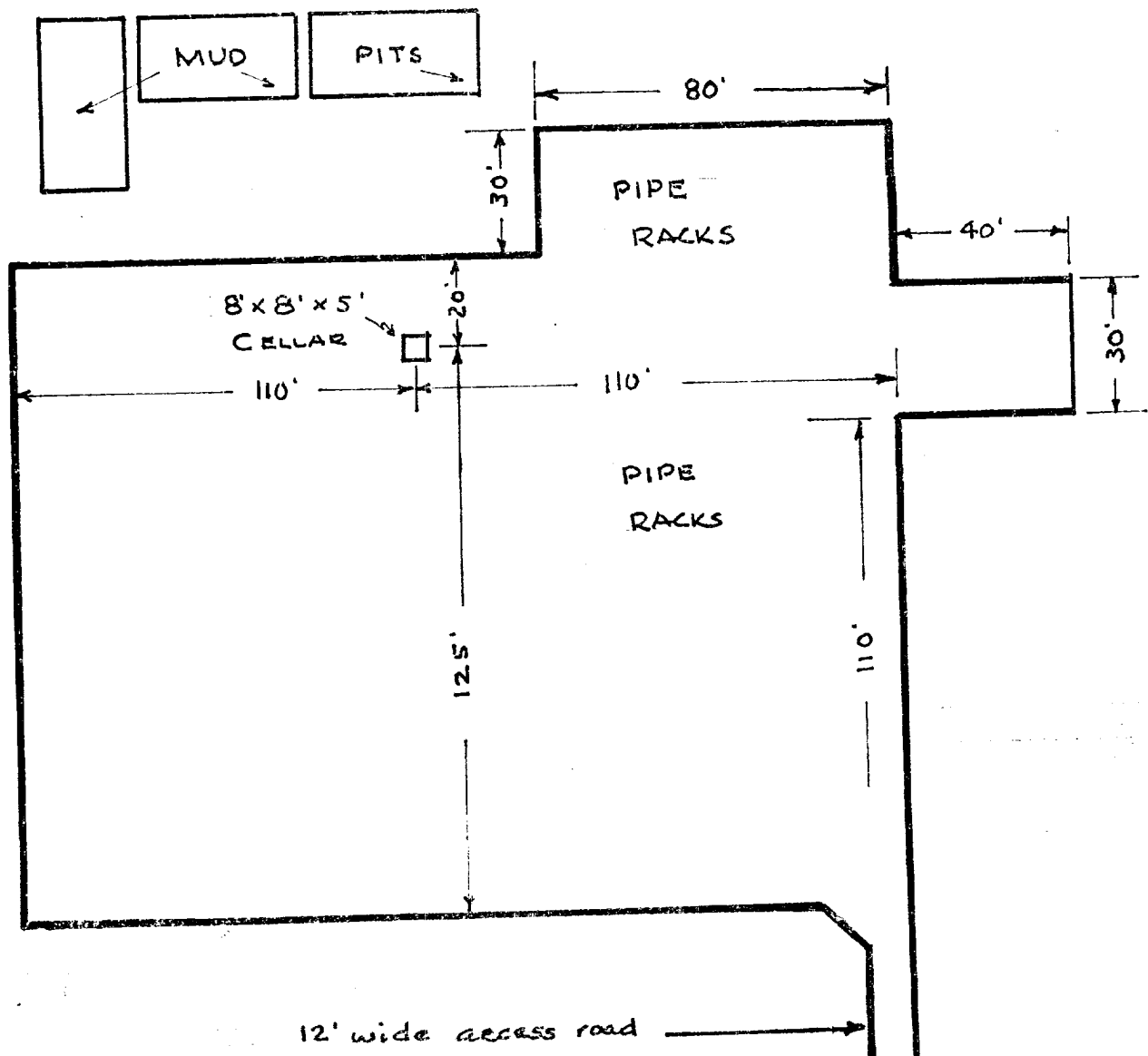
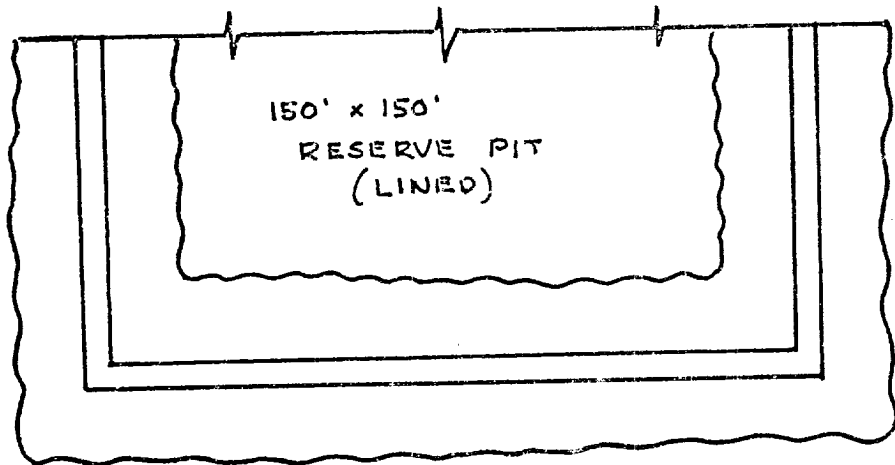


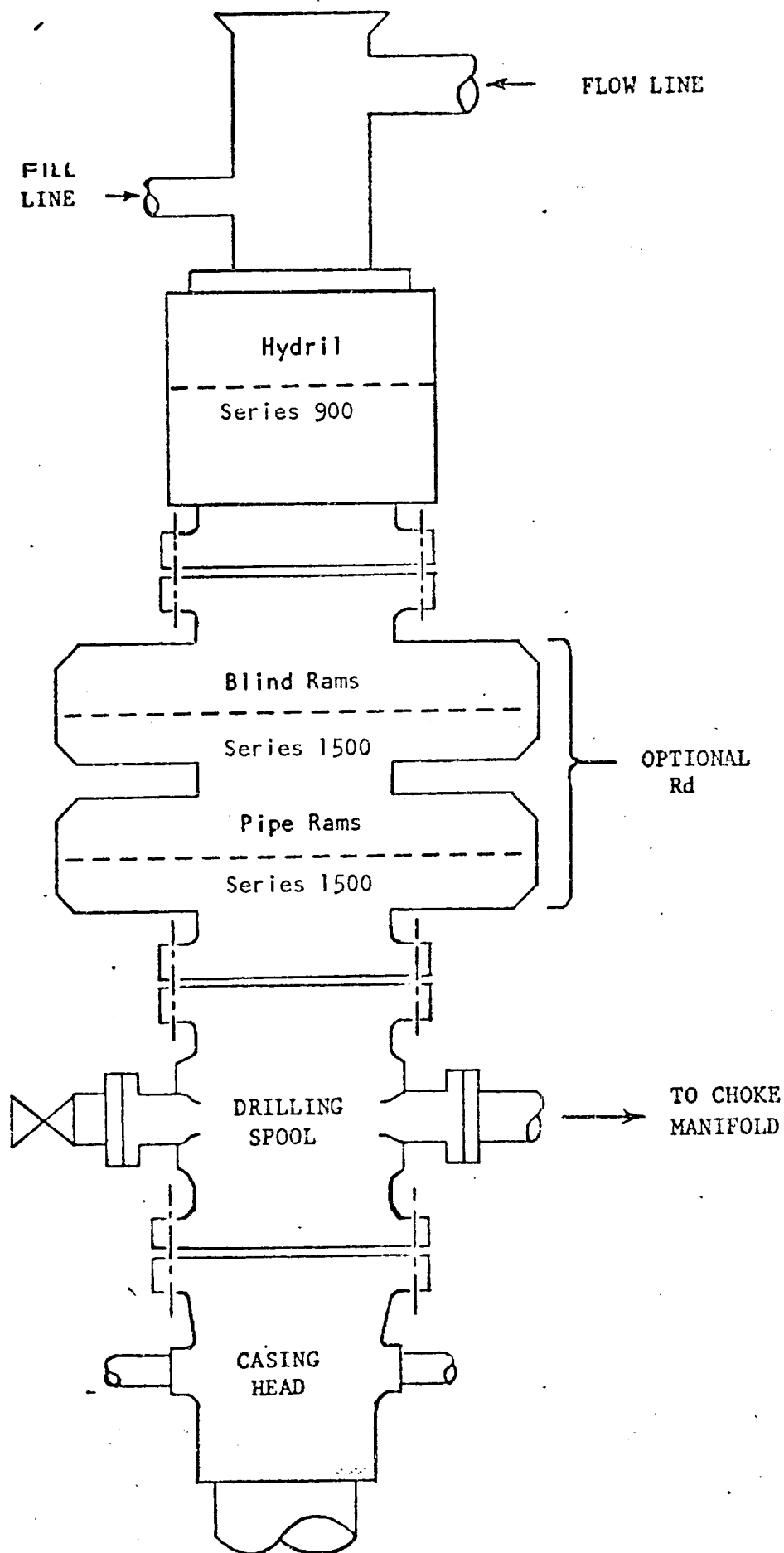
R 27 E

GOVERNMENT "AD" No 1

660' FNL, 1980' FWL, SECTION 21-21S.-27E.
EDDY COUNTY, NEW MEXICO

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

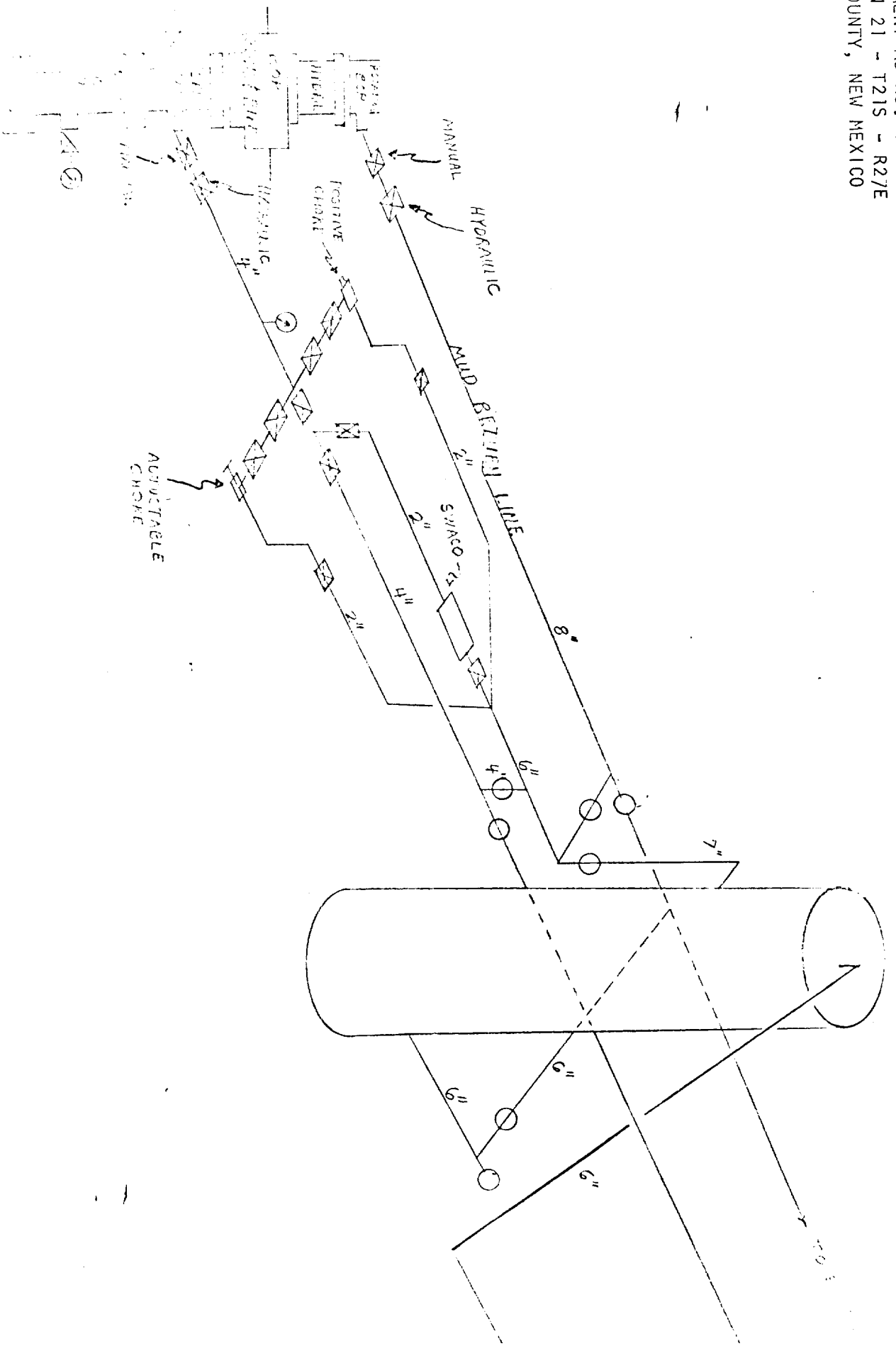




CLOSING METHOD

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.

"
"



THE 2nd AND 3rd OF FEBRUARY

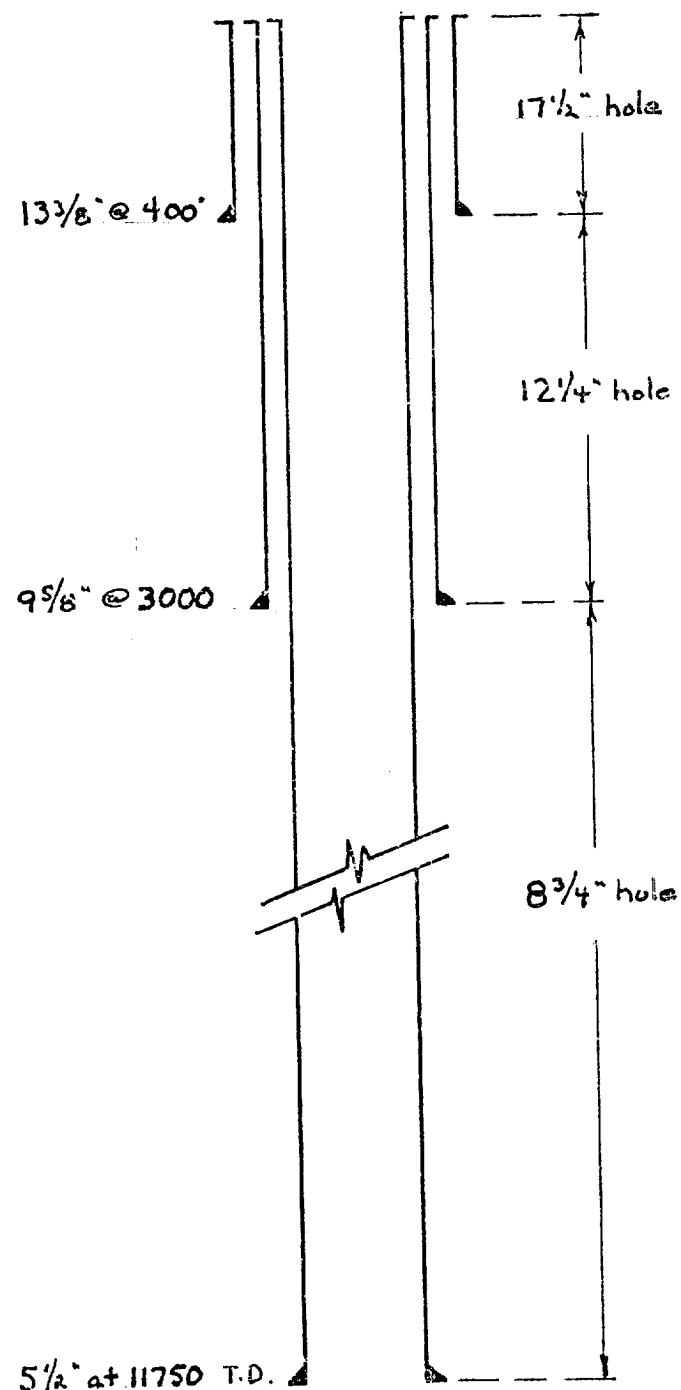
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GOVERNMENT "AD" No. 1

660' FNL, 1980' FWL, SECTION 21-21S.-27E.
EDDY COUNTY, NEW MEXICO

HOLE SIZE &
CASING PROGRAM —

ESTIMATED
FORMATION TOPS —



- Bone Spring 5200
- Dean 8450
- Wolfcamp 8800
- Canyon 9400
- Strawn 10150
- Morrow 11100
- Chester 11700
- T.D. 11750

MUD PROGRAM

Government "AD" No. 1

660' FNL, 1980' FWL
Sec. 21-21S-27E
Eddy County, New Mexico

- 0' - 400' Spud with fresh water and native mud.
Mud weight 8.5 ppg. Viscosity 30-34.
- 400' - 3000' Drill with fresh water and native mud.
If circulation is lost and cannot be
regained, dry drill to 3000' with fresh
water. Mud weight 8.5 ppg. Viscosity
28-30.
- 3000' - 7000' Drill with fresh water - brine system.
Mud weight 9.4-9.5 ppg. Maintain pH
of 10.
- 7000' - 10000' Start increasing mud weight gradually
at 7000' to 9.8 ppg at 8500'. Maintain
weight and viscosity as dictated by
hole conditions.
- 10000' - 11750' TD Mud up at 10700'. Reduce water loss to
6-10 cc prior to drilling through the
Morrow. Mud weight approximately 9.8
ppg. Viscosity 30-34 sec.