

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 Gas Injection ☐SINGLE
WELL ☐ MULTIPLE
WELL ☒

2. NAME OF OPERATOR

Cities Service Oil Company ✓

3. ADDRESS OF OPERATOR

Box 1919 - Midland, Texas 79701

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

At surface

1880' FWL & 990' FSL of Sec. 35-T17S-R27E, Eddy Co., New Mexico

At proposed prod. zone

Same as above

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

Approx. 10 miles SE of Artesia, New Mexico

10. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drig. unit line, if any)

650' NW

16. NO. OF ACRES IN LEASE

360

17. NO. OF ACRES ASSIGNED

TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

668' SE

19. PROPOSED DEPTH

5600'

20. ROTARY OR CABLE TOOLS

Rotary

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

3626' GR.

22. APPROX. DATE WORK WILL START*

September 1, 1974

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11 1/4"	8 5/8"	24#	985'	1000 Sacks (Circulate)
7 7/8"	4 1/2"	10.5#	5600'	500 Sacks

It is proposed to drill to a T.D. of 5600' and inject gas into the Abo Zone.

The blowout prevention program is as follows:

1. One set of blind rams.
2. One set of drill pipe rams.

Case 5327 9-18-74

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

24.

SIGNED

E. Spindler

TITLE Region Operation Manager

DATE August 8, 1974

(This space for Federal or State office use)

PERMIT NO.

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:K. L. BEEKMAN
ACTING DISTRICT ENGINEER

TITLE

DATE

THIS APPROVAL IS RESCINDED IF OPERATIONS
ARE NOT COMPLETED WITHIN 3 MONTHS.
EXPIRES DEC 10 1974

*See Instructions On Reverse Side

RECEIVED

AUG 13 1974

U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICOAPPROVED
SEP 11 1974

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION**

All distances must be from the outer boundaries of the Section

Lessee Cities Service Oil Company		Unit Citgo Empire Abo Unit Tract 1		Well No. 11
N 35	Township 17 South	Range 27 East	County Eddy	
Section 1000		Line and West		Line 990
Section 3626.0		Point Abo		Dedicated Acreage 40

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

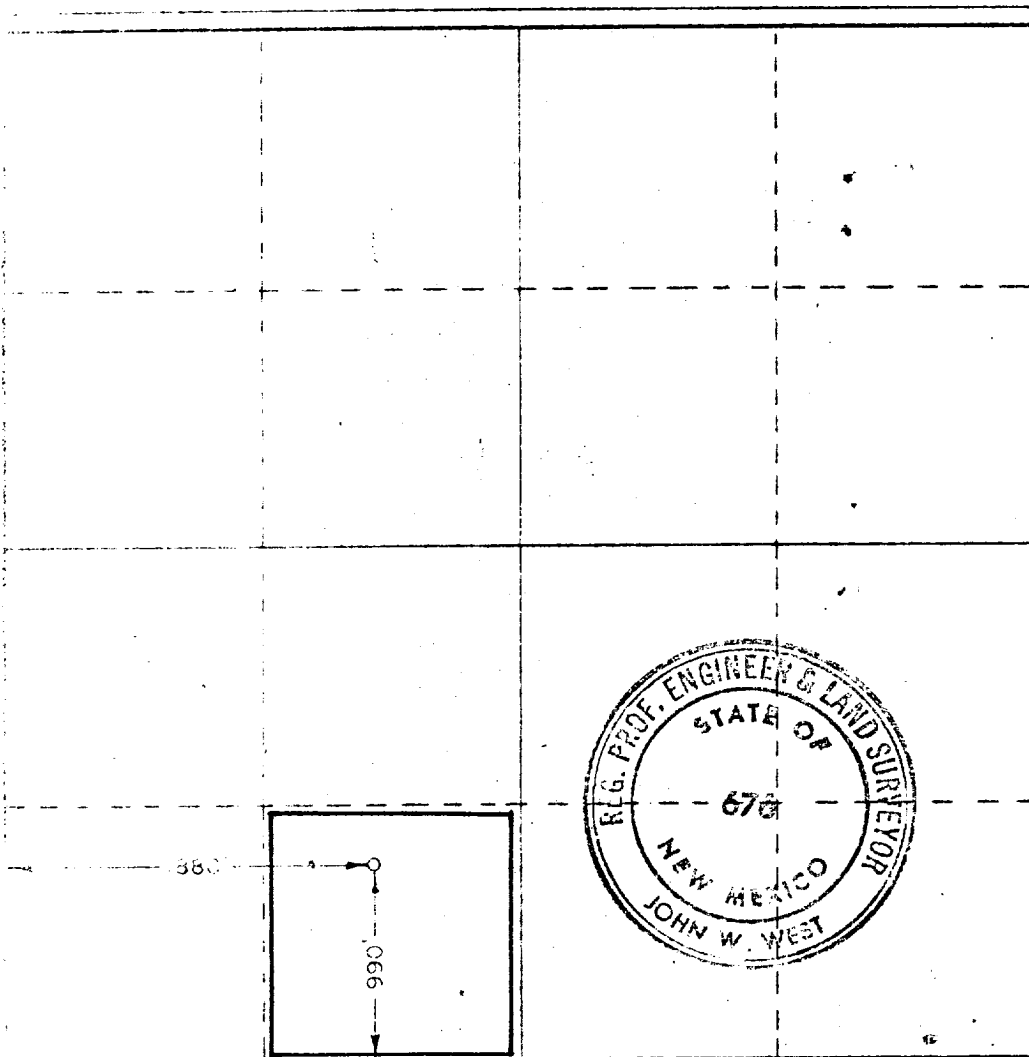
If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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

No acreage will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-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 *E. J. J. J.*
 Position
Region Operation Manager
 Company
Cities Service Oil Company
 Date
August 8, 1974

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 I hereby certify that the information shown on this plat was plotted from a true and correct survey made by me and that the information is true and correct to the best of my knowledge and belief.

Date Surveyed
July 31, 1974

Registered Professional Engineer and/or Land Surveyor

John W. West
 Certificate No. **672**

340 320 300 280 260 240 220 200 180 160 140 120 100 80 60 40 20 0

CITIES SERVICE OIL COMPANY



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

August 12, 1974

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

Re: Application for Permit to Drill
Citgo Empire Abo Unit Tract 1, Well 11,
Eddy County, New Mexico.

Gentlemen:

Cities Service Oil Company respectfully requests permission to drill Well No. 11 on Tract No. 1 on the Citgo Empire Abo Unit, located 1880' FWL and 990' FSL of Section 35-17S-27E, Eddy County, New Mexico.

It is proposed to inject gas into the Abo formation through the subject well and produce the unit under New Mexico Oil Conservation Commission Order No. R-4808 rules and regulations with credit for injected gas applied to the reservoir voidage. The source of injection gas will be produced gas from the Abo formation.

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. Letter to New Mexico Oil Conservation Commission requesting administrative approval of location change.
4. Development plan which includes the following:
 - a. County road map showing location of well in relation to existing roads and wells.
 - b. Plat of location layout showing approximate dimensions and position of pipe racks, mud pits and cellar.
 - c. Diagram of blowout preventer stack.
 - d. Diagram of choke manifold.
 - e. Schematic diagram of hole size, casing program and completion tubing.
 - f. Summary of proposed mud program.

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U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

The well is located on the North side of the black topped road due north of Cities Service Oil Company's Russell C- Magruder A tank battery.

The nearest inhabited residence is the home of Mrs. Evans 3/8 mile East of the proposed location.

Projected total depth is 5600' with completion to be in the Abo gas cap. The well will be equipped and used for gas injection purposes.

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

The proposed casing program consists of:

8-5/8" 24# set at 985' with cement circulated

4-1/2" 10.5# set at 5600' with sufficient cement to fill annular space to 4400'

The blowout preventer program will consist of 3000# blind rams and pipe rams with a 3000# choke manifold.

Please contact me 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:bl

Attachment

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AUG 13 1974
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

CITIES SERVICE OIL COMPANY



Box 1919
Midland, Texas 79701
Telephone: 915 634-7131

August 7, 1974

New Mexico Oil Conservation Commission
Drawer DD
Artesia, New Mexico 88210

Gentlemen:

Administrative approval is requested for the drilling of Cities Service Oil Company's Citgo Empire Abo Unit #111. The location for the drilling of this well has been changed to 990' from the South line and 1880' from the West line of Section 35, T-17S, R-27E, Eddy County, New Mexico.

The drilling site authorized for this well by Order No. R-4808 was 990 FSL, 2635 FEL of the same section. This location cannot be used due to surface conditions such as pipe yard, corral and outbuildings.

The requested location is 745' West of the approved location in the same 40 acre unit of Section 35 and is free of roads and other surface obstructions.

Rule 10 of New Mexico Oil Conservation Commission Order No. R-4808 stipulates that injection wells shall be no closer than 1650 feet to a tract not committed to the unit. The proposed location will be 1140 feet from the Northeast corner of Tract 88 of the ARCO Empire Abo Unit.

The proposed location of 990' FSL and 1880' FWL of Section 35-17S-27E, Eddy County, New Mexico is requested for the following reasons:

1. The previously authorized location cannot be used due to surface conditions.
2. The objective of this well is to inject gas into the gas cap and moving the location East or North any appreciable distance would make the gas cap inaccessible.

We are attaching a letter, dated August 7, 1974, that we have furnished offset operators advising them of our application.

Thank you for your consideration of our request.

Yours very truly,

E. Y. Wilder
Region Operation Manager

EYW:EL:bl

Attachment

CITGO EMPIRE ABO UNIT
EDDY COUNTY, NEW MEXICO
1" = 2000'

22

23

24

27

26

25

ABO NOT PRODUCING

ABO NOT PRODUCING

ABO NOT PRODUCING

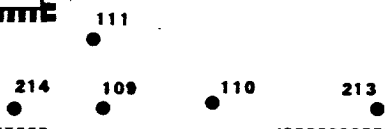
34

35

36

Atlantic
Richfield Co.

ATLANTIC RICHFIELD CO.



111

214

109

110

213

305

404

ATLANTIC RICHFIELD CO.

ATLANTIC RICHFIELD CO.

3

2

1

ATLANTIC RICHFIELD CO.

CITIES SERVICE OIL COMPANY



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

August 7, 1974

Atlantic Richfield Company
Box 1610
Midland, Texas 79701

Gentlemen:

Cities Service Oil Company is making application with the New Mexico Oil Conservation Commission to drill its Citgo Empire Abo Unit #111, a gas injection well, located 990' from the South line and 1880' from the West line of Section 35, T-17S, R27E, Eddy County, New Mexico. We are attaching a copy of this application for your information.

In accordance with New Mexico Oil Conservation Commission regulations we are attaching a copy of this application and request that you, as an offset operator, waive objection to the drilling of this well.

Thank you for your consideration of this request.

Yours very truly,

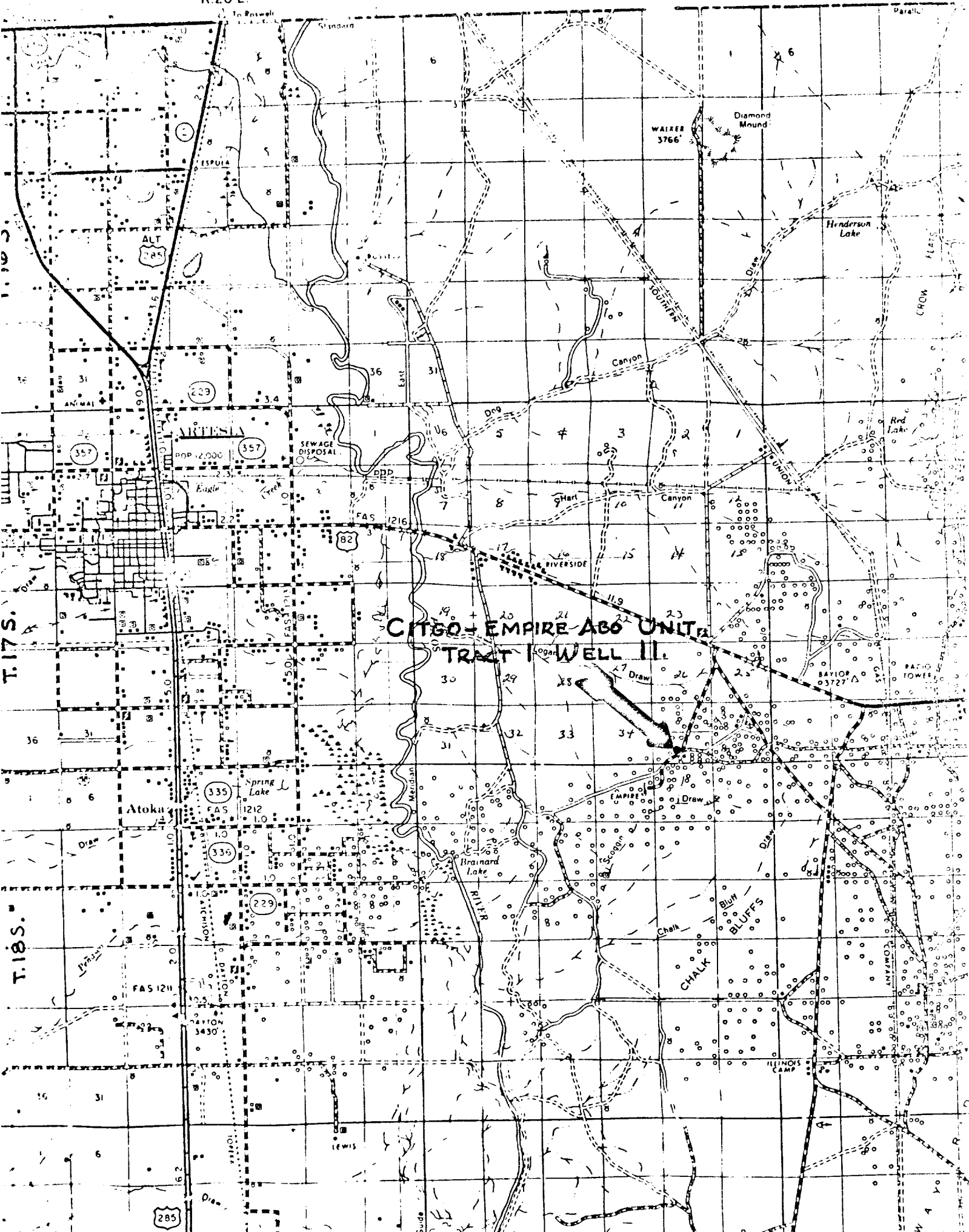
CITIES SERVICE OIL COMPANY

E. Y. Wilder
Region Operation Manager

EYW:RHS:bl

Attachment

cc: New Mexico Oil Conservation Commission
Drawer DD
Artesia, New Mexico 88210

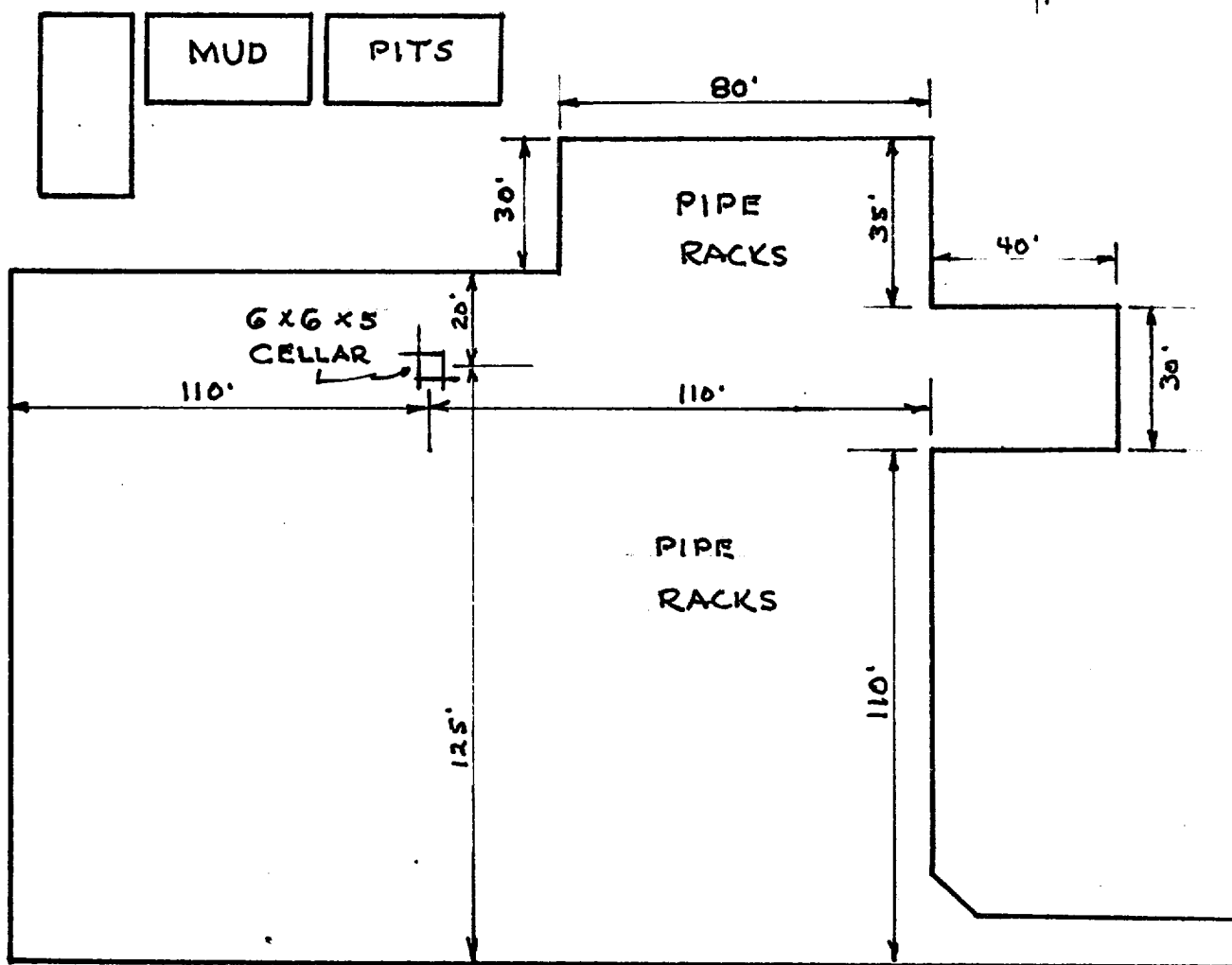
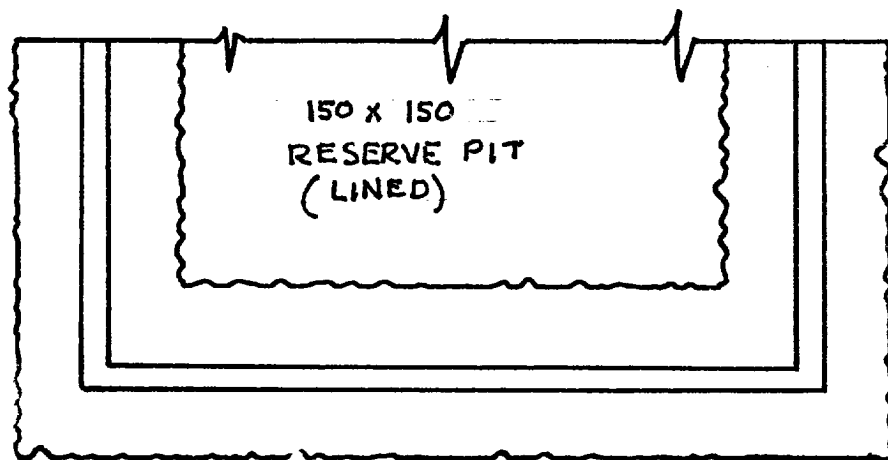


CITGO-EMPIRE ABO UNIT - TRACT 1 WELL 11

1880 FWL, 990 FSL, SEC. 35-17S-27E

EDDY COUNTY, NEW MEXICO

Rig up with V-Door to East and
reserve pit to North —

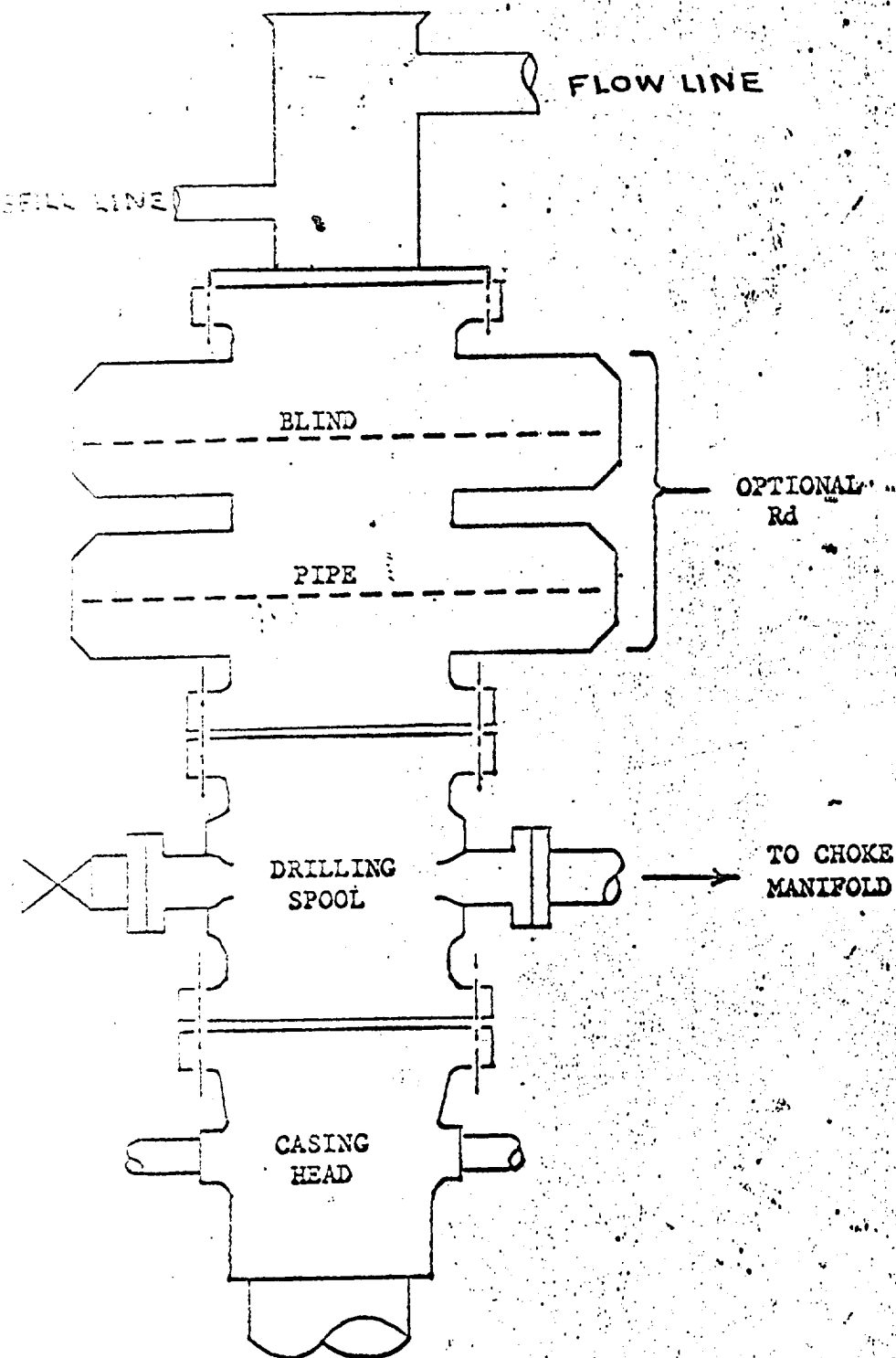


-SRRA
SRDA

Cities Service Oil Company
Citgo Empire Abo Unit
Tract 1 Well #11
990' FSL & 1880' FWL of Sec. 35-T17S-R27E
Eddy County, New Mexico

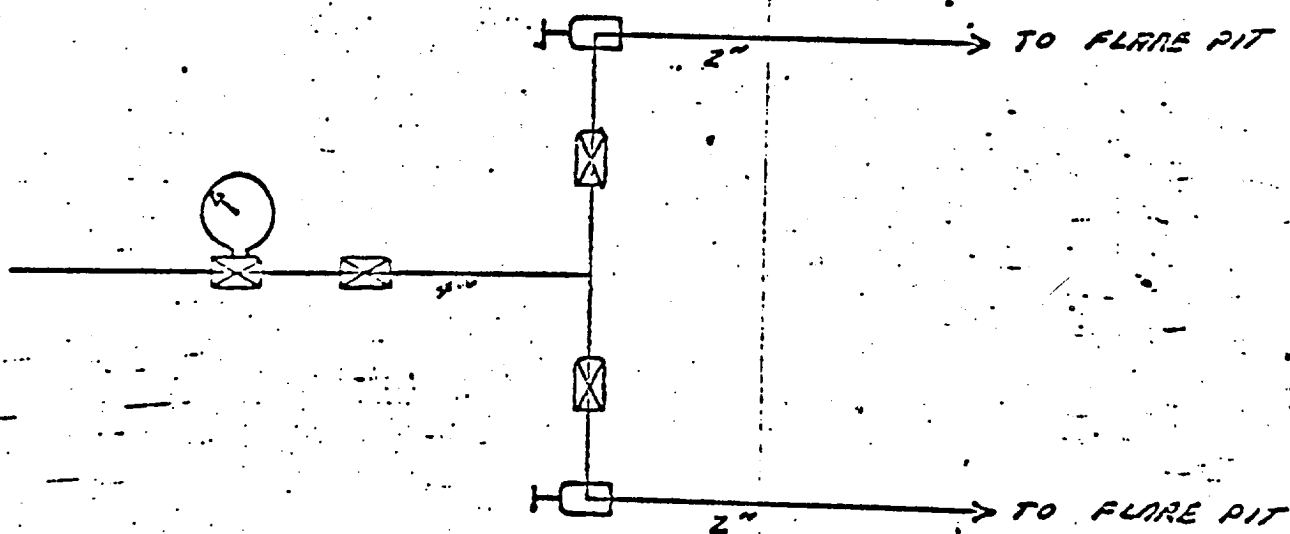
CLOSING METHOD


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.




CHOKE & MANIFOLD SCHEMATIC

Cities Service Oil Company
Citgo Empire Abo Unit
Tract 1 Well No. 11
990' FSL & 1880' FWL of Sec. 35-T17S-R27E
Eddy County, New Mexico



 ADJUSTABLE CHOKE

 3000 # V.I.P. 2" CAMERON TYPE F GATE VALVE OR EQUIV.

CITGO EMPIRE ABO
TRACT 1 WELL 11
990 FSL 1880 FWL
SECTION 35, T-17-S, R-27E
EDDY Co. NEW MEXICO

12 1/4" hole

8 5/8" 24# K-55 STC @ 985'

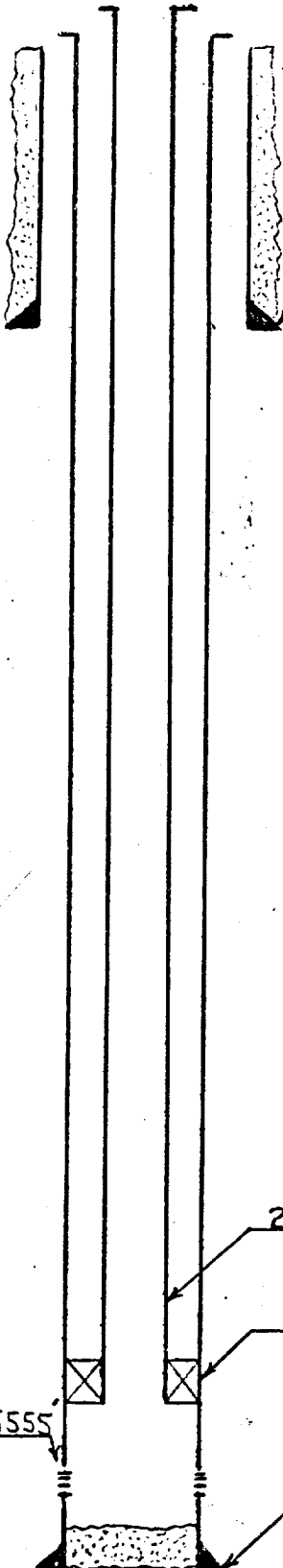
7 7/8" hole

2 3/8 8 rd. 4.6# EVE Plastic Lined
@ 5450'

Guiberson Uni-Packer VI @ approx. 545

Proposed perforations 5540-5555'

4 1/2" 10.5# K-55 STC @ 5600'



**IMCO SERVICES**A Division of HALLIBURTON Company
2400 West Loop South, P. O. Box 22805
Houston, Texas 77022 A/C 713 622 5155COMPANY CITIES SERVICE OILWELL G.I.E. ABO UNIT

FIELD _____

LOCATION SEC.35, 17S, 27ECOUNTY EDDYSTATE NEW MEXICOPROPOSED MUD PROGRAMPROPOSED DEPTH: 5,600'CASING PROGRAM:

1,000' of 8-5/8" Surface

5,600' of 4-1/2" Production

PROPOSED MUD PROGRAM BY CASING INTERVAL

<u>DEPTH (FEET)</u>	<u>MUD WEIGHT (PPG)</u>	<u>VISCOSITY (SEC)</u>	<u>FLUID LOSS (ML)</u>	<u>MUD TYPE</u>
0- 1,000'	8.8 - 9.0	31 - 32	No Control	IMCO-Gel/ Lime Slurry
Spud with an IMCO-Gel/lime slurry having a viscosity of 31-32 sec. This type fluid should be sufficient to surface casing point. Set 8-5/8" Surface Casing at 1,000'.				
1,000- 5,400'	8.4	28	No Control	Fresh Water
Drill with fresh water circulating the reserve pit and employing the use of a flocculant, if necessary, to minimize solids build-up.				
5,400- 5,600'	8.8 - 8.9	36 - 38	No Control	Gelex & IMCO-Gel

This fluid should provide safe drilling to total depth and insure logging and casing operations.