

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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"/>			3. LEASE DESIGNATION AND SERIAL NO. LC-029389-a	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR ARCO Oil and Gas Co. ✓			7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR P.O. Box 1610, Midland, TX 79702			8. FARM OR LEASE NAME Baish Federal	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At proposed prod. zone 660' FNL & 1980' FWL (Unit letter C) (Same as Above)			9. WELL NO. #3	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 8 miles Southeast of Loco Hills, New Mexico			10. FIELD AND POOL, OR WILDCAT Shugart (Bone Springs)	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 660' FNL			11. SEC., T., R., M., OR ELE. AND SURVEY OR AREA Sec. 9-18S-31E	
16. NO. OF ACRES IN LEASE 440			12. COUNTY OR PARISH Eddy	
17. NO. OF ACRES ASSIGNED TO THIS WELL 40			13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320'			20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DV, RT, GR, etc.) GR 3713.6'			22. APPROX. DATE WORK WILL START* ASAP	

23. 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"	54.5# K-55	680'	650 sx Circ
11"	8-5/8"	24# K-55	2150'	800 sx Circ
7-7/8"	5-1/2"	17# K-55	8900'	1700 sx TOC @ 1500'
		17# N-80		

Propose to drill a North Shugart (Bone Springs) development well and test for commercial production.

Blowout preventor program attached.

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 Scott Day TITLE Drilling Engineer DATE 2-5-87

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE 2-17-87

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

**NL MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-122  
Supersedes C-128  
Effective 4-65

All distances must be from the outer boundaries of the Section

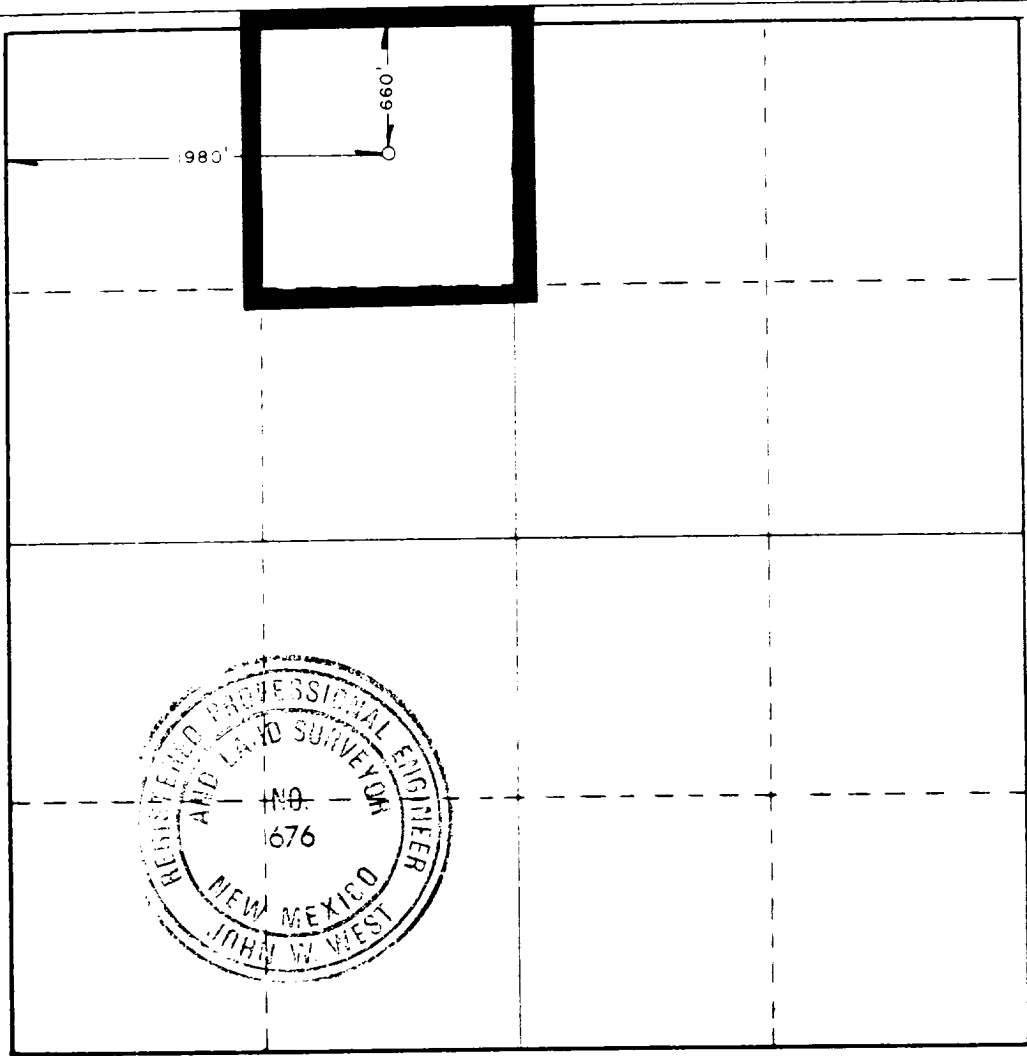
Operator <b>ARCO OIL AND GAS COMPANY</b> ✓			Lease <b>BAISH FEDERAL</b>		Well No. <b>3</b>
Section Letter <b>C</b>	Section <b>9</b>	Township <b>18 SOUTH</b>	Range <b>31 EAST</b>	County <b>EDDY</b>	
Actual Surface Location of Well: <b>660</b> feet from the <b>NORTH</b> line and <b>1980</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>3713.6'</b>	Producing Formation <b>Bone Springs</b>		Pool <b>North Shugart</b>	Estimated Acreage <b>40</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: **ARTESIA OFFICE**

**RECEIVED BY  
FEB 10 1987  
O. C. D.  
ARTESIA OFFICE**

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**

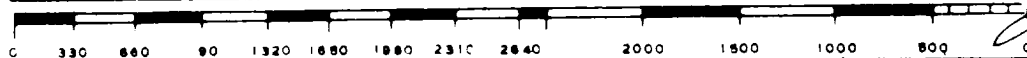
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

By: *Grant Ray*  
 Title: **Drilling Engineer**  
 Company: **ARCO Oil and Gas Co.**  
 Date: **2-5-87**

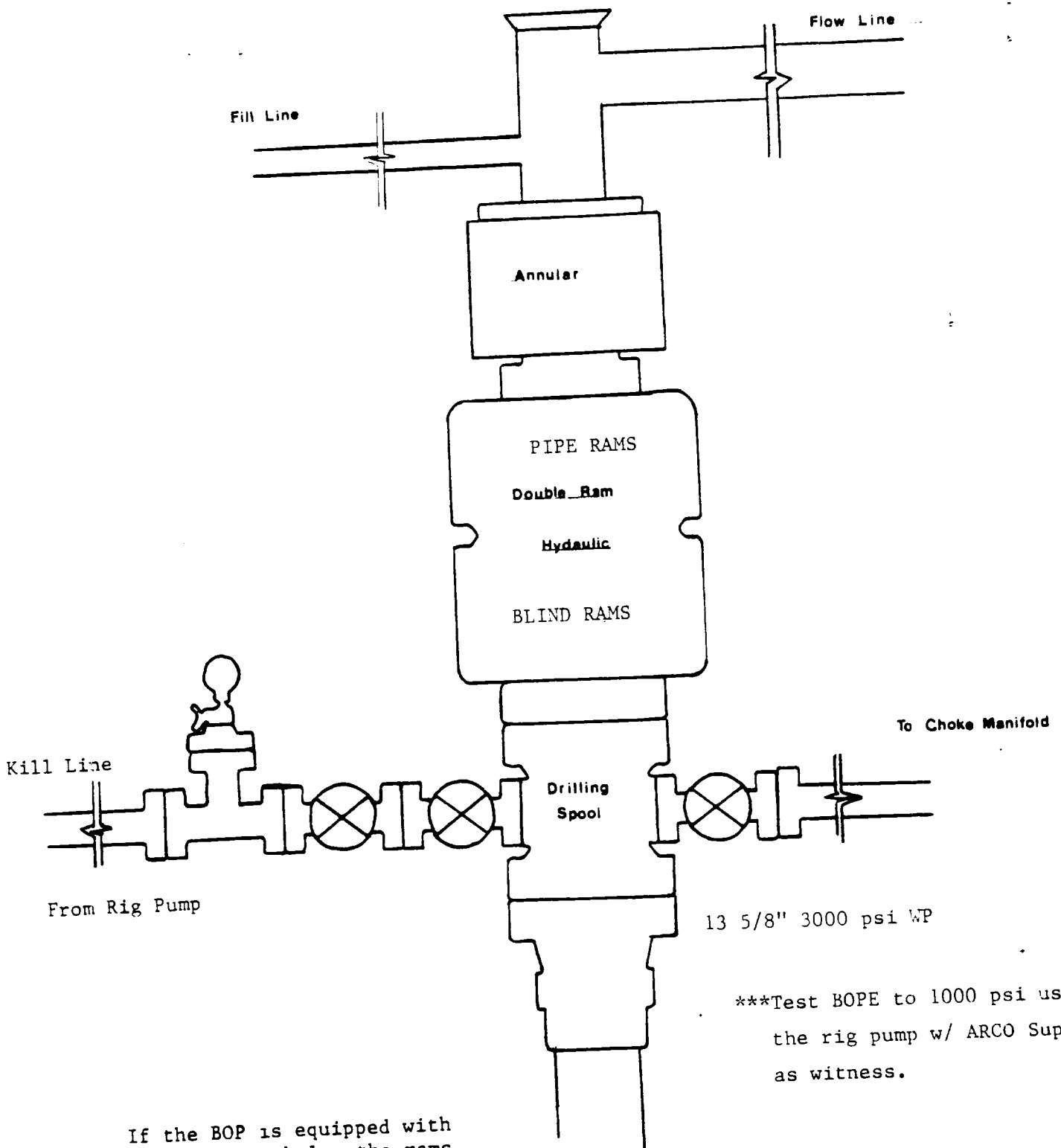
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: **JANUARY 25, 1986**  
 Registered Professional Engineer and/or Land Surveyor

*John W. West*  
 Certificate No. **JOHN W. WEST, 676**  
**RONALD J. EIDSON, 3239**



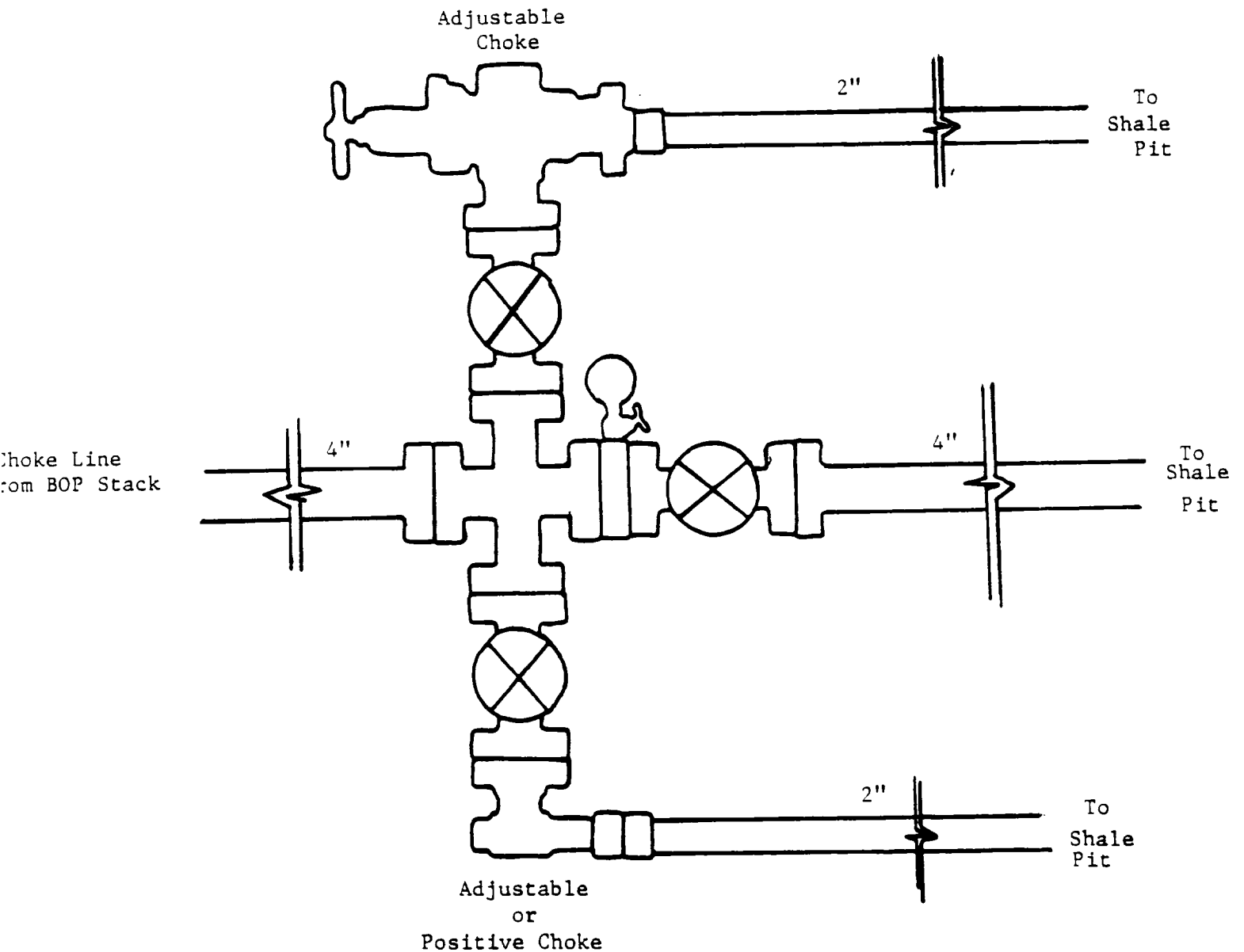
ARCO Oil & Gas  
3000 psi WP BOP Stack  
S R<sub>d</sub> A



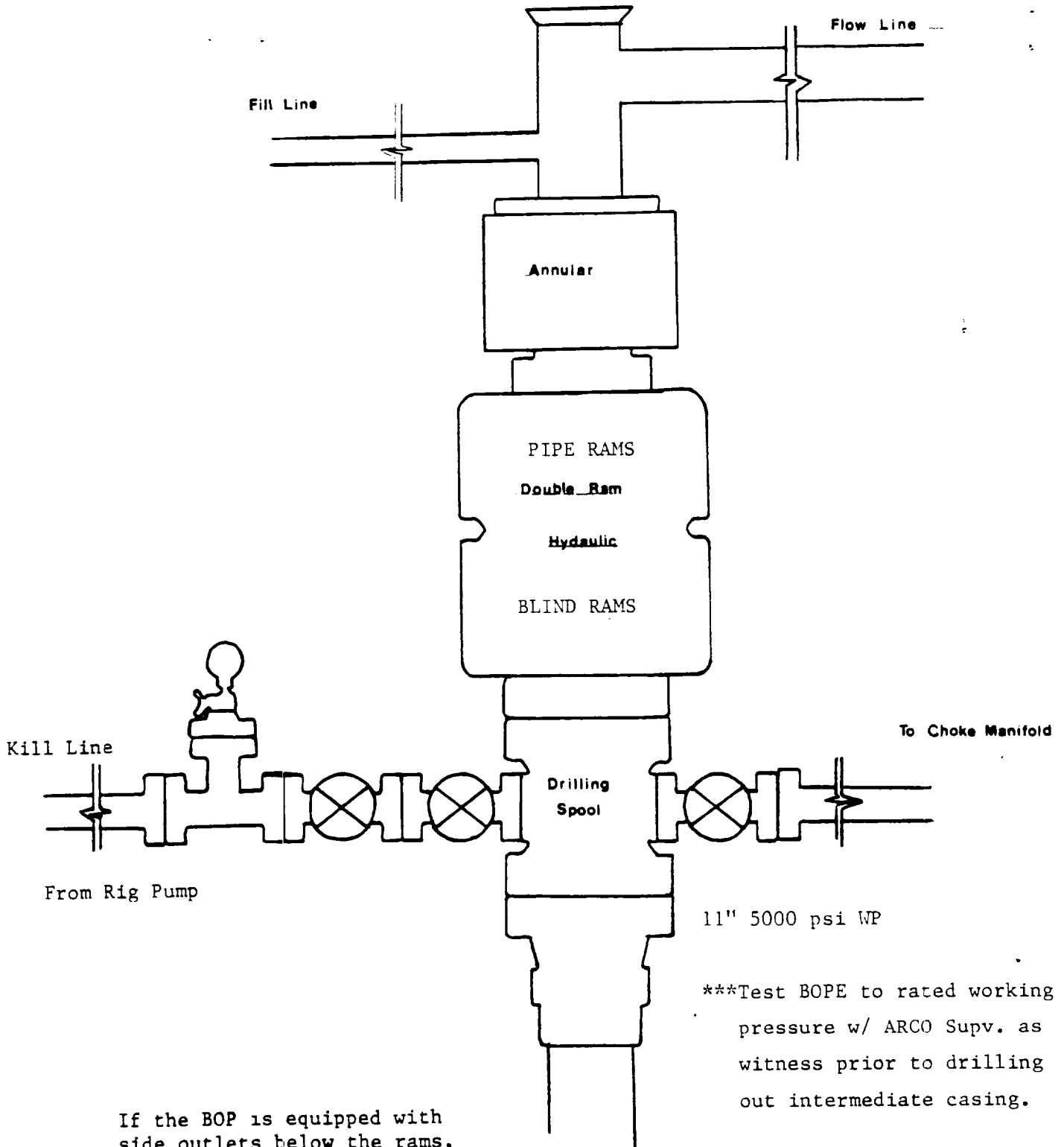
\*\*\*Test BOPE to 1000 psi using  
the rig pump w/ ARCO Supv.  
as witness.

If the BOP is equipped with  
side outlets below the rams,  
a spool is not required.

ARCO Oil & Gas  
3000psi WP Choke Manifold

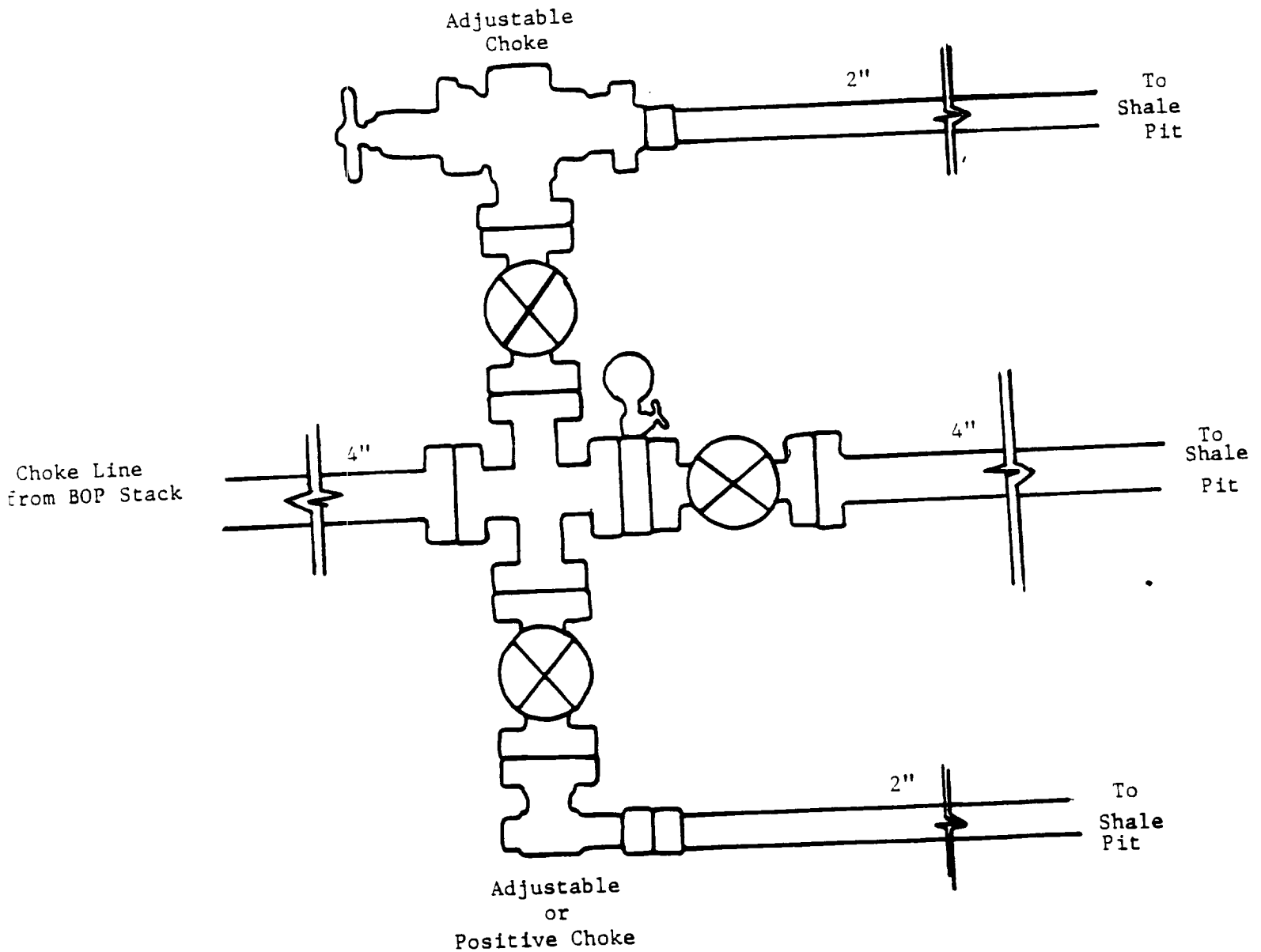


ARCO Oil & Gas  
5000 psi WP BOP Stack  
SR<sub>d</sub> A



If the BOP is equipped with side outlets below the rams, a spool is not required.

ARCO Oil & Gas  
5000psi WP Choke Manifold



To supplement USGS Form 3160-3 "Application for Permit to Drill, Deepen or Plugback", the following additional information is submitted to comply with USGS Order NTL-6.

Operator: ARCO Oil and Gas Company

Lease & Well No: Baish Federal #3

Location: Unit Letter C

Section 9, T-18-S, R-31-E

Eddy County, New Mexico

Lease, New Mexico LC - 029389-a

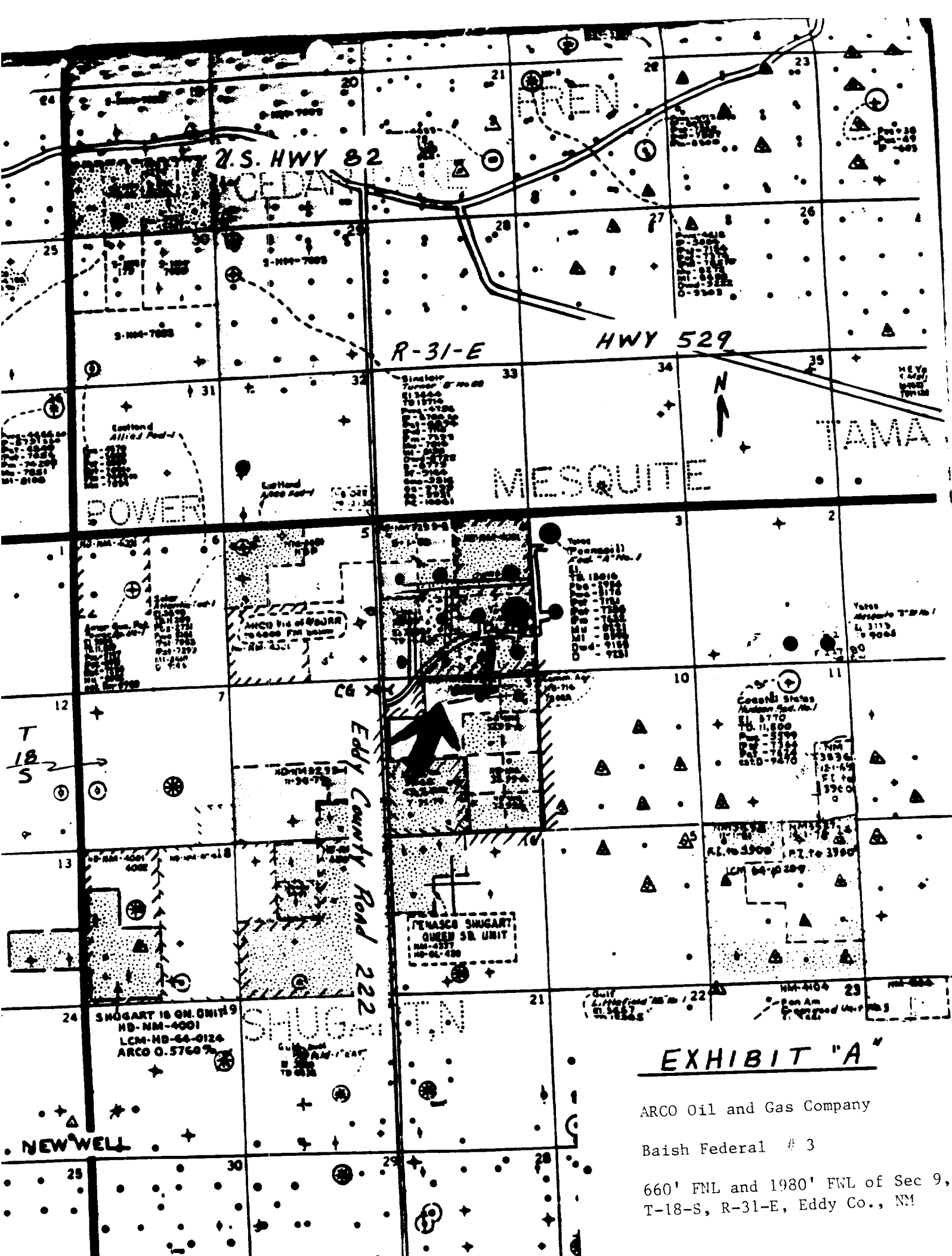
Development well ☒ Exploratory well ☐

1. See Well Location and Acreage Dedication Plat Form C-102.
2. See Form 3160-3 for elevation above sea level of unprepared location.
3. The geologic name of the surface formation is: Querecho Plains Aeolian material with loose sandy loams and commonly harbor calcareous gravels.
4. The type of drilling tools and associated equipment to be utilized will be: Rotary
5. The proposed drilling depth will be 8900'.
6. The estimated tops of important geologic markers are:

TOS	690'	Queen	3170'
BOS	2000'	San Andres	4200'
Yates	2100'	Bone Springs	5500'
7. The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are:

Bone Springs Sand 7900' Oil

8. The proposed casing program including the size, grade and weight-per-foot of each string has been indicated on Form 3160-3. All strings of casing will be: New ☒ Used ☐.
9. See Form 3160-3 for amount of cement.





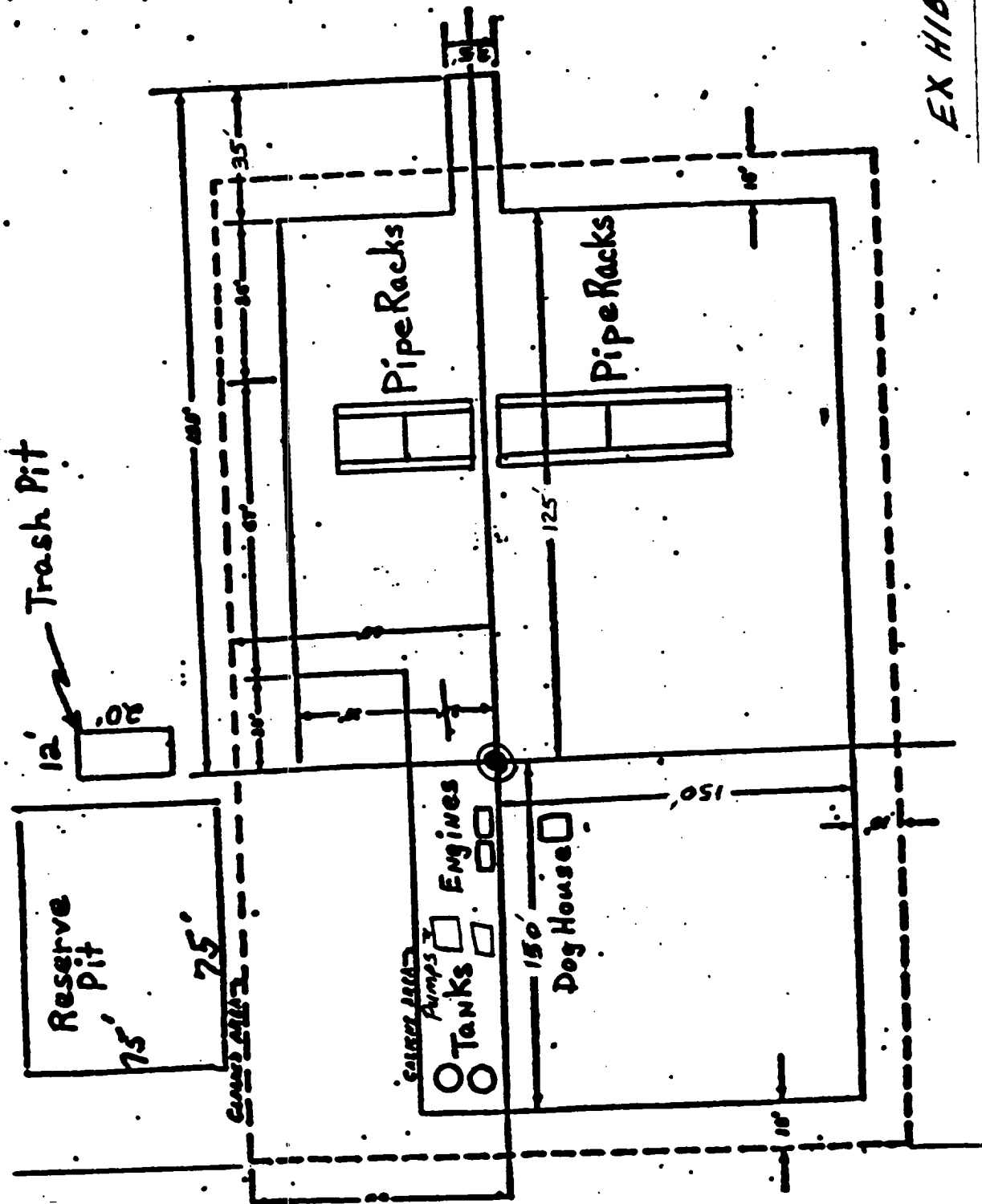


EXHIBIT "D"

ARCO Oil and Gas Company  
 660' FNL & 1980' FWL of Sec 9,  
 T-18-S, R-31-E, Eddy Co., NM