

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.  
NM-86554

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Arrington Federal

9. WELL NO.  
2

10. FIELD AND POOL, OR WILDCAT  
Shugart Y, SR, Q, G

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA  
Sec. 14-T19S-R31E

12. COUNTY OR PARISH  
Eddy

13. STATE  
New Mexico

17. NO. OF ACRES ASSIGNED  
TO THIS WELL  
40

20. ROTARY OR CABLE TOOLS  
Rotary

22. APPROX. DATE WORK WILL START\*  
June 25, 1991

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

David H. Arrington Oil & Gas, Inc.

3. ADDRESS OF OPERATOR

P. O. Box 2071

Midland, TX 79702

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

At surface

330' FNL & 990' FWL

At proposed prod. zone

Same

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

18 miles SE of Loco Hills, NM

10. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

330'

16. NO. OF ACRES IN LEASE  
160

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.

N/A

19. PROPOSED DEPTH  
4000'

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

3553' GL

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24# J-55	700'	400 sx "C" Circ. to surf.
7 7/8"	5 1/2"	14# J-55	4000'	Circ 550 sx HL + 150 sx "C"

Mud Program:

0' - 700': Fresh water spud mud w/gel:	Mud Wt. 8.4-8.7ppg	Vis. 28-32	W/L Control No W/L cont.
700' - 4000': Brine mud w/gel, starch:	10 ppg	30-38	W/L 10-20cc

BOP Program:

A 10" 3000 psi wp Shaffer Series 900 BOP will be installed on the 11 3/4" casing. Casing and BOP will be tested before drilling out with 7 7/8". BOP will be used as a 2000 psi wp system and will be tested daily. See exhibit "E".

SPECIAL STIPULATIONS  
ATTACHED

Post ID-1  
5-31-91  
Thur Loc + API

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 \_\_\_\_\_ TITLE \_\_\_\_\_ DATE May 2, 1991  
Agent

(This space for Federal or State office use)

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

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE 5-23-91  
CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

**DISTRICT I**

P. O. Box 1980  
Hobbs, NM 88240

**DISTRICT II**

P. O. Drawer DD  
Artesia, NM 88210

**DISTRICT III**

1000 Rio Brazos Rd  
Aztec, NM 87410

**OIL CONSERVATION DIVISION**

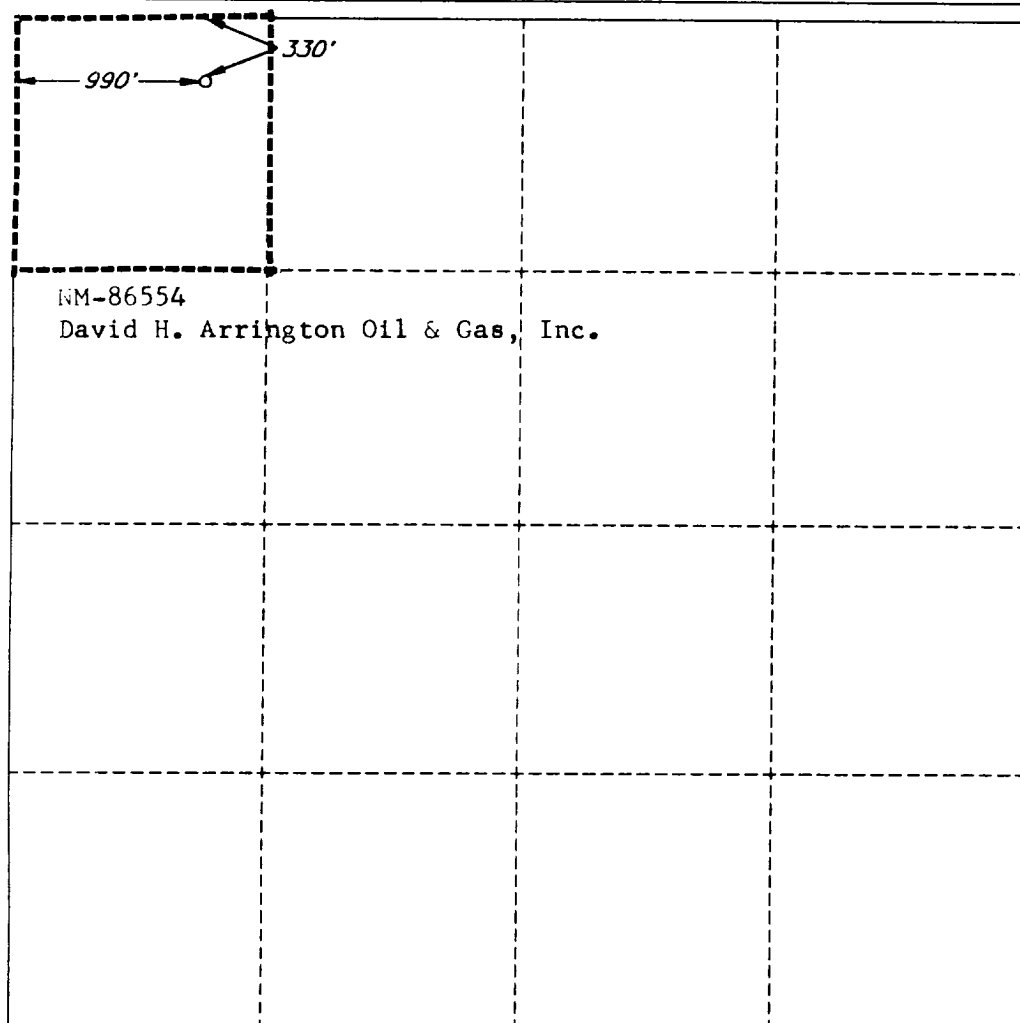
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the section

Operator <b>DAVID H. ARRINGTON OIL &amp; GAS, INC.</b>			Lease <b>ARRINGTON FEDERAL</b>		Well No. <b>2</b>
Unit Letter <b>D</b>	Section <b>14</b>	Township <b>19-SOUTH</b>	Range <b>31-EAST</b>	<b>NMPM</b>	<b>EDDY COUNTY</b>
Actual Footage Location of Well <b>330</b> feet from the <b>NORTH</b> line and <b>990</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>3553'</b>	Producing Formation <b>Seven Rivers</b>		Pool <b>Shugart Y, SR, Q, G</b>		<b>40</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 interest of all the owners been consolidated by communitization, unitization, forced-pooling, etc.?  
☐ Yes ☐ No If answer is "yes", type of consolidation \_\_\_\_\_  
If the answer is "no", list the owners and tract descriptions which have actually been consolidated. (Use the 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 interest, has been approved by the division.



**OPERATOR CERTIFICATION**

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

Signature

Printed Name

George R. Smith

Position

Agent for:

Company

David H. Arrington O & G Inc

Date

May 2, 1991

**SURVEYOR CERTIFICATION**

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

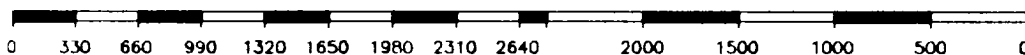
APRIL 23, 1991

Signature and Seal of  
Professional Surveyor

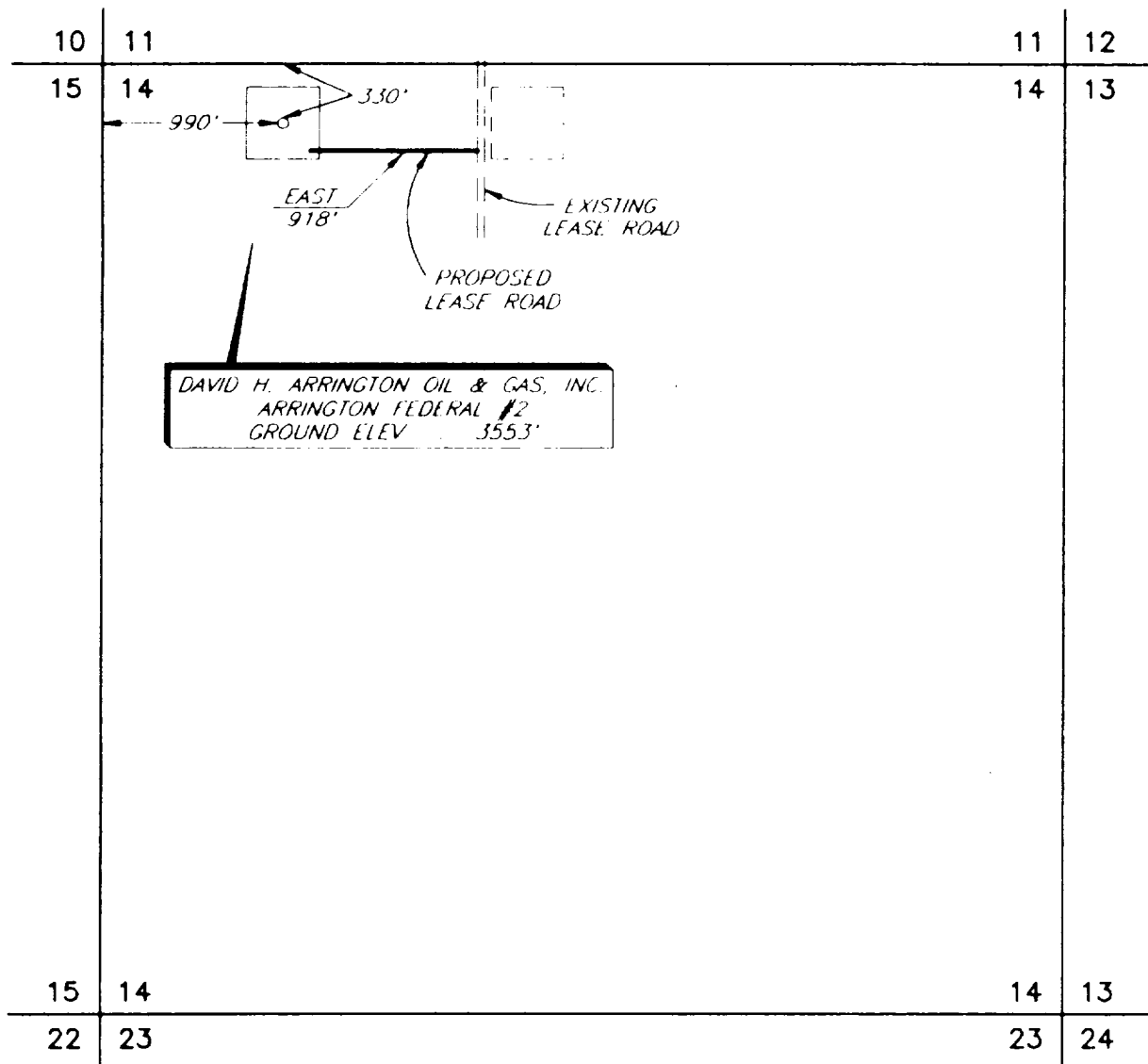
*V. Lynn Bezner*

Certificate No.

V. LYNN BEZNER, R.L.S. #7920



PLAT SHOWING PROPOSED  
WELL LOCATION and LEASE ROAD in  
SECTION 14, T-19-S, R-31-E,  
EDDY COUNTY, NEW MEXICO



PLAN VIEW  
1" = 1000'

400'  
3554.7'

## APPLICATION FOR DRILLING

DAVID H. ARRINGTON OIL & GAS, INC.  
Arrington Federal, Well No. 2  
330' FNL & 990' FWL, sec. 14-T19S-R31E  
Eddy County, New Mexico  
Lease No.: NM-86554  
(Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Manzano Oil Corporation submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.

2. The estimated tops of geologic markers are as follows:

Rustler	700'	Queen	3300'
Top/Salt	800'	T.D.	4000'
Tansill	2200'		
Yates	2400'		
Seven Rivers	2600'		

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 350'.  
Rustler 700' - 800'.

Gas: Possible in the Yates, Seven Rivers or the Queen.

Oil: Possible in the Yates, Seven Rivers or the Queen.

4. Proposed Casing Program: See Form 3160-3.
5. Proposed Control Equipment: See Form 3160-3 and Exhibit "E".
6. Mud Program: See Form 3160-3.
7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.
8. Testing, Logging, and Coring Program:  
  
Drill Stem Tests: One planned in Seven Rivers and one in the Queen.  
  
Logging: Gamma Ray/Cal.: Surf. Csg. to T.D.  
DLL-MSFL, CNL-LDT Below 8 5/8" to T.D.  
  
Coring: None planned.
9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight.
10. Anticipated starting date: June 25, 1991.  
Anticipated completion of drilling operations: Approximately 3 weeks.

## MULTI POINT SURFACE USE AND OPERATIONS PLAN

DAVID H. ARRINGTON OIL & GAS, INC.  
Arrington Federal, Well No. 2  
330' FNL & 990' FWL, Sec. 14-T19S-R31E  
Eddy County, New Mexico  
NM-86554  
(Development Well)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM Topo map showing the location of the proposed well as staked. The well site location is approximately 43 road miles east of Artesia, New Mexico or 18 miles southeast of Loco Hills, NM. Traveling east of Loco Hills there will be approximately 16 miles of paved Federal & county highway and 1.6 miles of gravel county and oilfield roads.
- B. Directions: Travel east from Loco Hills, NM on U.S. Highway 82 for approximately 5.2 miles, then turn south onto paved County Rd. 222. Continue south for 10.4 miles. Turn southeast onto the gravel County Rd. #248 for approximately 1.1 mile, then turn left (northeast & north) on a caliche oilfield road for .5 miles to the start of the access road on the left. The location is staked approximately 1000 feet west of the existing access road.

### 2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be constructed to a width of 12 feet (24' Max.) and approximately 918 feet long from the existing access road on the east to the southeast corner of the proposed location. See Exhibit "B".
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche and will be properly drained.
- C. Turnouts: None will be required.
- D. Culverts: None.
- E. Cuts and Fills: None.
- F. Gates, Cattleguards: None required.
- G. Off Lease R/W: None required.

### 3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a two mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. There are no production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery will be installed on the drilling pad or a flow line will be run adjacent to the proposed access road back to the Arrington Fed., well No. 1 tank battery. See Exhibit "C".

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the proposed access road and well site pad will be obtained on site within the approved 400' X 400' or from an approved Federal pit in the SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 14-T19S-R31E. The topsoil from the location will be stockpiled near the location for future rehabilitation use. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.
- H. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 400' X 400'.
- B. Mat Size: 230' X 150', plus 95' X 83' reserve pits.
- C. Cut & Fill: Cut 1 foot on the northeast and fill to the southwest.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment or as soon as the pits are dry enough to work.

11. OTHER INFORMATION:

- A. Topography: The well site and access road are located approximately three miles west/southwest of the Querecho Plains with the proposed site on very level location with a 1.0% slope to the southwest from an elevation of 3553'.
- B. Soil: The topsoil at the well site is a fine sandy loam of the Simona-Wink Series, which probably over lays a caliche bed at a depth of 2 - 3 feet. There is some caliche scatter on the surface.
- C. Flora and Fauna: The vegetation cover is a fair to good grass cover of three-awn, dropseed, blue and black grama, and other misc. native grasses along with plants of mesquite, Mormon-tea, yucca, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None in area.
- E. Residences and Other Structures: None except oil production equipment.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road is on Federal surface and minerals.

11. OTHER INFORMATION: cont.....

- H. There is no evidence of any archaeological, historical or cultural sites in the area. An archaeological survey will be conducted by Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202, and their report will be submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

- A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

Steve Scott  
310 W. Texas  
Midland, TX 79701  
Office Phone: (915) 682-9553

Keith Logan  
David H. Arrington Oil & Gas, Inc.  
P. O. Box 2071  
Midland, TX 79702  
Office Phone: (915) 682-6685

13. CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by David H. Arrington Oil & Gas, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

May 2, 1991

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George R. Smith  
Agent for: David H. Arrington Oil & Gas, Inc.



U.S. Hwy 82

LOCAL MIL. OIL FIELD

County Rd. 222

Arrington Federal, Well No. 2 →

County Rd. 248

EXHIBIT 'A'  
DAVID H. ARRINGTON OIL & GAS, INC.  
Arrington Federal, Well No. 2  
330' FNL & 990' FWL, sec. 14-T19S-R31E  
Existing Access Roads:  
Proposed Access Road: —





Peterson Drilling Company Rig 2 location plat

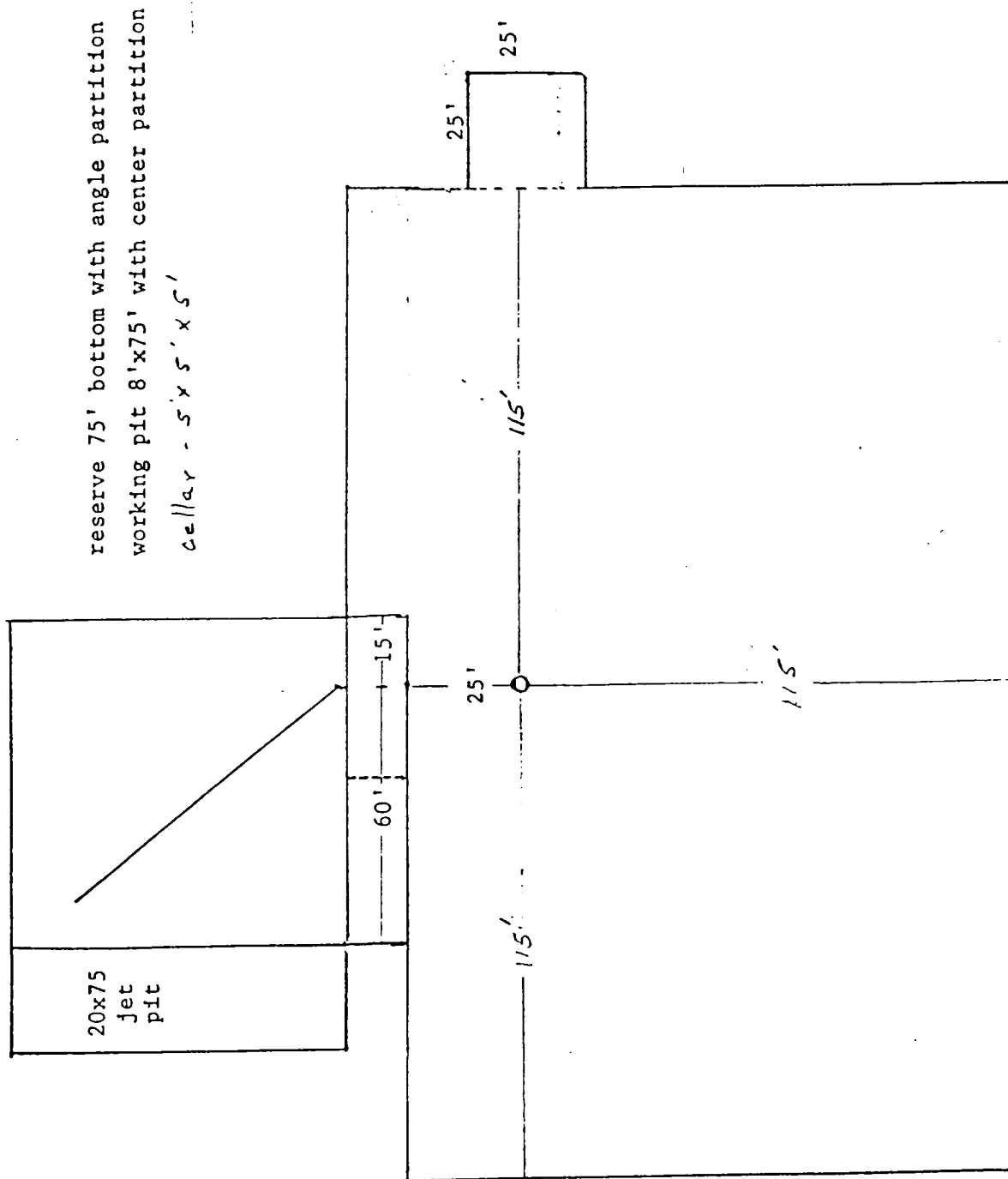
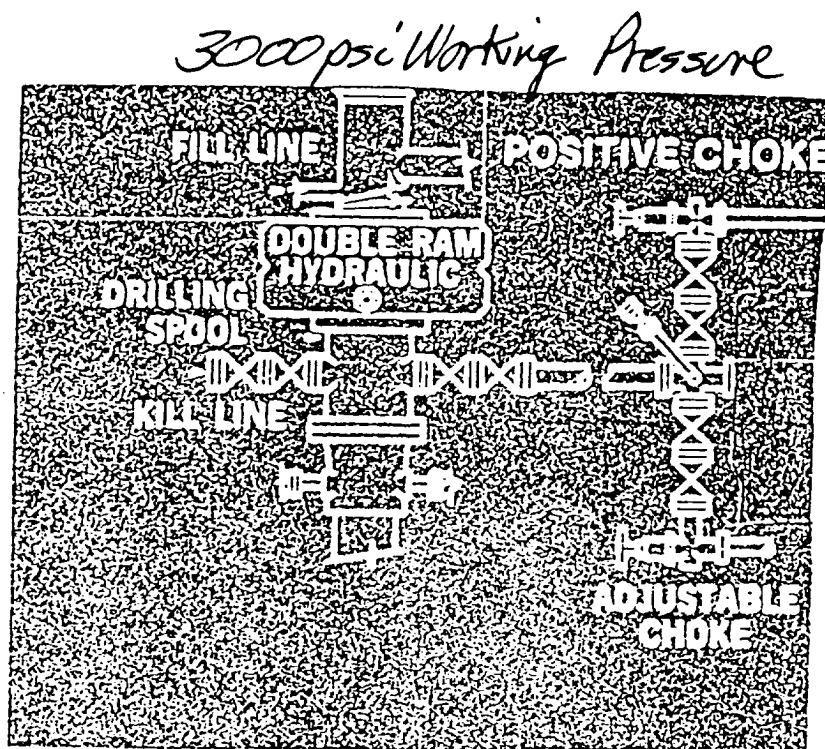


EXHIBIT "D"  
DAVID H. ARRINGTON OIL & GAS, INC.  
Arrington Federal, Well No. 2  
Pad & Pit Layout



*Series 900*

EXHIBIT "E"  
DAVID H. ARRINGTON OIL & GAS, INC.  
Arrington Federal, Well No. 2  
BOP Specifications