Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-039-21552

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Palmer Oil & Gas Company

3. ADDRESS OF OPERATOR
P. O. Box 2564, Billings, Montana 59103

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
M SW¼SW¼ 970' FWL 900' FSL
At proposed prod. zone
same

5. LEASE DESIGNATION AND SERIAL NO.
Joint Venture

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Jicarilla Apache

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Apache-JVA

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
Blanco-Mesaverde

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 21-T27N-R2W

12. COUNTY OR PARISH
Rio Arriba

13. STATE
New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 25 miles North of Ojito

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 900'

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL
S/320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH
6320'

20. ROTARY OR CABLE TOOLS
Rotary

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

22. APPROX. DATE WORK WILL START*
December 1, 1977

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/4"	9-5/8"	36#	300'	300 sacks
8-3/4"	7"	20#	4050'	250 sacks
6¼"	4½"	10.5#	6320'	600 sacks

1. Palmer Oil & Gas Company will drill a 6320' Mesaverde test in the SW¼SW¼ of Section 21-T27N-R2W.
2. Well to be drilled by rotary tools. Set 300' of 9-5/8" casing and cement to surface; drill 8-3/4" hole to 4,050' and set 7" casing. Gas drill 4,050' to T.D. and run 4½" casing.
3. IES and Porosity Logs will be run at T.D. All potential zones will be analyzed from surface to total depth, and if potentially commercial, 4½" casing or liner will be set, cemented and perforated.
4. After perforating, the productive zones will be fractured, if necessary.
5. Survey plat is attached.
6. Spacing unit will be S½ Section 21.
7. Gas is not dedicated.

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 Robert D Ballantyne Robert D. Ballantyne TITLE Drilling Superintendent DATE 11/4/77

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Approved

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
Palmer Oil & Gas Company	JVA	3

Unit Letter	Section	Township	Range	County
M	21	27N	2W	Rio Arriba

Actual Footage Location of Well:
900 feet from the South line and 970 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
7376	Mesaverde	Blanco-Mesaverde ext	320.00 Acres

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

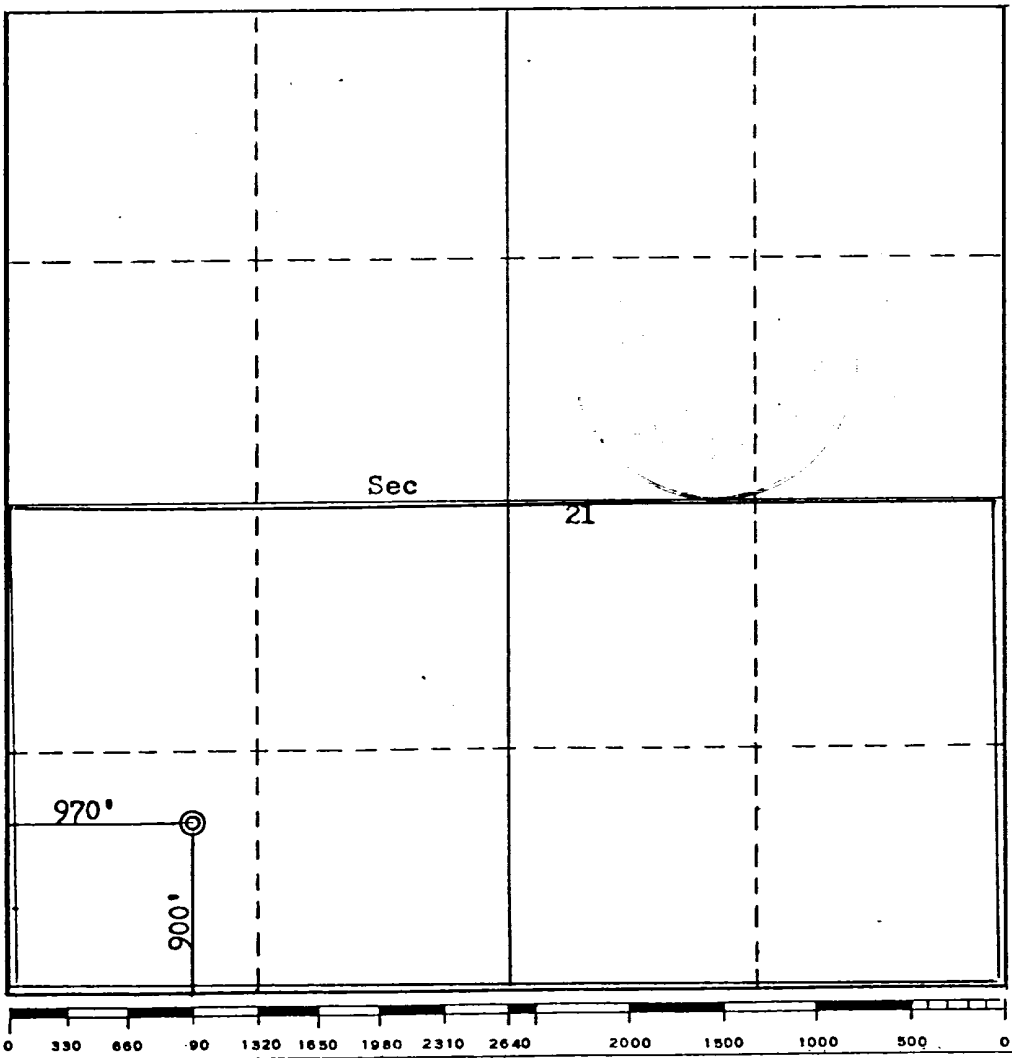
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the 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 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.

Robert D Ballantyne

Name: Robert D. Ballantyne

Position: Drilling Superintendent

Company: PALMER OIL & GAS COMPANY

Date: November 7, 1977

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: October 26, 1977

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No. 3950

TWELVE POINT PLAN OF DEVELOPMENT

For Surface Use for Palmer Oil & Gas Company's
Apache JVA #3
SW¼SW¼ Section 21-T27N-R2W
Rio Arriba County, New Mexico

1. Existing roads including location of the exit from the main highway.
   Existing roads includes the main road which runs along the southern boundary of the Jicarilla Apache Reservation which is due South of this location. See Appendix 1, Page 91 of Environmental Study dated October 10, 1976, and Plats No. 1 & 2 (Topographic Maps).

2. Planned access road.
   See Topographic Maps attached, and refer to Page 91 of Environmental Study. Access road will be very minimum.

3. Location of wells.
   See attached Plat No. 2.

4. Location of tank batteries, production facilities and production gathering and service lines.
   If this well is productive, it would be gas; therefore, the facilities would be the wellhead, tanks for produced water and condensate, if any, separator and gas line to the well. The tanks and separator would be set within 150' of the well and the gas line would run adjacent and parallel to roads per Page 91 of Environmental Study.

5. Location and type of water supply.
   No arrangement for water has been made at this time.

6. Source of construction materials.
   All construction material such as gravel, sand, timbers, etc. will be purchased and hauled to the location. No water, sand or gravel will be used from this land.

7. Methods for handling waste disposal.
   1) Cuttings will be buried 3' below the surface.
   2) Drilling fluids will be left in a fenced, open pit to evaporate.
   3) Produced oil or condensate (if any) will be stored in a tank.
   4) Portable toilet to be provided.
   5) Trash will be burned in burn pit.
   6) After pit area is sufficiently dry, cuttings will be pushed into pit and sub-soil will be placed on any remaining fluid and cuttings, then top soil, if any, will be placed over both pit and location area.

8. Ancillary facilities.
   No camps or airstrips will be used.

9. Wellsite layout.
   See Plat No. 3. Top soil, if any, will be stockpiled and reused. Pits will not be lined.

10. Plans for restoration of surface.
Upon completion of the well, all pits will be backfilled and top soil replaced and recontoured back to the original terrain. Pits will be back filled as soon as they evaporate enough to permit such work. Should it be necessary to protect livestock or wild game, pits will be fenced and maintained until clean-up operations are commenced. Should oil accumulate on the pit, it will be removed and buried 6' deep or overhead flagging will be employed to protect wildlife.

11. Other information.
1) Topography - Drillsite and access low valley profile. See Page 91 of Environmental Study.
2) Vegetation - Sparce grass, sagebrush.
3) Land use - Land is used for grazing with no reservoir or water on this site. There are no known archeological, cultural, or historical sites on this site.

12. Lessee's or operator's representative.

Elledge Consulting and Production Company
1701 Bloomfield Highway
Farmington, New Mexico 87401

Harold W. Elledge, President — Office Phone (505) 327-1181

OR

Robert Ballantyne — Office Phone (406) 248-3151
P. O. Box 2564 — Home Phone (406) 656-1304
Billings, Montana 59103

13. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this 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 Four Corners Drilling Co. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is proposed.

Robert D Ballantyne
Robert D. Ballantyne

Proposed well 8A is to be located 1,000 feet from the south line and 2,600 feet from the west line of section 21 at an elevation of approximately 7,400 feet. This location can be reached by existing trails from the 7B location but those trails are in very poor condition and must be improved or a new road built before drilling can begin. If the well proves to be productive a buried pipeline will be laid along the access road to connect with the existing gathering system at the 7B location.

Figure 31
Looking North Across the Proposed 8A Location

Vicinity Map for

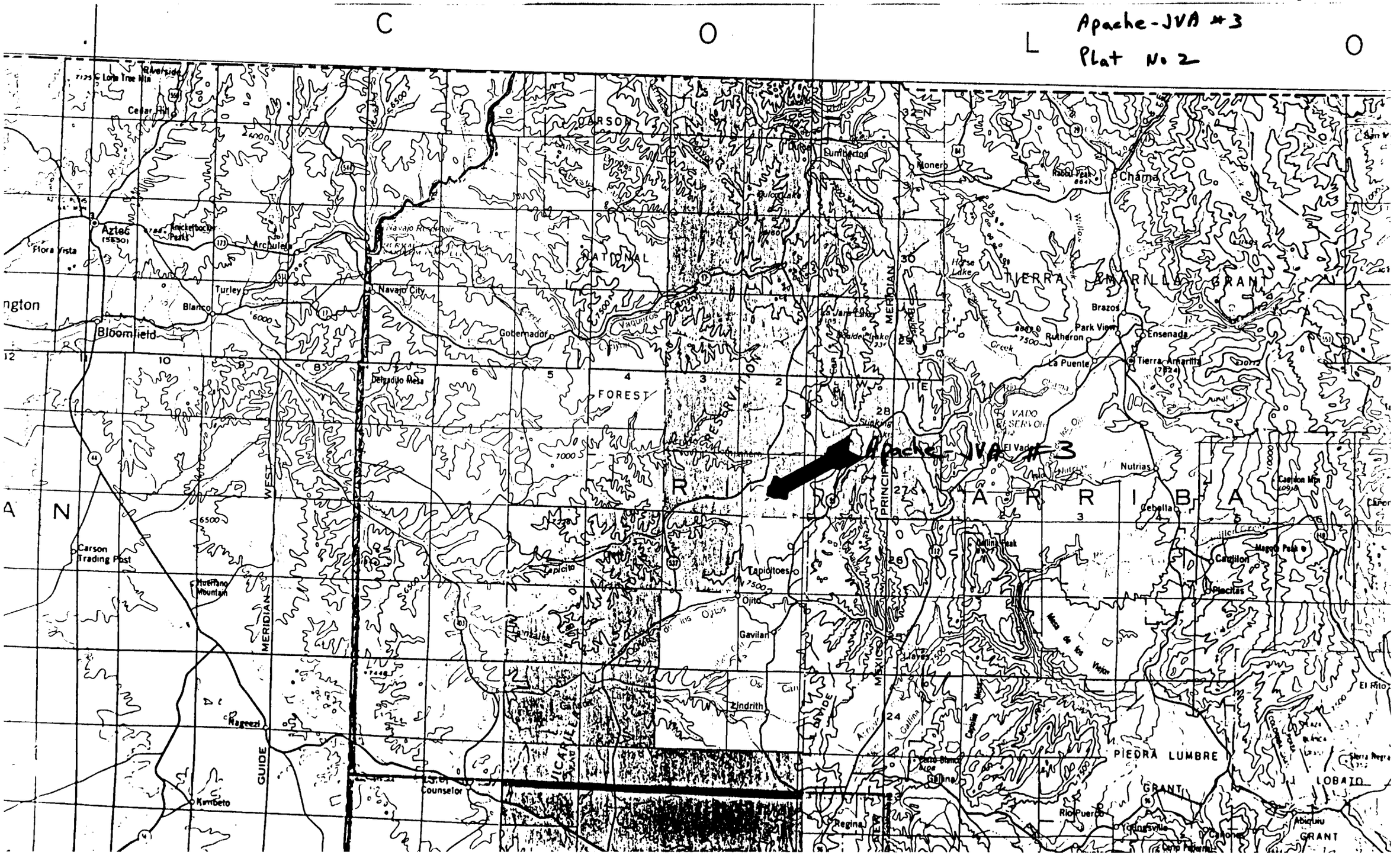
PALMER OIL & GAS CO. #3 JVA

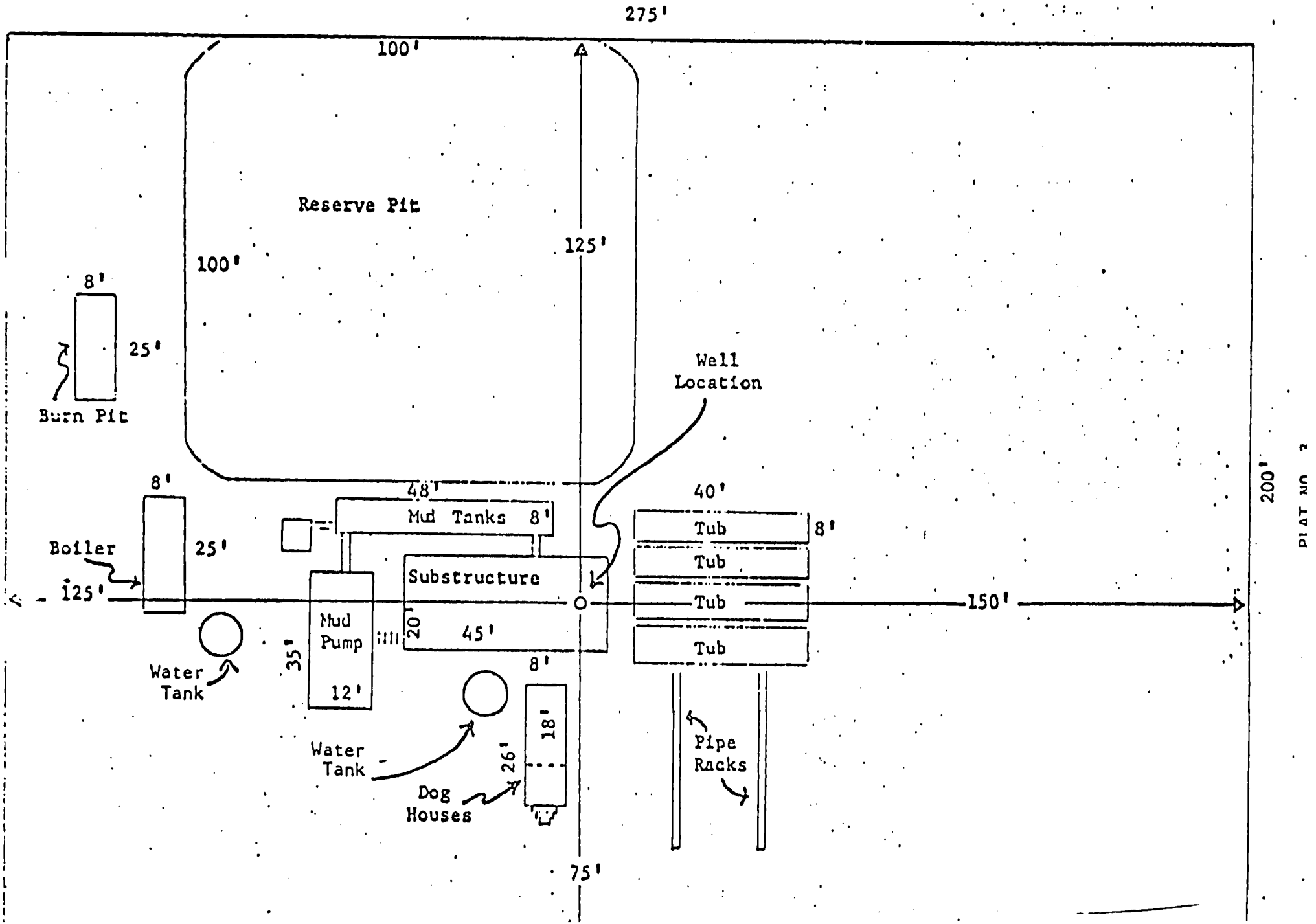
900'FSL 970'FWL Sec 21-T27N-R2W

RIO ARRIBA COUNTY, NEW MEXICO

Plat No 1

Apache-JVA #3
Plat No. 2




275'
100'
Reserve Pit
100'
125'
8'
25'
Burn Pit
Well Location
8'
48'
Mud Tanks 8'
40'
Tub
8'
Tub
Tub
Tub
Boiler
25'
125'
Substructure
150'
Mud Pump
12'
35'
20'
45'
8'
Water Tank
Water Tank
18'
26'
Dog Houses
Pipe Racks
75'
200'
PLAT NO

SEVEN POINT WELL CONTROL PLAN

PALMER OIL & GAS COMPANY
Apache-JVA 3
SW¼SW¼ Section 21-T27N-R2W
Rio Arriba County, New Mexico

1. Surface Casing: 9-5/8" 36#/ft., Grade K-55, Short T&C, set at 300' and cemented with pump and plug method back to surface.

2. Casinghead Flange: 9-5/8" X 10-3/4" top 1500 psig W. P. Larkin (or equivalent) casinghead with two 2" 1500 psi L. P. outlets.

3. 7" intermediate casing will be set to approximately 4,050' to case off any possible water from the Picture Cliff formation so as the remaining hole can be gas drilled.

4. Blowout Preventor: An 8" 3000 psig W. P. Double gate hydraulic Shaffer BOP (or equivalent) with drill pipe rams and blind rams. All fill, kill and choke lines will be minimum of 2" 2000 psi working pressure. The rams will be closed daily and checked for proper operation.

5. Auxillary Equipment: a) Drill pipe floats will be allowed at contractor's discretion; b) Visual and manual monitoring of mud system will be maintained.

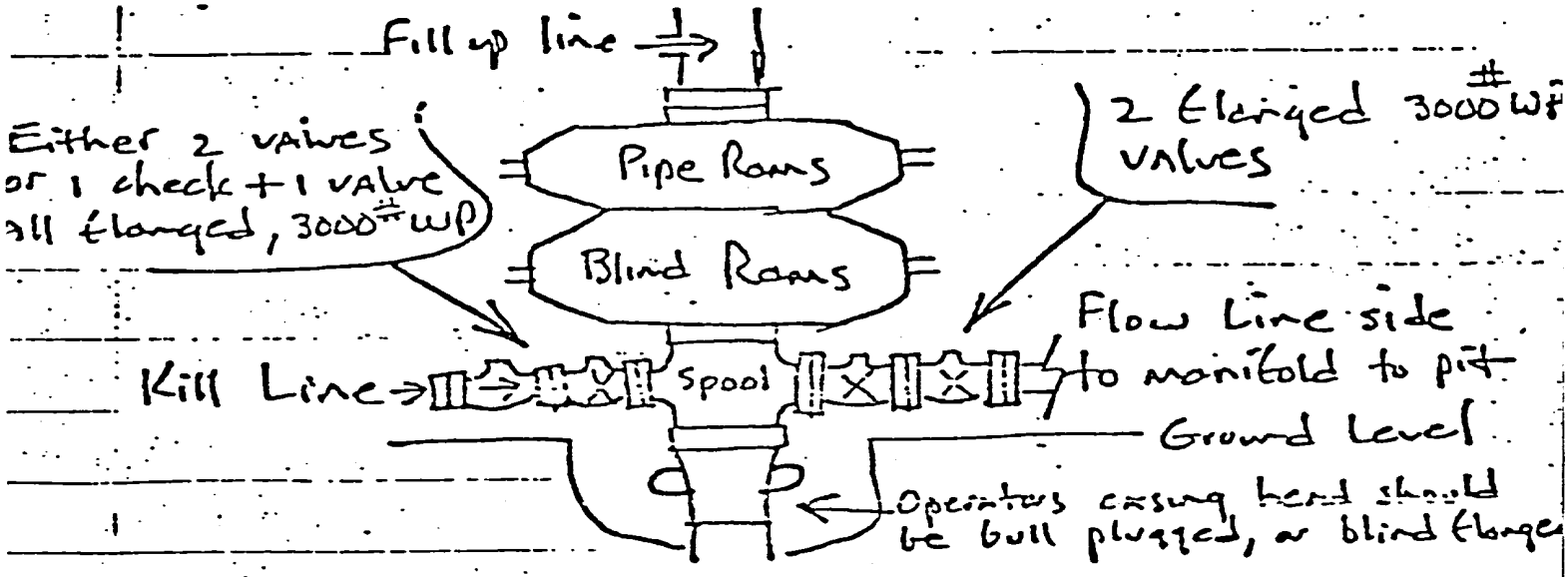
6. Anticipated bottom hole pressure is less than 1800 psi at 6320' or a gradient of .277 psi/ft.

7. Well will be drilled with water base mud system with 8.8 - 9.0 ppg weight 35-45 seconds viscosity to 4,050' - Gas drilling from 4,050' to T.D.

PALMER OIL & GAS COMPANY

By: Robert D Ballantyne
Robert D. Ballantyne

BLOWOUT PREVENTOR EQUIPMENT



Detail Flow Line Side (manifold)
(All fittings flanged & WP of 3000#)