

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY30-039-22247
5. LEASE DESIGNATION AND SERIAL NO.

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 ☐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

990' FNL, 1650' FEL

At proposed prod. zone

same

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

Approximately 27 miles North of Ojito

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

990'

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

16. NO. OF ACRES IN LEASE

Joint Venture

19. PROPOSED DEPTH

6350'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

21/320

20. ROTARY OR CABLE TOOLS

Rotary

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

7352' GR

22. APPROX. DATE WORK WILL START*

December 1, 1979

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" new	36#	300'	300 sacks
8-3/4"	7" new	20#	4000'	250 sacks
6-1/4"	4-1/2" new	10.5#	6350'	600 sacks

- Palmer Oil & Gas Company will drill a 6350' Mesaverde test in the NW1/4NE1/4 Section 21-27N-2W.
- Well to be drilled by rotary tools. Set 300' of 9-5/8" casing and cement to surface; drill 8-3/4" hole to 4000' and set 7" casing. Air drill 4000' to T.D. and run 4 1/2" casing.
- 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, 4 1/2" casing or liner will be set, cemented and perforated.
- After perforating, the productive zones will be fractured, if necessary.
- Survey plat attached.
- Spacing unit will be the N1/2 of Section 21.
- 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

TITLE Drilling Superintendent

DATE November 2, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

uk Earl

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1-78

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

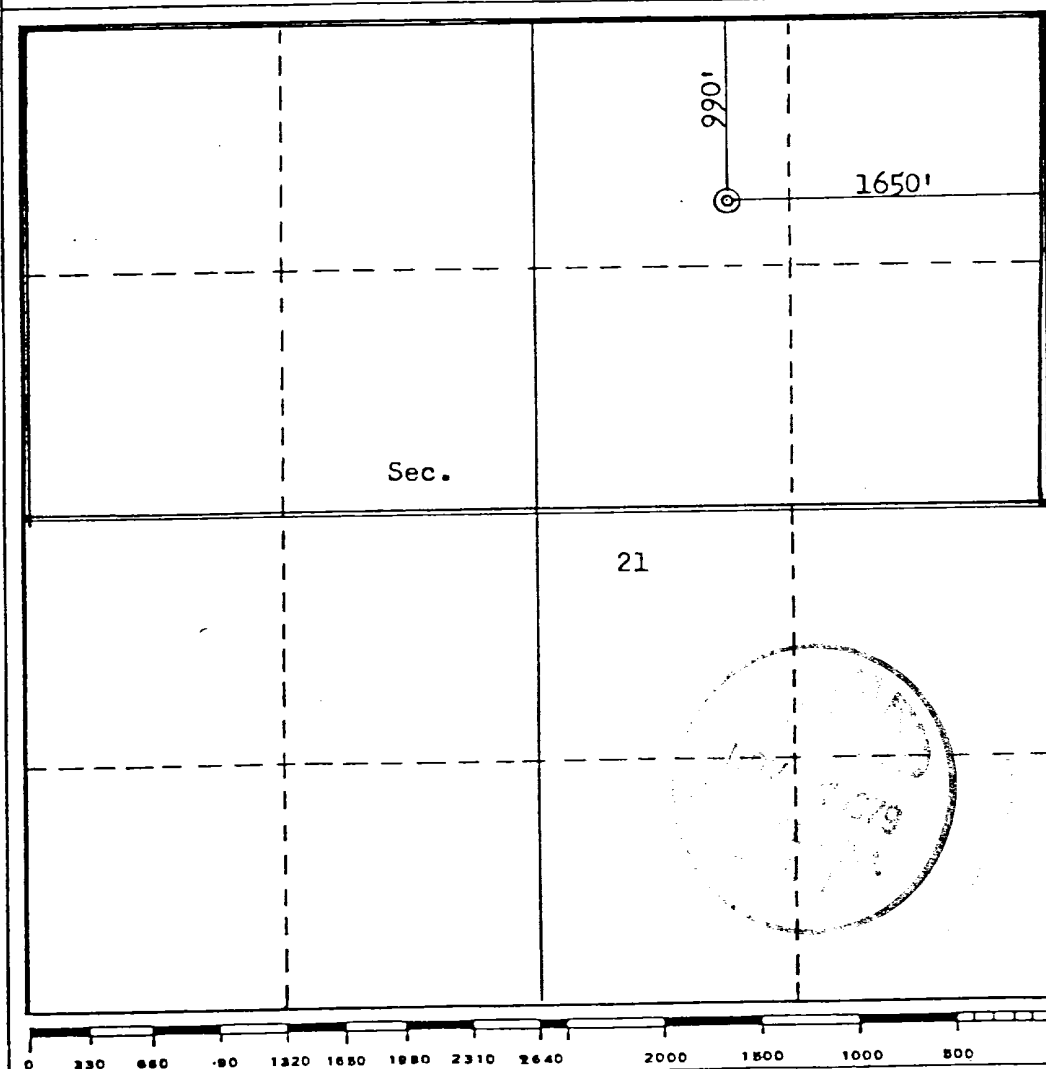
Operator PALMER OIL & GAS COMPANY		Lease APACHE JVA		Well No. 8
Unit Letter B	Section 21	Township 27N	Range 2W	County Rio Arriba
Actual Footage Location of Well: 990 feet from the North line and 1650 feet from the East line				
Ground Level Elev. 7352	Producing Formation Mesaverde	Pool Blanco Mesaverde ext	Dedicated Acreage: 320 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 2, 1979

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

August 27, 1979

Registered Professional Engineer
and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No. NEXICO

3950 ERR. 1P

THIRTEEN POINT PLAN OF DEVELOPMENT

For Surface Use with Palmer Oil & Gas Company's
Apache JVA #8
NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 21-T27N-R2W
Rio Arriba County, New Mexico.

1. Existing roads including location of the exit from the main highway.
Existing roads include the main road which runs along the southern boundary of the Jicarilla Apache Reservation, turn north on good gravel road two miles to a fork, then right for one and a half miles into Leavry Canyon, turn south on access road.
See Appendix 1, Pages 91 and 92 of Environmental Study dated October 10, 1976, and Maps #1 and #2.
2. Planned access road.
See Topographic Map #1.
Access road will be bladed, not more than 25' wide, and approximately one mile long.
3. Location of wells.
See Map #3.
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 oil and condensate, 10' x 10' water pit if necessary, 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.
5. Location and type of water supply.
Water will be purchased from the Stevenson Water Hole at Bassett Springs.
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 #3. Top soil, if any, will be stockpiled and reused. Pits will not be lined. The Blouie Pit will be constructed in such a manner so as to be long and narrow, extending in the direction of the gas or air flow from the Blouie line. Any trees on either side of this pit area within approximately 50', should be cleared so as not to cause a fire hazard if it is necessary to flare the gas. Any trees which must be destroyed will be counted by the BIA Forester and Palmer's representative and the Jicarilla Apache Tribe will be compensated for them.
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 six feet deep or overhead flagging will be employed to protect wildlife.

11. Other information.

- 1) Topography - Drillsite and access low valley profile. See Pages 92, 93, and 94 of Environmental Study.
- 2) Vegetation - Sparse grass, sagebrush, pinion trees and juniper.
- 3) Land use - Land is used for grazing with no reservoir or water on this site. There are no known archaeological, cultural, or historical sites on this site. We plan to have the Cultural Resources Management of the NM State University do the archaeology work.

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

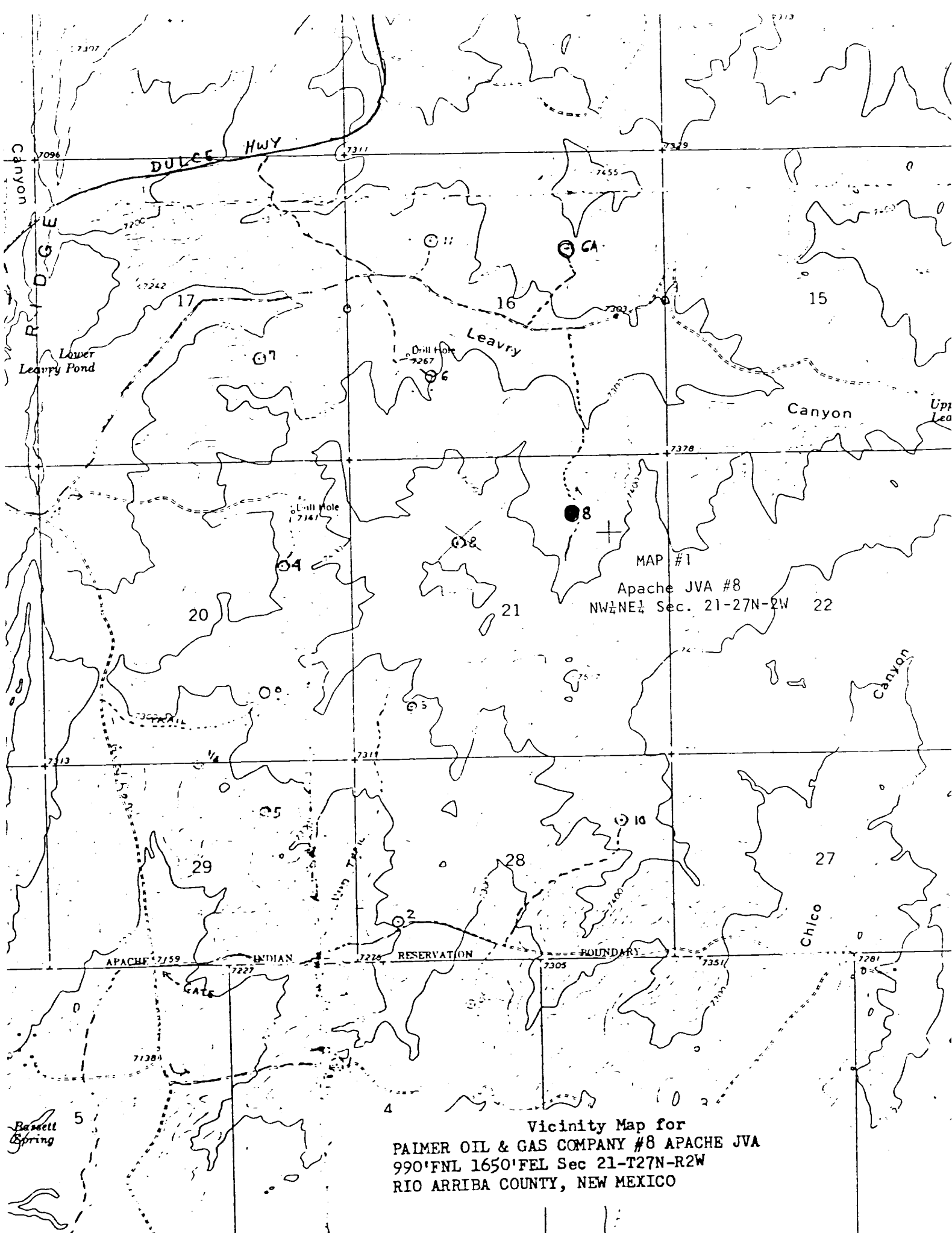
Robert D. Ballantyne
P. O. Box 2564
Billings, Montana 59103

Office Phone (406) 248-3151
Home Phone (406) 656-1304

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 approved.

Robert D. Ballantyne

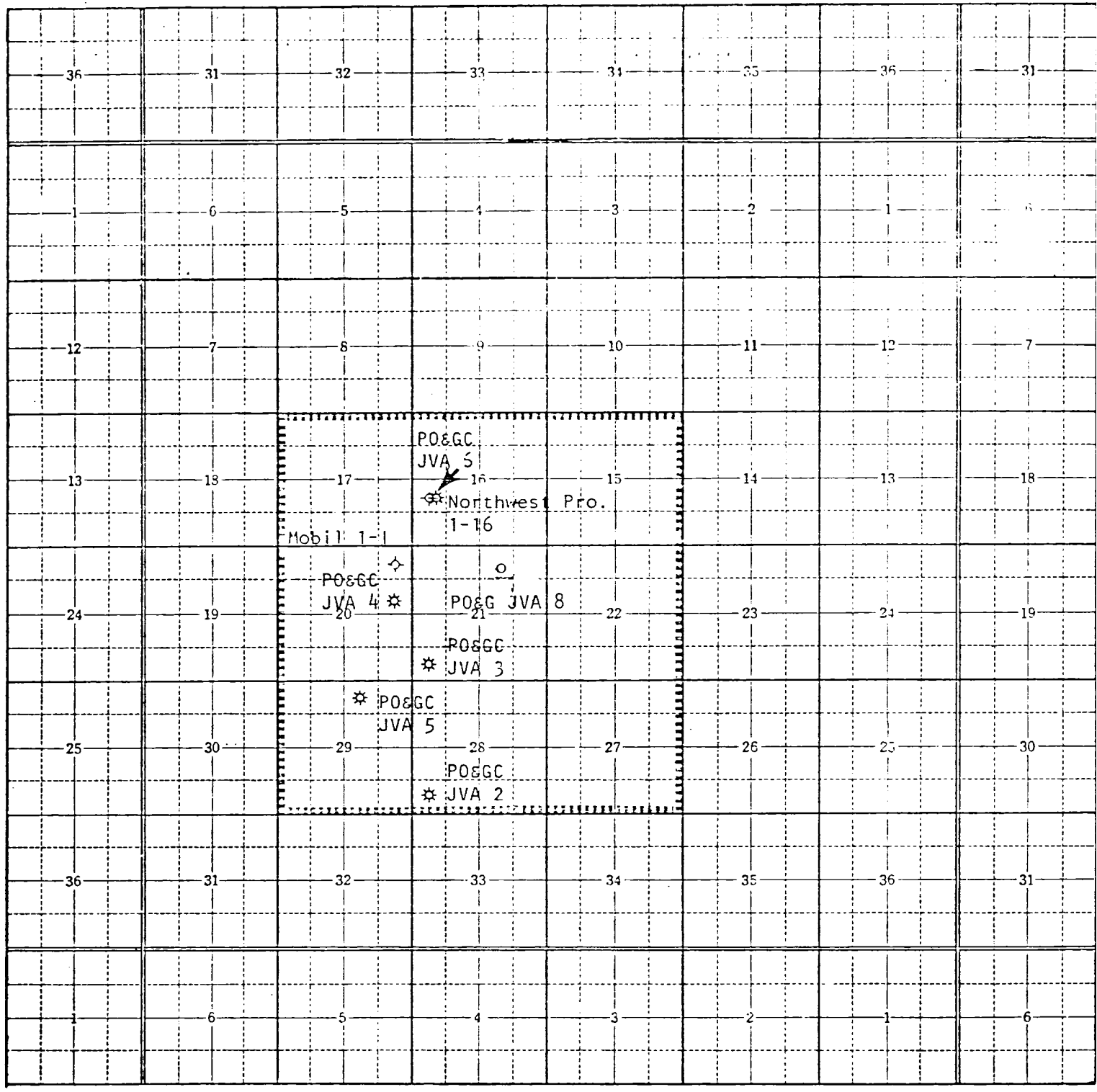
Robert D. Ballantyne
Drilling Superintendent



Vicinity Map for
PALMER OIL & GAS COMPANY #8 APACHE JVA
990'FNL 1650'FEL Sec 21-T27N-R2W
RIO ARriba COUNTY, NEW MEXICO

Township 27N Range 2W County Rio Arriba State New Mexico

Island Township Plat



JVA #8
T27N-R2W, Sec. 21
NW 1/4 NE 1/4
Map #3

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

Proposed well 8B will lie 900 feet from the north line and 1,775 feet from the east line of section 21. The elevation of the well will be about 7,355 feet. This location will lie adjacent to an existing road and access will be from that road. Should this well prove productive it will be connected to the existing gathering system at the 6A location by a buried pipeline running north along the 8B access road to the main Leavry Canyon road and then generally westward parallel and adjacent to that road to the 6A location.



Figure 32
Looking North Across the Proposed 8B Location

TELEPHONE: (505) 327-1122



- Apache JVA #3

NOTE: Sec. 21-27N-2V

SEVEN POINT WELL CONTROL PLAN

PALMER OIL & GAS COMPANY
Apache JVA #8
NW $\frac{1}{4}$ NE $\frac{1}{4}$ 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: 10" 900 S adapted to 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 4000' to case off any possible water from the Picture Cliff formation so as the remaining hole can be air drilled.
4. Blowout Preventor: A 10" 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 6350' 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 4000' - Air drilling from 4000 to T.D.

PALMER OIL & GAS COMPANY

Robert D. Ballantyne
Robert D. Ballantyne
Drilling Superintendent

