

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-22031

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

A NE1NE1 1100' FNL & 850' FEL
At proposed prod. zone
same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approx. 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)
850'

16. NO. OF ACRES IN LEASE
Joint Venture

17. NO. OF ACRES ASSIGNED
TO THIS WELL
E 215.04

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.
JVA #2
3940' SW
6350'

19. PROPOSED DEPTH
6350'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
7425' GR.

22. APPROX. DATE WORK WILL START*
June 1, 1979

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 NE1NE1 of Section 28-T27N-R2W.
- 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 E 1/2 of Section 28.
- 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 April 24, 1979
Robert D. Ballantyne

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

450

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-102
Supersedes O-129
Effective 1-1-65

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

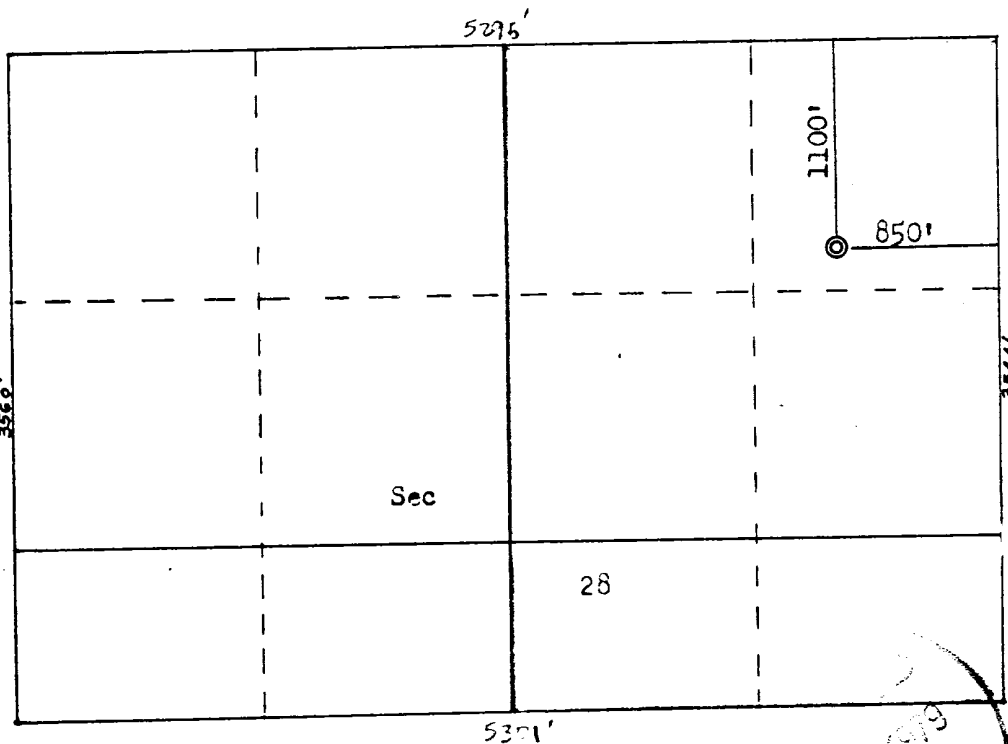
Operator PALMER OIL & GAS COMPANY		Lease APACHE JVA		Well No. 10
Unit Letter A	Section 28	Township 27N	Range 2W	County RIO ARriba
Actual Footage Location of Well:				
1100 feet from the North line and		850 feet from the East line		
Ground Level Elev. 7425	Producing Formation Mesaverde	Pool Blanco-Mesaverde	Dedicated Acreage 215.04 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 _____

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
Jan 3, 1979

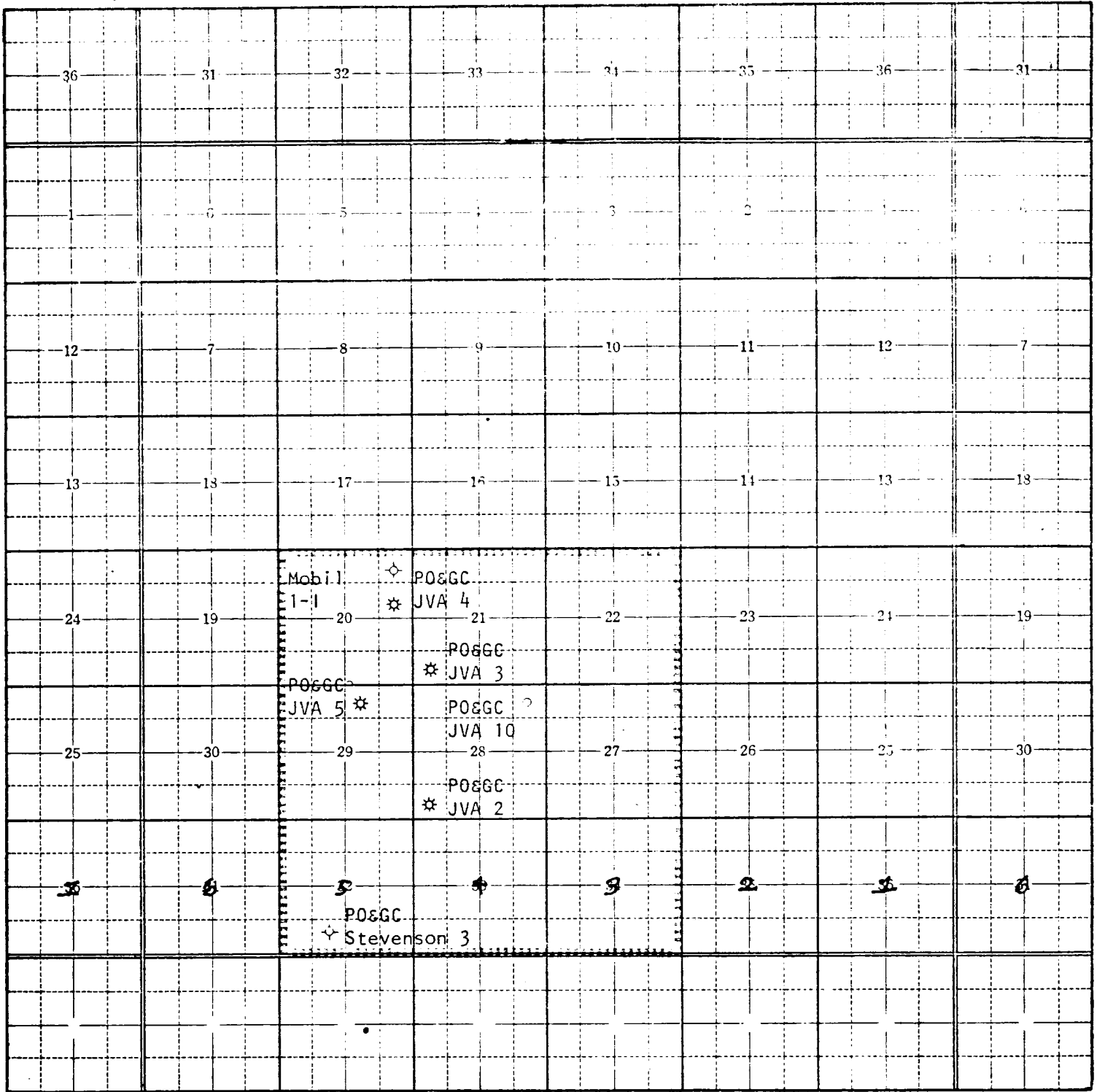
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
December 11, 1978
Registered Professional Engineer and Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.
Certificate No. **3950**

SCALE: 1"=1000'

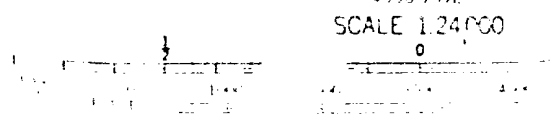
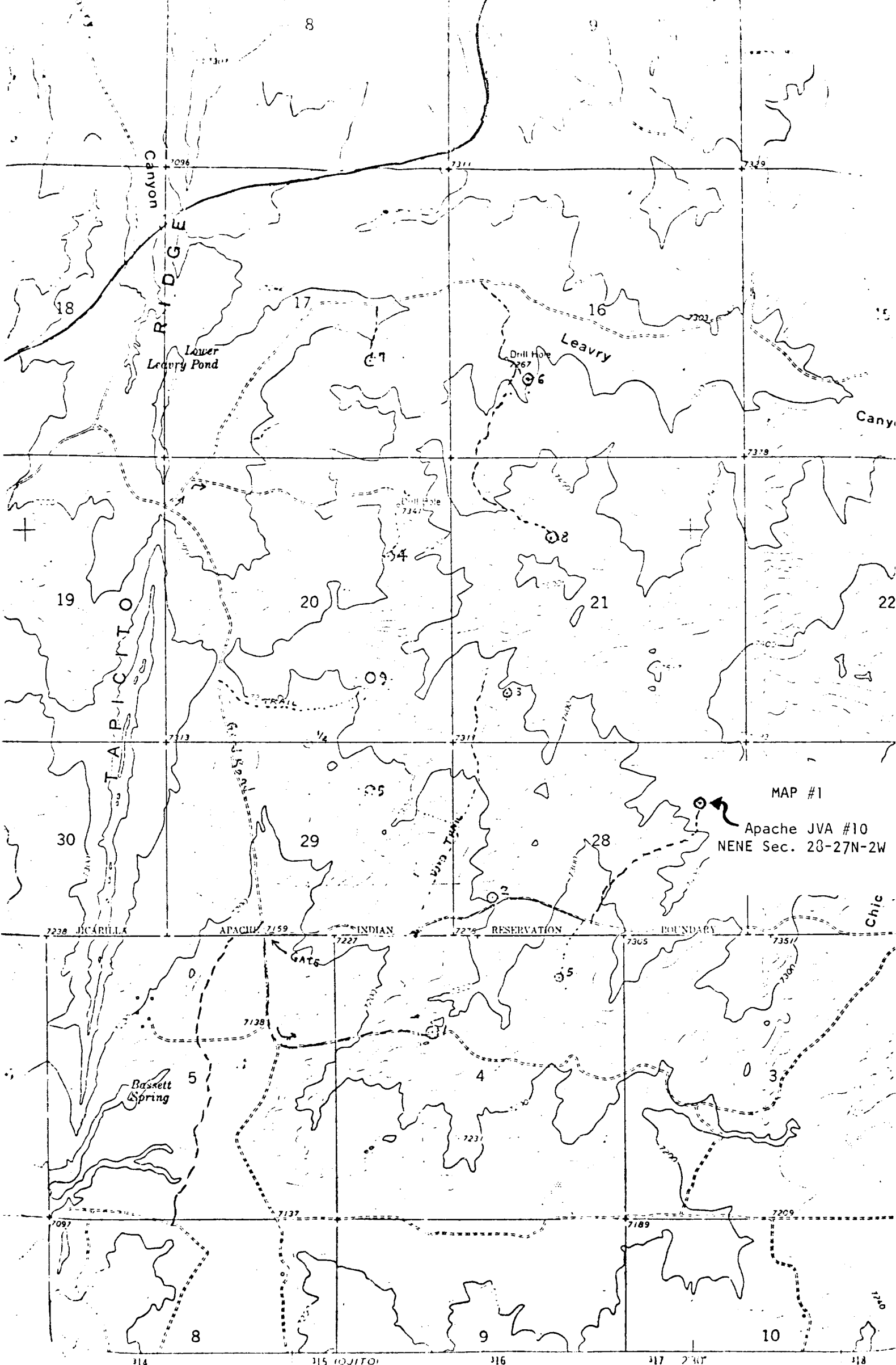
Township 27N Range 2W County Rio Arriba State New Mexico

Island Township Plat



JVA #10
T27N-R2W, Sec. 28
NE $\frac{1}{4}$ NE $\frac{1}{4}$

Map #3



Vicinity Map for
PALMER OIL & GAS CO. #10 APACHE JVA
1100' E 1/4 28-27N-2W
RIO ARriba COUNTY, NEW MEXICO

TWELVE POINT PLAN OF DEVELOPMENT

For Surface Use with Palmer Oil & Gas Company's
Apache JVA #10
NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 28-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 and travel one mile to a fork, then right for one and a half miles along southern boundary of reservation, turn north on access road and travel for one half of a mile to the location. See Appendix 1, Pages 89, 90, and 91 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 and not more than 25 feet wide.
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.
No arrangement 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 three feet 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. If there are any trees which have to be destroyed in building the location or access road, these trees will be counted by BIA and Palmer's representative and the Jicarilla Apache Tribe will be compensated for same.
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 backfilled 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 89, 90, and 91 of Environmental Study.
- 2) Vegetation - Sparse grass, sagebrush.
- 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. An archaeological survey will be done at the time of the location inspection by the Government Agency and Palmer's representative.

12. Lessee's or operator's representative.

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

Harold 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 proposed.

PALMER OIL & GAS COMPANY

By: Robert D. Ballantyne
Robert D. Ballantyne
Drilling Superintendent

Proposed well 7A is to be located 800 feet from the south line and 2,250 feet from the west line of section 28 at an elevation of approximately 7,280 feet. This location is along an existing trail several hundred feet north of the main road along the southern boundary of the Jicarilla Apache



Figure 29
Looking North Across the Proposed 7A Location

Reservation. It will be necessary to improve the trail somewhat as well as to repair parts of the south boundary road before drilling this well. Should this well prove productive, a buried pipeline will be laid from the location southward along the access road to the reservation boundary road where it will turn west for about 3,000 feet staying parallel and adjacent to the road to join the flow line from well 4B.

Proposed well 7B is to be located 800 feet from the north line and 2,200 feet from the west line of section 28 at an elevation of approximately 7,340 feet. Existing trails reach this location from the 7A location but they will have to be improved or a new road built before drilling can



Figure 30
Looking West Across the Proposed 7B Location

begin. If this well proves productive it will be connected to the gathering system at the 7A location by a pipeline buried alongside the access road.

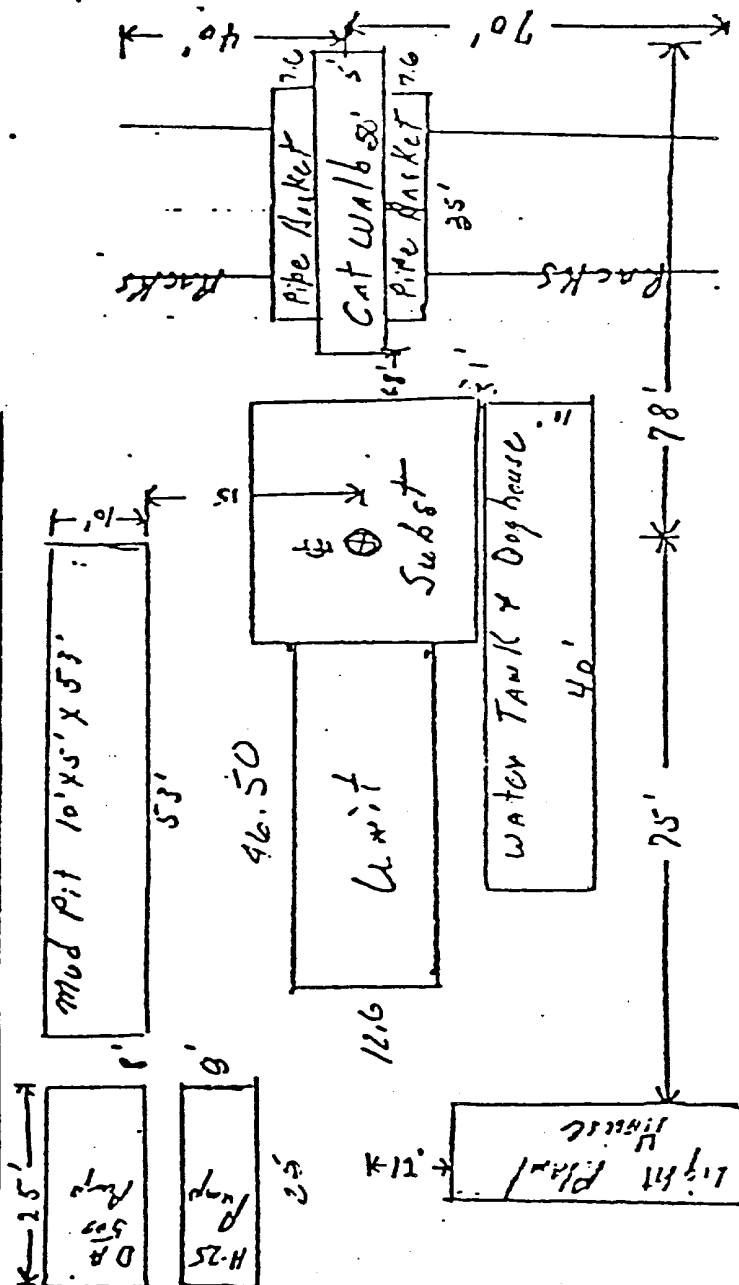
SEVEN POINT WELL CONTROL PLAN

PALMER OIL & GAS COMPANY
Apache JVA #10
NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 28-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" 300 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. Auxiliary 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

By: Robert D. Ballantyne
Robert D. Ballantyne
Drilling Superintendent



Apache JVA #10
NENE Sec. 28-27N-2W

C

MEMO SEC. 28-2/11-2M

