

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

1850' FEL, 1525' FNL

At proposed prod. zone

Same

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

10 Miles North of Navajo City, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drg. unit line, if any)

1525'

16. NO. OF ACRES IN LEASE

160

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

None

19. PROPOSED DEPTH

6200'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

6494 GL

22. APPROX. DATE WORK WILL START*

April 15, 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"	32#	200'	225 sacks
8 3/4"	7 "	20#	3700'	225 sacks
6 1/4"	4 1/2"	10.5#	6200'	325 sacks

- Palmer Oil & Gas will air drill a 6200' Mancos test.
- Surface pipe will be set to 200'. Intermediate pipe will be set thru the Picture Cliffs or approximately 3700' and if well is productive 4 1/2" casing will be run.
- Intermediate electric logs are planned at 3700' and electric log will be run from T.D. to 3700' after reaching T.D.
- After perforating the productive zone will be fractured if necessary.
- The gas is not dedicated.
- A Shaffer 8" - 3000' BOP with blind and pipe rams to be used.
- See Commission Order No. R-5364 for unorthodox location.
- The Spacing Unit comprises the W $\frac{1}{2}$ SW $\frac{1}{4}$ Section 2, E $\frac{1}{2}$ SE $\frac{1}{4}$ Section 3, and NE $\frac{1}{4}$ Section 10.
- Palmer Oil & Gas Company is in process of communitizing to conform with above spacing unit.

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

March 21, 1977

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*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.

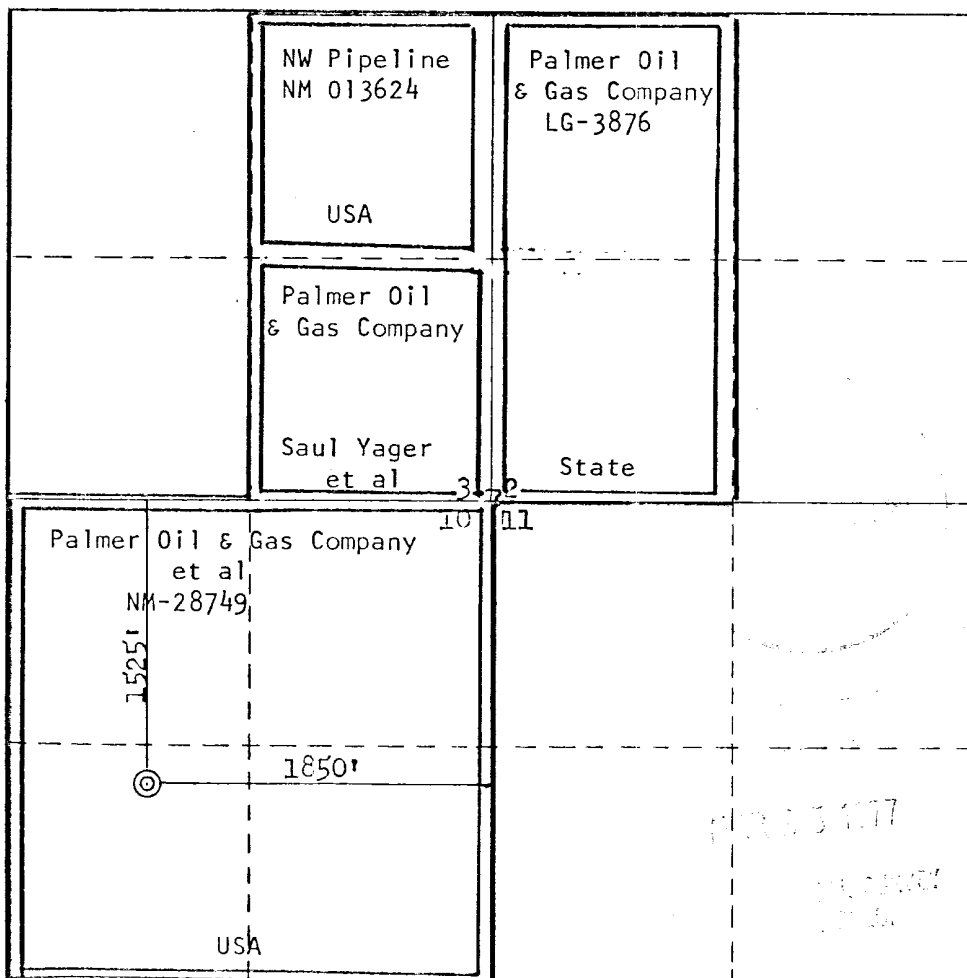
Operator Palmer Oil Company			Lease Federal		Well No. 2
Unit Letter G	Section 10	Township 31N	Range 7W	County San Juan	
Actual Footage Location of Well: 1525 feet from the North line and 1850 feet from the East line					
Ground Level Elev. (619)	Producing Formation Mesaverde		Pool Blanco Mesaverde	Dedicated Acreage: 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.

Name
L. C. Campbell

Position
Land Manager

Company
Palmer Oil & Gas Company

Date
March 23, 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
March 16, 1977

Registered Professional Engineer and/or Land Surveyor

Fred B. Ferrer Jr.

Certificate No.

3950

TWELVE POINT PLAN OF DEVELOPMENT

For Surface Use for Palmer Oil & Gas Company's
Federal No. 2
SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 10-T31N-R7W
San Juan County, New Mexico

1. Existing roads including location of the exit from the main highway.
Refer to attached highway map. The location will be approximately 10 miles North of Navajo City.
2. Planned access road.
See Topographic Map attached. Approximately 600' of road work is planned for the drilling phase of this work. Grading of rough spots will be performed and if necessary, culverts will be used to maintain natural drainage of the land. The access road will be kept to a minimum of not more than 25'. Any existing gates and cattle guards will be used and maintained.
3. Location of wells. No additional wells are planned on this lease.
See attached plat.
4. Location of existing and/or proposed facilities.
There are no existing production facilities owned or controlled by the lease. Should commercial production result in this well, the tanks will be 12' in diameter with 4' between same. A skid mounted production unit will be used. All equipment will be set on gravel pad. The gravel will be purchased and hauled in from Farmington. Livestock and wildlife will be protected by a guard around the wellhead unit. No fence is planned around the tanks or separator as no hazard exists. The location of the tank battery will be as close as practical to the well and on the high side of the same. The tank battery graded site will approximate 175' X 50'.
5. Location and type of water supply.
No arrangements for water have been made at this time.
6. Source of construction materials.
All construction material such as gravel, sand, timbers, etc., will be purchased in Farmington and hauled to the location. No water, sand, or gravel will be used from this lease.
7. Methods for handling waste disposal.
At the time of drilling, a reserve pit will be in use to dispose of waste drilling fluids. An earthen pit will be dug adjacent to the reserve pit for waste disposal such as food wrappers, rags, empty containers, etc. Upon completion of the operation, the reserve pit and other earthen pits will be covered with a minimum of 3' of clean soil and reseeded as per USGS requirements for this area.
8. Ancillary Facilities.
No camps or airstrips will be used.
9. Wellsite layout.
See attached plat. Top soil will be stockpiled and placed back in place upon completion. The pits will be unlined.

12283 1977

10. Plans for restoration of surface.

Upon completion of the drilling of the well, all pits will be backfilled and top soil replaced and recontoured back to the original terrain. The location of the separator unit and tanks will be left level with gravel pad under each piece of equipment. Pits will be backfilled as soon as they evaporate enough to permit such work. If well is drilled as planned in early 1977, complete restoration and clean up will be accomplished by Fall, 1977. 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. The location will be reseeded as per USGS requirements prior to September, 1977.

11. Other information.

- 1) Topography -- drillsite and access is low valley profile and sandy hills.
- 2) Vegetation -- sparse grass, sagebrush and sparse pinon trees.
- 3) Land use -- land is used for grazing with no reservoir or water on this lease. There are no known archeological, cultural, or historical sites on this lease.

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

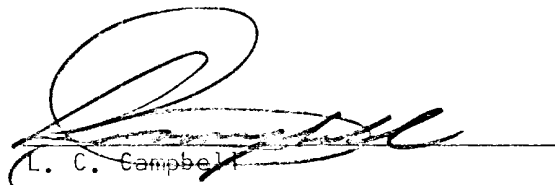
Robert Ballantyne
P. O. Box 2564
Billings, Montana 59103

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 Cardinal Drilling Company, and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is proposed.

Date: March 23, 1977



L. C. Campbell

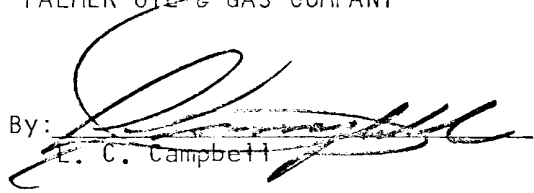
SEVEN POINT WELL CONTROL PLAN

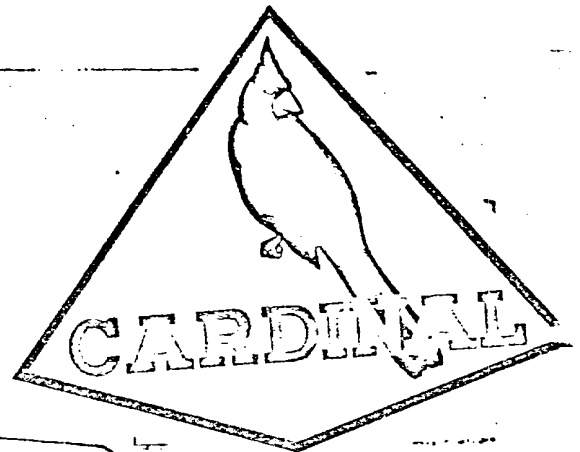
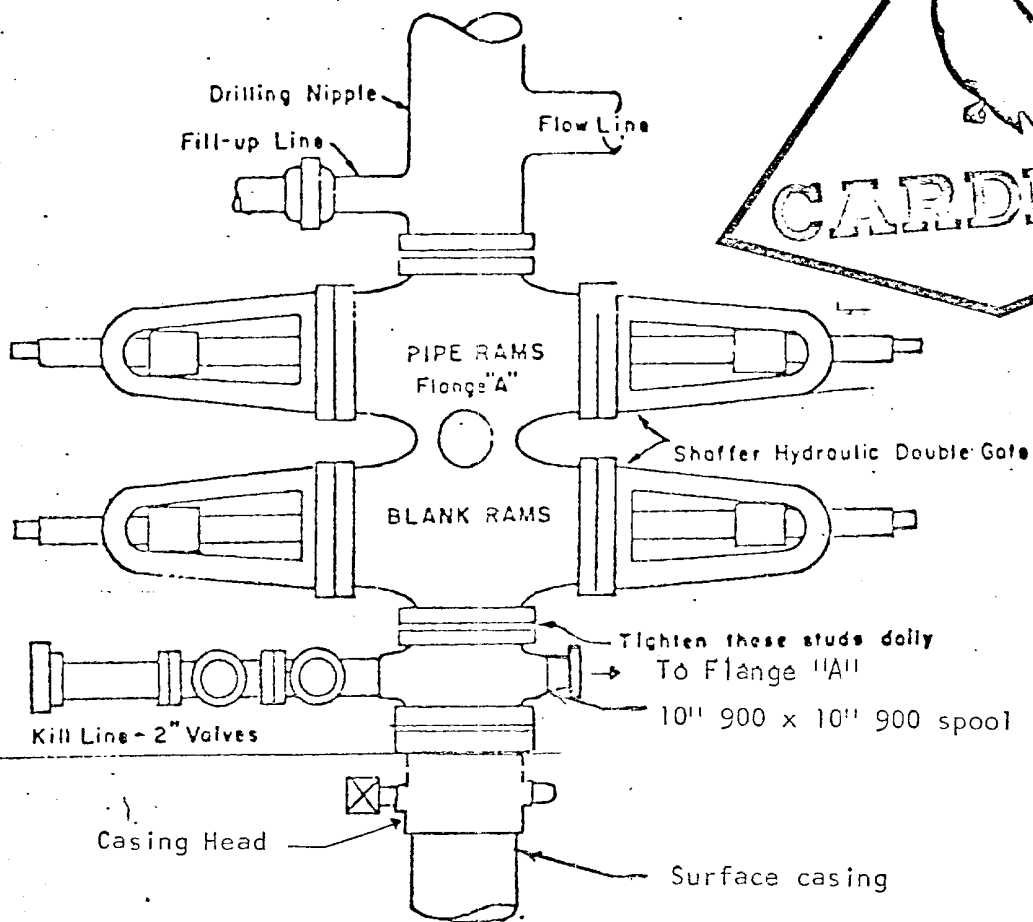
PALMER OIL & GAS COMPANY
Federal No. 2
SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 10-T31N-R7W
San Juan County, New Mexico

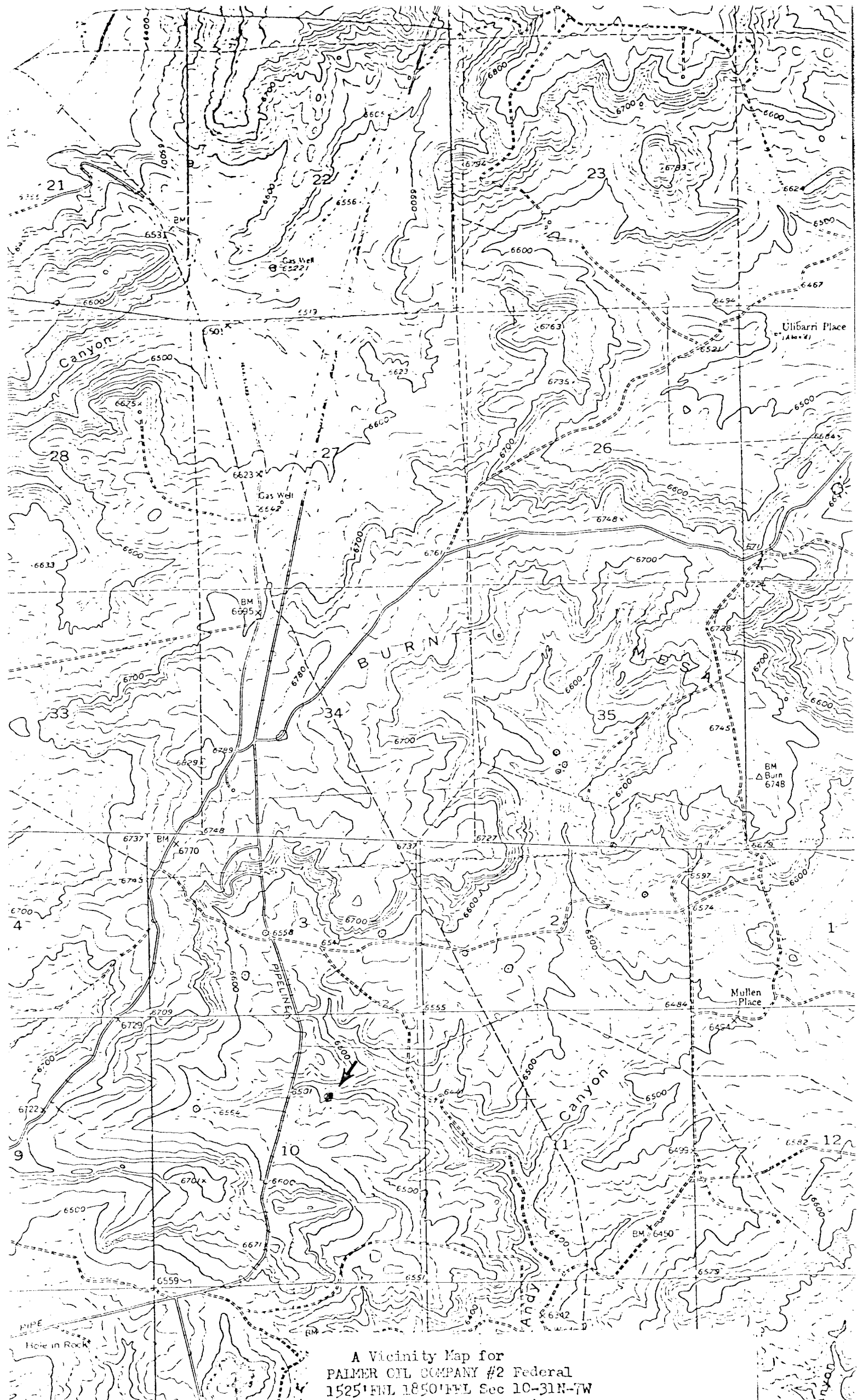
1. Surface Casing: 9-5/8" 24#/ft., Grade K-55, Short T&C, set at 200' and cemented with pump and plug method back to surface.
2. Casinghead Flange: 9-5/8" X 10-3/4" top 1500 psig W. P. Larkin (or equivalent) casinghead with two 2" 1500 psi L. P. outlets.
3. Approximately 3875' of 7" 23# intermediate casing will be set through the Point Lookout.
4. Blowout Preventor: An 8" 3000 psig W. P. Double gate hydraulic Schaffer 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 1000 psi at 4800' or a gradient of .229 psi/ft.
7. Well will be drilled with water base mud system with 8.8 - 9.0 ppg weight, 35 - 45 seconds viscosity to 3875. Intermediate string of 7" will be set and cemented to surface. A 6-1/2" gas drilled hole will be drilled to approximately 4800' and a 4-1/2" 9.5# liner set through the mesaverde pay and cemented back to the intermediate casing.

PALMER OIL & GAS COMPANY

By:


E. C. Campbell





A Vicinity Map for
PALMER OIL COMPANY #2 Federal
1525' ENL 1850' ENL Sec 10-31N-7W
San Juan County, New Mexico

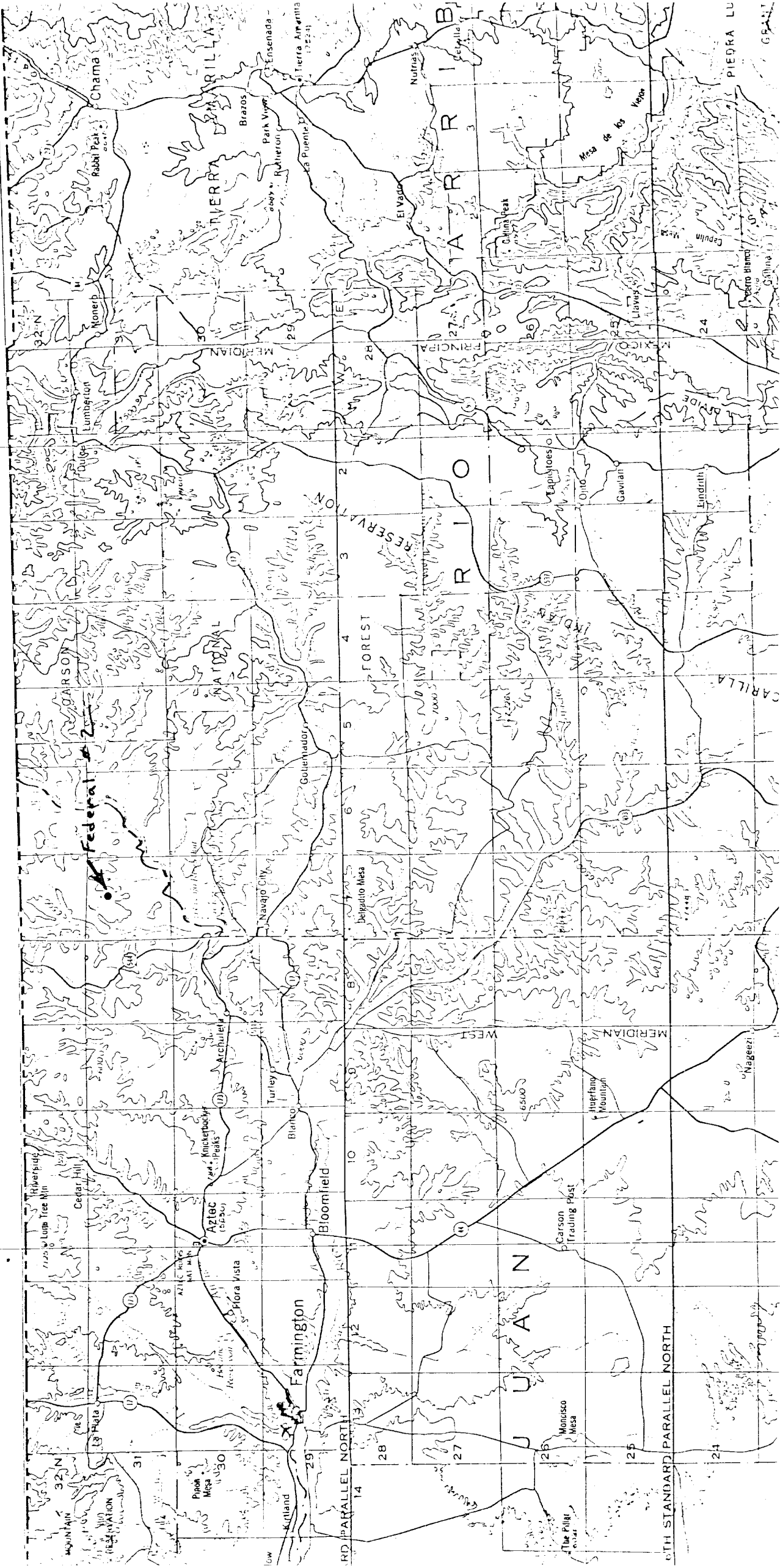
108°

L

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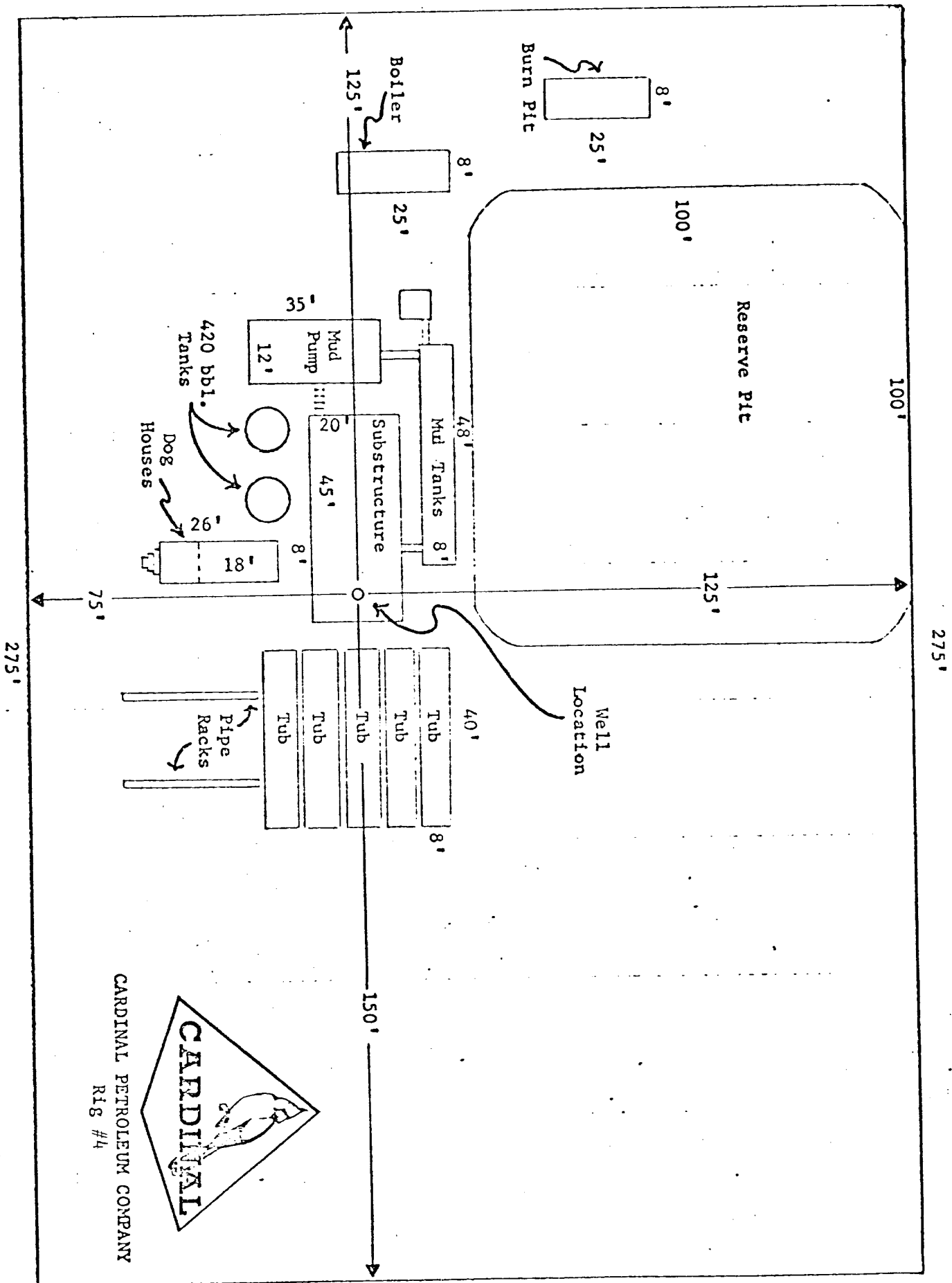
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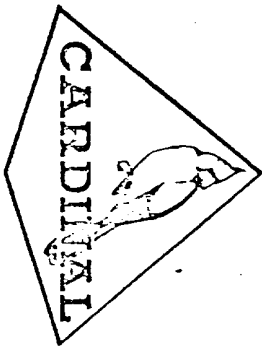




200'



CARDINAL PETROLEUM COMPANY
Rt 6 #4



200'