

# Getty Oil Company

P. O. Box 3360  
Casper, Wyoming 82602

July 28, 1977

U. S. Geological Survey  
P. O. Box 959  
Farmington, New Mexico 87401

Re: Marshall-Gentle 1A  
1640 FSL 840 FEL  
Sec. 14 T27N-R3W  
San Juan County, New Mexico

Gentlemen:

The thirteen point Surface Use and Operations Plan and the ten point Well Control Plan are submitted below in conjunction with an Application for Permit to Drill:

1. Existing roads: This proposed development well is located in the Blanco Mesaverde Field approximately 13 miles southsoutheast of Blanco, New Mexico. The roads to be used are shown on a vicinity map taken from the Bloomfield and Gould Pass Quadrangle topographic maps, Figure No. 1.
2. Planned access road: There is an existing road to the proposed location. Figure No. 2
3. Location of existing wells: Shown on Figure No. 3.
4. Location of tank batteries, production facilities and production gathering and service lines: Figure No. 4.
5. Location and type of water supply: Water is to be obtained from the San Juan River near Blanco, New Mexico and hauled to the wellsite on existing roads.
6. Source of construction materials: On-site native soil will be used for pad construction.
7. Methods for handling waste disposal: Drill cuttings, used mud and water will be contained in the earthen reserve pit. Dry cuttings will be contained in the flare pit during gas drilling. Garbage, sewage and discarded trash will be properly contained for later burial or, if necessary, hauled to a sanitary land fill. The burn pit will be screened. Drilling mud contained in the reserve pit after the well completion will be allowed to dry out before covering by backfilling. Liquids recovered during well tests will be retained in test tanks for proper disposal.

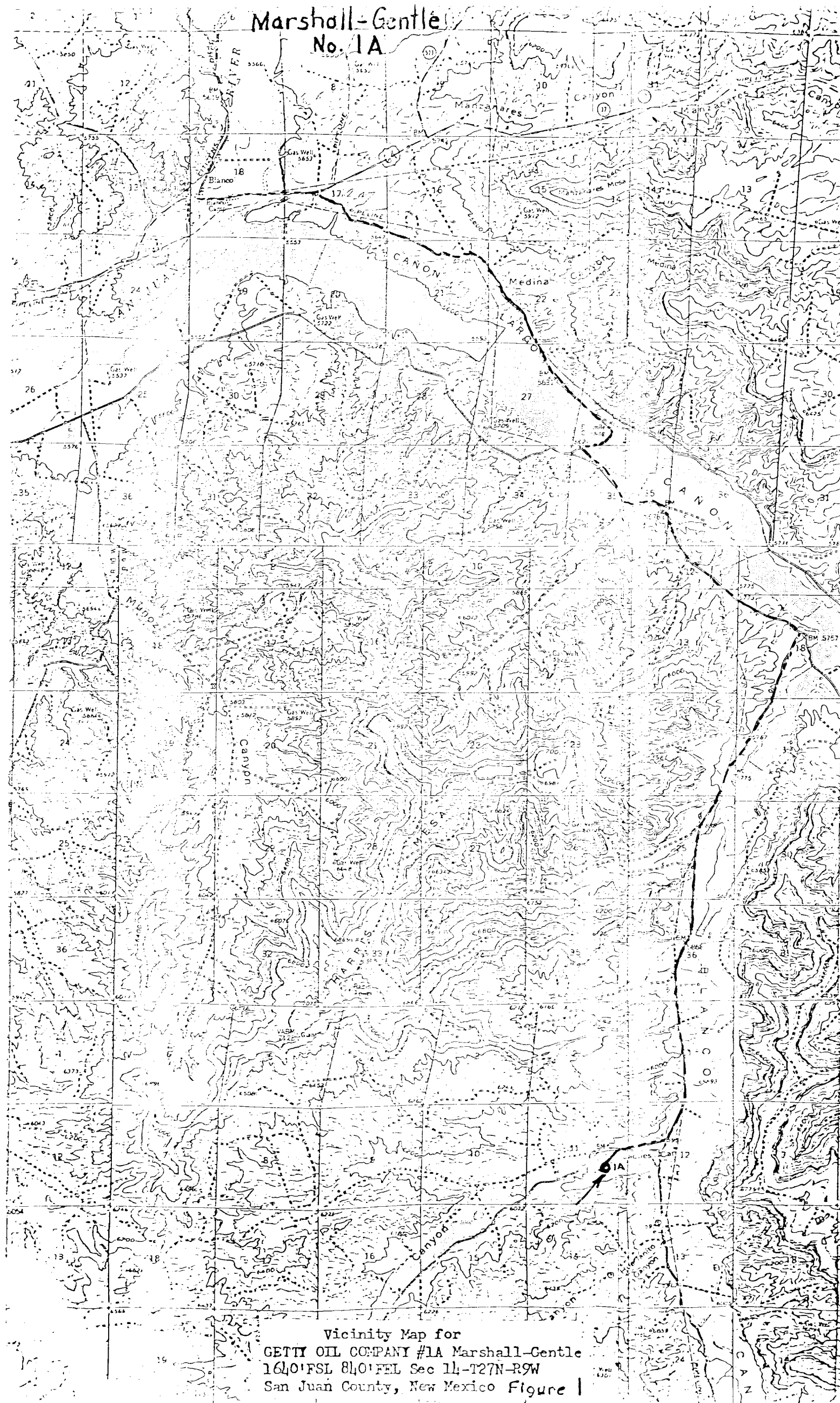
8. Ancillary facilities: None
9. Well site layout: Figure No. 5. It is not planned to line pits.
10. Plans for restoration of the surface: As soon as practical following drilling and completion operations surplus materials will be cleared from the location. When the fenced reserve pit has dried out it will be backfilled, reshaped and seeded along with other disturbed areas not needed for production purposes. Seeding will be done according to BLM requirements for the Farmington Resources Area. See Figures No. 6 and No. 7. It is expected that seeding will be done between July 1 and September 15, 1978.
11. Other information: A general description of the terrain and vegetation can be found in the attached Archaeological Clearance Survey Report--77-SJC--100 dated 24 June 1977. Clearance has been recommended for this well site. Proper drainage ditches will be cut above any high banks around the pad to prevent serious erosion. Cuts of six (6) to eight (8) feet will be necessary along the northwest edge of the well pad. There are no water wells, occupied dwellings or prominent surface features on or adjacent to the well site. All permanent equipment will be painted Sandstone Brown #595-30318.
12. Lessee's or operator's representative:
- |                            |                              |
|----------------------------|------------------------------|
| Mr. Roy J. McWhirter       | Mr. Richard P. Hergenreter   |
| P. O. Box 3360             | P. O. Box 510                |
| Casper, Wyoming 82602      | Farmington, New Mexico 87401 |
| Office Phone: 307-265-8386 | Office Phone: 505-325-9682   |
| Home Phone: 307-234-5241   | Home Phone: 505-325-2469     |
13. Certification:

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 are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Getty Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

7-29-77  
Date

Charles Mowry AREA ENGINEER  
Name and Title

# Marshall-Gentle No. 1A

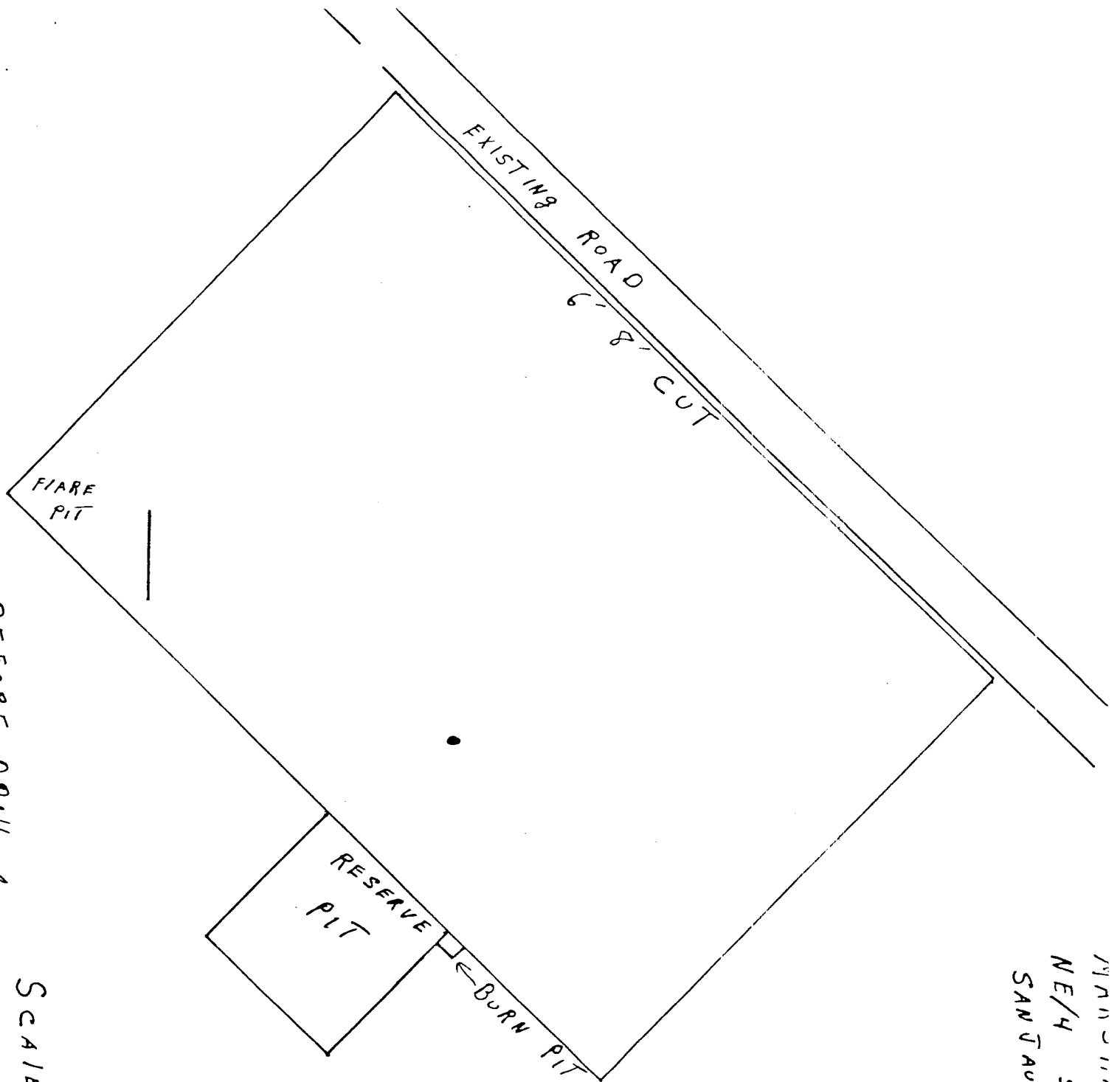


Vicinity Map for  
GETTY OIL COMPANY #1A Marshall-Gentle  
1640' FSL 840' FEL Sec 14-127N-R9W  
San Juan County, New Mexico Figure 1

Figure 1  
Fold Out.

BEFORE DRILLING

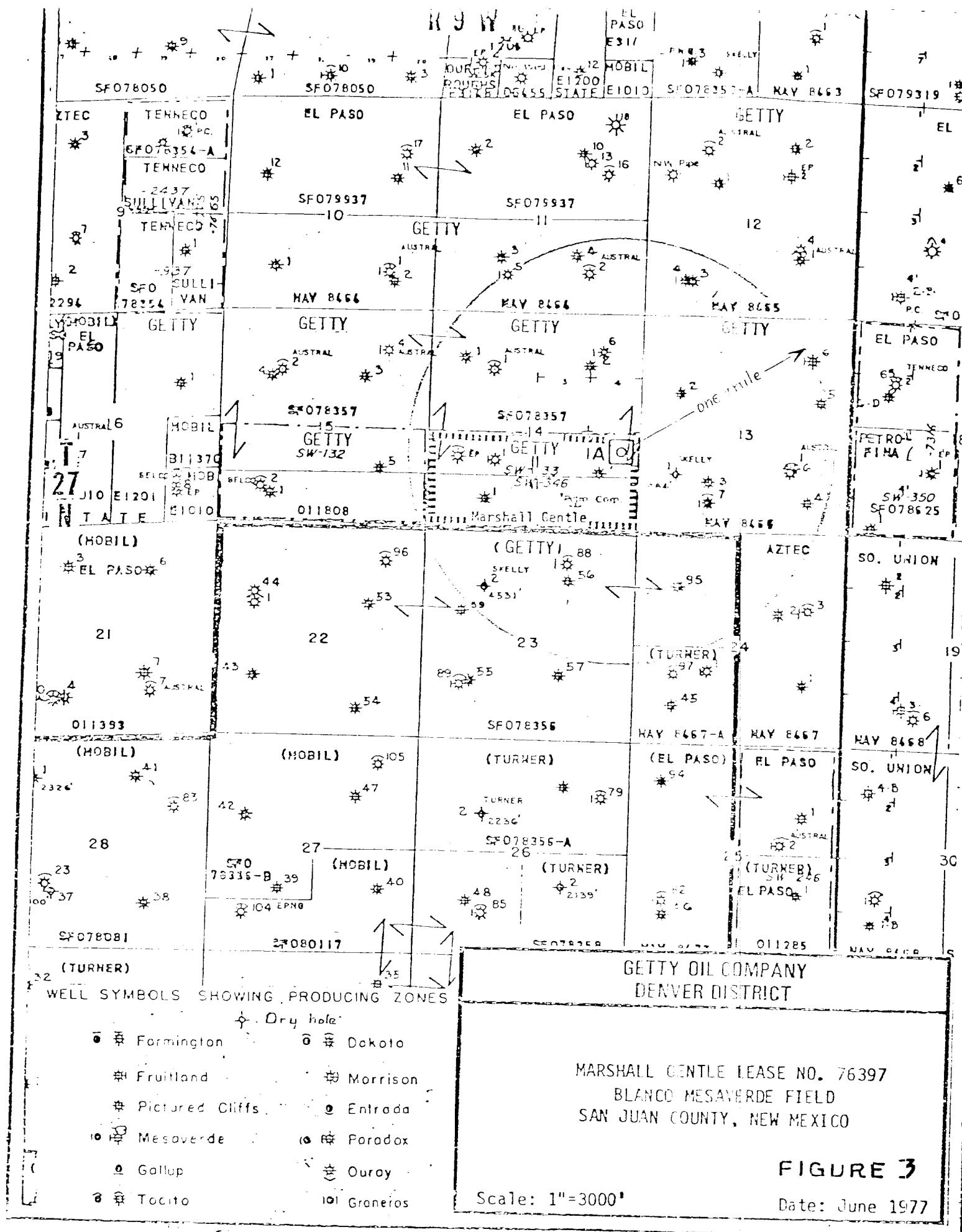
SCALE 1" = 50'



NE/4 SE/4 SEC 14-27N-9W N  
SANTA AN CO NEW MEXICO

BEFORE DRILLING  
SCALE: 1" = 50'

Figure No. 2



From Bloomfield, New Mexico,  
south Hwy 44 approx. 16.5 miles,  
thence half-left (SE) bearing  
somewhat left (E) for approx.  
14.5 miles to Blanco Wash,  
thence right (S) 1 mile, thence  
right (W) 1/4 mile, thence  
right (N) approx. 200 yds.,  
thence left follow road up  
mesa to Lease.

Section 14, T27N, R9W  
San Juan County, New Mexico

- |                |                                 |
|----------------|---------------------------------|
| SKELLY LEASE   |                                 |
| ABANDONED WELL |                                 |
| OIL WELL       |                                 |
| GAS WELL       |                                 |
| DRY HOLE       |                                 |
| SHD WELLS      |                                 |
| TSD            | TEMPORARY SHUT DOWN WELL        |
|                | INJECTION WELL                  |
|                | WATER SUPPLY WELL               |
| —————          | FLOW LINES                      |
| -----          | GAS LINES                       |
| .....          | INJECTION LINES                 |
| ----           | SHD LINES                       |
| -----          | POWER LINES                     |
| -----          | LEASE ROADS                     |
| ~~~~~          | VALLEY OR DRAW                  |
| ⊙ ⊙ ⊙          | TANK BATTERY                    |
| ▭              | INJECTION PLANT                 |
| ○              | SALT WATER TANK OR CONCRETE PIT |
| ○              | OPEN DIRT PIT                   |
| ◻              | BUILDINGS                       |
| ⊙              | SEPARATORS                      |
| ⬡              | THEATERS                        |

100% Working Interest

GETTY OIL COMPANY  
ALASKA-RKY MTN DISTRICT

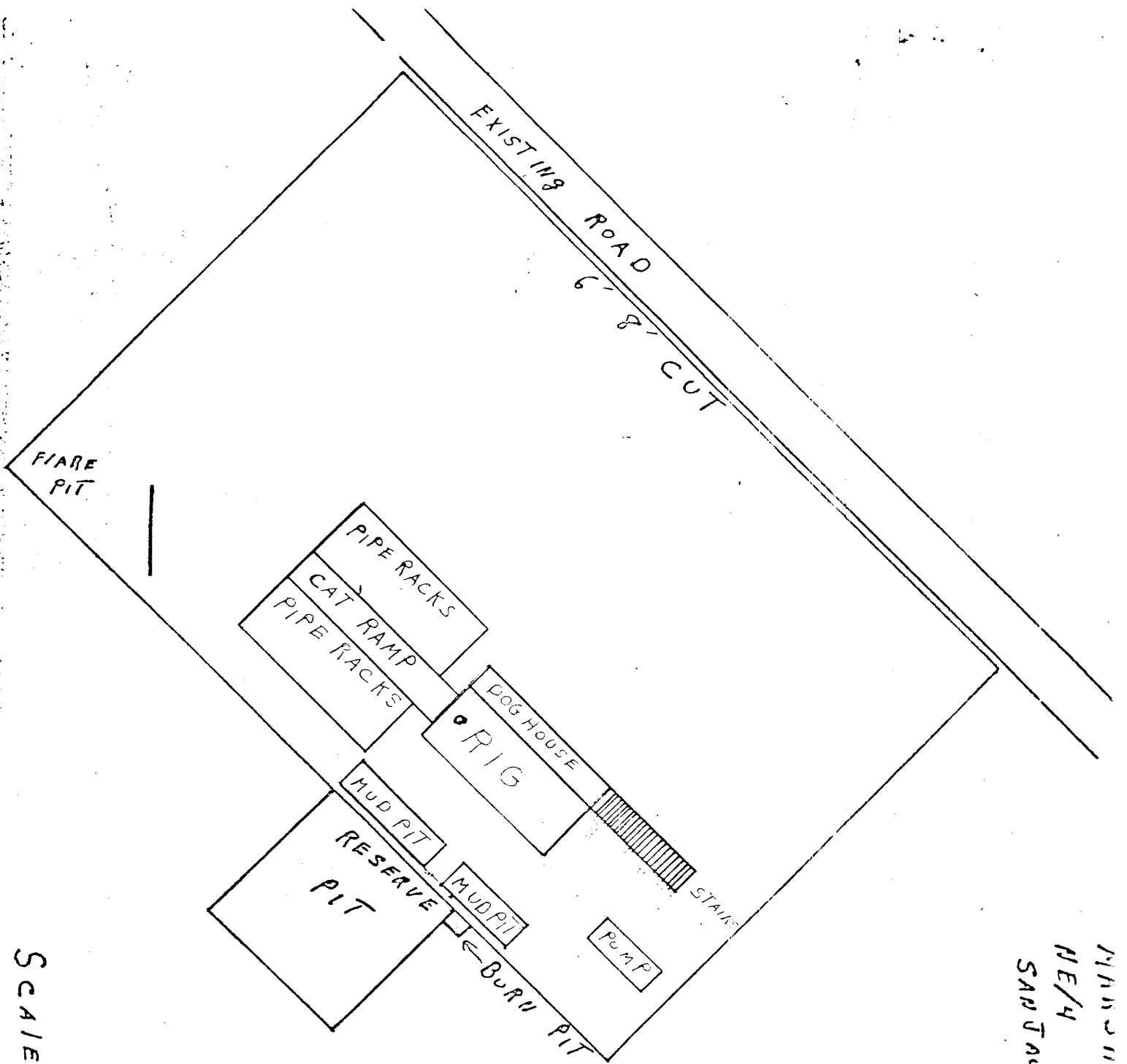
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Marshall "Gentle" Lease No. 76397  
Blanco-Mesaverde Field  
San Juan Basin

Scale: 1" = 1000'

June, 1973

Figure No. 4



NE/4 SE/4 SEC 14-27N-9W N  
SANDTOD CO NEW MEXICO

DURING DRILLING

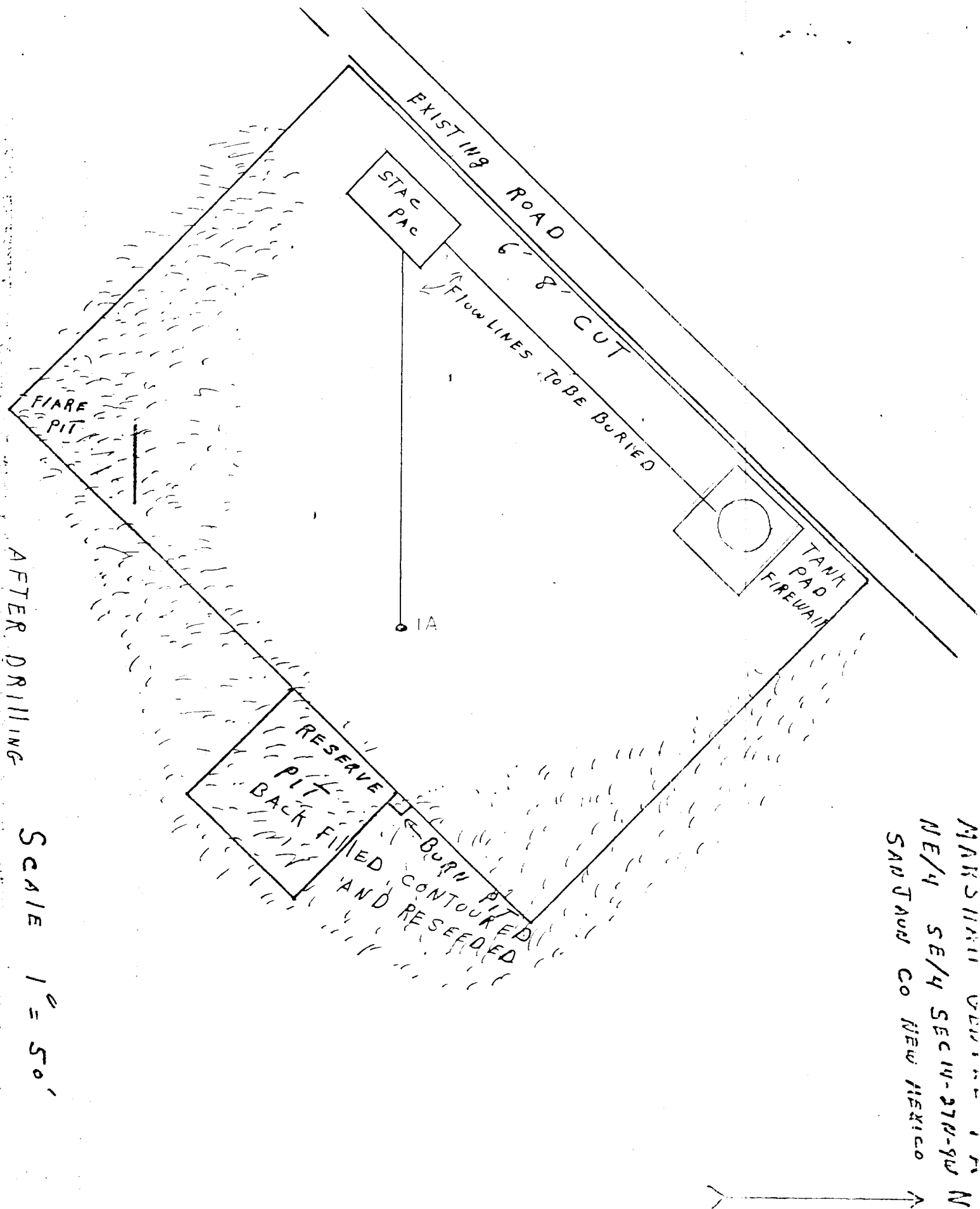
SCALE 1" = 50'

DURING DRILLING

SCALE: 1" = 50'

Figure No. 5





AFTER WELL COMPLETION Figure No. 6

BLM SEEDING REQUIREMENTS  
IN THE FARMINGTON RESOURCE AREA

1. SEED MIXTURE 2

2. TIME:

All seeding will take place between July 1 and September 15.

3. EQUIPMENT:

Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. The seed will be planted not less than one-half inch deep or more than one inch deep. The seeder will be followed with a drag, packer, or roller to insure uniform coverage of the seed, and adequate compaction. Drilling will be done on the contour where possible, not up and down the slope. Where slopes are too steep for contour drilling, a "cyclone" hand seeder or similar broadcast seeder will be used. Seed will then be covered to the depth described above by whatever means is practical.

4. SPECIES TO BE PLANTED IN POUNDS PURE-LIVE SEED PER ACRE:

CRESTED WHEATGRASS (Agropyron desertorum) - 1/2 lbs.

FOURWING SALTBUCH (dewinged) (Atriplex confertifolia) - 1 lb.

SAND DROPSEED (Sporobolus cryptandrus) - 3/4 lb.

~~WATERBURY (Eriogonum fasciculatum) - 1 lb.~~

ALKALI SACATON (Sporobolus airoides) - 3/4 lb.

FIGURE NO. 7

Report 77-SJC-100  
Permit 75-NM-013 &  
75-NM-018

Archaeological Clearance Survey of  
Five Proposed Well Locations Conducted  
for Getty Oil Company

Suzanne DeHoff  
Cultural Resource  
Management Program  
San Juan Campus  
N. M. State University  
24 June 1977

Report 77-SJC-100  
Permit 75-NM-013 &  
75-NM-018

Archaeological Clearance Survey of  
Five Proposed Well Locations Conducted  
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N. M. State University  
24 June 1977

Archaeological Clearance Survey of  
Five Proposed Well Locations Conducted  
for Getty Oil Company

On June 23, 1977 Suzanne DeHoff of New Mexico State University's Cultural Resource Management Program, San Juan Campus, conducted an archaeological clearance survey of five proposed well locations at the request of Paul Berhost of Getty Oil Company.

Present in the field during the investigations were Messrs. Getty; Getty Oil Company, Lee Freeman; U. S. Geological Survey - Farmington, Danny Wood; W & C Contracting, and Bob Moore, of the Bureau of Land Management (only present on the two locations on BLM lands).

The proposed locations are located on Bureau of Land Management and Indian Allotted lands. Work was performed under Federal Antiquities Permits 75-NM-013 and 75-NM-018. A 300 X 300 foot area was inspected at all five proposed locations. This was done by walking around the perimeter of the location and then walking in zig-zag parallel lines over the interior of the locations. No cultural resources were found within the boundaries of the proposed pads.

MARSHALL - GENTLE "IA"

BLM lands

This proposed location lies 1640 feet from the south line and 840 feet from the east line of Section 14, Township 27 North, Range 9 West, San Juan County, New Mexico, N.M.P.M. (Figure 1)

The location is situated on a slight slope to the southeast. The terrain is gently rolling with several moderately deep arroyos

MARSHALL-GENTLE "14" cont'd.

running through the area to a large wash about 400 feet to the south. The soil is a sandy loam and supports a vegetation of wheat grass, snakeweed, sagebrush, and juniper.

The well head will be approximately 150 feet south of an existing road and no new access road will be required.

No cultural resources were found and clearance is recommended.

MARSHALL A "6A"

FLM Lands

This proposed location is 1660 feet from the north line and 1160 feet from the west line of Section 14, Township 27 North, Range 9 West, San Juan County, New Mexico, N.M.P.M. (Figure 1)

The vegetation in this area is pinon, juniper, prickly pear cactus, snakeweed, narrow leaf yucca, and antelope bitterbrush. The soil is a sandy loam with sandstone bedrock exposed at several places. There is a slight slope to the northeast.

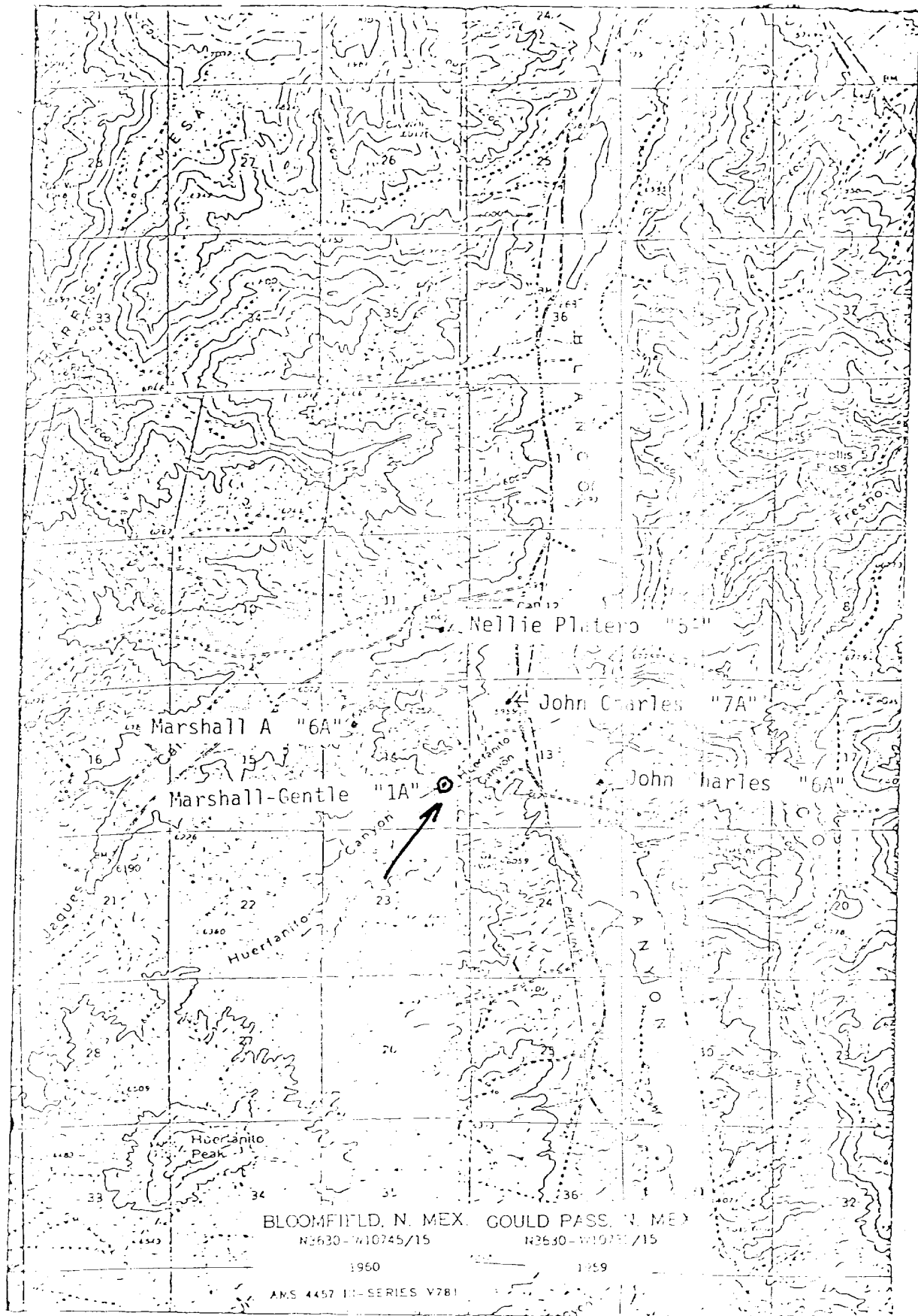
Access will be from an existing location about 100 feet to the east.

No cultural resources were found and clearance is recommended.

JOHN CHARLES "6A"

Indian Allotted Land

This proposed location is 1850 feet from the south line and 840 feet from the east line of Section 13, Township 27 North, Range 9 West, San Juan County, New Mexico, N.M.P.M. (Figure 1)



# Getty Oil Company

P. O. Box 3360  
Casper, Wyoming 82602

July 28, 1977

United States Geological Survey  
Box 959  
Farmington, New Mexico 87401

Re: Ten Point Well Control  
Marshall-Gentle 1A  
1640' FSL 840' FEL  
Sec. 14-T27N-R9W  
San Juan County, New Mexico

Gentlemen:

1. Surface formation is sand and sandy loam believed to be Tertiary.
2. Estimated tops of important geological markers.  
Estimated KB elevation 5975, GL is 5963.

	<u>Depth</u>	<u>Datum</u>
Mesaverde	3610'	2450'
Point Lookout	4260'	1800'

3. There are no fresh water zones below 300' in the immediate area. No other water, oil, gas or other mineral bearing formations are expected to be encountered from 300' to the Mesaverde formation.
4. Proposed casing program:  
(300') 9-5/8" O. D. 32.3#, H-40, 8rd, ST&C  
(2400') 7" O. D., 17#, H-40, 8rd, ST&C  
(2300') 4" O.D. 11.34#, J-55, 8rd, ST&C
5. The blowout preventer specifications and schematic diagram is included as a separate exhibit. The blowout preventers will be operationally and pressure tested to manufacturer's specifications (3000 psi) prior to drilling out the guide shoe on the 9 5/8" O.D. surface casing. The pipe rams and hydril will be operationally tested daily. The blind rams will be operationally tested when drill pipe is out of the hole.
6. Mud Program:

<u>Interval Feet</u>	<u>Mud Wt. (ppg)</u>	<u>Viscosity (Sec./qt.)</u>	<u>Fluid Loss (ml/30mm.)</u>	<u>Mud Type</u>
0'-300'	8.4-8.8	50-60	NC	Gel/Lime
300'-2200'	8.4-8.8	28-30	NC	Gel
2200'-2400'	8.7-8.9	45-50	10-12	Gel/polymer
2400'-4500'	N/A	N/A	N/A	Natural Gas



7. Auxiliary Equipment:

1. Upper and lower Kelly Cocks will be used.
  2. Floats at bit will be used where permissible.
  3. Visual monitoring of mud pits and system.
  4. A sub with a full opening valve will be available to be stabbed into the drill pipe or collars when the Kelly is not in the string.
8. A DST or core will not be taken in this well. A gamma Ray-Neutron log will be run from 4500'-2400'.
9. Abnormal pressures, temperatures or potential hazards are not expected during the drilling of this well.
10. The anticipated starting date for this well is 10/22/77. We estimate that it will take a total of twenty days to drill and complete this well.

FOUR CORNERS DRILLING CO

P.O. BOX 1067  
657 WILD HORSE DRIVE  
FARMINGTON, NEW MEXICO 87401

TELEPHONE: (505) 327-1122

DRILLING RIG INVENTORY

RIG NO. 2

DERRICK: CARDWELL 108' 270,000 HOOK LOAD CAPACITY

SUBSTRUCTURE: CARDWELL 9'6" X 12'6" TELESCOPING 440,000 GROSS LOAD

DRAWWORKS: CARDWELL KB-500 SELF PROPELLED BACK IN 600 HP INPUT RATED 8,000' 4 1/2'

AUXILIARY BRAKE: PARKERBURG 22" SINGLE

ENGINES: 2 GENERAL MOTORS 8V71N DIESEL 318 HP EACH

MUD PUMPS: EMSCO DA-500 POWERED BY 2 GM 8V71N ENGINES 318 HP EACH

AUXILIARY MUD PUMP: EMSCO H-25 POWERED BY 2 GM 671N ENGINES 160 HP EACH

DESILTER: PIONEER 10 CONE W/B.J. 5" X 6" PUMP WITH ELECTRIC MOTOR

MUD TANK: 1 5' X 10' X 50' 450 BBL. W/4 COMPARTMENTS

WATER STORAGE: 1 10' X 10' X 30' 520 BBL. TANK

GENERATORS: 1 EACH 100 KW AC

ROTARY TABLE: OILWELL SUPERSPEED 21"

TRAVELING BLOCK: McKISSICK W/WEBB WILSON HYDRA HOOK 150 TON COMBINATION

SWIVEL: NATIONAL TYPE D 200 TON

BLOWOUT PREVENTOR: SHAFFER DOUBLE GATE HYDRAULIC 16" X 3000

SPECIAL TOOLS: TONG TORQUE INDICATOR

RATE OF PENETRATION RECORDER

SHALE SHAKER

TRAILER HOUSE

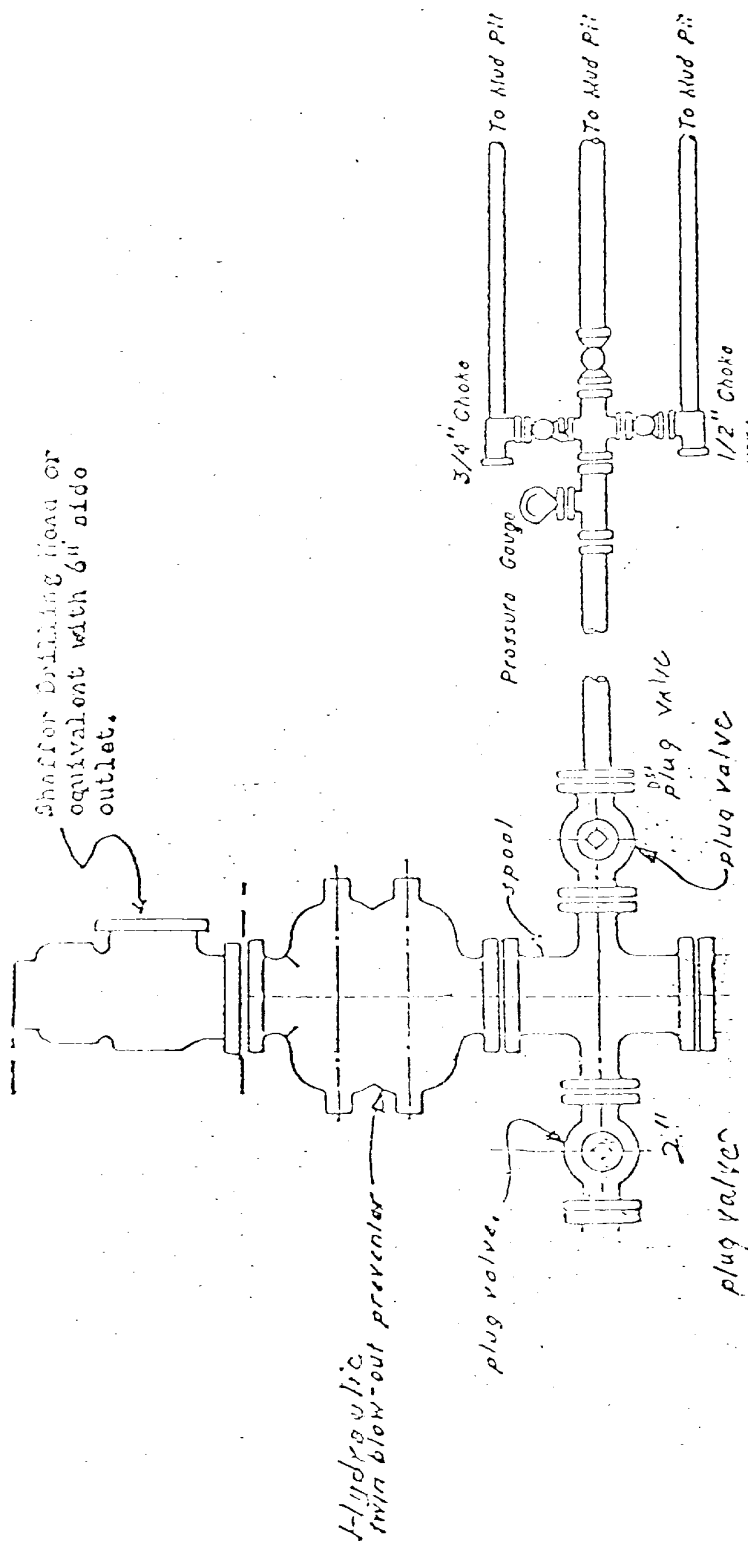
TWO WAY RADIO

NECESSARY DRILLPIPE & DRILL COLLARS TO MEET B D SPECIFICATIONS.

# FOUR CORNERS DRILLING CO.

P.O. BOX 1067  
657 WILD HORSE DRIVE  
FARMINGTON, NEW MEXICO 87401

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