

# Getty Oil Company

P. O. Box 3360  
Casper, Wyoming 82602

July 27, 1977

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

Re: Marshall "A", No. 6A  
1660 FNL 1160 FWL  
Sec. 14, T27N-R9W  
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: Approximately 50 feet of road 24 feet wide will be constructed. It will be centerline flagged prior to inspection. 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 up to twelve (12) feet along the south side and five (5) feet along the east side of the pad will be necessary. There are no water wells, occupied dwellings or prominent surface features on or adjacent to the well site. All permanent equipment will be painted Pinon Green No. 595-34127.
12. Lessee's or operator's representative:

Mr. Roy J. McWhirter  
P. O. Box 3360  
Casper, Wyoming 82602  
Office Phone: 307-265-8386  
Home Phone: 307-234-5241

Mr. Richard P. Hergenreter  
P. O. Box 510  
Farmington, New Mexico 87401  
Office Phone: 505-325-9682  
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.

July 27, 1977      Charles M. Newby, P.E. ENGINEER  
Date                                  Name and Title

Marshall A No. 6A

CANYON

Medina

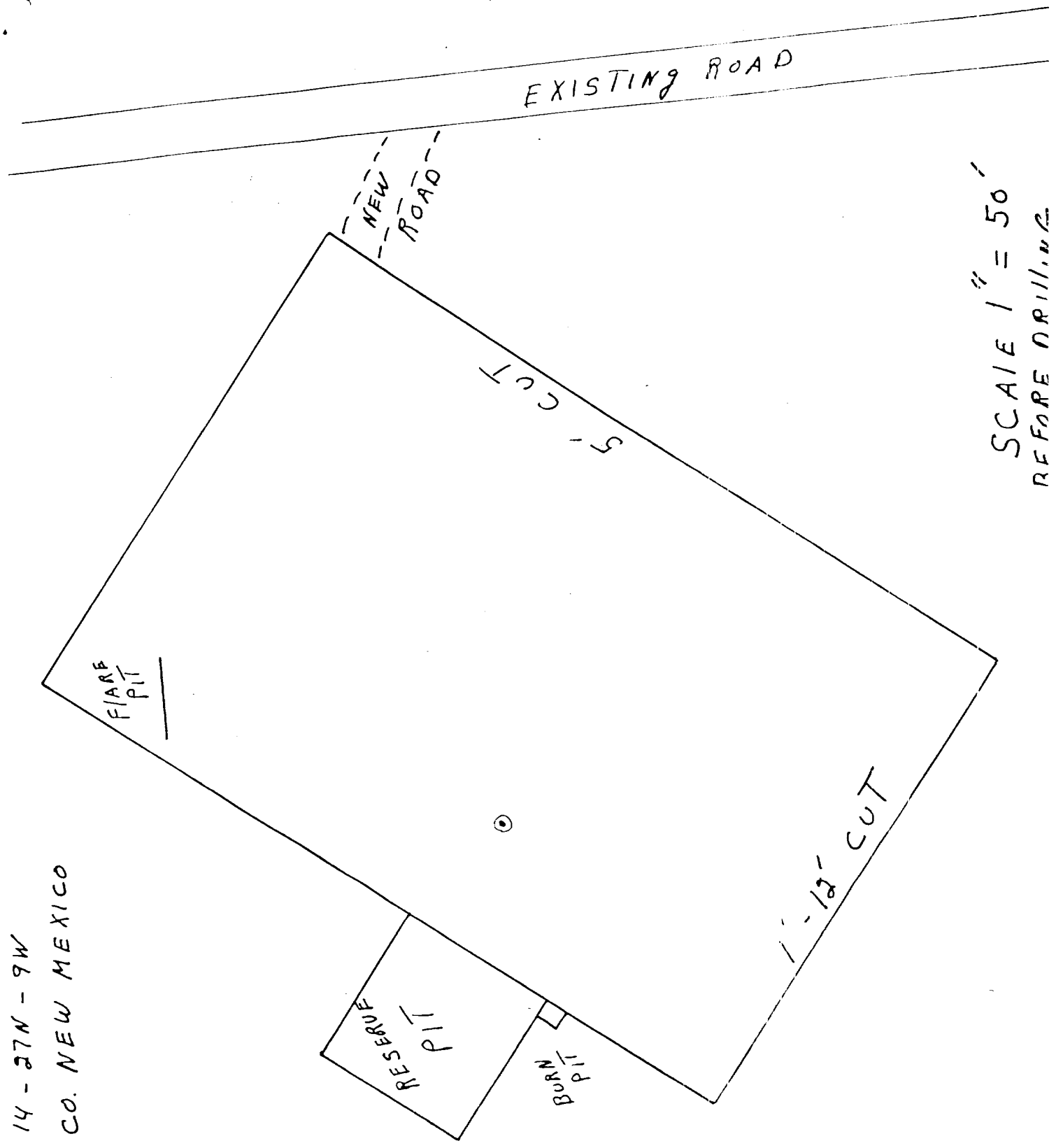
BLANCO

Jaques

PIPELINE

96A

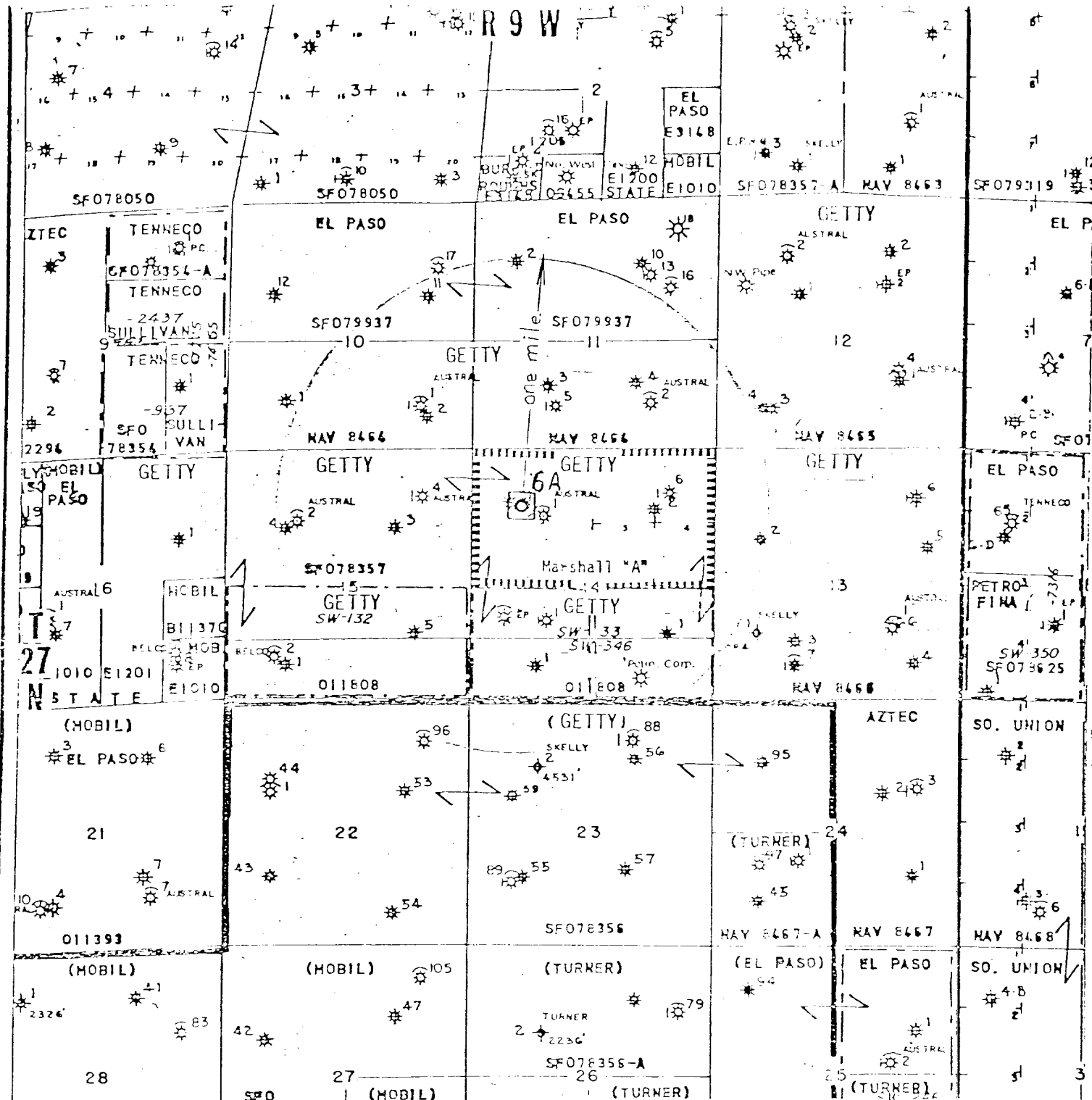
MARSHALL 0-17  
NW/4 SEC 14-27N-9W  
SAN JUAN CO. NEW MEXICO



SCALE 1" = 50'  
REFORE DRILLING

Figure No.2

R 9 W



WELL SYMBOLS SHOWING PRODUCING ZONES

- Farmington
- Fruitland
- Pictured Cliffs
- Mesaverde
- Gallup
- Tootie
- Dakota
- Morrison
- Entrada
- Paradox
- Oroya
- Graneros

GETTY OIL COMPANY  
DENVER DISTRICT

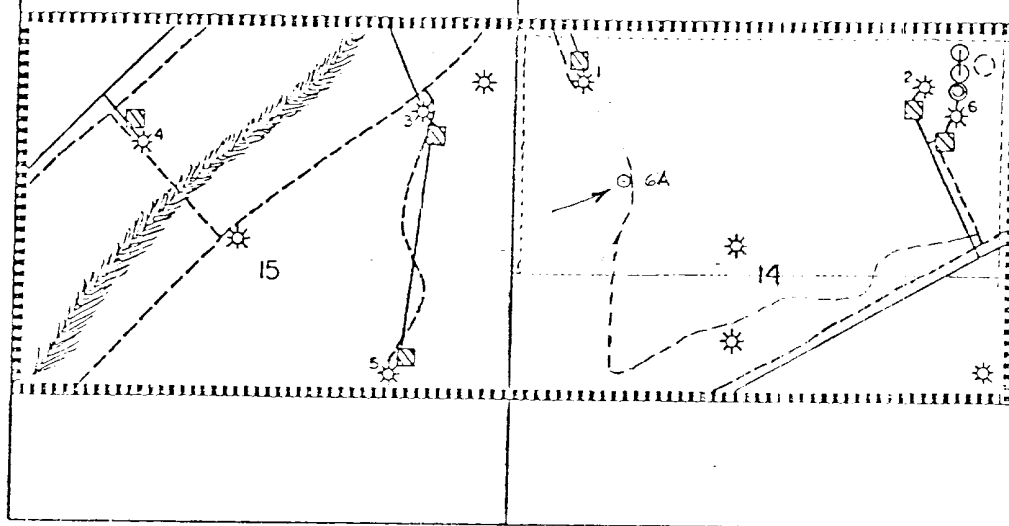
MARSHALL "A" LEASE NO. 57525  
BLANCO MESAVERDE FIELD  
SAN JUAN COUNTY, NEW MEXICO

FIGURE 3

Scale: 1"=3000'

Date: June 1977

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



Sections 14 and 15, T27N, R9W  
 San Juan County, New Mexico

- SKELLY LEASE
- ⊗ ABANDONED WELL
- ⊙ OIL WELL
- ⊛ GAS WELL
- ⊕ DRY HOLE
- ⊖ SWD WELLS
- TSD TEMPORARY SHUT DOWN WELL
- △ INJECTION WELL
- ⊗ WATER SUPPLY WELL
- FLOW LINES
- GAS LINES
- INJECTION LINES
- SWD LINES
- POWER LINES
- LEASE ROADS
- VALLEY OR DRAW
- ⊙⊙ TANK BATTERY
- ⊙ INJECTION PLANT
- ⊙ SALT WATER TANK OR CONCRETE PIT
- ⊙ OPEN DIRT PIT
- ⊙ BUILDINGS
- ⊙ SEPARATORS
- ⊙ TREATERS

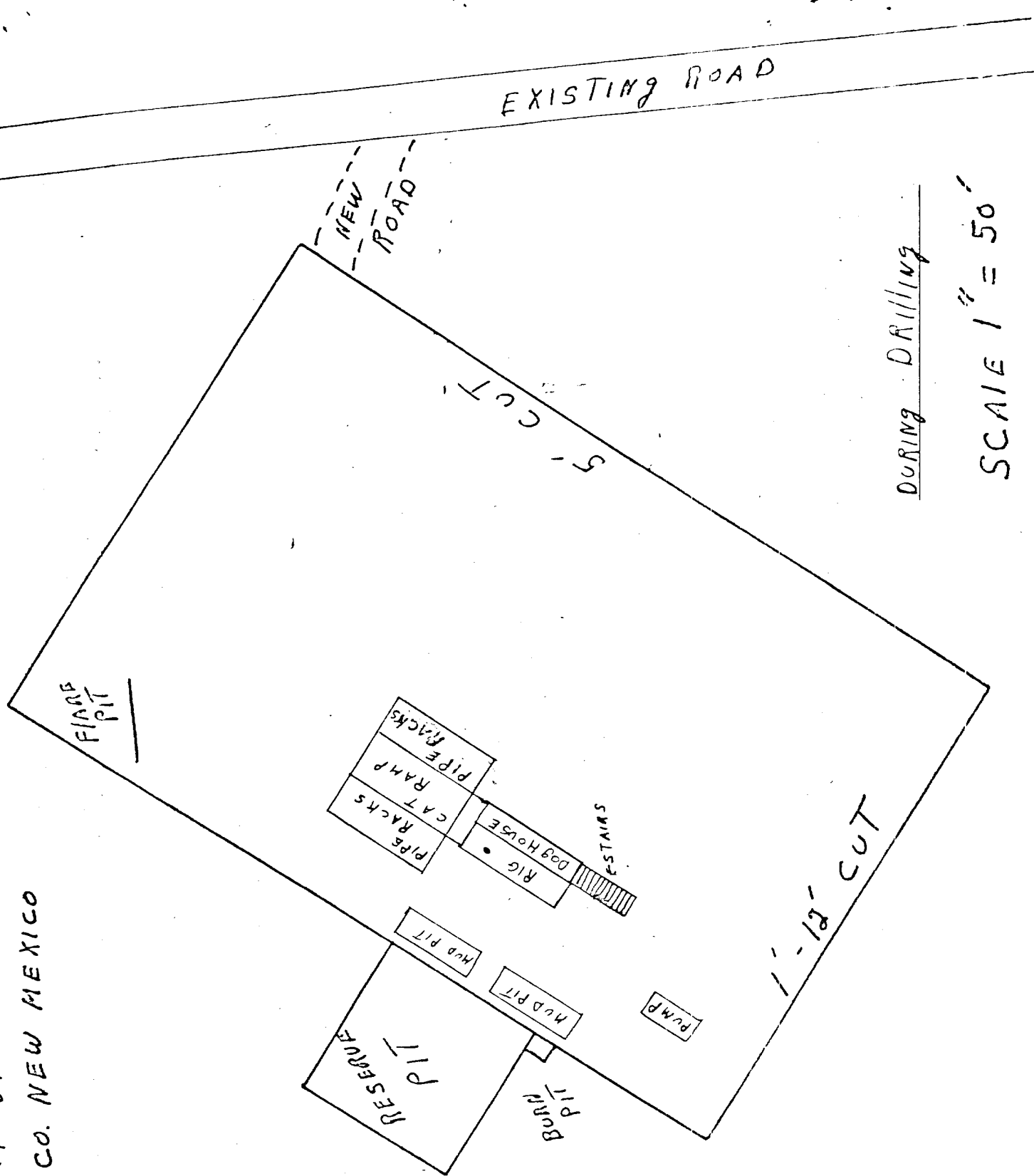
**Geffy** 100% Working Interest

SKELLY OIL COMPANY DENVER DISTRICT
590-00-06-00
Marshall "A" Lease No. 57525 Blanco-Mesaverde Field San Juan Basin
Scale 1" = 2000'

May, 1974

Figure No. 4

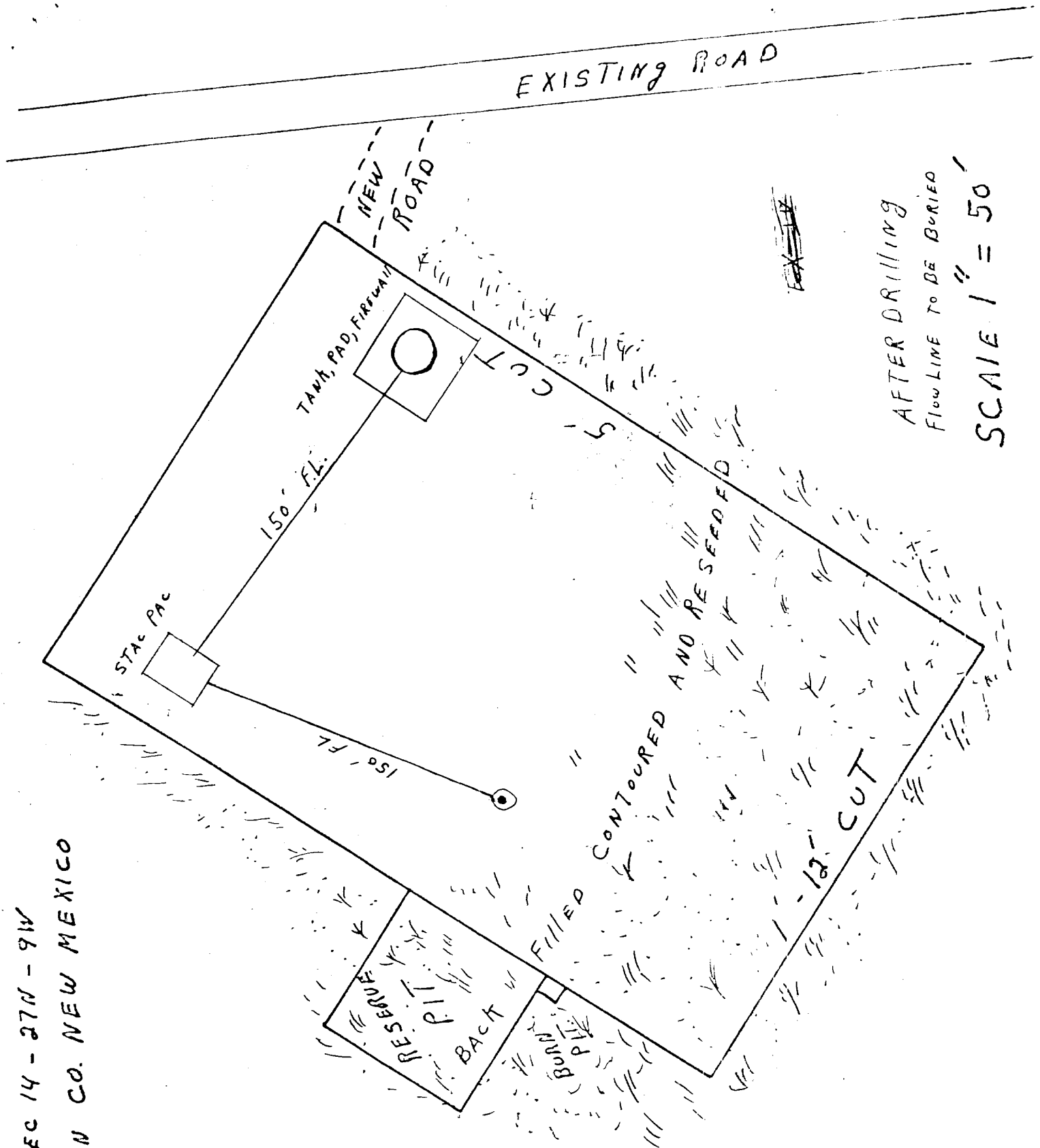
MARSHALL  
 NW/4 SEC 14 - 27N - 9W  
 SAN JUAN CO. NEW MEXICO



DURING DRILLING  
 SCALE 1" = 50'

Figure No.5

HANDSON  
NW/4 SEC 14 - 27N - 9W  
SAN JUAN CO. NEW MEXICO



AFTER DRILLING  
FLOWLINE TO BE BURIED  
SCALE 1" = 50'

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) - 2 1/2 lbs.

FOURWING SALTBUSH (dewinged) (Atriplex canescens) - 1 lb.

SAND DROPSEED (Sporobolus cryptandrus) 3/4 lb.

~~WINTERBERG (Elymus caninus) - 1 lb.~~

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

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

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

Susanne DeHoff  
Cultural Resource  
Management Program  
San Juan Campus  
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

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" 

B M 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.

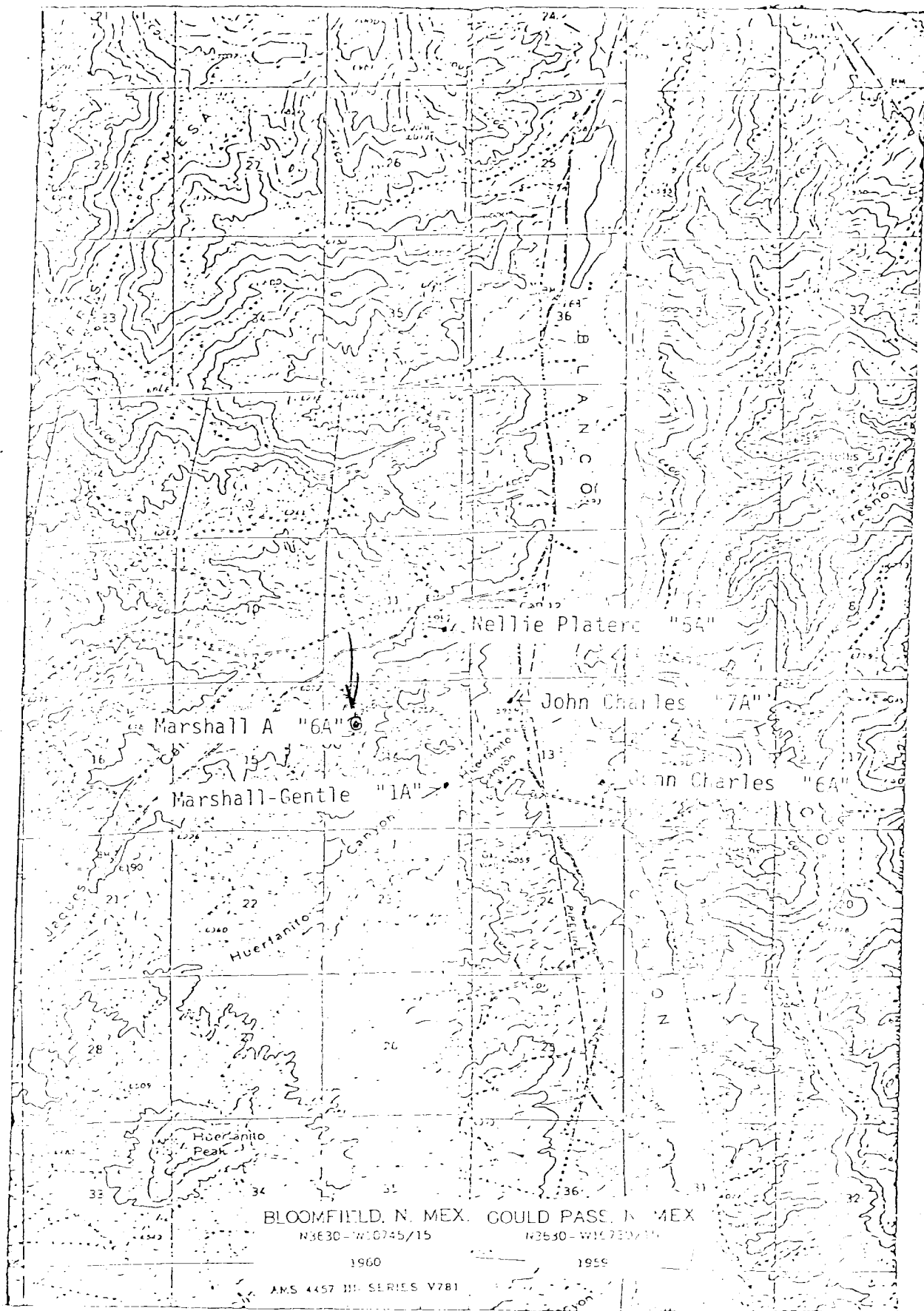
Access will be from an existing location about 200 feet to the east.

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 27, 1977

United States Geological Survey  
Box 959  
Farmington, New Mexico 87401

Re: Ten Point Well Control  
Marshall "A", No. 5A  
1660 FNL, 1160 FWL  
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	3620'	2405'
Point Lookout	4280'	1745'

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. Bottom liner to 4500 feet.
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</u> <u>Feet</u>	<u>Mud Wt.</u> <u>(ppg)</u>	<u>Viscosity</u> <u>(Sec./qt.)</u>	<u>Fluid Loss</u> <u>(ml/30min.)</u>	<u>Mud</u> <u>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 10/1/77. 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 TRIDENT-PAID 8,000' 4 1/2" DP.

AUXILIARY BRAKE: PARKERSBURG 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 6V71N 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 10" X 3000

SPECIAL TOOLS: TONG TORQUE INDICATOR

RATE OF PENETRATION RECORDER

SHALE SHAKER

TRAILER HOUSE

TWO WAY RADIO

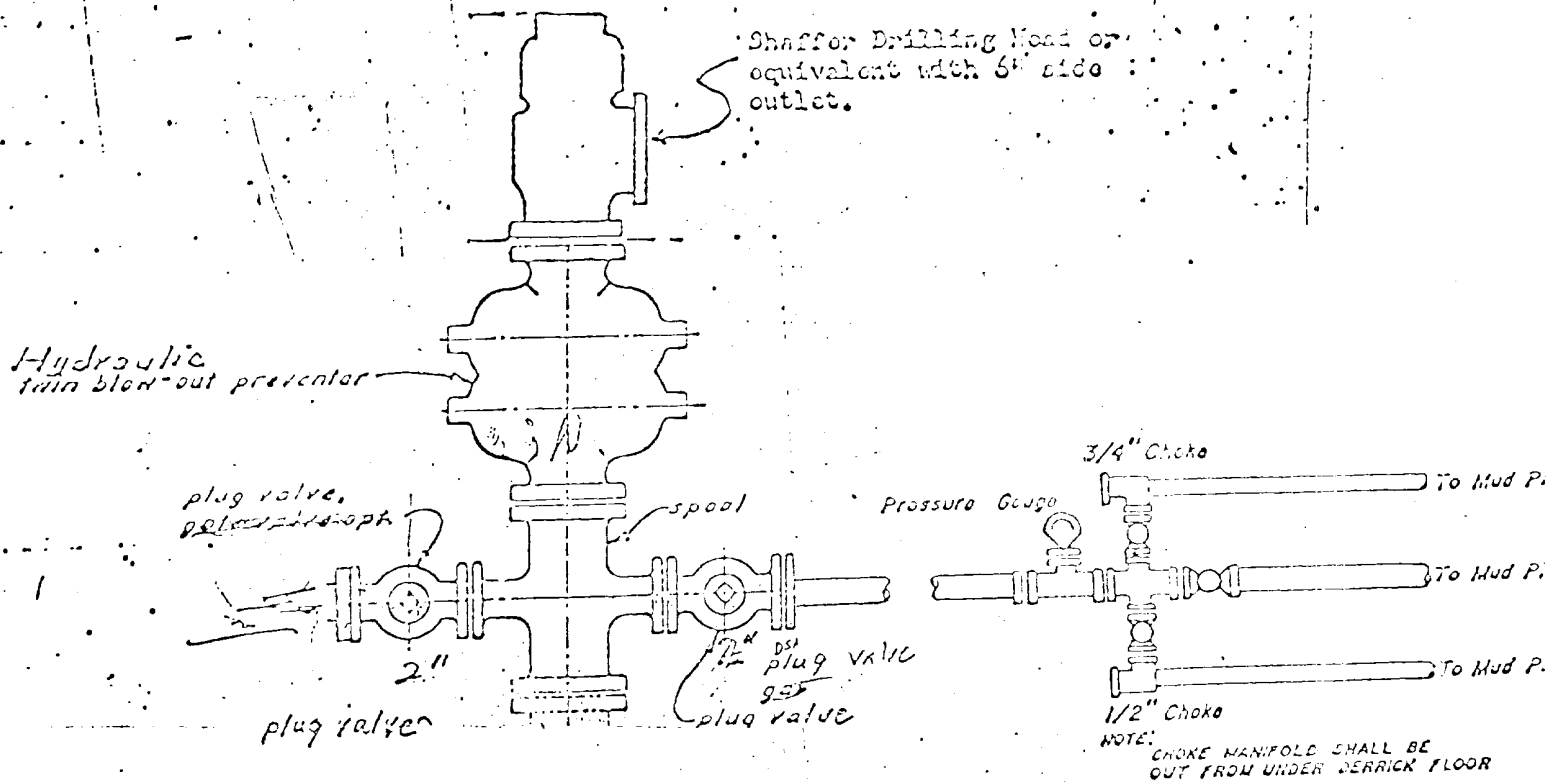
NECESSARY DRILLPIPE & DRILL COLLARS TO MEET BID SPECIFICATIONS.



# FOUR CORNERS DRILLING CO.

P. O. BOX 1067  
702 E. BROADWAY  
FARMINGTON, NEW MEXICO 87401

TELEPHONE: (505) 327-1122



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