

ATTACHMENT TO USGS FORM 9-331C

MESA PETROLEUM CO.

Suter Com #5

Sec. 15, T32N, R11W

San Juan County, New Mexico

Anticipated Formations:

Tertiary	Surface
Ojo Alamo	1910'
Kirtland	1950'
Farmington	2000' (possibly gas productive)
Fruitland	2735'
Pictured Cliffs	3210' (possibly gas productive)
Lewis	3375'

Testing, Logging, Coring:

One drillstem test on Farmington Zone (2000-2500') anticipated.

No cores anticipated.

Logs: IES - Base of surface casing to T.D.

GR-CAL-FDC-CNL - Top of Ojo Alamo Zone to T.D.

Mud Program:

Fresh gel system with weights as follows:

9.0 ppg	Surface to 2000'
9.5 - 9.7 ppg	2000' to 2600'
9.9 - 10.0 ppg	2600' to T.D.

Potential Hazards:

No hydrogen sulfide or abnormally pressured zones are anticipated.



DEVELOPMENT PLAN FOR SURFACE USE

MESA PETROLEUM CO.

Suter Com #5

1190' FSL & 790' FWL

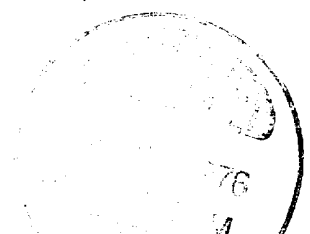
Sec. 15, T32N, R11W

San Juan County, New Mexico

1. See Exhibit "A" for existing roads.
2. The access road will be from location north for approximately 100' to an existing road as indicated on Exhibit "A". The road will be compacted earth, 16' wide with bar ditches for drainage.
3. See Exhibit "A".
4. See Exhibit "B".
5. Water supply for drilling operations will be procured from the water hole at Pump Wash (See Exhibit "A") and will be trucked to the location.
6. Location and road will be built from native materials. No sand, gravel, etc from outside sources will be required.
7. Waste drilling fluids and cuttings will be contained in earthen pits which will be backfilled after sufficient drying. Trash and garbage will be contained in a separate earthen pit and back filled.
8. No camp or airstrip is planned.
9. See Exhibit "C".
10. Upon completion of drilling operations, unused areas of the location will be restored as near as possible to the original contour and drainage. Pits will be back filled and contoured after sufficient drying. Area will be reseeded as per Exhibit "D". All work to be completed by September 15, 1977.
11. Included in Exhibit "E".
12. Company representative responsible for compliance of the Development Plan for Surface Use is Mr. James Archer. He may be contacted at one of the following phone numbers:
 - A. Office: 505 334-6157
 - B. Home: 505 327-3197
 - C. Car Radio: 505 325-1873
 - D. Mailing Address: Mesa Petroleum Co.
P.O. Drawer P
Aztec, New Mexico 87410
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 exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that

(cont'd)



13. (cont'd)

work associated with the operations proposed herein will be performed by Mesa Petroleum Co., its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

9/23/76
DATE

J. H. H. H.
NAME
Operations Manager
TITLE



GEOLOGICAL SURVEY

Sutter Com #5
S 1/4 15 - 32 N 70 11 W

EXHIBIT "A"

108°00'
00'

272

235000m.E

P 11 W

271

LA PLATA CO

657

SAN JUAN CO

m.N.

7
2
2

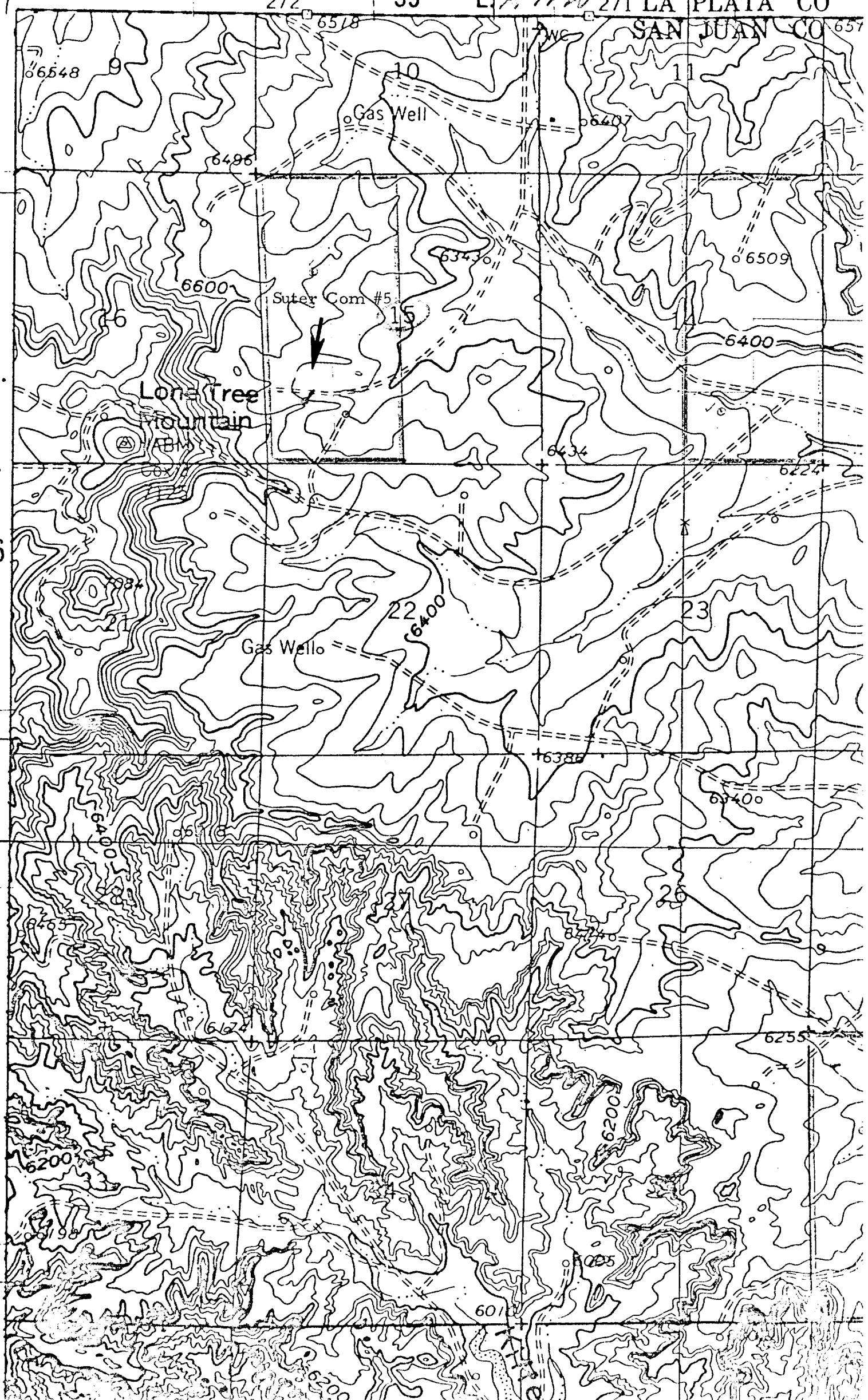
1096

4357 LINE
(ADOBE DOWNS RANCH 1:24 000)

093

2 N.

N.





UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

EXHIBIT "A"

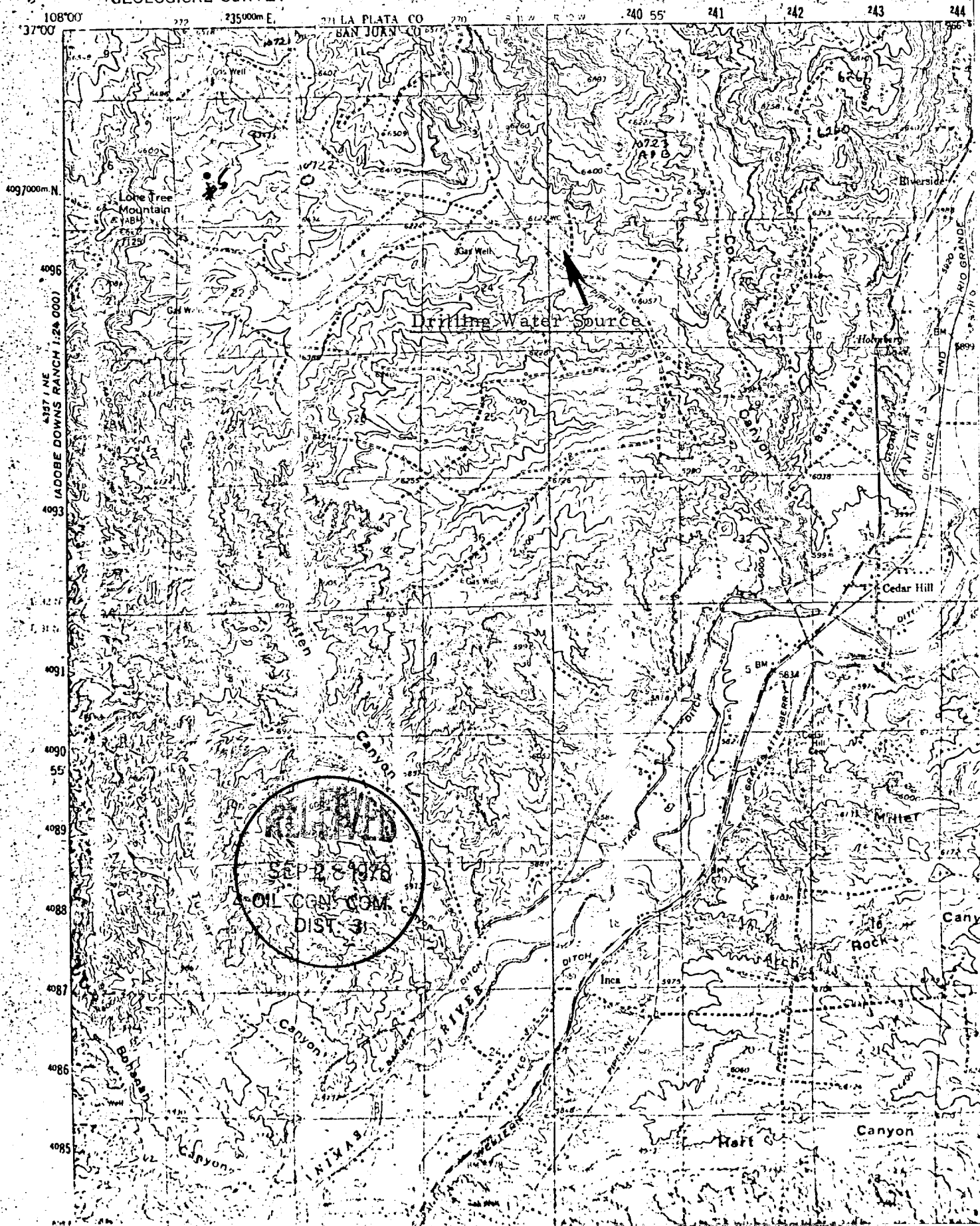
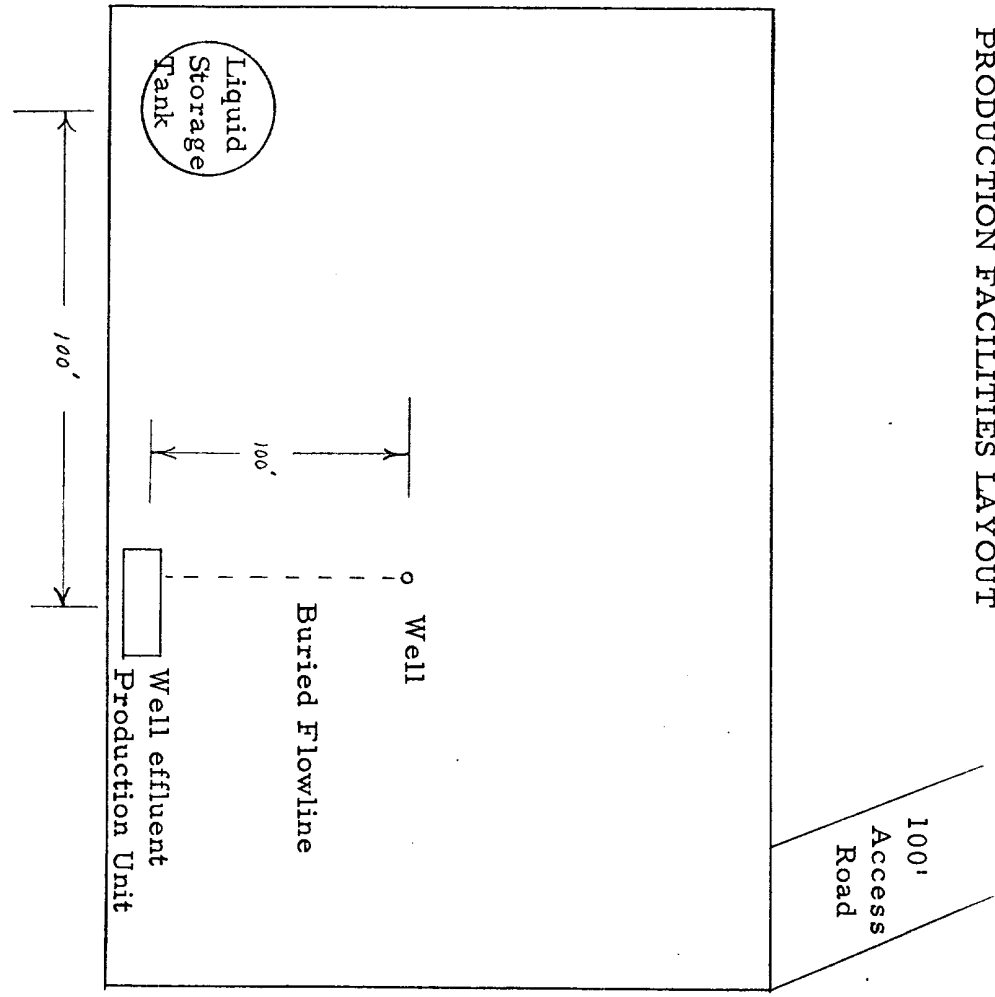


EXHIBIT "B"

PRODUCTION FACILITIES LAYOUT

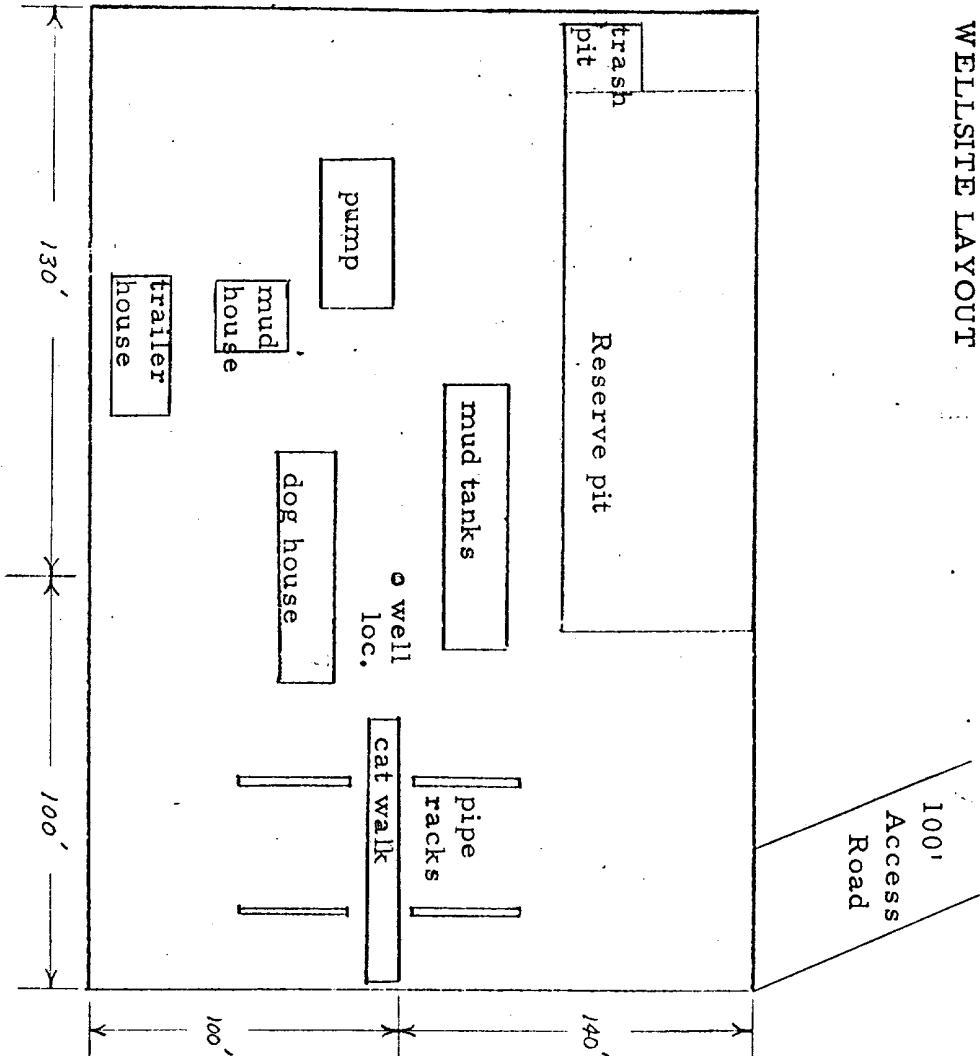


SLP 281976
OIL CON. COM.
DIST. 3

MESA PETROLEUM CO.
Suter Com #5
1190' FSL & 790' FWL
Sec. 15, T32N, R11W
San Juan County, New Mexico

EXHIBIT "C"

WELLSITE LAYOUT



MESA PETROLEUM CO.
Suter Com #5
1190' FSL & 790' FWL
Sec. 15, T32N, R11W
San Juan County, New Mexico

EXHIBIT "D"

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) - $3\frac{1}{4}$ lbs.

FOURWING SALTBUSH (dewinged) (Atriplex canescens) - $\frac{1}{2}$ lb.

SAND DROPSEED (Sporobolus cryptandrus) - $\frac{3}{4}$ lb.

WINTERFAT (Eurotia lanata) - $\frac{1}{2}$ lb.

ALKALI SACATON (Sporobolus airoides) - $\frac{3}{4}$ lb.

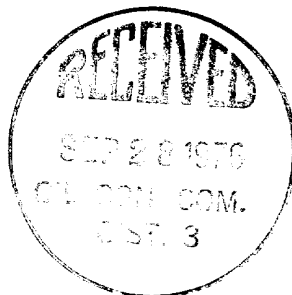


EXHIBIT "E"

Archaeological Clearance Survey Report
for
Mesa Petroleum Co.

RECEIVED
SEP 01 1976
AMA. PROJ.

August 26, 1976

Location
Suter Com. #5



Submitted by
Dr. J. Loring Haskell
Operations Director and
Principal Investigator
Agency of Conservation Archaeology

Prepared by
Nancy S. Hewett

J. L. H.

Introduction

The Agency of Conservation Archaeology of the San Juan County Museum Association and Eastern New Mexico University recently completed an archaeological clearance survey on lands near Cedar Hill, New Mexico, to be impacted by the proposed construction of one well and access road by Mesa Petroleum Company, Aztec, New Mexico.

The survey project was initiated at the request of Mr. James Archer of Mesa Petroleum Company on August 23, 1976. It was administered by Mr. Archer and Dr. J. Loring Haskell of the Agency of Conservation Archaeology, Portales.

The field work was conducted by Mrs. Nancy Hewett of the Agency of Conservation Archaeology, Farmington, on August 23, 1976 under provisions of a Federal Antiquities permit No. 76-NM-023 which expires on March 7, 1977. Representing Mesa Petroleum Company in the field was Mr. James Archer. The United States Geological Survey was represented by Mr. Ray Swanson, and the Bureau of Land Management was represented by Mr. Bob Moore. Mr. Joe McKinney represented Achison Construction Company.

Survey

The requested archaeological clearance survey involved one well and one access road described below and located on lands under the jurisdiction of the Bureau of Land Management. For specific details of location, please see the attached map and the recommendations section of this report.

The general survey procedure employed was to walk the area of the proposed construction in a zig zag manner. Visual inspection was made of the ground surface for evidence of any artifactual remains of historic or prehistoric origin. Any artifacts encountered would initiate a further search of the area to determine association with other artifacts or dwellings. Floral, faunal and geological observations were made to briefly describe the environmental situation.

Suter Com. #5

Environment: The terrain of the well pad and access road is the north slope of an east-west mesa finger and is rolling. Drainage is to the north into an unnamed canyon which eventually drains into Cox Canyon to the east. The primary vegetation is juniper (Juniperus sp.), pinon (Pinus edulis), Gambel oak (Quercus gambelii), mountain mahogany (Cercoparpus montanus), Utah serviceberry (Amelanchier utahensis), bitterbrush (Purshia tridentata), and various herbs and grasses.

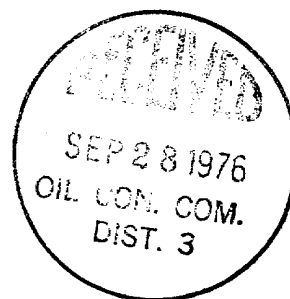
Cultural Resources: No artifacts were noted.



August 26, 1976

<u>Well</u>	<u>Areas Surveyed</u>	<u>Location</u>	<u>Clearance Status</u>
#5	(pad) 300' x 200' (road) approx. 100' x 20'	1190' F/SL 790' F/WL Sec. 15 T32N R11W San Juan County, New Mexico. Map Source: 15' USGS Aztec Quadrangle	Recommended

Due to the absence of cultural resources, both well pad and access road are recommended for immediate archaeological clearance.



UNITED STATES
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GEOLOGICAL SURVEY

EXHIBIT "E"

