

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-045-24781

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
MESA PETROLEUM CO.

3. ADDRESS OF OPERATOR
1660 Lincoln, 2800 Lincoln Center, Denver, Colorado 80264

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface

910'/N & 660'/W

At proposed prod. zone

SAME

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

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

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

6895 GL

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8	24	250	250 sks
7 7/8	4 1/2	10.5	5750	950 sks

24. (SEE ATTACHMENTS)

GAS UNDER THIS LEASE IS NOT DEDICATED TO A CONTRACT

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO THE FOLLOWING CONDITIONS

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 John Alexander TITLE AGENT DATE December 5, 1980

(This space for Federal or State office use)

PERMIT NO. APPROVED APPROVAL DATE 1/15/1981

APPROVED BY John Alexander TITLE AGENT DATE 1/15/1981

CONDITIONS OF APPROVAL 1. Blowout preventer
2. District Engineer

at 3m

5. LEASE DESIGNATION AND SERIAL NO.

WM 12233

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

SOUTH BLANCO FEDERAL 25

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

LYEFOOK GALLUP EXT

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

25-24N-8W

12. COUNTY OR PARISH 13. STATE

SAN JUAN

NEW MEXICO

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

ROTARY

22. APPROX. DATE WORK WILL START*

December 20, 1980



P. O. BOX 2088

Form C-107
Revised 10-1-78

STATE OF NEW MEXICO
GEOLOGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

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

Operator MESA PETROLEUM COMPANY		Lease SOUTH BLANCO-FEDERAL 25		Well No. 4
Unit Letter D	Section 25	Township 24N	Range 8W	County San Juan
Actual Footage Location of Well:				
910 feet from the North		line and 660	feet from the West	line
Ground Level Elev: 4895	Producing Formation GALLUP	Pool LYBROOK GALLUP	Dedicated Acreage: 40 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.

910'

660'

Sec.

25

R
J
OIL

Scale: 1"=1000'

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name JOHN ALEXANDER

Position

AGENT

Company

MESA PETROLEUM CO.

Date _____

December 5, 1980

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 _____

November 3, 1980

Registered Professional Engineer
and Land Surveyor

Fred B. Kerr-Jr

Certificate No. *13*

3950

FORMATION INFORMATION AND DRILLING PRACTICES

MESA PETROLEUM

SOUTH BLANCO FEDERAL 25 No. 4
9 10' /N & 660' /W
25-T24N-R8W
San Juan Co., N.M.

LEASE NO. NM 12233

1. Surface Formation - Nacimientto
2. Estimated Formation Tops

Pictured Cliffs	2025
Point Lookout	4310
Gallup	5350
3. Estimated Depth of Anticipated Water, Oil, Gas or Minerals

5350' oil
4. Proposed Casing Program

0-250'	8 5/8" 54# K-55 new casing; cement to be 250 sks class "B" & 2% CaCl ₂
0-5750	4 1/2" 10.5# K-55 new casing; 1st stage 200 sks Halliburton light followed by 150 sks class "B" w/ 2% gel; 2nd stage 600 sks Halliburton light w/ 6 1/4# Gilsonite/sk. Stage tool to be below Chacra.
5. Pressure Control Equipment - Blowout Preventer

The attached schematic shows the type of blowout preventer to be used while drilling. The unit will be tested to 1000 psi prior to drilling from under surface pipe by pressuring through casing valves with blind ram closed. This procedure will be repeated with the pipe rams closed on a joint of drillpipe. Operation of the hydraulic system will be checked daily.
6. Drilling Fluids

Depth	Type	Vis	Weight	Fluid Loss
0-250	gel-lime	35-45	8.6-9.0	N/L
250-5750	low-solids	30-40	8.6-11.5	10
7. Auxiliary Equipment
 - a. bit float
 - b. stabbing valve to be used in drill pipe when kelly is not connected.
8. Logging - Coring - Testing Program

Logging - Open hole ; IES, FDC, GR, Caliper
Testing - None planned
Coring - None planned
9. Abnormal Temperatures, Pressures or Potential Hazards

There may be abnormal gas pressure in the Fruitland zone. A rotating head and careful mud control should negate this danger.
10. Starting Date

Anticipated starting date is December 20, 1980. Approximately 10 days will be needed to build roads and location, and drill the well to total depth. Completion will commence immediately, and require approximately 20 days.

(Potential)

PARTS AND DIMENSIONAL ILLUSTRATIONS

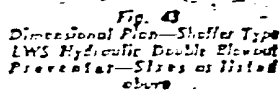
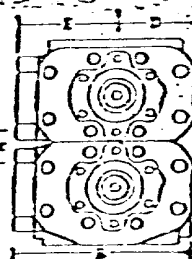


Fig. 44
Dimensional End Elevation—
Shelter Type LWS Hydraulic
Double Blowout Preventer—
Sizes as listed above



(50) 4 Hand Wheels
(48) 1 Door Wrench
(49) 1 Cylinder & Cylinder Head Wrench
(51) 4 Universal Joints

Refer to Figs. 43 and 44

[illegible]

SURFACE DEVELOPMENT PLAN

MESA PETROLEUM

SOUTH BLANCO FEDERAL 25 No. 4
910'/N & 660'/W
25-24N-8W
San Juan Co., N.M.

LEASE NO. NM 12233

1. Existing Roads (Shown in Green)

The attached topographic map shows all existing roads within one mile of the proposed location. The access road will join State Hwy.44 as indicated. The existing roads should bear normal drilling operation traffic, and will not have to be upgraded.

2. Planned Access Road (Shown in Red)

The new access road will be about 3/4 mile long and 20' wide. No turnouts will be needed. Waterbars will be used to aid drainage and prevent erosion; maximum grade will be about 10%. This road follows an existing trail.

3. Location of Existing Wells

All wells (water, disposal, drilling) are shown and so labeled on the topographic map.

4. Location of Tank Batteries, Prod. Facilities, & Prod. Gathering & Service Lines

All production facilities are to be contained within the proposed location site. Other facilities operated by Mesa are shown on the attached topographic map.

5. Location and Type of Water Supply

Water for drilling will be trucked from the Chapman's waterhole approximately 1 mile to the south. Water is privately owned.

6. Source of Construction Materials

Any construction material required for road or location will be excess material accumulated from building of such sites.

7. Methods of Handling Waste Disposal

The location of the reserve and burn pit is shown on the attached drillsite layout. All trash and burnable material will be burned in the burn pit when safety permits. All nonburnable material (drilling fluids, cuttings, chemicals) will be stored in the reserve pit and then buried when they have dried. Any oil produced while drilling will be trucked from the location prior to leaving pit to dry out. Pits will be completely fenced during drying time, then backfilled with dirt prior to preparing the location for production or abandonment.

8. A portable chemical toilet will be supplied for human waste.

9. Ancillary Facilities - No ancillary facilities are planned.

10. Well Site Layout

The attached layout shows drilling rig w/ all associated facilities. Cut and fill required is also indicated.

11. Plans for Restoration of Surface

Restoration of the wellsite and access road will begin within 90 days of well completion, weather permitting, and if required by private landowner. Should well be abandoned, the drilling site will be reshaped to its approximate former contour. The access road will be plowed up and leveled. Both drillsite and road will have any topsoil replaced and will be reseeded when germination of seeds can take place. In either case, cleanup of the site will include burning of any safely burnable material, filling of all pits, carrying away of all nonburnable material and any chemicals that cannot be safely buried, and hauling off of any oil that may have accumulated on the pits while drilling.

12. Other Information

The location lies on a gentle southwesterly sloping hill. The area is rugged and covered by native grasses and bushes. There are no occupied dwellings on the location. The surface is federally owned. No artifacts or cultural sites were noticed.

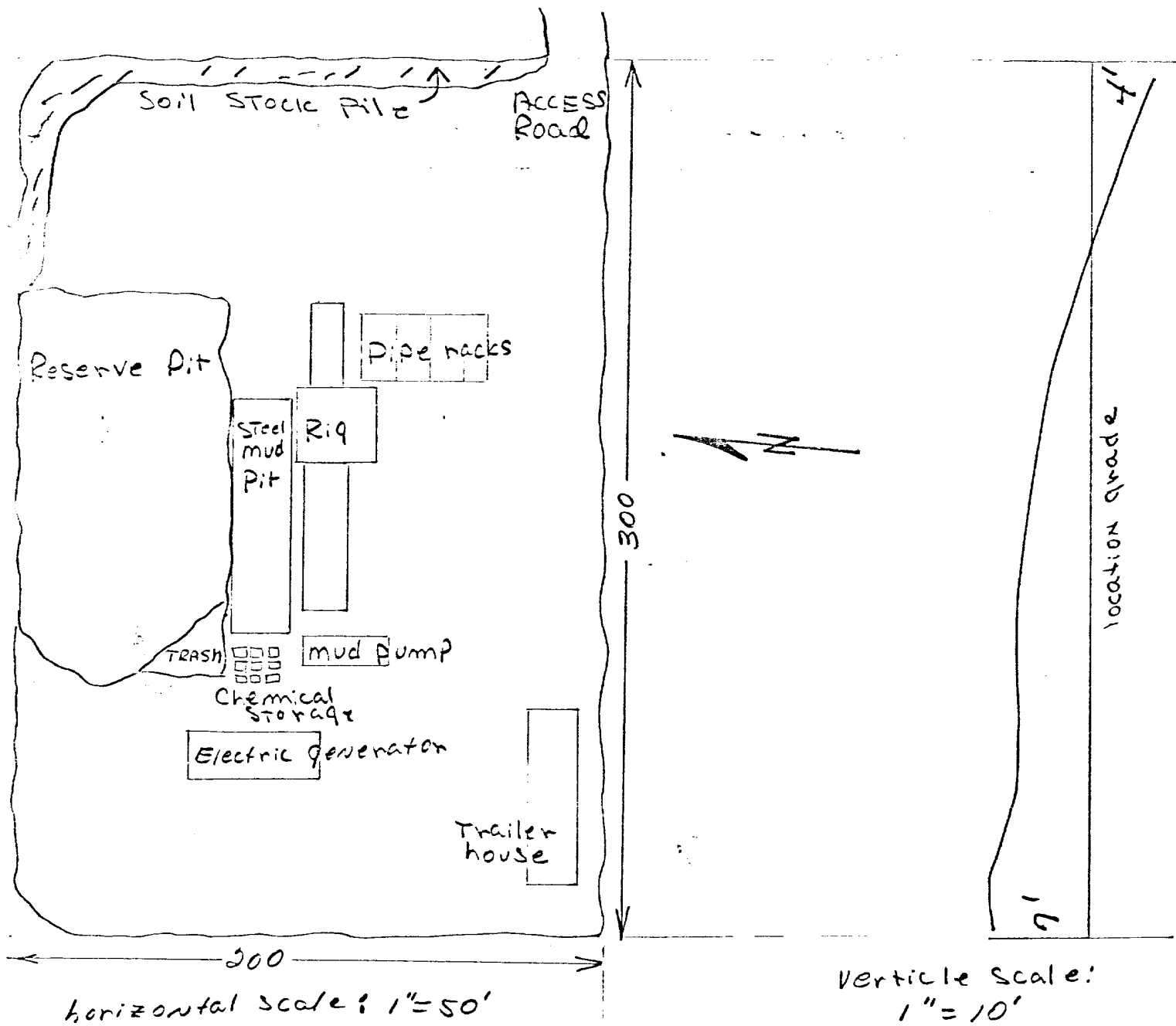
13. JOHN ALEXANDER
3E Company, Inc.
P. O. Box 190
Farmington, NM 87401
Phone: 505-327-4020

14. 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 the 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 Mesa Petroleum Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

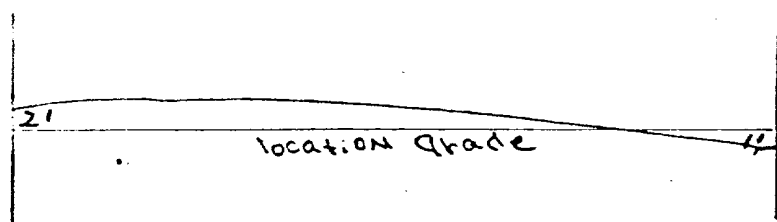
December 5, 1980

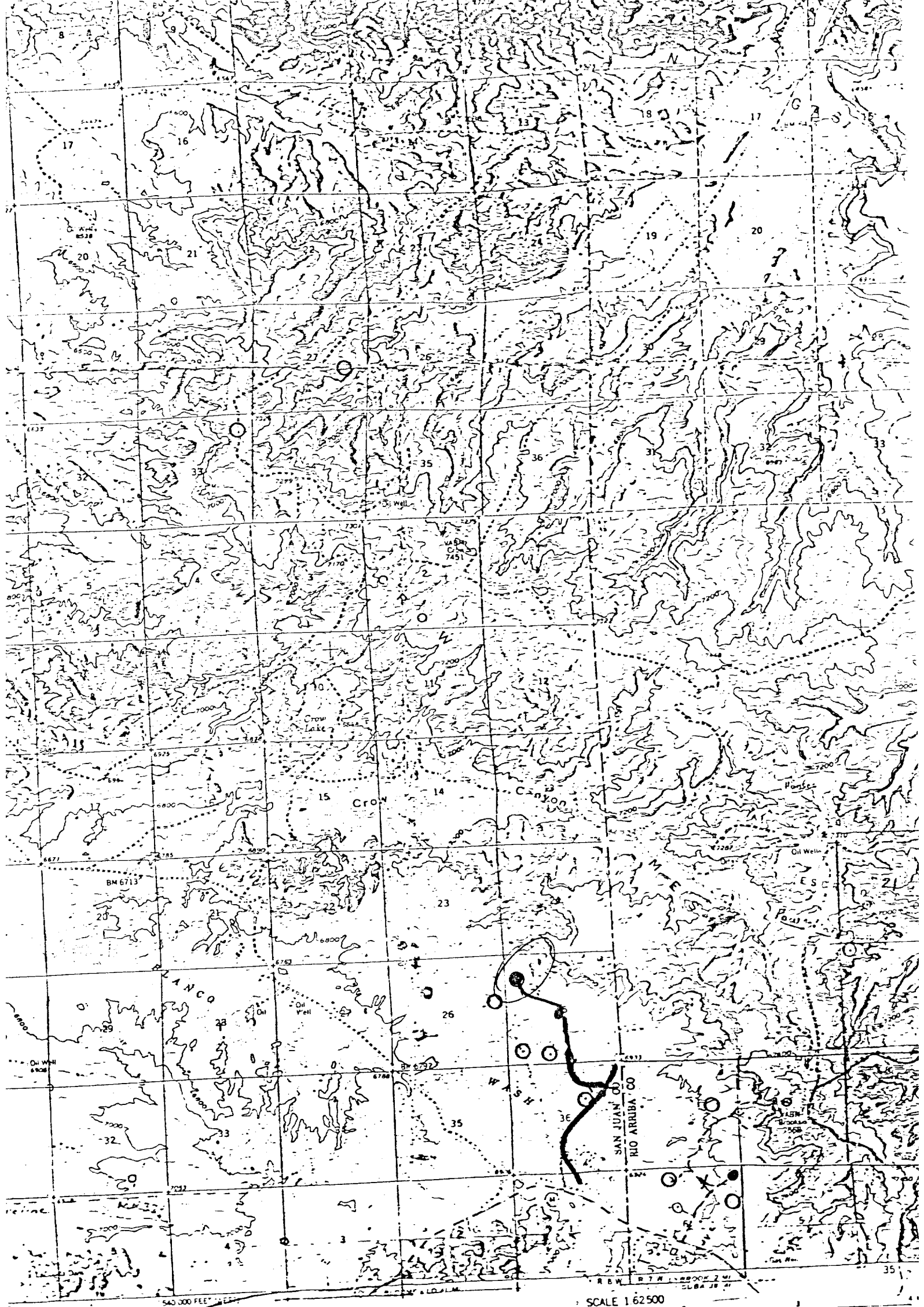

JOHN ALEXANDER

JA:cp



MESA Petroleum Co.
 South Blanco Federal 25[#]
 N/W/4 25-24N-8W
 SAN JUAN CO., N.M.





Geological Survey

from aerial
1959
on datum
coordinate system.
with grid ticks.
kations
sufficient data

TRUE NORTH

APPROXIMATE MEAN
ELEVATION 7000

Vicinity Map for
MESA PETROLEUM CO. #4 SOUTH BLANCO-FEDERAL 25
910'FNL 660'FWL Sec. 25-T24N-R8W
SAN JUAN COUNTY, NEW MEXICO

● Producing well w/ tanks
X drilling well

THIS MAP COMES WITH THE MAPS OF THE STATE OF NEW MEXICO
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D.C.
A FOLDER OF CHARTS, MAPS, AND OTHER MATERIALS IS AVAILABLE FOR

SCALE 1:62,500

19000 18000 17000 16000 15000 14000 13000 12000 11000 10000 9000 8000 7000 6000 5000 4000 3000 2000 1000 0

5 KILOMETERS