

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-22587

1. BUREAU OF LAND MANAGEMENT AND FEDERAL NO.

2. 33005

3. NAME OF LAND, FORTIER OR OTHER NAME

4. UNIT AGREEMENT NAME

5. NAME OF LEASE NAME

SOUTH BLANCO FEDERAL 31

6. WELL NO.

2

7. FIELD AND POOL OR WILDCAT

LYEFOCK GALLUP EXT

10. SECTION, TOWNSHIP OR RANGE, AND SURVEY OR AREA

31-24N-7W

11. COUNTY OR PARISH 12. STATE

RIO ARriba NEW MEXICO

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

2. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER

SINGLE ZONE ☐

MULTIPLE ZONE ☐

3. NAME OF OPERATOR

MESA PETROLEUM CO.

4. ADDRESS OF OPERATOR

1660 Lincoln, 2800 Lincoln Center, Denver, Colorado 80264

5. PROPOSED WELL (Specify whether shall be horizontal or vertical, and depth, etc.)

At surface

2270'N & 940'E

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 3000' unit line, if any.)

16. NO. OF WELLS IN LEASE

160

17. NO. OF WELLS ASSIGNED TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*

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

19. PROPOSED DEPTH

5800

20. ROTARY OR CABLE TOOLS

ROTARY

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

7012 GL

22. APPROX. DATE WORK WILL START*

December 20, 1980

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	5800'	950 sks

(SEE ATTACHMENTS)

GAS UNDER THIS LEASE IS NOT DEDICATED TO A CONTRACT



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 prevention program, if any.

24.

SIGNED

John Alexander

TITLE AGENT

DATE December 8, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

Barney Wamsley
for

TITLE

DATE

at 3m

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

P. O. BOX 2743

Form C-157
Revised 10-1-78

OIL AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

All distances must be from the center line of the Section.

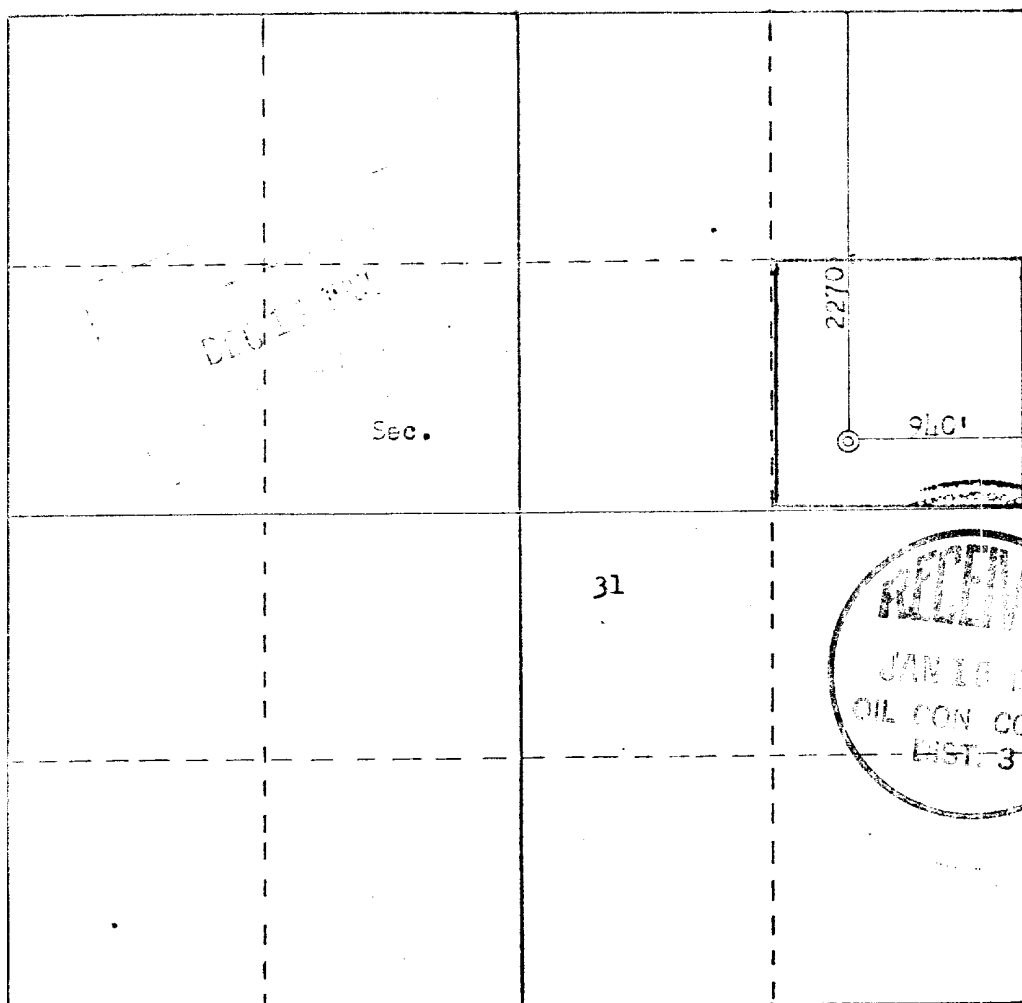
Operator MESA PETROLEUM COMPANY			Lease SOUTH BLANDO-FEDERAL 31		Well No. 2
Well Letter H	Section 31	Township 24N	Range 7W	County Rio Arriba	
Actual Footage Location of Well:					
2270 feet from the North		line and 940 feet from the East		Line	
Well Level Elev: 7012	Producing Formation GALLUP	Pool LYBROOK GALLUP		Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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.

John Alexander

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 5, 1980

Registered Professional Engineer

and Land Surveyor

Fred B. Kerr Jr.

Certificate No.

3950

Scale: 1"=1000'

FORMATION INFORMATION AND DRILLING PRACTICES

MESA PETROLEUM

WELL: SOUTH BLANCO FEDERAL 31 No. 2
LOCATION: 2270'/N & 940'/E
SECTION 31-T24N-R7W

Rio Arriba Co., N.M.

LEASE NO. NM 33005

1. Surface Formation - Nacimiento
2. Estimated Formation Tops
 Pictured Cliffs 2050
 Point Lookout 4370
 Gallup 5410
3. Estimated Depth of Anticipated Water, Oil, Gas or Minerals
 5410' oil
4. Proposed Casing Program
 0-250' 8 5/8" 54# K-55 new casing, cmt to be 250 sks class "B" & 2% CaCl₂
 250-5800 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%
 Gilsomite/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
 w/ 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
250-5800	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 well to total depth. Completion will commence
 immediately and require approximately 20 days.

[illegible]

PARTS AND DIMENSIONAL ILLUSTRATIONS

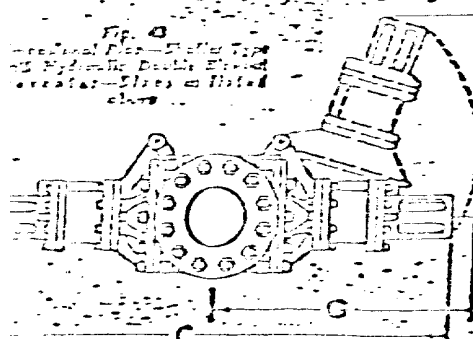
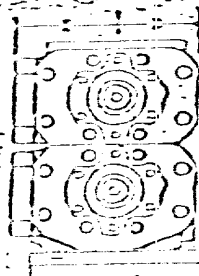


Fig. 44
Disassembled Tire Machine—
Shows Type LHS Hydraulic
Double-Acting Piston—
Tire as Held Also



(50) 4 Hand Wrenches
(45) 1 Door Wrench
(45) 1 Cylinder & Cylinder Head Wrench
(51) 4 Universal Joints

Refer to Page

[illegible]

SURFACE DEVELOPMENT PLAN

MESA PETROLEUM

SOUTH BLANCO FEDERAL 31 No.2
2270'/N & 940'/E
31-24N-7W
Rio Arriba Co., N.M.

LEASE NO. MM 33005

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 $\frac{1}{2}$ 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 non-burnable material (drilling fluids, cuttings, chemicals) will be stored in the reserve pit and 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 w/ 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 the drilling rig with 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 land owner. Should the 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 the hauling off of any oil that may have accumulated on the pits while drilling.

12. Other Information

The location lies on a flat area. The area is 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

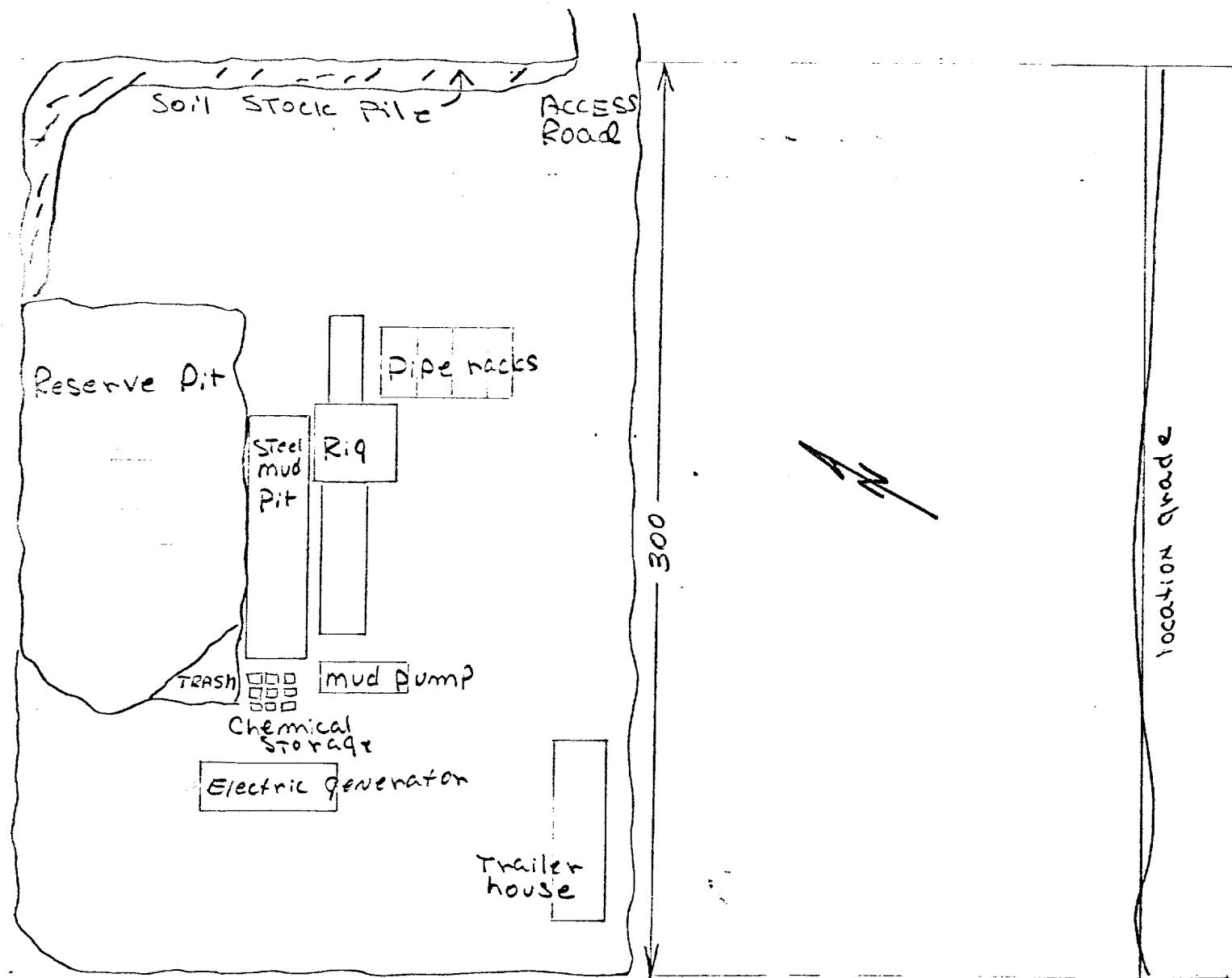
Phone: 505-327-4020

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 8, 1980


JOHN ALEXANDER

JA:cp

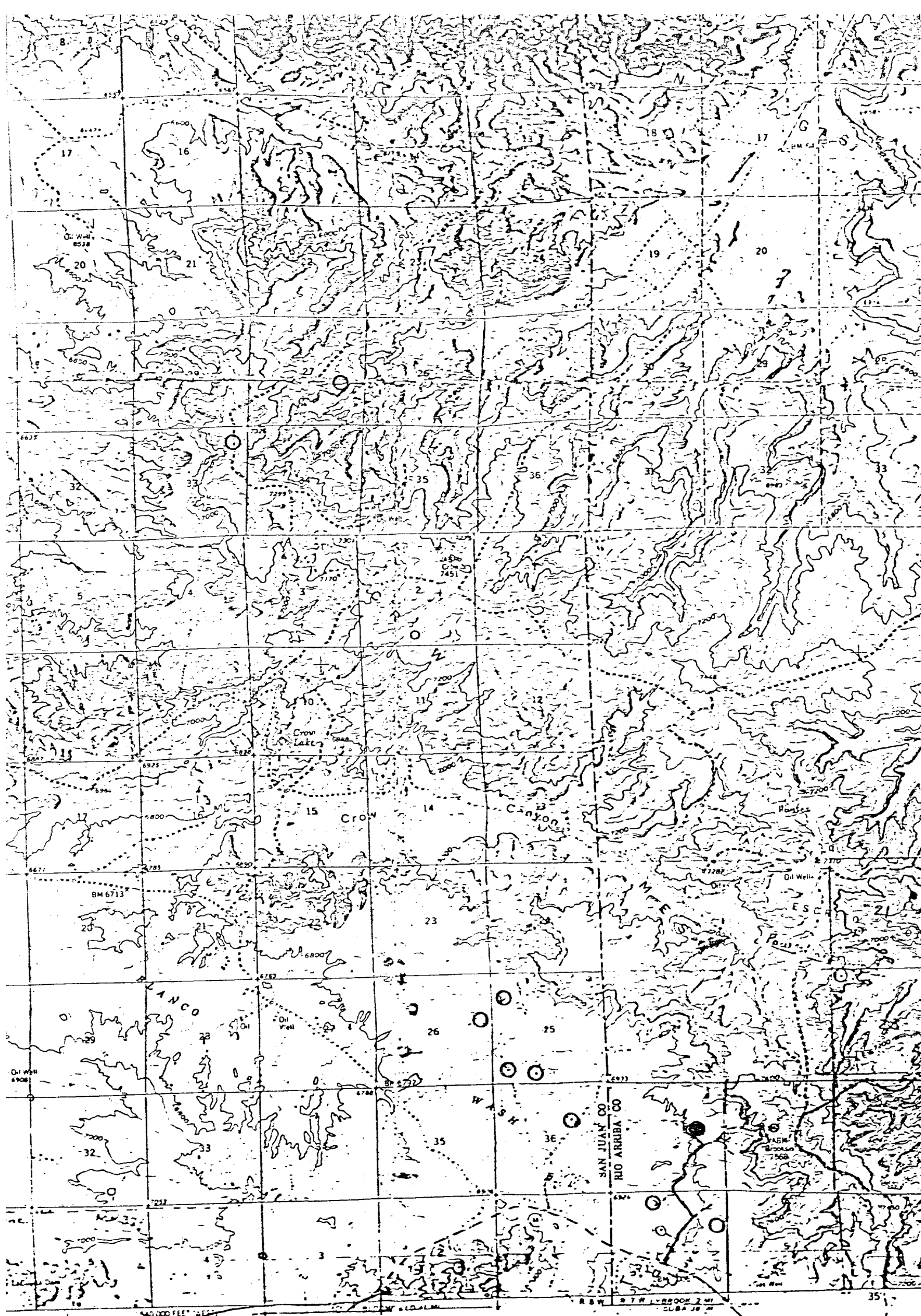


horizontal scale: 1" = 50'

Vertical scale:
1" = 10'

MESA Petroleum CO.
South Blanco Federal 31. NO. 2
NE/4 31-24N-7W
Rio Arriba Co., N.M.

location grade



logical Survey
Aerial
datum
ate system.
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ent data

Vicinity Map for
MESA PETROLEUM CO. #2 SOUTH BLANCO-FEDERAL 31
2270'FNL 940'FEL Sec. 31-T24N-R7W
RIO ARRIBA COUNTY, NEW MEXICO

APPROXIMATE MEAN
DECLINATION 1959

THE MAP IS AVAILABLE FOR SALE BY THE U.S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D.C.
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D.C.

