

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

3. ADDRESS OF OPERATOR

Box 2009, Amarillo, Texas 79105

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

At surface

330' N, 330' E

A 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)

16. NO. OF ACRES IN LEASE

241.26

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

19. PROPOSED DEPTH

5700'

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

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	9 5/8	36	250	200 sk
7 7/8	5 1/2	15.5	5700	950 sk

SEE ATTACHMENTS



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

June 22, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

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

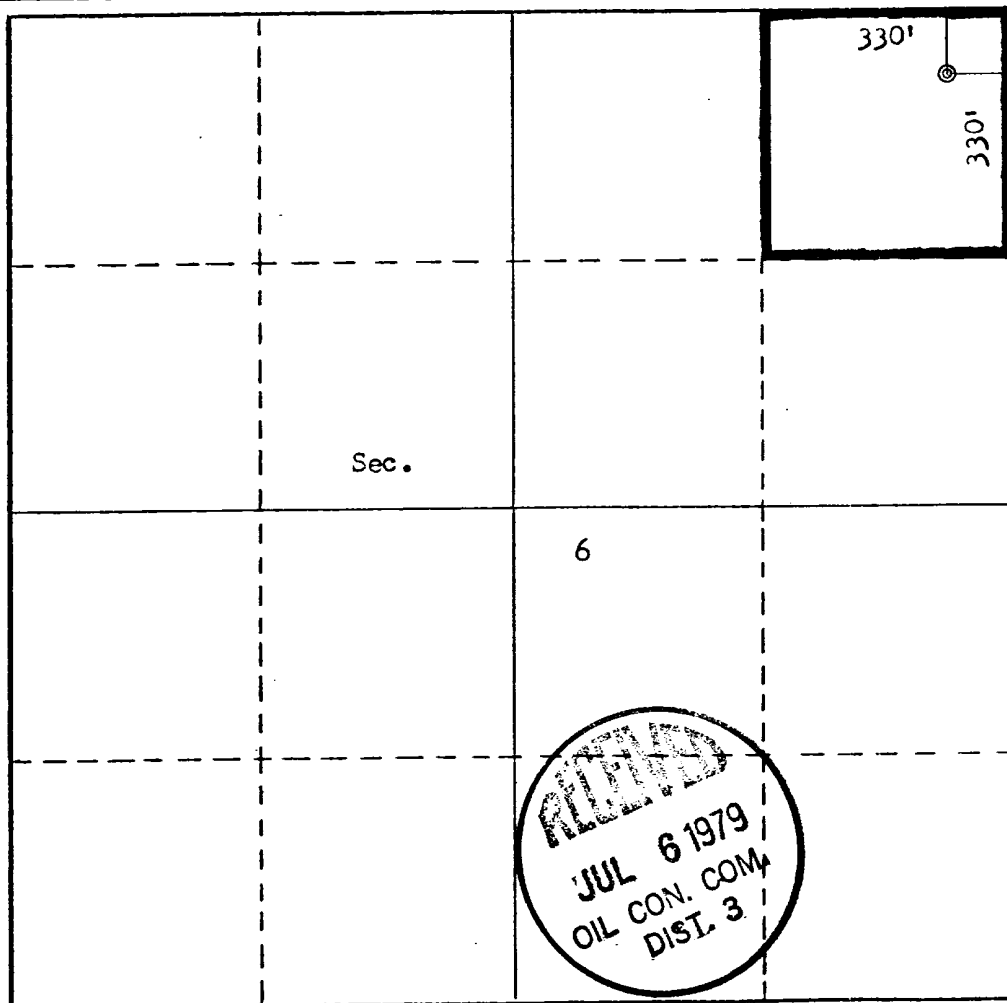
Operator MESA PETROLEUM COMPANY			Lease SOUTH BLANCO 6		Well No. 1
Unit Letter A	Section 6	Township 23N	Range 7W	County Rio Arriba	
Actual Footage Location of Well: 330 feet from the North line and 330 feet from the East line					
Ground Level Elev. 7013	Producing Formation Gallup		Pool Lybrook Gallup		Dedicated Acreage: 40.49 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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.



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

Date
June 22, 1979

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
June 18, 1979

Registered Professional Engineer and/or Land Surveyor

Fred B. Alexander, Jr.
Fred B. Alexander, Jr.

Certificate No.
3950

FORMATION INFORMATION AND DRILLING PRACTICES

MESA PETROLEUM

WELL: SOUTH BLANCO 6 No. 1
LOCATION: 330' FNL and 330' FEL
Sec. 6 -T23N-R7W
RIO ARRIBA CO., N.M.
LEASE NO. NM 23050

1) Surface Formation

Wasatch

2) Estimated Formation Tops

Kirtland	1460'	Mancos	4570'
Fruitland	1900'	Gallup	5360'
Cliffhouse	3520'		

3) Estimated Depth of Anticipated Water, Oil, Gas or Minerals

5360 oil

4) Proposed Casing Program

0-250' 9 5/8", 36#, K-55, new casing. Cement to be 200 sk. class "B" + 2% CaCl₂.

250-5700' 5 1/2", 15.5# K-55, new casing - first stage 200 sk Halliburton light followed by 150 sk. class "B" with 2% gel. Second stage 600 sk. Halliburton light with 6 1/4 lb. Gilsonite/sk.

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 800 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 drill pipe. 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 the kelly is not connected

8) Logging-Coring and Testing Program

Logging- Open hole- IES, FOC, 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 July 31, 1979. 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.



SHAFFER TOOL WORKS

SHAFFER HYDRAULIC BLOWOUT PREVENTERS

(Patented)

TYPE LWS PREVENTERS—8", 3000 Lb. & 5000 Lb.—10", 5000 Lb.
12", 3000 Lb.—13 5/8", 5000 Lb.—16", 3000 Lb.

PARTS AND DIMENSIONAL ILLUSTRATIONS

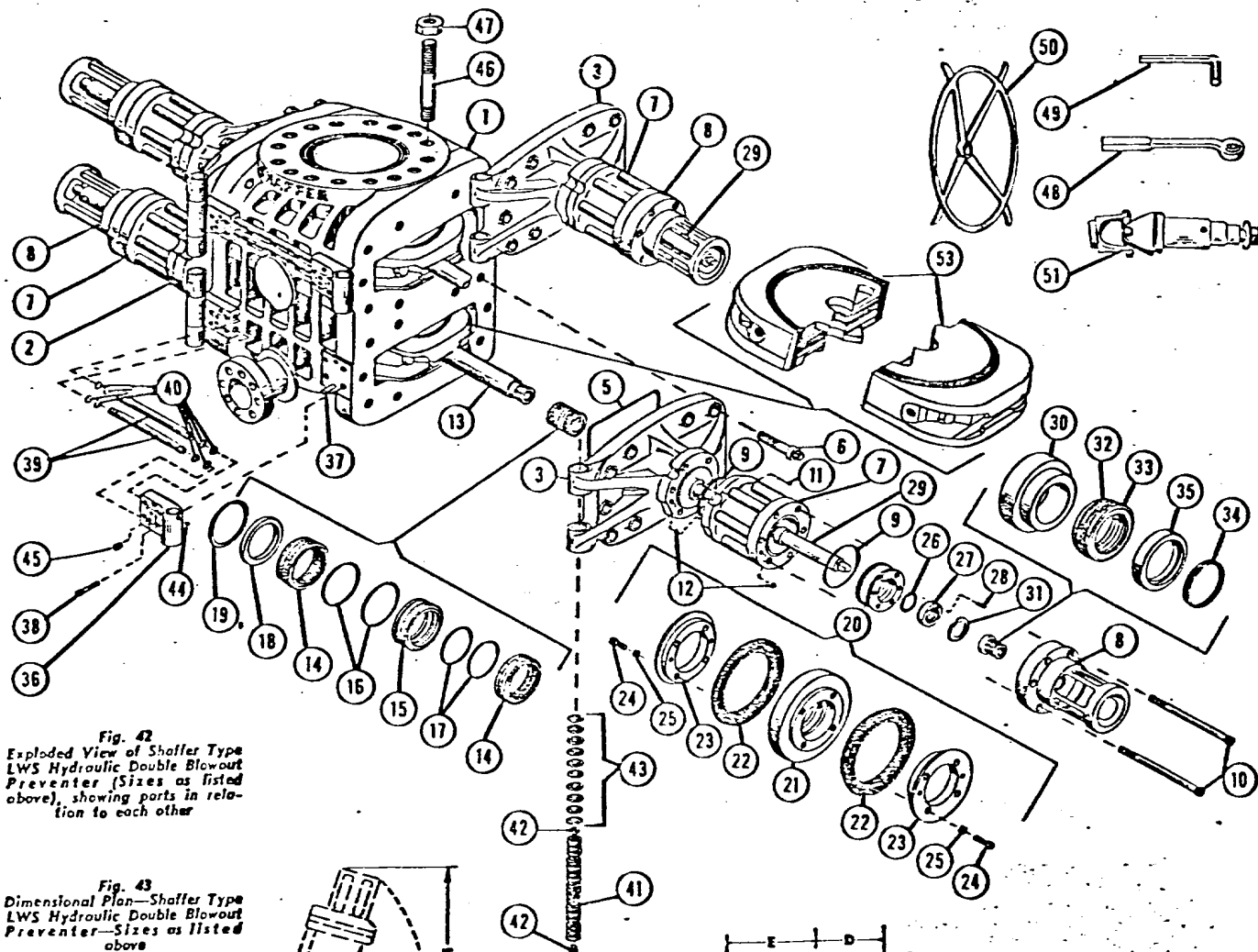


Fig. 42
Exploded View of Shaffer Type
LWS Hydraulic Double Blowout
Preventer (Sizes as listed
above), showing parts in rela-
tion to each other

Fig. 43
Dimensional Plan—Shaffer Type
LWS Hydraulic Double Blowout
Preventer—Sizes as listed
above

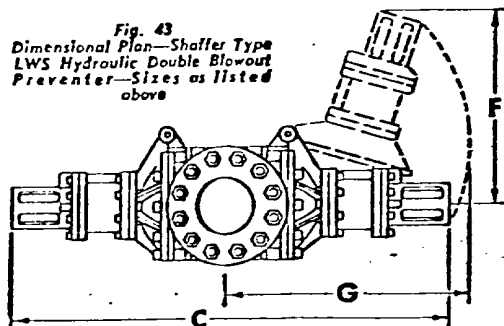
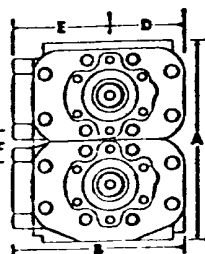


Fig. 44
Dimensional End Elevation—
Shaffer Type LWS Hydraulic
Double Blowout Preventer—
Sizes as listed above



STANDARD ACCESSORIES

- [50] 4 Hand Wheels
- [48] 1 Door Wrench
- [49] 1 Cylinder & Cylinder Head Wrench
- [51] 4 Universal Joints

DIMENSIONAL AND ENGINEERING DATA ON ABOVE SIZES OF TYPE LWS PREVENTERS

Refer to Figs. 43 and 44

Refer to Figs. 45 and 46

Size	Max. Service Press. Rating psi	Test Press. psi	Vertical Port	Max. Flange Size	Approx. Weight Lbs.		A				B	C	D	E	F	G	Closing Rate	Opening Rate	U.S. Gals. Fluid To Close Rams	U.S. Gals. Fluid To Open Rams		
					Studded Flange		Height		Single												Double	
					Single	Double	Studded Flange	Ballot Flange	Studded Flange	Ballot Flange												
8"	3,000	6,000	8"	7"	2,900	2,900	24 1/2"	24 1/2"	24 1/2"	41 1/2"	25 1/2"	28 1/2"	11 1/4"	14 1/4"	22"	48"	5.8 to 1	1.65 to 1	2.75	2.2		
10"	5,000	10,000	10"	9"	3,500	3,500	26 1/2"	26 1/2"	26 1/2"	45 1/2"	28 1/2"	30 1/2"	11 1/4"	14 1/4"	22"	48"	5.8 to 1	1.65 to 1	2.75	2.2		
12"	3,000	6,000	12 1/4"	10 1/2"	7,000	7,000	34 1/2"	34 1/2"	34 1/2"	50 1/2"	28 1/2"	30 1/2"	12 1/4"	15 1/4"	22"	48"	5.8 to 1	1.65 to 1	2.75	2.2		
13 5/8"	5,000	10,000	13 5/8"	12 1/2"	6,300	6,300	36 1/2"	36 1/2"	36 1/2"	52 1/2"	28 1/2"	30 1/2"	12 1/4"	15 1/4"	22"	48"	5.8 to 1	1.65 to 1	2.75	2.2		
16"	3,000	6,000	16"	13 1/2"	9,700	9,700	36 1/2"	36 1/2"	36 1/2"	52 1/2"	28 1/2"	30 1/2"	12 1/4"	15 1/4"	22"	48"	5.8 to 1	1.65 to 1	2.75	2.2		
16"	5,000	10,000	16"	13 1/2"	8,500	8,500	36 1/2"	36 1/2"	36 1/2"	52 1/2"	28 1/2"	30 1/2"	12 1/4"	15 1/4"	22"	48"	5.8 to 1	1.65 to 1	2.75	2.2		

SURFACE DEVELOPMENT PLAN

MESA PETROLEUM
WELL: SOUTH BLANCO 6 No. 1
LOCATION: 330' FNL and 330' FEL
SEC. 6-T23N-R7W
RIO ARRIBA CO., N.M.
LEASE NO. NM 23050

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 Highway 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. Water bars will be used to aid drainage and prevent erosion, maximum grade will be about 10%. No fences will have to be crossed. This road follows an existing trail.

3) Location of Existing Wells

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

4) Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines

All production facilities are to be contained within the proposed location site. Mesa operates no other facilities in the area.

5) Location and Type of Water Supply

Water for drilling will be trucked from the Chapmans waterhole approximately 1 1/4 miles to the west. 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 drill site 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, and then backfilled with dirt prior to preparing the location for production or abandonment.

7) A portable chemical toilet will be supplied for human waste.

8) Ancillary Facilities

No ancillary facilities are planned.

9) Well Site Layout

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

10) Plans for Restoration of Surface

Restoration of the well site 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 drill site and road will have any top soil 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.

11) Other Information

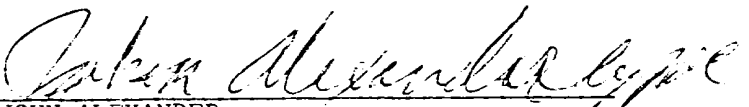
The location lies on a gentle southwesterly sloping hill. The area is rugged and covered by native grasses and bushes. There are no occupied dwellings on the location.

The surface is privately owned. No artifacts or cultural sites were noticed.

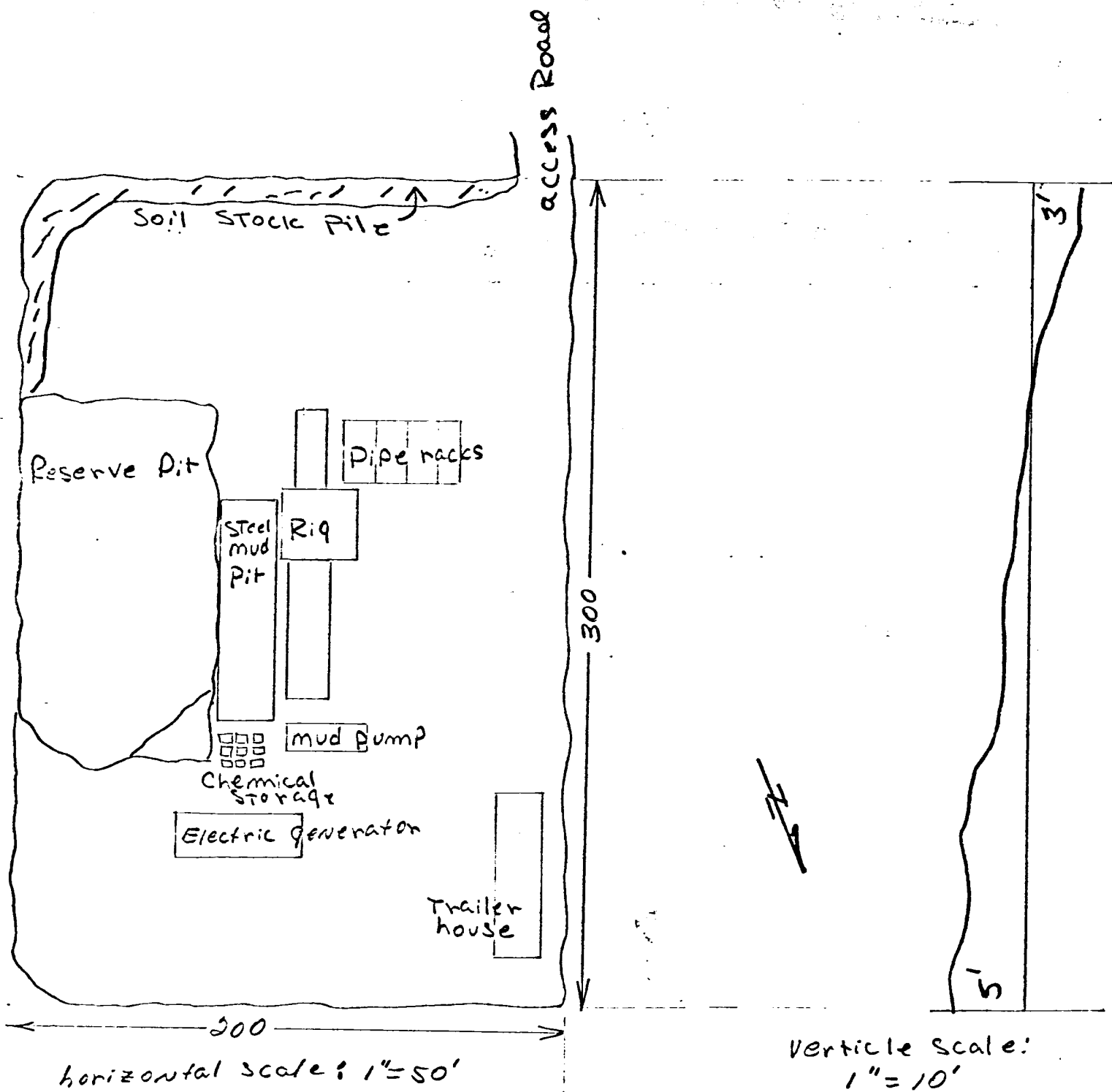
12) JOHN ALEXANDER - 3E Company, Inc.
P.O. Box 190
Farmington, NM 87401
Phone: 505-327-4020

13) I hereby certify that I or persons under my direct supervision have inspected the proposed drill site 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.

June 22, 1979


JOHN ALEXANDER

JA/clp



MESA Petroleum
South Blanco G No. 1

