

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30 645-24059

5. LEASE DESIGNATION AND SERIAL NO.
NM 020504, SF 078813

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
FEDERAL

9. WELL NO.
6E

10. FIELD AND POOL, OR WILDCAT
BASIN DAKOTA

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
6-29N-11W

12. COUNTY OR PARISH
SAN JUAN

13. STATE
NEW MEXICO

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
1600 Lincoln, 2800 Lincoln Center, Denver, Colorado 80264

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface 1750' N & 805' 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)

16. NO. OF ACRES IN LEASE
768.18

17. NO. OF ACRES ASSIGNED TO THIS WELL
220 N 288.10

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

19. PROPOSED DEPTH
6700

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5808 GL

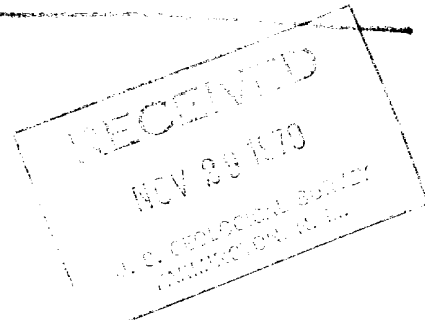
22. APPROX. DATE WORK WILL START*

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	300	200 sk
7 7/8	5 1/2	15.5	6700	625 sk

(SEE ATTACHMENTS)

Gas under this lease is dedicated to a contract.



18. 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 November 14, 1979
 (This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL, IF ANY:

11000

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

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

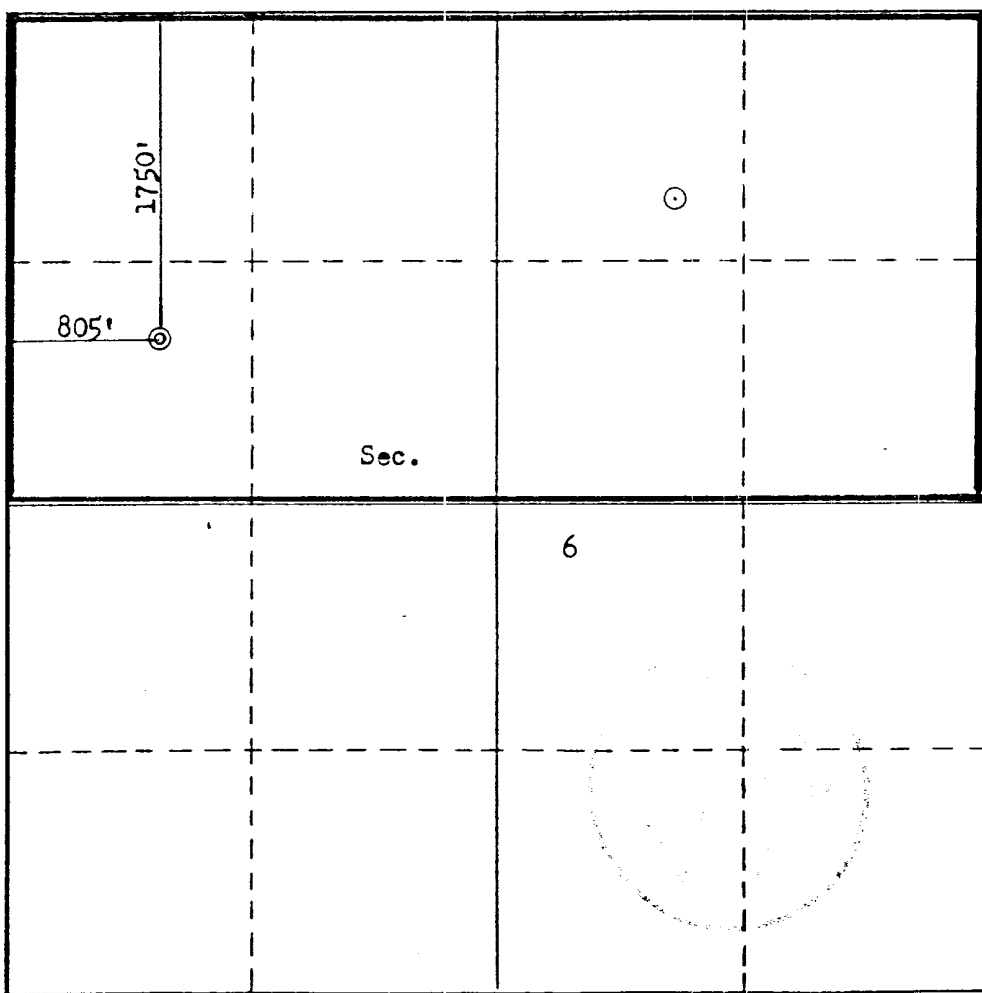
Operator MESA PETROLEUM COMPANY		Lease FEDERAL			Well No. 6-E
Unit Letter E	Section 6	Township 29N	Range 11W	County San Juan	
Actual Footage Location of Well: 1750 feet from the North line and 805 feet from the West line					
Ground Level Elev. 5808	Producing Formation Dakota		Pool Basin Dakota	Dedicated Acreage: 520 288.10 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 CO.

Date

November 14, 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

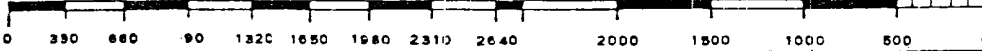
November 5, 1979

Registered Professional Engineer and/or Land Surveyor

Fred B. Kern
Fred B. Kern

Certificate No.

3950



MESA PETROLEUM COMPANY

Formation Information and Drilling Practices

WELL:

Federal 6E

LOCATION:

1750'/N & 805'/W

Sec.6-29N-11W

San Juan Co., NM

LEASE NUMBER:

NM 020504

SF 078813

1. Surface Formation

Nacimiento

2. Estimated Formation Tops

Ojo Alamo	597'	Point Lookout	4367
Pictured Cliffs	1957	Greenhorn	6297
Cliff House	3641	Dakota	6477

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

6477 Gas

4. Proposed Casing Program

0-300' 10 3/4", 40.5#, K-55 ST&C new casing. Cement w/300 sk. class "B" + 2% CaCl₂

0-6700' 5 1/2", 15.5# ST&C new casing. Cement 1st stage w/ 325 sk 50-50 Pozmix + 2% gel. Cement 2nd stage w/ 200 sk 65-35 Pozmix + 12% gel followed by 100 sk 50-50 Pozmix. Estimated cement top 500'.

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
0-300	Gel-lime	35-45	8.6-9.0	N/L
300-6700	Low-solids	30-40	8.6-11.5	10

7. Auxiliary Equipment

- bit float
- stabbing valve to be used in drill pipe when the kelly is not connected
- rotating drilling head.

8. Logging - Coring - Testing

Logging: Intermediate: IES, FDC/CNL, Caliper, GR Liner: GR-Induction, FDC, Caliper

Coring: None planned

Testing: None planned

9. Abnormal temperatures, pressures, or Potential Hazards

None expected.

10. Starting Date

Anticipated starting date is December 15, 1979. Approximately 15 days will be needed to build roads, location and drill to total depth. Completion will commence immediately and require approximately 20 days.

SHAFFER HYDRAULIC BLOWOUT PREVENTERS

(Patented)

TYPE LWS PREVENTERS—8", 3000 lb. & 5000 lb.—10", 5000 lb.
12", 3000 lb.—13 3/8", 5000 lb.—16", 3000 lb.

PARTS AND DIMENSIONAL ILLUSTRATIONS

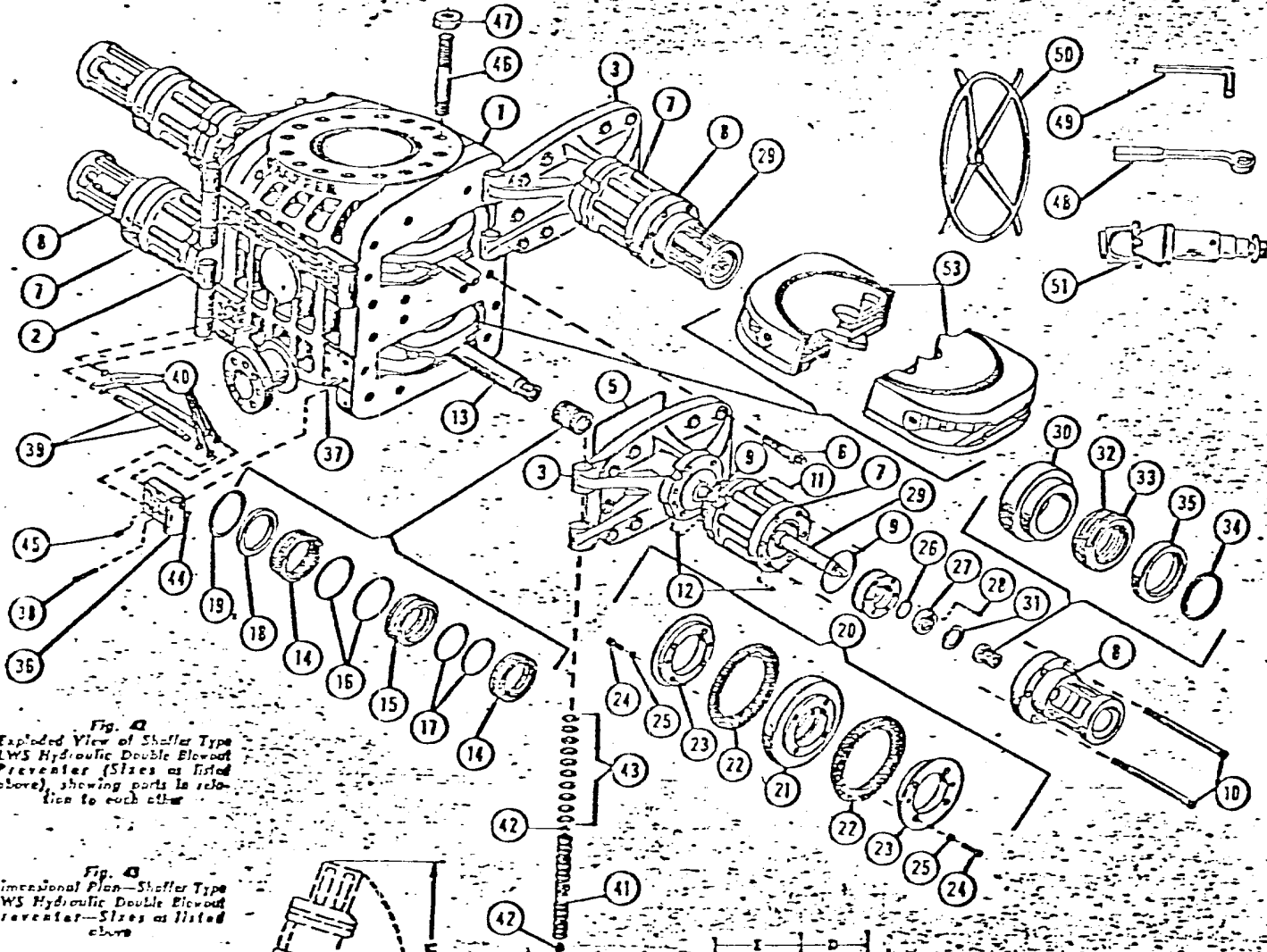


Fig. 4
Exploded View of Shaffer Type LWS Hydraulic Double Blowout Preventer (Sizes as listed above), showing parts in relation to each other.

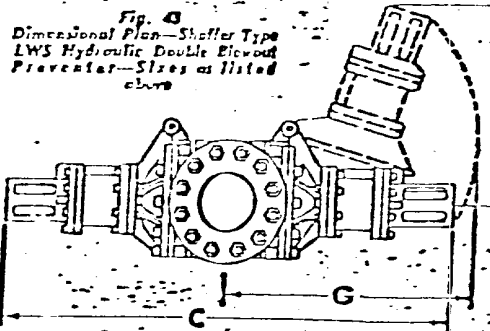
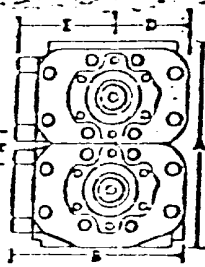


Fig. 4
Dimensional Plan—Shaffer Type LWS Hydraulic Double Blowout Preventer—Sizes as listed above.

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) 3 Cylinder & Cylinder Head Wrench
- (51) 4 Universal Joints

DIMENSIONAL AND ENGINEERING DATA ON ABOVE SIZES OF TYPE LWS PREVENTERS
Refer to Fig. 43 and 44

Type	Max. Working Pressure, psi	Test Pressure, psi	Nominal Size, in.	Actual Size, in.	Approx. Weight, lbs.	A				B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T																																																																									
						Shoulder Flange		End Flange																					Flange	Length	Center To End	Center To Flange	D. Flange	D. of Port	Weight	O. of Port	O. of Flange	U.S. Gal. Field To Close	U.S. Gal. Field To Open																																																														
						Single	Double	Single	Double																																																																																												
8"	3,000	8,000	8"	7 1/2"	2,900	10 1/2"	12 1/2"	14 1/2"	16 1/2"	18 1/2"	20 1/2"	22 1/2"	24 1/2"	26 1/2"	28 1/2"	30 1/2"	32 1/2"	34 1/2"	36 1/2"	38 1/2"	40 1/2"	42 1/2"	44 1/2"	46 1/2"	48 1/2"	50 1/2"	52 1/2"	54 1/2"	56 1/2"	58 1/2"	60 1/2"	62 1/2"	64 1/2"	66 1/2"	68 1/2"	70 1/2"	72 1/2"	74 1/2"	76 1/2"	78 1/2"	80 1/2"	82 1/2"	84 1/2"	86 1/2"	88 1/2"	90 1/2"	92 1/2"	94 1/2"	96 1/2"	98 1/2"	100 1/2"	102 1/2"	104 1/2"	106 1/2"	108 1/2"	110 1/2"	112 1/2"	114 1/2"	116 1/2"	118 1/2"	120 1/2"	122 1/2"	124 1/2"	126 1/2"	128 1/2"	130 1/2"	132 1/2"	134 1/2"	136 1/2"	138 1/2"	140 1/2"	142 1/2"	144 1/2"	146 1/2"	148 1/2"	150 1/2"	152 1/2"	154 1/2"	156 1/2"	158 1/2"	160 1/2"	162 1/2"	164 1/2"	166 1/2"	168 1/2"	170 1/2"	172 1/2"	174 1/2"	176 1/2"	178 1/2"	180 1/2"	182 1/2"	184 1/2"	186 1/2"	188 1/2"	190 1/2"	192 1/2"	194 1/2"	196 1/2"	198 1/2"	200 1/2"

MESA PETROLEUM COMPANY

Surface Use Plan

WELL:

Federal 6E

LOCATION:

1750'/N & 805'/W

Sec. 6-29N-11W

San Juan Co., NM

LEASE NUMBER:

NM 020504

SF 078813

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 an existing lease road.
2. Planned Access Road
The access road will be approximately 1200' 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 5%. No fences or cattleguards will be crossed.
3. Location of Existing Wells
All wells (water, oil, gas, disposal and 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 site. Other facilities operated by Mesa are shown on the attached topographic map.
5. Location of Water Supply
Water for drilling will be trucked from Bloomfield, NM approximately 8 miles south of the location. Water is privately owned.
6. Source of Construction Materials
Any construction material required for road or location will be excess material accumulated from building such sites.
7. Methods of Handling Waste Disposal (refer to attached well site layout)
All burnable material will be burned in the trash pit when conditions permit. All nonburnable material (drilling fluids, cuttings, chemicals, etc.) will be held in the reserve pit and buried when dry. Any oil produced while drilling will be trucked from the location prior to leaving the pit to dry. Pits will be fenced during dryout time, then completely backfilled with dirt prior to preparing the location for production or abandonment. Material that cannot otherwise be safely disposed of will be carried to a sanitary land fill.
8. Ancillary Facilities
No ancillary facilities are planned.
9. Well Site Layout
The attached layout shows the drilling rig with all facilities. Cut and fill required is also indicated.
10. Plans for Restoration of Surface
Restoration of well site and access road will begin within 90 days of well completion, weather permitting. Should the well be abandoned, the drilling site will be reshaped to its approximate former contour. The access road will be plowed and leveled. Both site and road will have topsoil replaced and will be reseeded when germination can occur.

Should the well be commercial, that portion of the location not needed for operation will be repaired as above. The portion needed for daily production operations, and the access road, will be maintained in good repair.

In either case, cleanup of the site will include burning any safely burnable material, filling of all pits, carrying away of all nonburnable material and chemicals that cannot be buried. Any oil that has accumulated on the pits will be trucked away.

11. Other Information

This well is located about 8 miles north of Bloomfield, NM. The area is rugged and covered with sagebrush, yucca, Pinon and Cedar trees. The soil is a sandy clay. Small animals and rodents inhabit the area.

Surface belongs to the Bureau of Land Management. There are no occupied dwellings in the area. No artifacts were noticed.

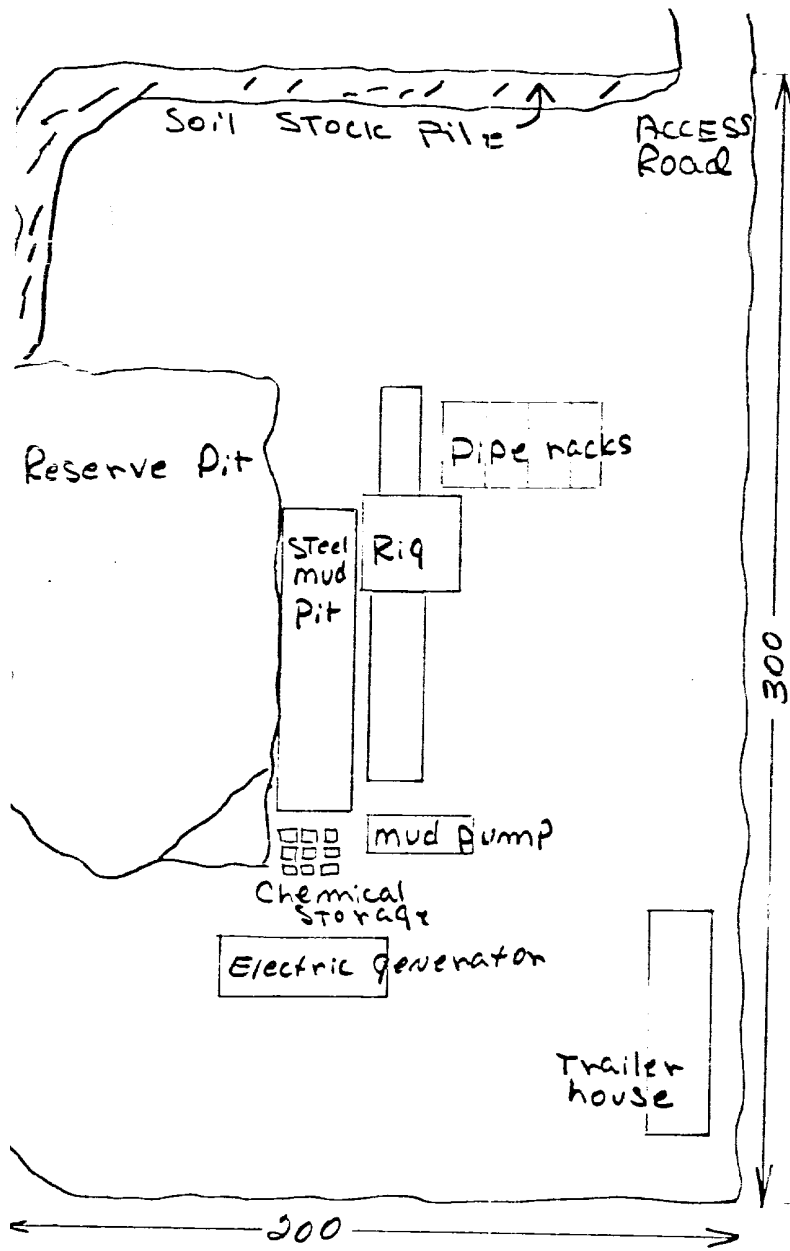
12. John Alexander
3E Company, Inc.
P.O. Box 190
Farmington, NM 87401
Phone: 505-327-4020

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.

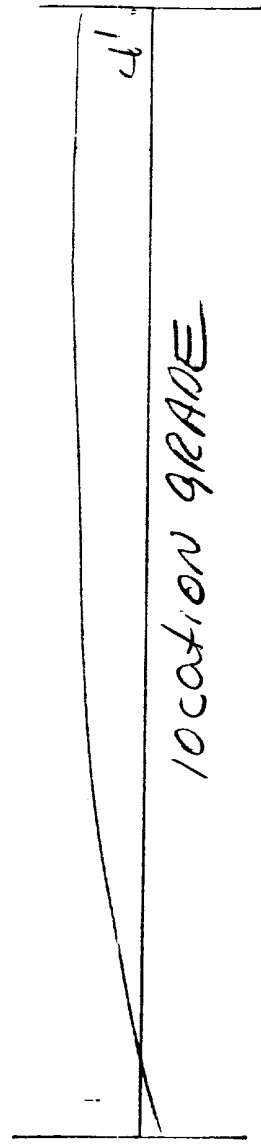
11-27-79
DATE

John Alexander
JOHN ALEXANDER

JA:cp

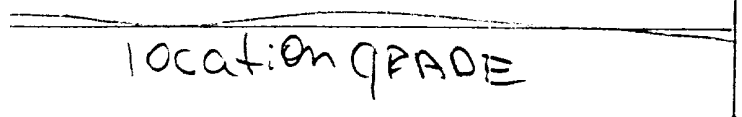


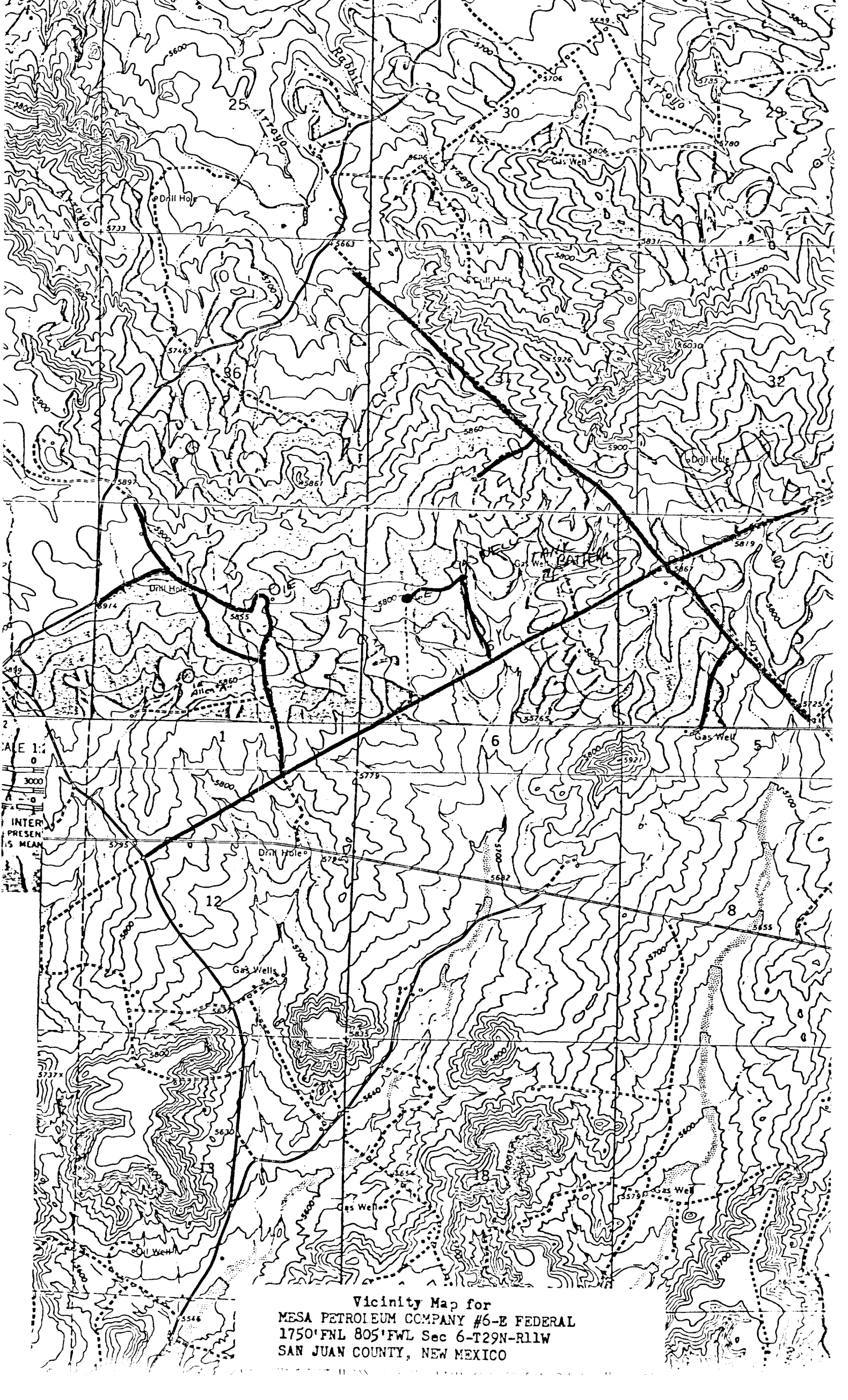
horizontal scale: 1" = 50'



verticle scale: 1" = 10'

MESA PETROLEUM CO.
FEDERAL 6E





Vicinity Map for
MESA PETROLEUM COMPANY #6-E FEDERAL
1750' FNL 805' FWL Sec 6-T29N-R11W
SAN JUAN COUNTY, NEW MEXICO