Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-045-23146

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [X]

2. NAME OF OPERATOR: Mesa Petroleum Company

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: 1830' FNL & 1795' FEL
At proposed prod. zone: SAME

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

5. LEASE DESIGNATION AND SERIAL NO.: NM 03563 NM03567 NM33048

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Gage [redacted]

9. WELL NO.: 3

10. FIELD AND POOL, OR WILDCAT: Basin Dak.-Blanco MV

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: S.20-T30N-R10W

12. COUNTY OR PARISH: San Juan | 13. STATE: NM

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

17. NO. OF ACRES ASSIGNED TO THIS WELL: Dak. ~~320~~-MV ~~320~~ N/316.18

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

19. PROPOSED DEPTH: 7600

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6385 GR

22. APPROX. DATE WORK WILL START*: August 1, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4	10 3/4	40.5	300	300 sk.
8 3/4	7	20	3000	220 sk.
6 1/4	4 1/2	10.5	2800-7600	500 sk.

(See attachments)

Gas under this lease is dedicated.

RECEIVED
JUL 07 1978
U. S. GEOLOGICAL SURVEY

RECEIVED
JUL 12 1978
OIL CON. COM.
DIST. 3

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 7-6-78

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

NSL C-104 for commingling

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
MESA PETROLEUM COMPANY	GAGE-[redacted]	3

Unit Letter	Section	Township	Range	County
G	20	30N	10W	San Juan

Actual Footage Location of Well: 1830 feet from the North line and 1795 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6385	Mesa Verde, Dakota	Basin Dak.-Blanco M.V	M.V~~320~~-Dak. ~~320~~ 319 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

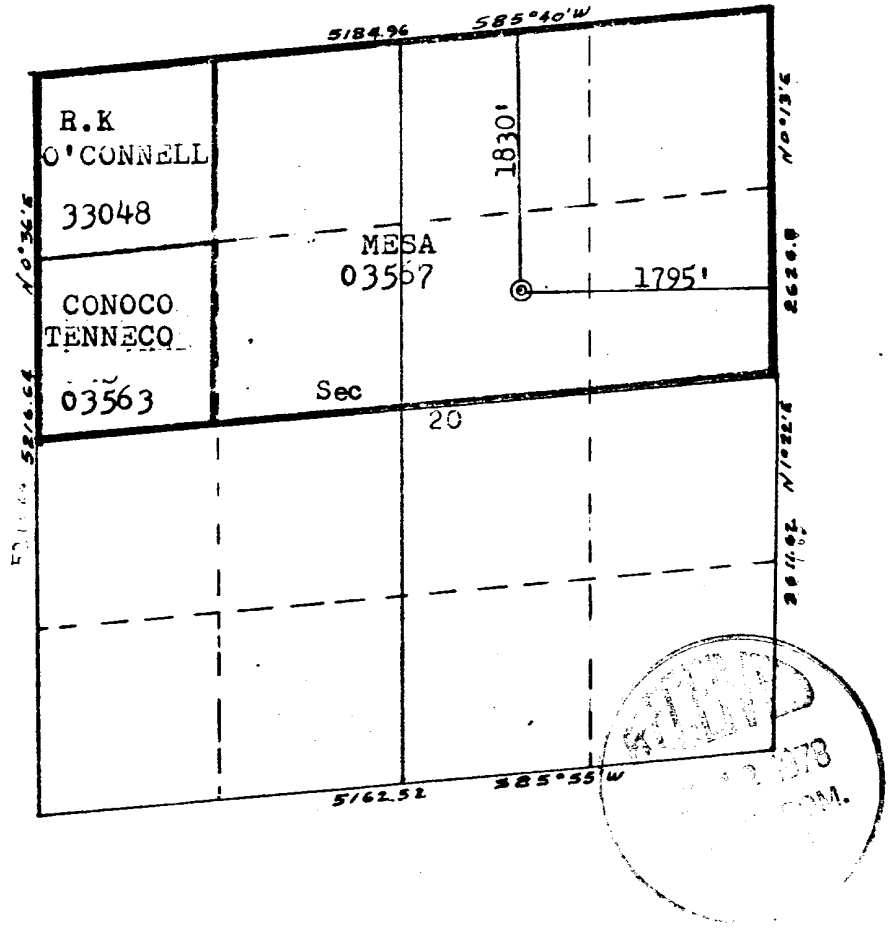
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.) none

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 16, 1978

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 8, 1978

Registered Professional Engineer and Land Surveyor

Fred B. Kerr Jr.

Certificate No. 3950

FORM 24-11

MESA PETROLEUM COMPANY

Formation Information and Drilling Practices

WELL:

Gage Federal #3

LOCATION:

1830' FNL & 1795' FEL

S.20-T.30N-R.10W

San Juan Co., NM

LEASE NUMBER:

NM03567

NM03563

NM33048

1) Surface Formation.

Wasatch

2) Estimated Formation Tops.

Pictured Cliffs	2384
Cliff House	4555
Menefee	4712
Point Lookout	5211
Mancos	5273
Gallup	6445
Greenhorn	7193
Dakota	7387

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

2384	gas
4555	gas
5211	gas
7387	gas

4) Proposed Casing Program.

0-300' 10 3/4", 40.5#, K-55, ST&C new casing. Cement with 300 sk. Class "B" + 2% $CaCl_2$.

0-3000 7", 20#, K-55, ST&C, new casing. Cement with 120 sk. 65-35 Pozmix w/12% gel and 12½ lb. Gilsonite/sk. followed by 100 sk. Class "B" + 2% $CaCl_2$ + 12½ lb. Gilsonite/sk.

2800'-7600' 4½", 10.5#, ST&C, new liner. Cement to be 500 sk. 50-50 Pozmix w/2% gel and 6¼ 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
0-300	gel-lime	35-45	8.6-9.0	N/L
300-3000	low-solids	30-40	8.6-11.5	10
3000-7600	Air			

7) Auxiliary Equipment.

a. bit float
b. stabbing valve to be used in drill pipe when the kelly is not connected
c. 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 August 1, 1978. Approximately 15 days will be needed to build roads, location and drill to total depth. Completion will commence immediately and requre approximately 20 days.

SHAFFER HYDRAULIC BLOWOUT PREVENTERS

(Patented)

TYPE LWS PREVENTERS—8", 3000 Lb. & 5000 lb.—10", 5000 Lb. 12", 3000 Lb.—13⅝", 5000 Lb.—16", 3000 Lb.

PARTS AND DIMENSIONAL ILLUSTRATIONS

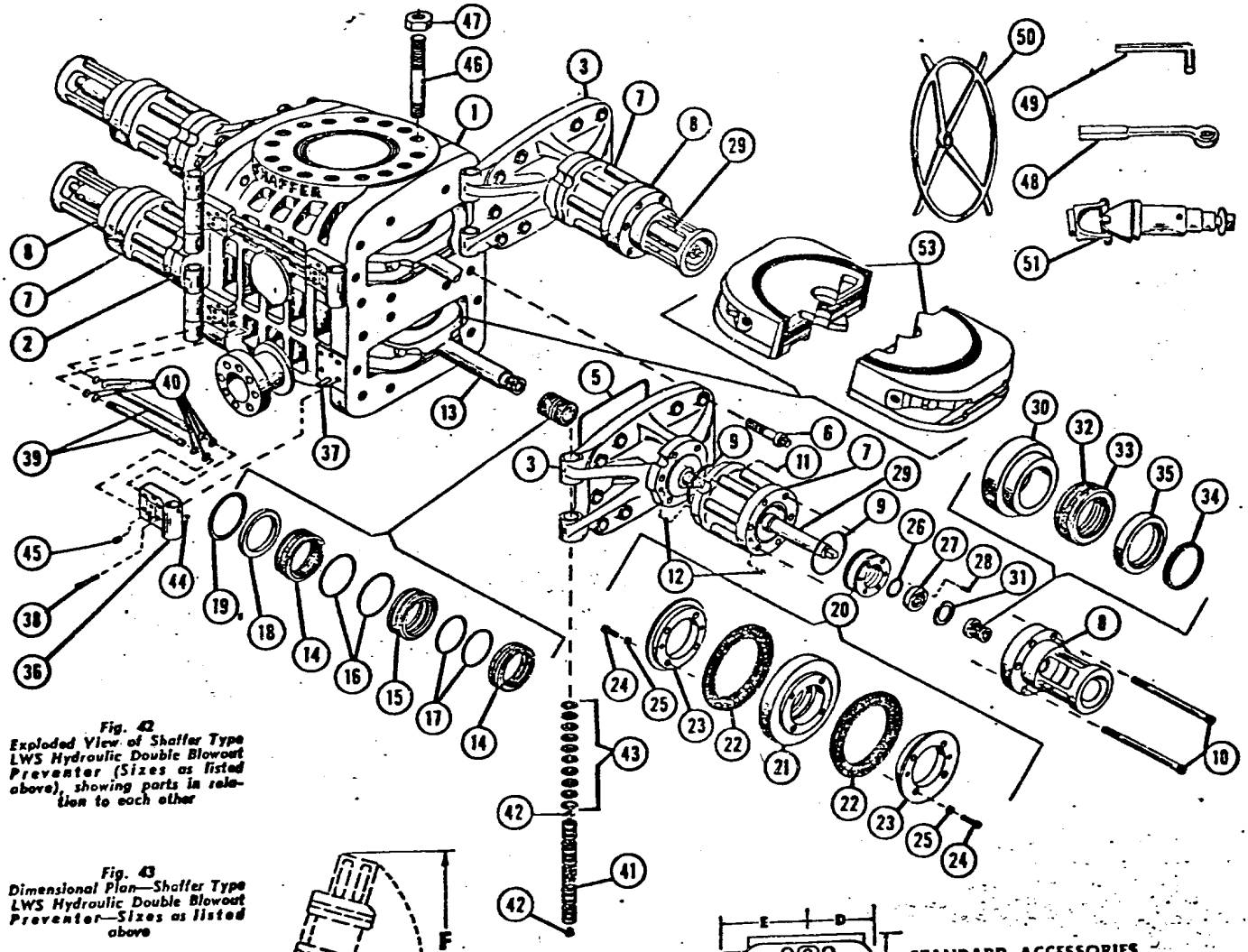


Fig. 42
Exploded View of Shaffer Type LWS Hydraulic Double Blowout Preventer (Sizes as listed above), showing parts in relation to each other

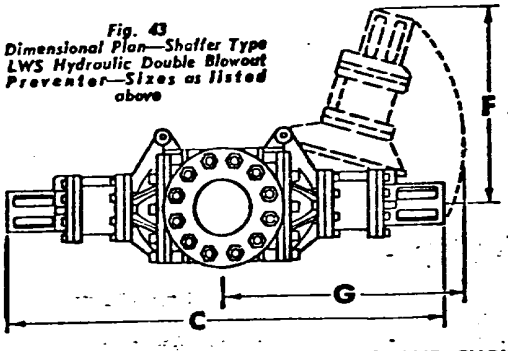


Fig. 43
Dimensional Plan—Shaffer Type LWS Hydraulic Double Blowout Preventer—Sizes as listed above

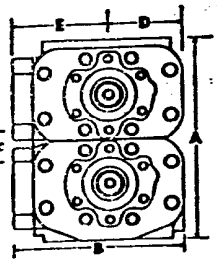


Fig. 44
Dimensional End Elevation—Shaffer Type LWS Hydraulic Double Blowout Preventer—Sizes as listed above

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

Size	Max. Service Press. Rating psi	Test Press. psi	Vertical Bore	Max. Ram Size	Approx. Weight Lbs. Studded Flange Single	Approx. Weight Lbs. Studded Flange Double	A Height Single Studded Flange	A Height Single Belted Flange	A Height Double Studded Flange	A Height Double Belted Flange	B Width	C Length	D Center To Front	E Center To Rear	F Door Open To Change Rams	G Door Open To Change Rams	Closing Ratio	Opening Ratio	U.S. Gals. Fluid To Close Rams	U.S. Gals. Fluid To Open Rams
8"	3,000	6,000	8"	7"	----	3,900	----	----	29½"	41¾"	25¾"	79½"	11¾"	14¾"	22°	46°	5.8 to 1	1.89 to 1	2.75	2.3
8"	5,000	10,000	8"	7"	----	3,900	----	----	29½"	45½"	25¾"	79½"	11¾"	14¾"	22°	46°	5.8 to 1	1.89 to 1	2.75	2.3
10"	5,000	10,000	11"	8¾"	5,600	7,000	34⅝"	34⅝"	33"	50¼"	28¾"	89¼"	12¾"	16"	22°	46°	8.5 to 1	1.89 to 1	2.25	2.7
12"	3,000	6,000	13⅝"	10¾"	----	8,200	----	----	34⅝"	47¾"	31¼"	92¾"	12¾"	18¾"	27°	53°	5.56 to 1	1.89 to 1	2.85	2.8
12"	5,000	10,000	13⅝"	10¾"	6,800	9,700	36⅝"	36⅝"	38"	49¾"	33¼"	92¾"	14¾"	16¾"	41°	54°	5.56 to 1	1.5 to 1	3.55	2.9
13⅝"	5,000	10,000	13⅝"	10¾"	----	----	----	----	----	----	33¼"	106¼"	16¾"	20¼"	22°	60°	5.56 to 1	1.89 to 1	3.9	3.3
16"	3,000	6,000	16¾"	13⅝"	----	8,500	----	----	----	----	55¼"									

MESA PETROLEUM COMPANY

Surface Use Plan

WELL:

Gage Federal #3

LOCATION:

1830' FNL & 1795' FEL

S.20-T30N-R10W

San Juan Co., NM

LEASE NUMBER:

NM03563

NM33048

NM03567

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 a county road which leads to state highway 550.

2) Planned Access Road.

The access road will be approximately 300' long and 20' wide. No turn-outs will be needed. Water bars will be used to aid drainage and prevent erosion. Maximum grade will be about 5%. No fences or cattle guards will be crossed.

3) Location of Existing Wells.

All wells (water, oil, gas, disposal, and drilling) are shown and so labeled onthe attached quarter section map.

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

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

5) Location of Water Supply.

Water for drilling will be trucked from Aztec, NM, approximately 6 miles southwest 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, the completely back filled with dirt prior to preparing the location for production or abandonment.

8) Ancillary Facilities.

No ancillary facilities are planned.

9) Well Site Lay Out.

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 top soil 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, clean up of the site will include burning any safely burnable material, filling of all pits, carrying away of all nonburnable material and chemicals that can not be buried. Any oil that has accumulated on the pits will be trucked away.

11) Other Information.

This well is located about 1½ miles southwest of Knickerbocker Peaks. The area is rugged and covered with sage brush, yucca, Pinion 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)

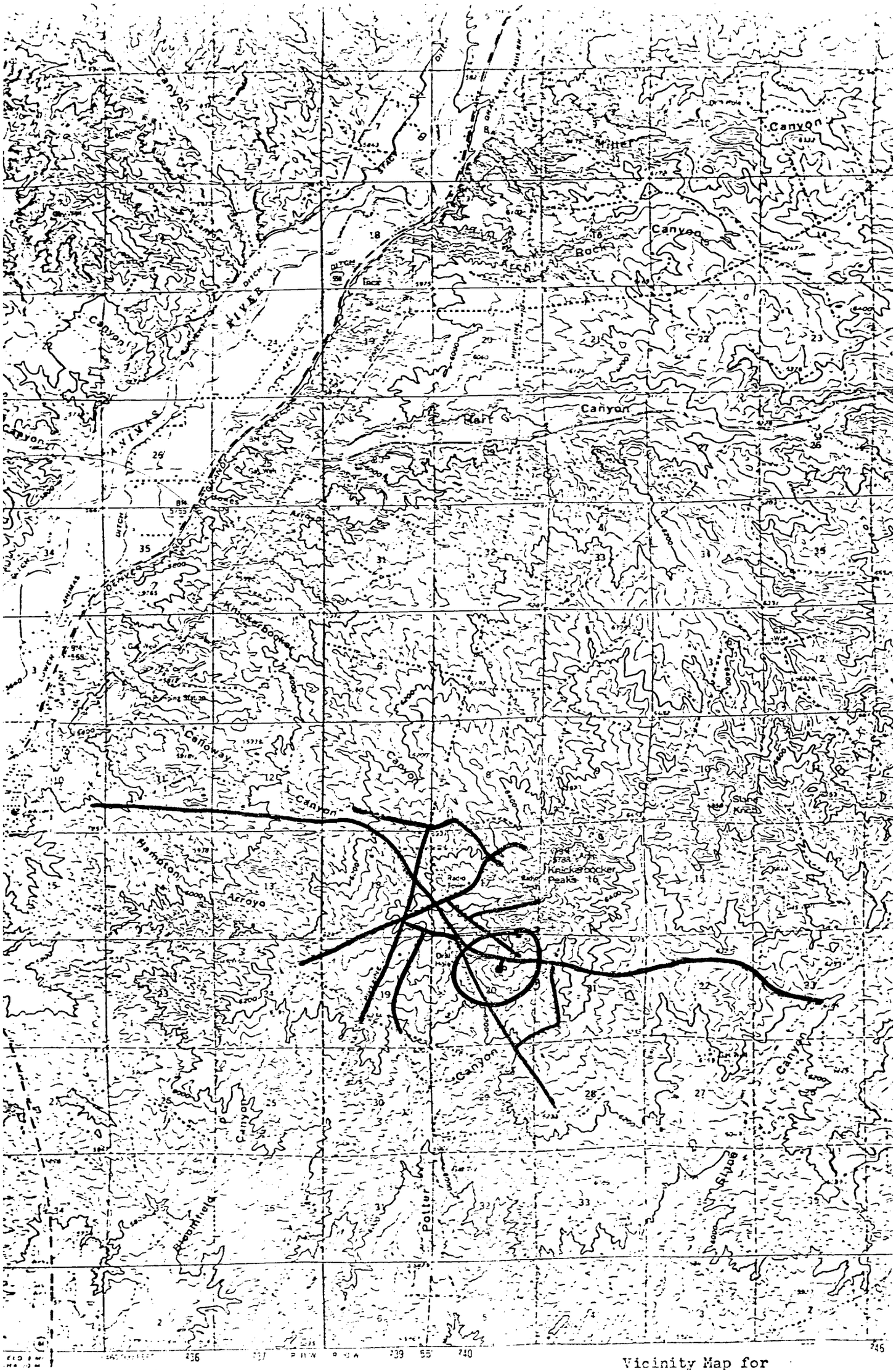
John Alexander
3E Company, Inc.
P.O. Box 190
Farmington, NM 87401
Phone: 505-327-4020

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 sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

6-20-78

John Alexander

John Alexander

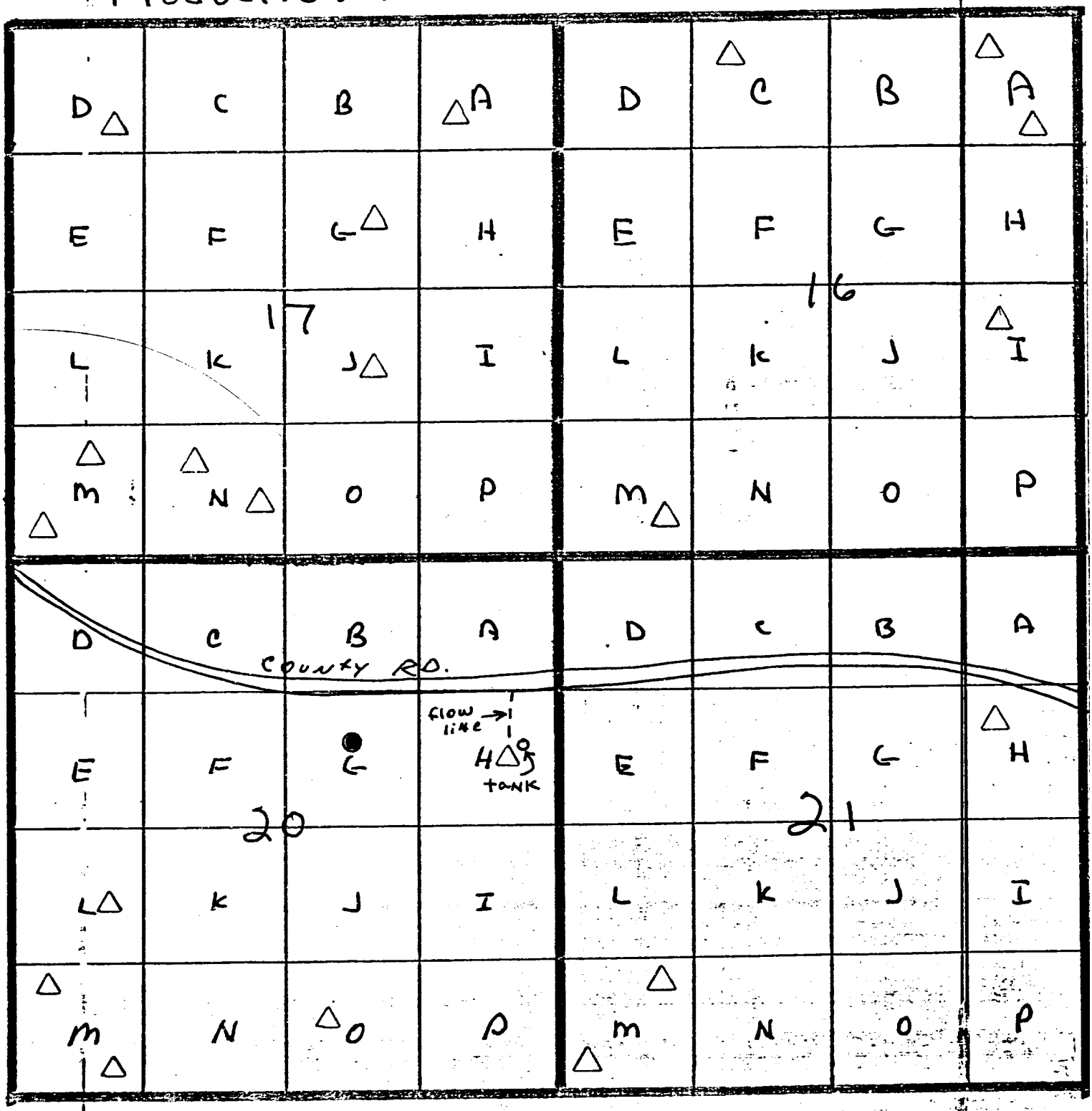


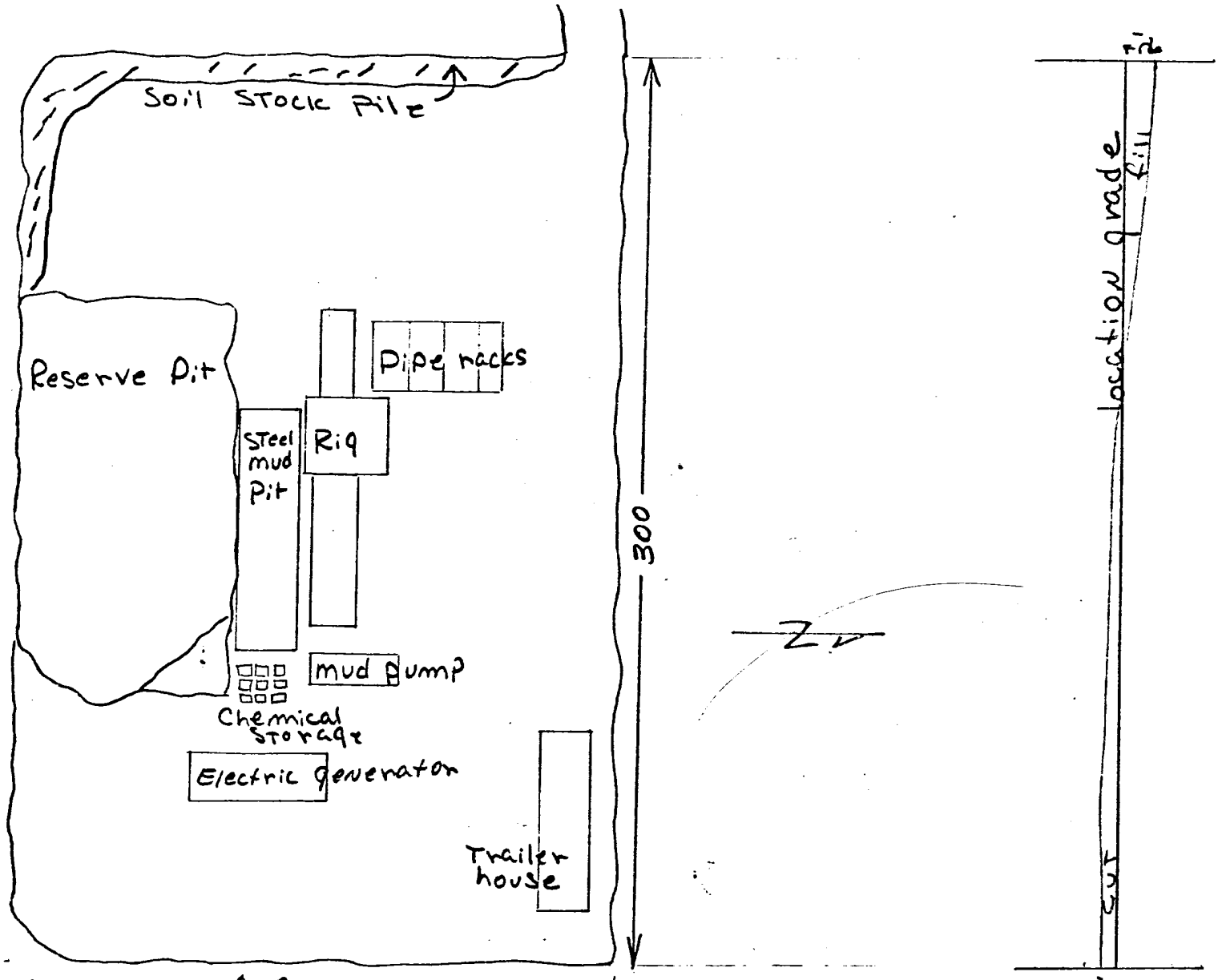
Vicinity Map for
MESA PETROLEUM CO. #3 GAGE-FEDERAL
1830'FNL 1795'FEL Sec 20-T30N-R10W
SAN JUAN COUNTY, NEW MEXICO

MESA Petroleum Co.
Gage Federal #3

OFFSET Wells &
Production Facilities

○ Subject well
△ GAS well





MESA Petroleum Co.
Gage Federal #3
S.20 - T. 30 N - R. 10 W
San Juan Co, N.M.