

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 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

790'W, 790'E

At proposed prod. zone

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

320

18. DISTANCE FROM PROPOSED LOCATION*

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

19. PROPOSED DEPTH

6500'

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

5655 GL

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15	10 3/4	40.5	300	200
8 3/4	7	20	1900	200
6 1/4	4 1/2	10.5	6500	600

SEE ATTACHMENTS

Gas under this lease is dedicated to a contract.

RECEIVED

OCT 24 1979

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

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

October 20, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NMOCCL

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1-78

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

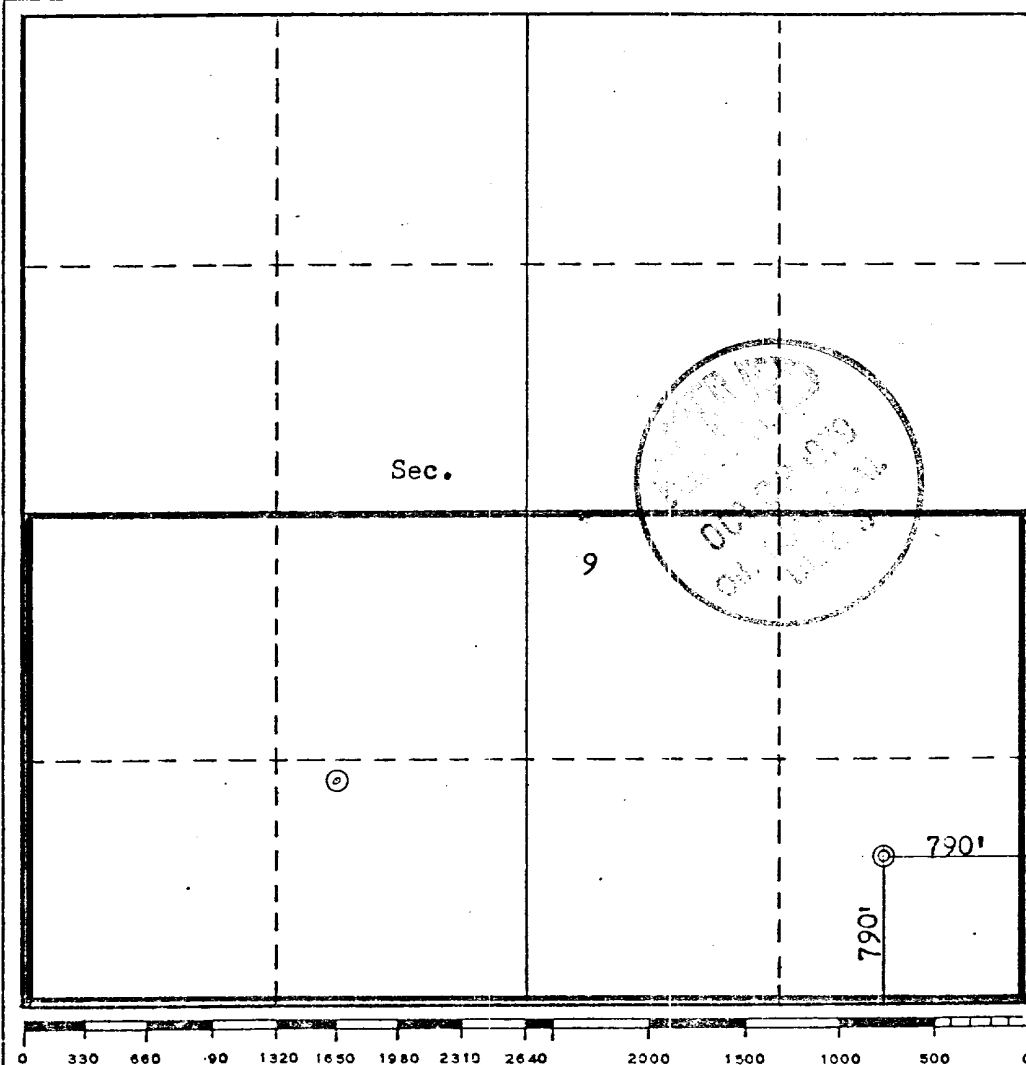
Operator MESA PETROLEUM COMPANY			Lease FEDERAL		Well No. 9-R
Unit Letter P	Section 9	Township 29N	Range 12W	County San Juan	
Actual Footage Location of Well: 790 feet from the South line and 790 feet from the East line					
Ground Level Elev. 5655	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 320 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.



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

October 20, 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

July 25, 1979

Registered Professional Engineer
and/or Land Surveyor

Fred B. Kershner
Fred B. Kershner

Certificate No.

3950

FRED B. KERSHNER

MESA PETROLEUM COMPANY

Formation Information and Drilling Practices

WELL:

Federal # 9 E

LOCATION:

790'/S and 790'/E

S.9-T29N- R12W

San Juan County, NM

LEASE NUMBER:

021119

1. Surface Formation Nacimiento

2. Estimated Formation Tops

Ojo Alamo	310'	Greenhorn	6100'
Pictured Cliffs	1700'	Dakota	6200'
Cliff House	3260		
Point Lookout	4070'		

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

1700'	Gas	4070'	Gas
3260'	Gas	6200'	Gas

4. Proposed Casing Program

0-300'	10 3/4", 40.5#, ST&C new casing. Cement with 300 sk. Class "B" + 2% CaCl ₂
0-1900'	7", 20#, K-55 ST&C new casing. Cement with 100 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.
1700'-6500'	4½", 10.5#, ST&C new liner. Cement to be 600 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
300-1900	low-solids	30-40	8.6-11.5	10
1900-6500	Air			

7. Auxiliary Equipment
 - a. Bit float
 - b. Stabbing valve to be used in drill pipe when 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, Potential Hazards

None expected.

10. Starting Date Anticipated starting date is November 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.

Size	Max. Service Press. Rating psi	Test Press. psi	Vertical Port	Max. Flow Size	Approx. Weight lbs.		A				B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	JJ	JK	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ										
					Studded Flange		Single		Double																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															Width	Length	Center To Front	Center To Rear	Door Open To Charge Rams	Door Open To Charge Rams	Covering Ratio	Operating Ratio	U.S. Gals. Filled To Close Rams	U.S. Gals. Filled To Open Rams
					Single	Double	Studded Flange	Beveled Flange	Studded Flange	Beveled Flange																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

12" x 12"	2,000	6,000	F	F	----	2,500	----	----	24 1/2"	41 1/2"	25 3/4"	75 3/4"	11 3/4"	14 3/4"	22"	44"	5.8 to 1	1.89 to 1	1.73	2.3
12" x 14"	1,000	10,000	F	F	----	2,500	----	----	24 1/2"	41 1/2"	25 3/4"	75 3/4"	11 3/4"	14 3/4"	22"	44"	5.8 to 1	1.89 to 1	1.73	2.3
12" x 16"	5,000	10,000	41"	8 1/2"	8,000	7,000	24 1/2"	24 1/2"	27"	42 1/2"	25 3/4"	75 3/4"	11 3/4"	14 3/4"	22"	44"	5.8 to 1	1.89 to 1	1.73	2.3
12" x 18"	2,000	6,000	12 1/2"	10 1/2"	8,000	8,000	24 1/2"	24 1/2"	27"	42 1/2"	25 3/4"	75 3/4"	11 3/4"	14 3/4"	22"	44"	5.8 to 1	1.89 to 1	1.73	2.3
12" x 20"	1,000	10,000	12 1/2"	10 1/2"	8,000	9,000	24 1/2"	24 1/2"	27"	42 1/2"	25 3/4"	75 3/4"	11 3/4"	14 3/4"	22"	44"	5.8 to 1	1.89 to 1	1.73	2.3
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MESA PETROLEUM COMPANY

Surface Use Plan

WELL:

Federal #9E

LOCATION:

790'/S and 790'/E

S.9-T29N-R12W

San Juan County, NM

LEASE #:

021119

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 2100' long and 20' wide. No turnouts will be needed. Water bars will be used to aid drainage and prevent erosion. Max. 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 attached 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 Aztec, NM approximately 8 miles east 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 be otherwise safely disposed of will be hauled 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 2 miles north of San Juan County Fairgrounds. 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.

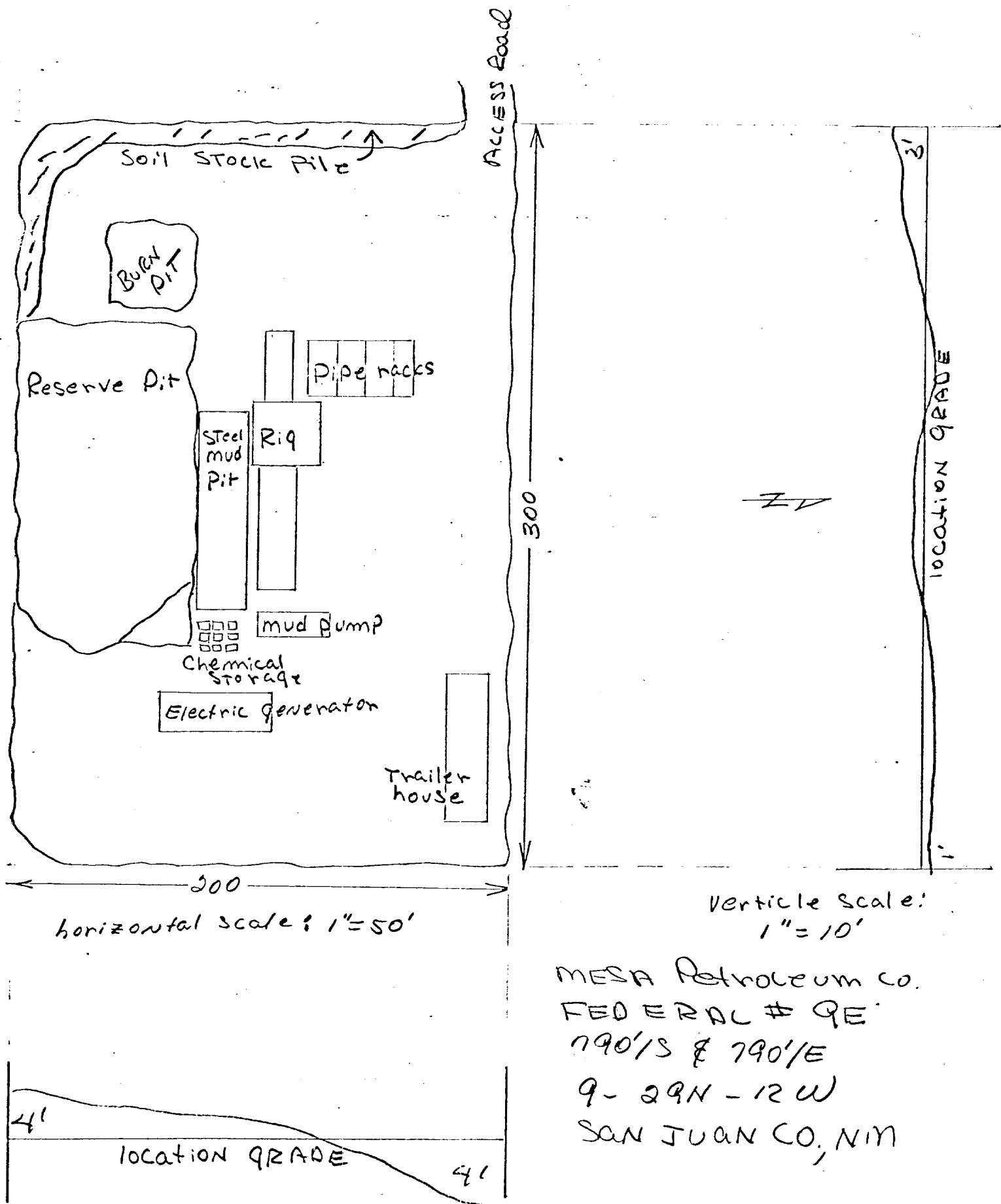
12. John Alexander
3E Company, Inc.
P.O. Box 190
Farmington, NM 87401
Phone: 505-327-4020

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.

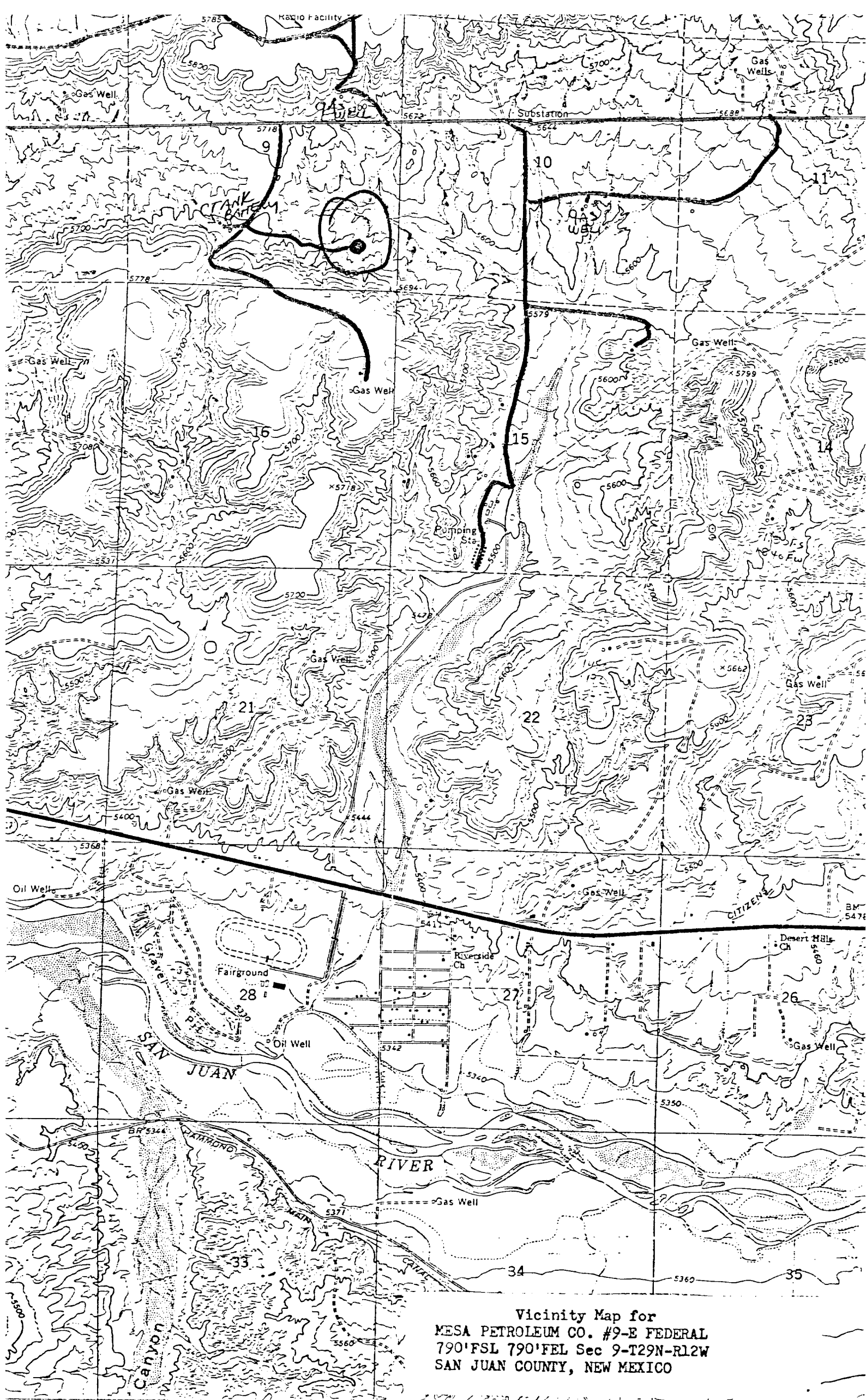
10-22-79

John Alexander
JOHN ALEXANDER

JA:cp



MESA Petroleum Co.
 FEDERAL # QE
 790'S & 790'E
 9-29N-12W
 SAN JUAN CO, N.M.



Vicinity Map for
MESA PETROLEUM CO. #9-E FEDERAL
790' FSL 790' FEL Sec 9-T29N-R12W
SAN JUAN COUNTY, NEW MEXICO