

Form 3160-3
(December 1990)

Draper DP
Albuquerque, NM 87110

SUBMIT IN DUPLICATE
(Other instructions on
reverse side)

30-015-27366
Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER ☐

2. NAME OF OPERATOR

Maralo, Inc.

MAR 22 1993

3. ADDRESS AND TELEPHONE NO.

P O Box 832, Midland TX 79702

(915) 684-7421

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

At surface

1650' FWL & 310' FNL Sec. 10, T24S-R29E

At proposed prod. zone

Same

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

6 miles East of Malaga, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drilg. unit line, if any)

510'

18. DISTANCE FROM PROPOSED LOCATION*

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

N/A

16. NO. OF ACRES IN LEASE

480

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

19. PROPOSED DEPTH

8000'

20. ROTARY OR CABLE TOOLS

Rotary

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

GL 3040.8'

22. APPROX. DATE WORK WILL START*

12/28/92

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" J55 ST&C	54.5# new	450'	500 sx class "C" circulate
12 1/4"	8 5/8" J55 ST&C	32# new	2800'	800 sx Lite + 150 sx Premium neat circulate
7 7/8"	5 1/2" J55 LT&C	17# new	8000'	1000 sx Premium 50/50 Poz volume to fill up to 4600' (25% excess)

- Set 40' of 20" conductor cement to surface with Redimix.
- Drill 17 1/2" hole to 450', run new 13 3/8" 54.5# J-55 ST&C casing, cement with 500 sx class "C", circulate to surface.
- Drill 12 1/4" hole to 2800', run new 8 5/8" 32# J-55 ST&C casing, cement with 800 sx premium Lite + 150 sx premium neat, circulate to surface.
- Drill 7 7/8" hole to 8000', run new 5 1/2" 17# LT&C J-55 casing, cement with 1000 sx premium 50/50 Poz volume to fill up to 4600' (25% excess).

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

Jose T. Garcia

TITLE

Agent

DATE

12/15/92

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

Orig. Signed by Richard-L. Manus

APPROVED BY

AREA MANAGER
CARLSBAD RESOURCE AREA

DATE

3-17-93

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MARALO, INC.			Lease CEDAR CANYON FEDERAL 10		Well No. 1
Unit Letter C	Section 10	Township 24 SOUTH	Range 29 EAST NMPM		County EDDY
Actual Footage Location of Well:					
880 feet from the NORTH line and		1650 feet from the WEST line			
Ground Level Elev. 3041.8'	Producing Formation BONE SPRINGS	Pool CEDAR HILLS			Dedicated Acreage: 40 Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>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).</p> <p>3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary. _____)</p> <p>No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.</p>					
					OPERATOR CERTIFICATION
					<p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature _____</p> <p>Printed Name Joe T. Janica</p> <p>Position Agent for Maralo Inc.</p> <p>Company Maralo Inc.</p> <p>Date 01/29/93</p>
					SURVEYOR CERTIFICATION
					<p>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.</p> <p>Date Surveyed JANUARY 21, 1993</p> <p>Signature & Seal of Professional Surveyor</p> <p></p>

APPLICATION TO DRILL

Maralo, Inc.
Cedar Canyon Federal "10" #1
Section 10, Unit "C", T24S-R29E
Eddy County, New Mexico

(SJS)

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

1. Location: 1650' FWL, & 510' FNL Section 10, T24S-R29E, Eddy County, New Mexico

2. Elevation Above Sea Level: 3040.8'

3. Geologic Name of Surface Formation: Pleistocene Aeolian deposit

4. Drilling Tools and Associated Equipment: Conventional rotary drilling rig using mud for the circulation medium.

5. Proposed Drilling Depth: 8000'

6. Estimated Geological Marker Tops:

Delaware	3120'
Cherry Canyon	4140'
Brushy Canyon	5350'
Bone Springs	6800'
1st Bone Springs Sand	7800'

7. Possible Mineral Bearing Formation:

Delaware	3120'	Oil
Cherry Canyon	4140'	Oil
Brushy Canyon	5350'	Oil
1st Bone Springs Sand	7800'	Oil

8. Casing Program:

Hole Size	Interval	OD Csg	Weight	Thread	Grade	Condition
25	0 - 40	20	Conductor	.30	Wall	New
17 1/2	0 - 450	13 3/8	54.5#	8R	J-55	ST&C New
12 1/4	0 - 2800	8 5/8	32#	8R	J-55	ST&C New
7 7/8	0 - 8000	5 1/2	17#	8R	J-55	LT&C New

9. Cementing and Setting Depth:

20" Conductor	Set @ 40' cement with Readymix to surface.
13 3/8" Surface Casing	Set @ 450' cement with 500 sx Class "C" cement w/2% CaCl circulate to surface.
8 5/8" Intermediate Casing	Set @ 2800' cement with 800 sx Light cement tail in with 150 sx of premium neat cement circulate to surface.
5 1/2" Production Casing	Set @ TD 8000' cement with 1000 sx premium 50/50 POz volume to fill up to 4600' 25% excess.

10. Pressure Control Equipment: Exhibit "E". A Blow-out Preventer (no less than ~~1500~~⁹⁰⁰ series) consisting of double ram type preventer with bag type preventer. Units will be hydraulically operated. Exhibit "E-1" Choke Manifold and Closing Unit. Blind rams on top, pipe rams on bottom to correspond with size of drill pipe in use. BOP will be nipped up on 13 3/8" casing and remain on well until casing is run and cemented. BOP will be tested as well as choke manifold. BOP will be worked at least once each day while drilling and blind ram will be worked on trips when no drill pipe is in hole. Flow sensor PVT, full opening stabbing valve and upper kelley cock will be utilized. No pressures greater than 2000 psi anticipated.

11. Proposed Mud Circulating System:

Depth	Mud Wt.	Mud Visc.	Fluid Loss	Type Mud
0- 450	8.6 - 9.0	34-36	NC	Spud Mud
450- 2800	10.0 - 10.1	28-29	NC	Brine water w/lime for pH control and paper for seepage
2800 -6000	9.0 - 9.2	28-29	20-30cc	Cut brine with starch lime for pH control and paper for seepage
6000-8000	9.0 - 9.5	29-32	10cc	Cut brine with starch lime for pH control and paper for seepage

To log well and run casing viscosity may have to be raised and water loss may be required to be lowered to 8cc or less depending on hole conditions.

12. Testing, Logging and Coring Programs:

- (A) Possible D.S.T. if shows dictate.
- (B) Open hole logs: DLL w/LDT-CNL w/PEF Cal-SFL from TD to 2500' with Gamma Ray to surface. BSC-Neutron-Gamma Ray to surface BHC Sonic TD to 2500'.
- (C) No coring planned.
- (D) Two man mud logging unit will start logging @ 2700' and log to TD.

13. Potential Hazards: No abnormal pressures or temperature zones are expected (nothing abnormal in offset wells). Hydrogen sulfide gas is not anticipated however, precautions for detection will be observed. No major lost circulation is expected (none reported in this area). H2S detector at cellar and end of mud flowline.

14. Anticipated Starting Date and Duration of Operation: Road and location construction will begin after BLM approval of APD. Anticipated spud date 12/28/92. Drilling expected to take 20 to 28 days. If production casing is run an additional 30 days to complete and construct surface facility and place well on production.
15. Other Facets of Operations: After running casing, cased hole gamma ray collar correlation logs will be run from total depth over possible pay intervals. The Bone Springs pay will be perforated and stimulated. The well will be swab tested and potentialized as an oil well.

SURFACE USE PLAN

Maralo, Inc.
Cedar Canyon Federal "10" #1
Section 10, Unit "A", T24S-R29E
Eddy County, New Mexico

SJS

1. EXISTING ROADS - Area map, Exhibit "B", is a reproduction of the New Mexico General Hi-Way Map. Existing and proposed roads are shown on the exhibit. All roads shall be maintained in a condition equal that which existed prior to the start of construction.
 - A. Exhibit "A" shows the proposed development well site as staked.
 - B. From Loving, New Mexico take State Road 31 east to State Road 128, turn east go 12.5 miles to Twin Wells Road (CR 787) turn south go 9.8 miles to junction CR 746 turn west go 8.9 miles to junction of CR 746A turn north follow main road for approximately 4.5 miles turn west follow good lease road for 3.5 miles to location.
2. PLANNED ACCESS ROADS - Approximately 1200' of new access road will be constructed.
 - A. The access road will be crowned and ditched to a 12'00" wide travel surface with a 40' right-of-way.
 - B. Gradient on all roads will be less than 5.00%.
 - C. Turnouts will be constructed as necessary.
 - D. If needed, road will be surfaced with a minimum of 4" caliche. This material will be obtained from a local source.
 - E. Centerline for the new access road has been flagged. Earthwork will be as required by field conditions.
 - F. Culverts in the access road will not be used. The road will be constructed to utilize low water crossings for drainage as required by the Topography.
3. LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS - Exhibit "A-1"
 - (A) Water wells - None known
 - (B) Disposal wells - None known
 - (C) Drilling wells - None known
 - (D) Producing wells- See Exhibit "A-1"
 - (E) Abandoned wells- See Exhibit "A-1"
 - (F) Staked Location- See Exhibit "A-1"

SURFACE USE PLAN

Page Two

Maralo, Inc.

Cedar Canyon Federal "10" #1

4. If, upon completion, the well is a producer, Maralo, Inc. will furnish maps or plats showing On Well Pad facilities and Off Well Pad facilities (if needed) on a Sundry Notice before construction of these facilities starts.

5. LOCATION AND TYPE OF WATER SUPPLY

Water will be purchased locally from a commercial source and trucked over the access roads or piped in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIALS

If needed, construction materials will be obtained from the drill site's excavations or from a local source. These materials will be transported over the access route as shown on Exhibit "C".

7. METHODS FOR HANDLING WASTE DISPOSAL

- A.
 1. Drill cuttings will be disposed of in the reserve pit.
 2. Trash, waste paper, and garbage will either be contained in a fenced trash trailer or in a trash pit, fenced with mesh wire to prevent wind-scattering during storage. When the rig moves out, all trash and debris left at the site will be contained to prevent scattering and will be buried at least 36" deep within a reasonable period of time. ~~NOT AUTHORIZED~~ *528*
 3. Salts remaining after completion of the well will be picked up by the supplier, including broken sacks.
 4. Sewage from trailer houses will drain into holes with minimum depth of 10'00". These holes will be covered during drilling and backfilled upon completion. A "porta John" will be provided for the rig crews. This will be properly maintained during the drilling operations and removed upon completion of the well.
- B. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for backfilling. In the event drilling fluids will not evaporate in a reasonable period of time they will be transported by tank truck to a state approved disposal site.

Water produced during testing of the well will be disposed of in the reserve pit. Oil produced during testing of the well will be stored in test tanks until sold and hauled from the site.

8. ANCILLARY FACILITIES

No camps or airstrips will be constructed.

SURFACE USE PLAN

Page Three

Maralo, Inc.

Cedar Canyon Federal "10" #1

9. WELL SITE LAYOUT

- A. Exhibit "D" shows the proposed well site layout.
- B. This exhibit indicates proposed location of reserve and trash pits; and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pit is proposed to be unlined, unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with polyethylene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be contoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

SURFACE USE PLAN

Page Four

Maralo, Inc.

Cedar Canyon Federal "10" #1

11. OTHER INFORMATION

- A. The topography consists of isolated hills with a dip to the west toward the Pecos River valley (approximately 65' per mile.) Sandy soil Pleistocene age aeolian deposits, native grass with mesquite and catclaw.
- B. The surface is used to mainly access producing wells in the area and grazing for livestock. It is administered by the Bureau of Land Management and is being leased to M & M Cattle Co., c/o Ellen Medera, P O Box 1686, Carlsbad, NM 88221.
- C. An archeological study is being conducted for the location and new access road. The report will be submitted separately when completed.
- D. There are no buildings of any kind in the area.

12. OPERATOR'S REPRESENTATIVE - field representative for contact regarding compliance with the Surface Use Plan is:

Before and during construction:

Natural Resources Engineering, Inc.
P O Box 2188
Hobbs NM 88241
Office Phone (505)392-2112
Joe T. Janica

After construction:

Maralo, Inc.
P O Box 832
Midland TX 79702
Office Phone (915)684-7441
Dick Lowery

3. CERTIFICATION - 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 currently exist; that the statements made in this 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 Maralo, Inc and its contractors/ subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

NAME :

Joe T Janica

DATE :

12/15/92

TITLE :

agent.

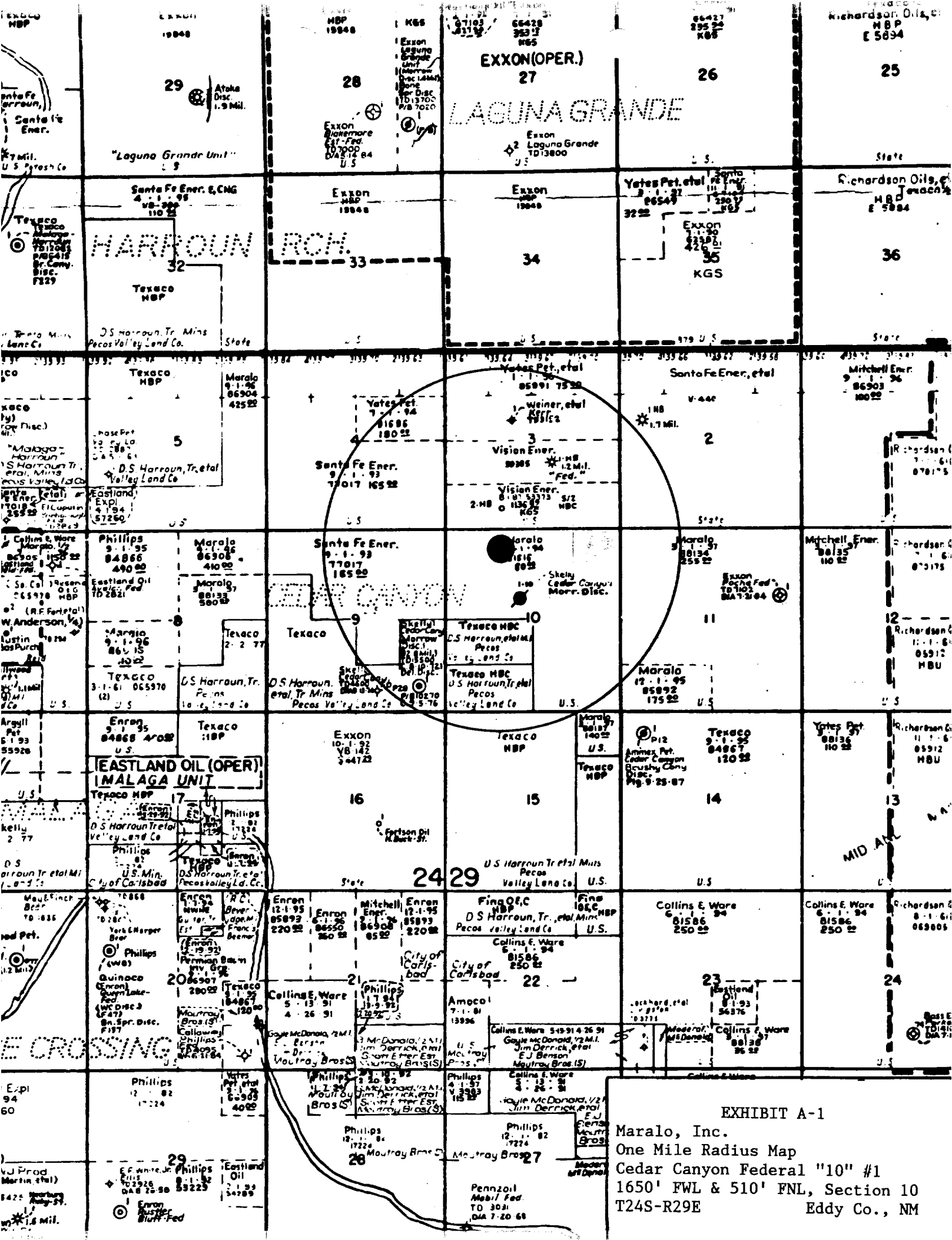


EXHIBIT A-1

Maralo, Inc.
One Mile Radius Map
Cedar Canyon Federal "10" #1
1650' FWL & 510' FNL, Section 10
T24S-R29E
Eddy Co., NM

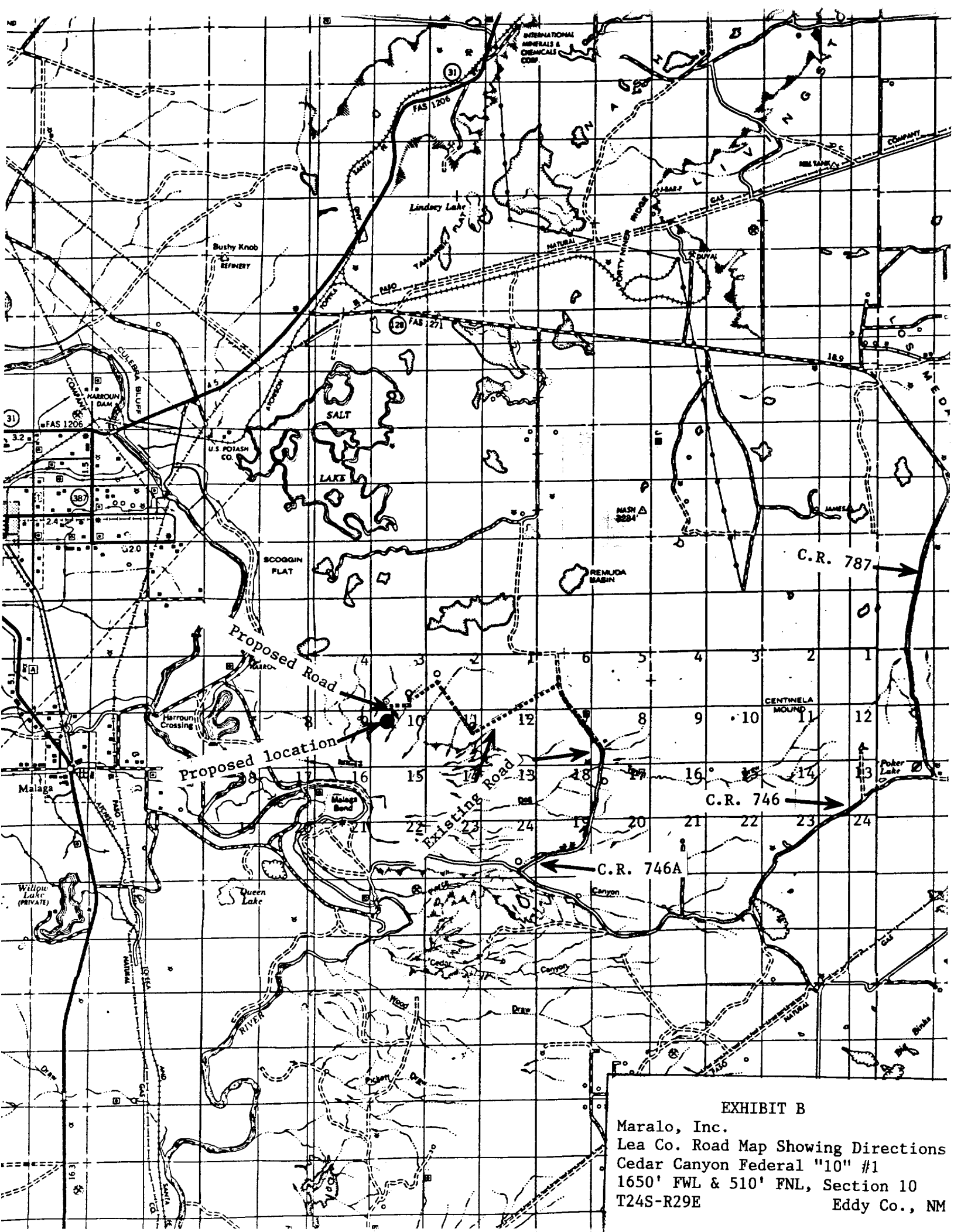
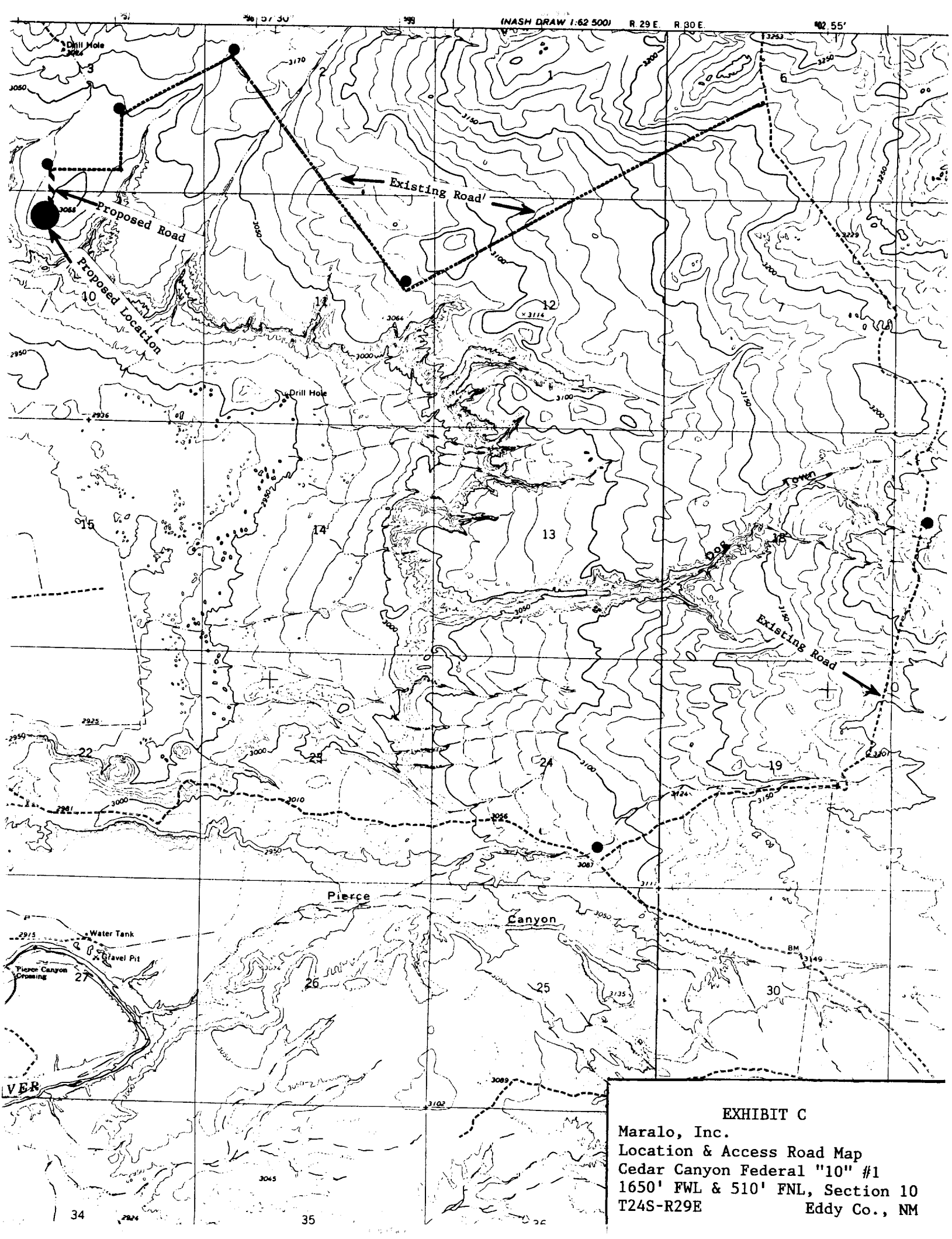


EXHIBIT B

Maralo, Inc.
 Lea Co. Road Map Showing Directions
 Cedar Canyon Federal "10" #1
 1650' FWL & 510' FNL, Section 10
 T24S-R29E
 Eddy Co., NM



(NASH DRAW 1:62 500)

R 29 E R 30 E

42 55'

Existing Road

Proposed Road

Proposed Location

Drill Hole

Drill Hole

Drill Hole

Drill Hole

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EXHIBIT C

Maralo, Inc.
Location & Access Road Map
Cedar Canyon Federal "10" #1
1650' FWL & 510' FNL, Section 10
T24S-R29E
Eddy Co., NM

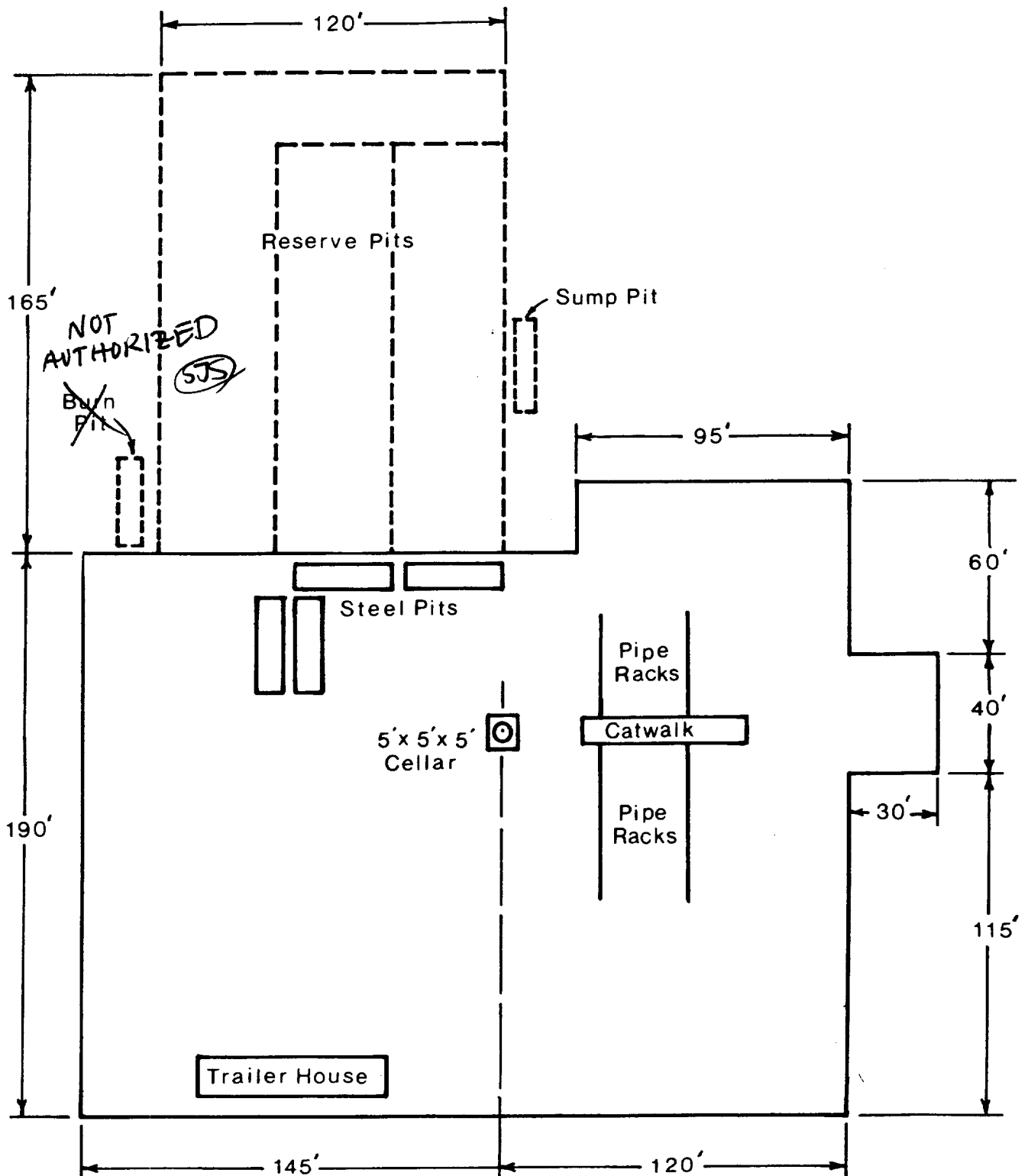
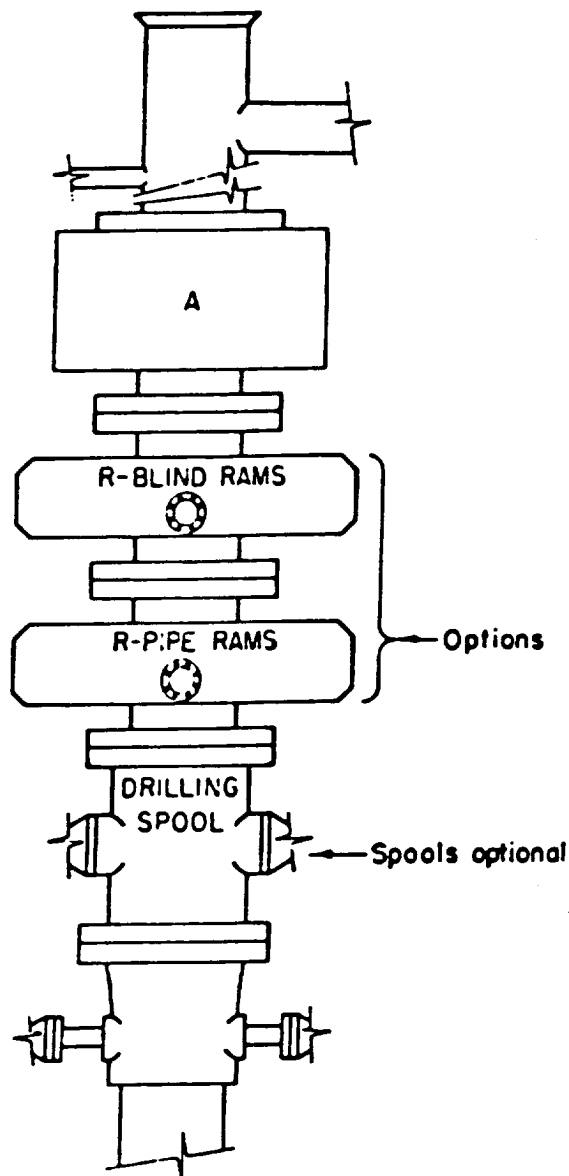


EXHIBIT D

Maralo, Inc.
 Plat of Rig Layout
 Cedar Canyon Federal "10" #1
 1650' FWL & 880' FNL, Section 10
 T24S-R29E ~~880~~ Eddy Co., NM



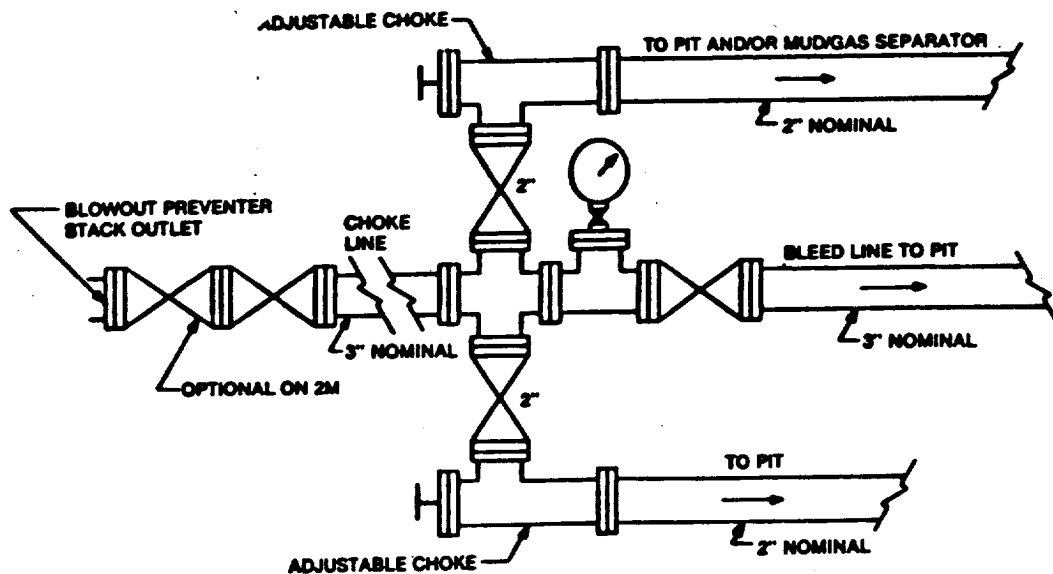
ARRANGEMENT SRRA

3M

EXHIBIT E

Maralo, Inc.

BOP sketch of type to be used on
Cedar Canyon Federal "10" #1
1650' FWL & 280' FNL, Section 10
T24S-R29E (53) Eddy Co., NM



3M

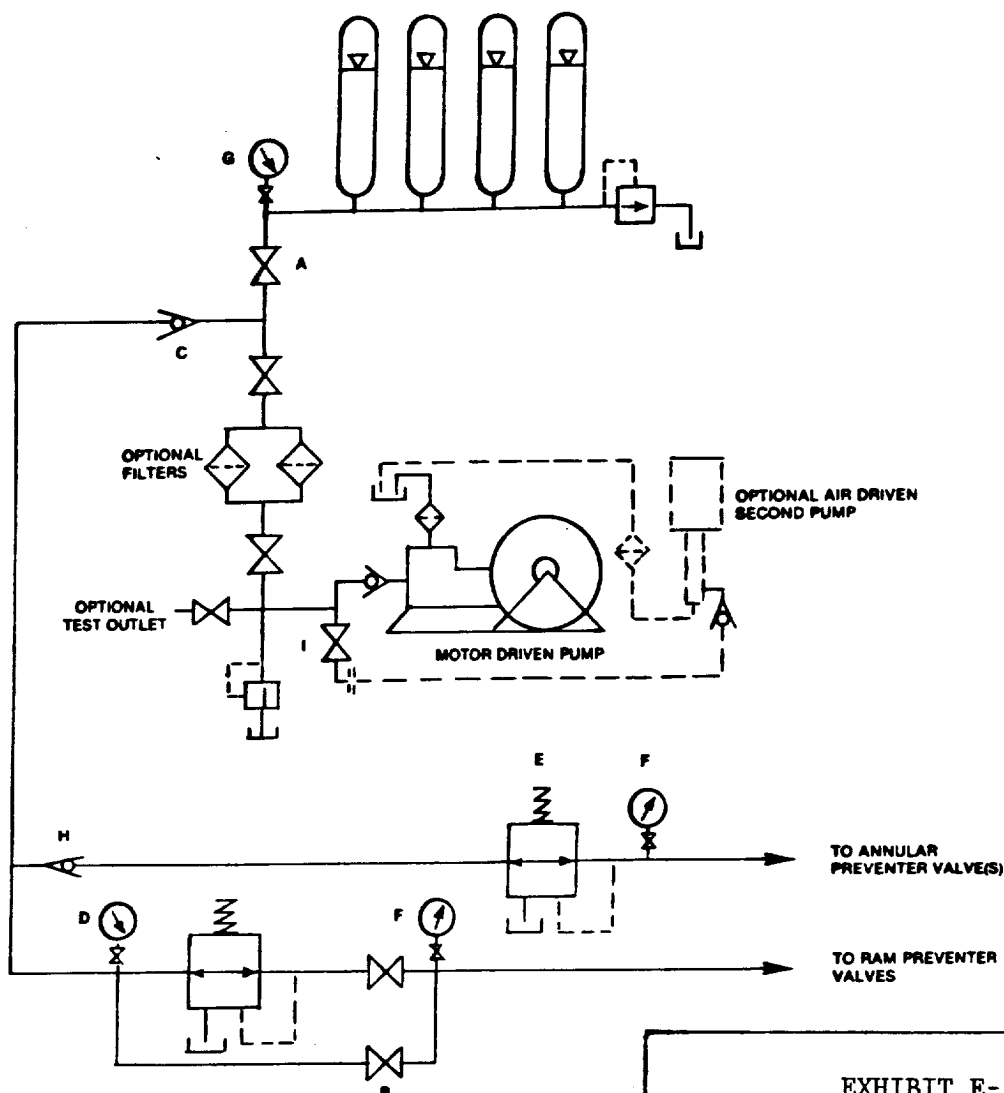


EXHIBIT E-1

Maralo, Inc.
 Choke Manifold & Closing Unit
 Cedar Canyon Federal "10" #1
 1650' FWL & 880' FNL, Section 10
 T24S-R29E 638 Eddy Co., NM

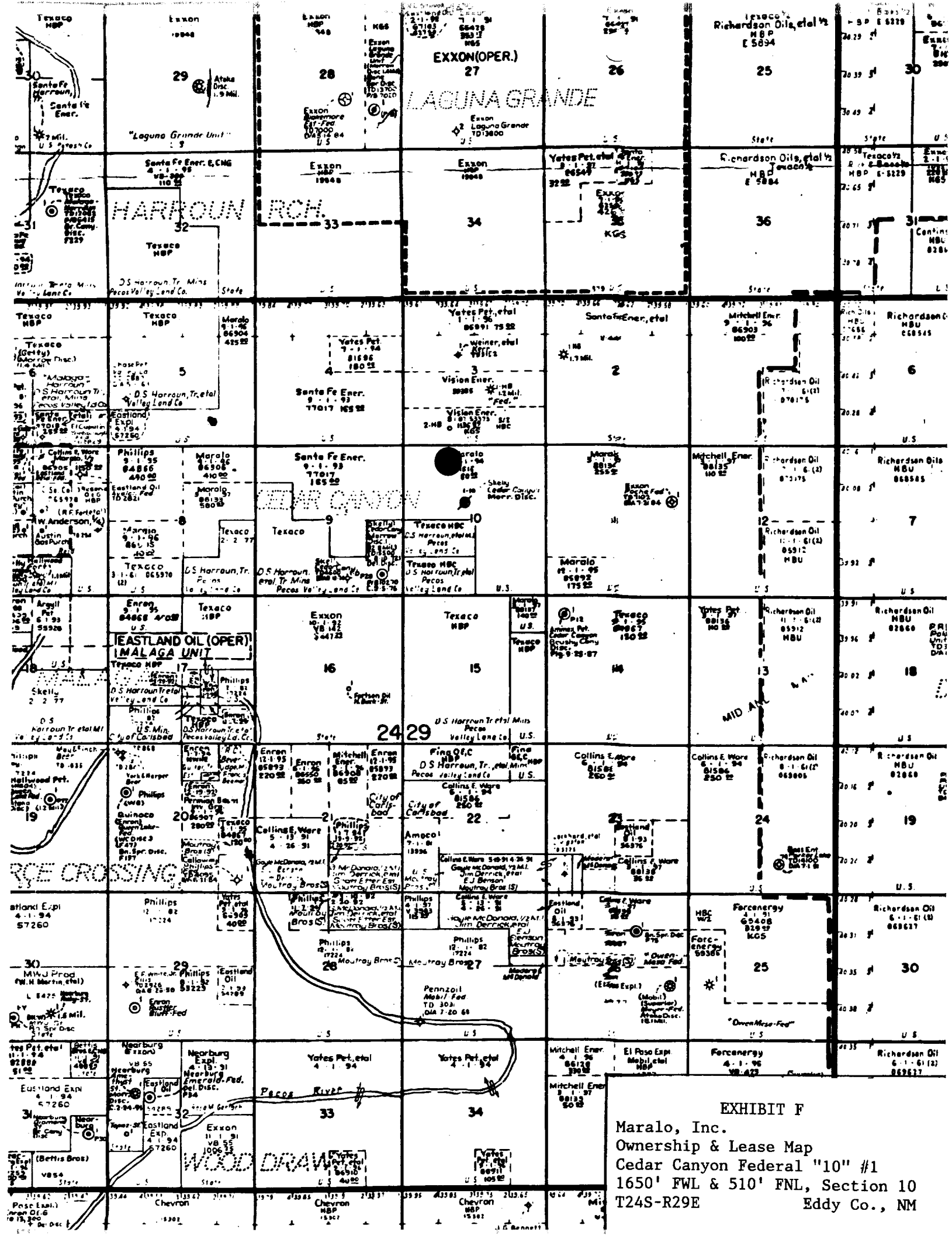


EXHIBIT F

Maralo, Inc.
Ownership & Lease Map
Cedar Canyon Federal "10" #1
1650' FWL & 510' FNL, Section 10
T24S-R29E Eddy Co., NM