N.M.O.C.D. COPY

Form 9-331 C
(May 1963)

SUBMIT IN LICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-005-60772

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-23264

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

7. UNIT AGREEMENT NAME:

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

8. FARM OR LEASE NAME: SALT FEDERAL

2. NAME OF OPERATOR: Mesa Petroleum Co

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: 1000 Vaughn Building/Midland, Texas 79701

10. FIELD AND POOL, OR WILDCAT: Undesignated Abo

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FSL & 1980' FWL
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec 8, T8S, R23E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 19 miles N/NW of Roswell

12. COUNTY OR PARISH: Chaves | 13. STATE: N. Mexico

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
660'/660'	639.96	160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
2800'	3500'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4106.7' GR

22. APPROX. DATE WORK WILL START*: August 18,1980

RECEIVED
AUG 26 1980
O. C. D.
ARTESIA, OFFICE

RECEIVED
JUL 18 1980
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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#	700'	240 LW/100 "C"
7-7/8"	4-1/2"	10.5#	3500'	310 LW/360 POZ "C"

Propose to drill surface hole to 700' without BOPs. After cementing 8-5/8" casing at 700' and installing bradenhead, will nipple up 10" API 3000 psi BOPs and drill 7-7/8" hole to total depth of 3500'. Drilling fluid will consist of fresh water and fresh water additions, however, mud weight may increase from 8.8 ppg to as high as 10.2 - 10.3 ppg due to leaching of salt stringers. After log evaluation, 4-1/2" casing may be run to total depth and cemented (with cement being raised to surface pipe or surface).

Gas sales are not dedicated.

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 R. L. Martin TITLE Regulatory Coordinator DATE July 17, 1980

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (Orig. Sgd.) PETER W. CHESTER TITLE ACTING DISTRICT ENGINEER DATE AUG 22 1980

CONDITIONS OF APPROVAL, IF ANY:

NO [illegible]

*See Instructions On Reverse Side

N. MEXICO OIL CONSERVATION COMMISS

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 Co.	Salt Federal	1

Unit Letter	Section	Township	Range	County
N	8	8 South	23 East	Chaves

Actual Footage Location of Well:
660 feet from the South line and 1980 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4106.7	Abo	Undesignated	SW/4 160 Acres

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

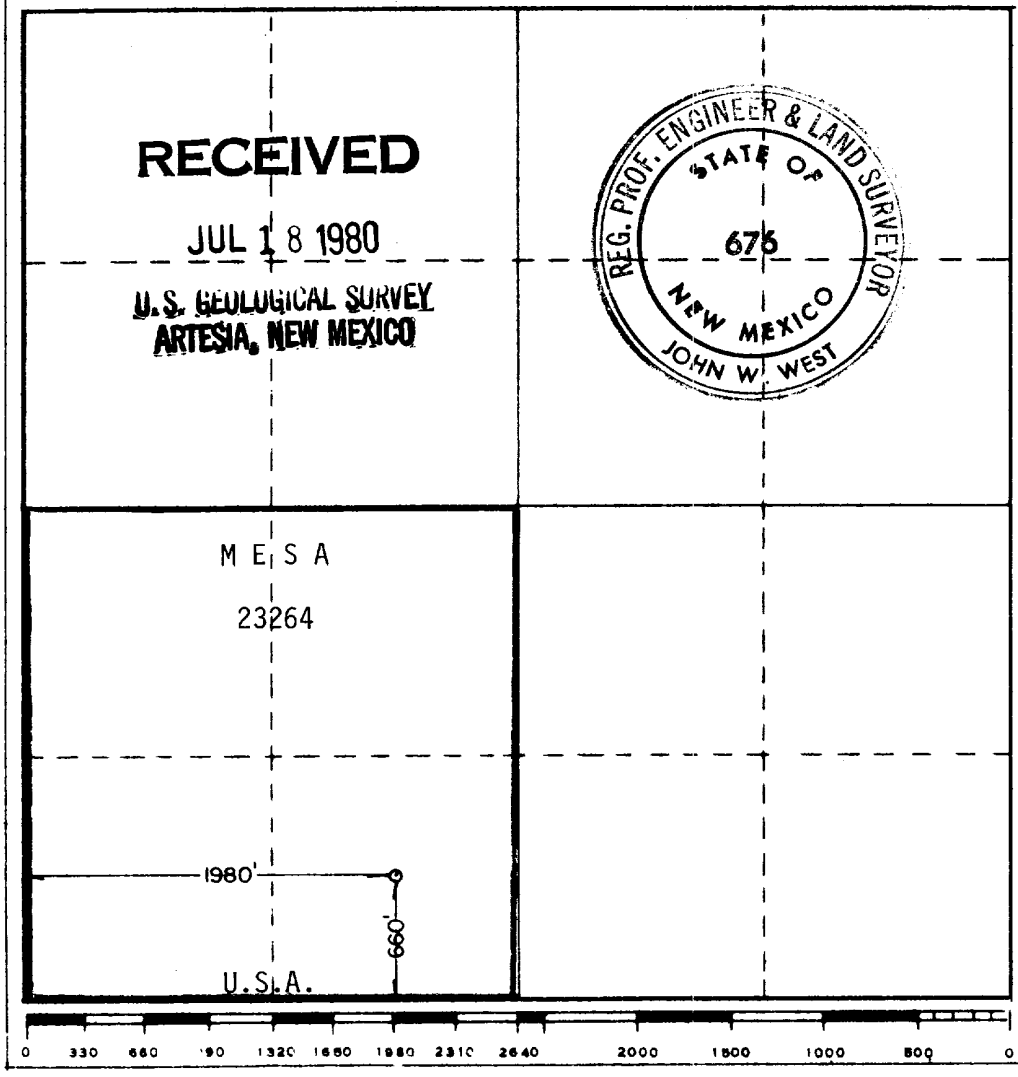
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

R. E. Mathis

Name: R. E. MATHIS

Position: Regulatory Coordinator

Company: Mesa Petroleum Co

Date: July 17, 1980

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 15,1980

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6666
Ronald J. Eidson 3239

United States Department of the Interior

GEOLOGICAL SURVEY

ARTESIA

[redacted] DISTRICT

RECEIVED
AUG 26 1980
O. C. D.
ARTESIA, OFFICE

Mesa Petroleum Co
Salt Fed. No. 1
660' FSL 1980' FWL, Sec 8 T8S R23E
Chaves County Lease NM-23264

[Above Data Required on Well Sign]

GENERAL REQUIREMENTS
FOR
OIL AND GAS OPERATIONS ON FEDERAL LEASES

These General Requirements apply generally to all oil and gas operations on Federal leases. They apply specifically to the above described well. Special requirements that apply and are effective for this well, if any, are check-marked in section 15 of these General Requirements.

1. GENERAL:

A. Full-compliance with applicable laws and regulations, with the approved Permit to Drill, and with the approved Surface Use and Operations Plan is required. Lessee's and/or operators are fully accountable for the actions of their contractors and subcontractors.

B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease name or unit name, well number, location of the well and the lease serial number.

C. A complete copy of the approved Application for Permit to Drill and the accompanying Surface Use and Operations Plan along with any conditions of approval shall be available to authorized personnel at the drillsite whenever active construction or drilling operations are underway.

D. A drilling operations progress report is to be submitted daily from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should be on paper not less than 5 X 8 inches in size and each page should identify the well by operator's name, well name and number, and by well location.

E. Immediate notice is required of all blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life. (See NTL-3)

F. No construction activities, such as roads, well sites, tank battery sites, pits, or other work involving surface disturbance will be commenced until a Surface Use and Operations Plan is submitted and approval obtained.

G. If, during operations, any archeological or historical sites, or any object of antiquity subject to the Antiquities Act of June 8, 1906, are discovered, all operations which would affect such sites are to be suspended and the discovery reported promptly to the appropriate offices of the Geological Survey and the Bureau of Land Management.

H. Prior approval of the District Engineer is required for variance from the approved drilling program and before commencing plugging operations, plugback work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval does not waive the written report requirements.

I. Blowout prevention equipment is to be installed, tested, and in working order before drilling below the surface casing and shall be maintained ready for use until drilling operations are completed.

J. All shows of fresh water and minerals will be reported and protected.

K. Well area and lease premises will be maintained in a workmanlike manner with due regard to safety, conservation, and appearance. All waste associated with the drilling operations will be contained and will be buried in place (in a separate trash pit) or removed and deposited in an approved sanitary landfill. All garbage (metal containers will be crushed) and debris left on site will be buried at least two feet deep. All trash and debris will be buried or removed from the site within one month after removal of the drilling rig and/or completion rig, and the wellsite will be kept clean and in an aesthetically satisfactory condition for the life of the well.

L. Unless drilling operations are commenced within one year, approval of an Application for Permit to Drill will automatically expire. A written request for extension may be granted if timely submitted.

2. CONSTRUCTION ACTIVITIES, (ALSO REFER TO SEC. 3, DRILLING PITS):

A. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan, the conditions of approval and a copy of sec. 2 and 3 of these General Requirements.

B. No caliche, gravel, or other related minerals from new or existing pits on Federal land will be used in construction of roads, well sites, etc., without prior approval from the Bureau of Land Management.

C. Vegetative materials removed during construction must be disposed of in such manner that it does not detract from the aesthetics of the area and does not accelerate erosion. Vegetation removed during clearing operations should be placed in drainages, washes, gullies, etc., and "walked down" by crawler type tractor. If there are no drainages in the immediate area, the vegetation should be "walked down" in place. All trash resulting from construction activities will be disposed of. Any large rocks resulting from construction activities will not be piled or left in rows but will be left so they do not detract from the natural appearance of the area. Any available topsoil encountered during construction should be stockpiled for use in restoring the pit area after the pits are covered.

D.

E. Each existing fence to be crossed by the permittee will be braced and tied off before cutting so as to prevent slacking of the wire. The opening will be protected as necessary during construction to prevent the escape of livestock and upon completion of construction, the fence will be repaired back to the original standard of the existing fence. A cattleguard will be installed in any fence where a road is to be regularly traveled. A twelve foot gate will be installed adjacent to the cattleguard when necessary.

NOTE: Sec. 2-C and 2-D above apply primarily to Federal Surface. If the land is privately owned, these requirements may be varied to comply with the operator-landowner agreement.

3. DRILLING PITS:

A. Mud pits will be constructed so as not to leak, break or allow discharge of liquids. Pits are not to be located in natural drainage. Any plastic material used to line pits must be removed to below ground level before pits are covered.

B. All unguarded pits containing liquids will be fenced.

C. Liquids in pits will be allowed to evaporate, or be properly disposed of otherwise, before pits are broken. Under no circumstances will pits be allowed to be cut to be drained.

4. CASING AND CEMENTING REQUIREMENTS:

A. Surface casing is to be set at sufficient depth to protect fresh water zones and cement circulated to the surface. In areas where the salt section (Salado) is present, surface casing should be set at least 50 feet into the Rustler Anhydrite and cement circulated to the surface. If surface casing is set at a lesser depth, the first string of casing set below the salt section must be cemented from the casing shoe to the surface or cemented to the surface through a stage tool set at least 50 feet below the top of the Rustler, after cementing around the shoe with sufficient cement to fill to the base of the salt section, minimum.

B. Intermediate and production casing strings are to be set and cemented as necessary to effectively isolate and seal off all water, oil, gas or potash bearing strata encountered in the well down to the casing point. Where the salt section is present, the minimum required cement fill behind the first casing string, either production or intermediate, set below the salt section is back to above the base of the salt section.

C. Prior to drilling the plug after cementing, all casing strings shall be pressure tested. Test pressure shall not be less than 600 psi for surface casing, and a minimum of 1,500 psi or 0.2 psi/ft., whichever is greater, for other casing strings. If the pressure declines more than 10 percent in 30 minutes, or if there is other indication of a leak, the casing shall be recemented, repaired, or an additional casing string run, and the casing shall be tested again in the same manner.

D. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until the cement has reached a compressive strength of at least 500 psi at the shoe, except that in no case shall tests be initiated until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log.

5. BLOWOUT PREVENTION:

A. Blowout preventers and related well-control equipment shall be installed, tested and used in such manner necessary to prevent blowouts.

B. Ram-type blowout preventers and related control equipment shall be pressure tested with water to the rated working pressure of the stack assembly (except that the annular-type preventer may be tested to 70 percent of rated working pressure): (a) when installed, (b) before drilling possible abnormally pressured zones, and (c) following repairs that require disconnecting a pressure seal in the assembly.

C. While drill pipe is in use, ram-type blowout preventers shall be actuated to test proper functioning once each trip, but in no event less than once each day. The annular-type blowout preventer shall be actuated on the drill pipe at least once each week.

D. Blowout preventers are to have proper rams for the operations being performed. Casing rams are required when running casing.

E. Blowout preventers are to have handwheels installed.

F. A choke line and a kill line are to be properly installed. The kill line is <u>not</u> to be used as a fill-up line.

G. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.

H. Drill string safety valve(s) to fit all pipe in the drill string are to be maintained on the rig floor while drilling operations are in progress.

I. Blowout prevention drills are to be conducted as necessary to assure that equipment is operational and that each crew is properly trained to carry out emergency duties. All BOP tests and drills are to be recorded in the driller's log.

J. The maximum pressure to be allowed on blowout preventers during well control operations is to be posted for each casing string.

K. The characteristics, use, and testing of drilling mud and the conduct of related drilling procedures shall be such as are necessary for well control. Quantities of mud materials sufficient to insure well control shall be maintained, readily accessible for use at all times.

L. When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 100 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running pipe to bottom.

M. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the toolpusher shall maintain rig floor surveillance at all times, unless the well is secured with blowout preventers or cement plugs.

6. REPORTS:

A. The following reports shall be filed with the District Engineer within 15 days after the work is completed:

(1) Five copies of Sundry Report, Form 9-331, giving complete information concerning:

(a) Setting of each string of casing. Show size, grade and weight of casing set, size hole, depth set, amount and type of cement used, whether cement circulated, top of cement behind casing if determined, depth of cementing tools if used, casing test method and results, and date work was done. Show spud date on first report submitted.

(b) Intervals tested, perforated, acidized, or fractured and results obtained. Show date work was done.

(2) Four copies of Well Completion Report, Form 9-330. Show formation tops, drill stem test information, completion data, and production tests. Show all oil and gas zones and important water sands under item 37. Data on water sands should include rate of water inflow and elevation to which water rose in hole.

(3) Two copies of all electrical and radioactivity logs run.

7. DRILLER'S LOG:

A. The following shall be entered in the daily driller's log:

(1) Blowout preventer pressure tests including test pressures and results.

(2) Blowout preventer tests for proper functioning.

(3) Blowout prevention drills conducted.

(4) Casing run, including size, grade, weight and depth set.

(5) How pipe was cemented, including amount of cement, type, whether cement circulated, location of cementing tools, etc.

(6) Waiting on cement time for each casing string.

(7) Casing pressure tests after cementing including test pressure and results.

8. DRILLSTEM TESTS:

A. Estimated amounts of oil and gas recovered and/or produced during drillstem tests are to be shown in the driller's log and reported in accordance with NTL-4A.

9. GAS FLARING:

Pursuant to NTL-4A

10. WATER DISPOSAL:

A. An application for approval of the disposal method for water production from all new wells must be filed with the District Engineer prusuant to Section VII of NTL-2B. Failure to timely file such application will be considered an incident of non-compliance and will be grounds for issuing a shut-in order until the application is submitted.

11. SAFETY:

A. All rig heating stoves are to be the explosion-proof type.

B. Drilling rig engines should have water cooled exhausts.

C. Rig safety lines are to be installed.

D. Hard hats must be utilized.

12. SUBSEQUENT OR CHANGE OF PLANS:

A. Any additional construction, re-construction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, will require the filing of a suitable plan and prior approval by the Survey after clearance with the surface management agency.

13. REMOVAL OF DRILLING RIG:

A. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drillsite without prior approval from the Survey.

14. ABANDONMENT:

A. If the well is dry and is to be plugged, approval of the proposed plugging program may be obtained orally. However, oral approval must be confirmed in writing by immediately filing a Notice of Intention to Abandon on Form 9-331 in quintuplicate with the District Engineer. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc.

B. Upon completion of approved plugging, erect a regulation well marker which should not be less than 4 inches in diameter and extend at least 4 feet above general ground level. Heap up the dirt around the base of the marker about 12 inches to take care of any settling of the cellar. The top of the marker must be closed or capped. The following minimum information shall be permanently placed on the marker with a plate, cap, or welded bead:

(1) Operator
(2) Well number and name
(3) Section - Township - Range
(4) ¼ ¼ section or footage location from section lines

C. If, upon abandonment of wells on Federal surface, the retention of the well pad and/or access road is not considered necessary for the management and multiple use of the natural resources, they will be ripped a minimum of 12" in depth. All ripped surfaces are to be protected from vehicular travel by construction of a dead-end ditch and earthen barricade at the entrance to these ripped areas. (Reseeding of the affected areas may be required.)

D. Surface restoration after abandonment of wells on non-Federal surface normally will be in accordance with the operator - landowner agreement.

E. Within 15 days after plugging the well, a Subsequent Report of Abandonment is to be filed on form 9-331 in quintuplicate showing the manner in which the well was plugged, including depths where casing was cut and pulled from, intervals, by depths, where cement plugs were placed, and the date plugging was completed. When all surface restoration work is completed, advise the District Office so that a field inspection of the wellsite can be made.

15. SPECIAL STIPULATIONS:

The following special requirements apply and are effective when check-marked.

☐ A. 8 5/8" surface casing should be set in the Rustler Anhydrite formation and cement circulated to the surface. ~~If surface casing is set at a lesser depth, the _____ casing must be cemented from the casing shoe to the surface or cemented to the surface through a stage tool set at least 50 feet below the top of the Rustler after cementing around the shoe with sufficient cement to fill to the base of the salt section.~~

☒ B. Before drilling below the 8 5/8" casing, the blowout preventer assembly will consist of a minimum of ~~[redacted] type and~~ two ram type preventers.

☐ C. Casing protectors will be run on drill pipe while drilling through the _____ casing. Protectors will be of sufficient number and of sufficient outside diameter to protect the casing.

☐ D. Minimum required fill of cement behind the 4 1/2" casing is to SURFACE

☐ E. After setting the 8 5/8" casing string and before drilling into the WOLFCAMP formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures ~~by an independent service company~~. Any equipment failing to test satisfactorily shall be repaired or replaced. ~~This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.~~

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the _____ formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:

(1) A recording pit level indicator to determine pit volume gains and losses.

(2) A mud volume measuring device for accurately determing mud volume necessary to fill the hole on trips.

(3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.

☐ F. For the protection of livestock and wildlife all pits containing toxic liquids will be fenced and covered with a fine mesh netting (i.e. Hardware Cloth) with openings being 1/2 inch or less.

☒ G. Above ground permanent structures and equipment shall be painted in accordance with the attached Painting Guidelines. The paint color is to simulate:

☒ Sandstone Brown, Fed. Std. 595-20318 or 30318

☐ Sagebrush Gray, Fed. Std. 595-26357 or 36357

☒ H. A kelly cock will be installed and maintained in operable condition.

☐ I. The District Office is to be notified in sufficient time for a representative to witness cementing of the 4½" casing.

☐ J. A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the U. S. Geological Survey, P. O. Drawer 1857, Roswell, New Mexico 88201. The effective date of the agreement must be prior to any sales.

☐ K. A Gamma Ray-Compensated Neutron log is required from the base of the salt section to the surface with cable speed not to exceed 30 feet per minute.

☒ L. At least one working day prior to constructing the well pad, access roads and/or related facilities, the operator or dirt contractor shall notify the authorized officer (Bureau of Land Management, Carlsbad Resource Area, 505-887-6544). He shall also notify the Authorized Officer within two working days after completion of earth-moving activities.

☒ M. All access roads constructed in conjunction with the drilling permit(APD) will be limited to a 12 foot wide driving surface, excluding turn-arounds. Surface disturbance associated with construction and/or use of the road will be limited to 25 feet in width. If well is a producer, all roads will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts and/or any other measures deemed necessary by the authorized officer of the BLM. The following is a general guide for the spacing of water bars:

% Slope	
less than 2%	200 ft.
2% to 4%	100 ft.
4% to 5%	75 ft.
more than 5%	50 ft.

☐ N. Special Stipulations:

DIRECTORY OF FEDERAL REGULATORY PERSONNEL

OIL & GAS OPERATIONS IN HOBBS DISTRICT

SURFACE USE AND REHABILITATION

Bureau of Land Management

Carlsbad Area (Lea and Eddy Counties)
P. O. Box 506
Carlsbad, NM 88220
Office Phone: (505) 887-6544

G. Ben Koski
Don Peterson

Roswell Area (Roosevelt and Chaves Counties)
P. O. Box 1397
Roswell, NM 88201
Office Phone: (505) 622-7670

Tom Hewitt
Lloyd Read

DRILLING & PRODUCING OPERATIONS

U. S. Geological Survey - Oil and Gas Operations
414 West Taylor
P. O. Box 1157
Hobbs, NM 88240

Office Hours: 8:00 a.m. - 4:30 p.m.
Office Phone: (505) 393-3612
(505) 393-5146

Home Phones:

Winnie O. Kelly	(505) 393-6646
Ray J. Foster	(505) 393-8465

United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Box 1157
Hobbs, New Mexico 88240

June 1, 1978

PAINTING REQUIREMENTS FOR OIL FIELD EQUIPMENT AND STRUCTURES

Sec. 102 (a) (8) of the "Federal Land Policy and Management Act of 1976" states:

> "the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use;"

In accordance with the above Act, the Bureau of Land Management has determined that all oil field equipment and structures installed on Federal leases, whether the leases contain a camouflage stipulation or not, will require painting to reduce the visual impact of color.

The following painting quidelines and procedures apply to all oilfield equipment and structures installed after the date of this notice. Painting stipulations and requirements previously issued to operators are modified to meet these quidelines and procedures.

A. All equipment and structures (except heater treater fireboxes and stocks, small wire or galvanized fencing, and flow lines and other lines on the ground) that are located within 1/4 mile of any of the following will be camouflaged:

   1. A paved road.

   2. An unpaved road which is well-traveled by non-oil field personnel (at least 50 vehicles per 24 hours).

   3. An officially-designated public use site, observation area, or overlook.

B. All equipment and structures not covered by A. above will be camouflaged using the following procedures:

1. The initial criteria to be used to determine what should be camouflaged will be the equipment or structures that can be seen one-quarter mile or beyond from the proposed location. The equipment or structures that cannot be seen from this distance should not require camouflaging.

2. As a general rule, all high-level equipment (six feet or higher) such as tanks, separators and heater treater (except the firebox and stack) will require camouflaging.

3. As a general rule, equipment such as pumping units (the tips of movable parts--such as the horsehead, weights and beam--will be painted according to OSHA requirements), flow lines or other lines on the ground, other small-size lines (4-inch diameter and smaller), low-level well head equipment and headers (up to five feet in height), and small and galvanized wire and pipe that are not normally painted will not require painting. If this type of equipment is normally painted, or painted from previous use, the contrast of color will be considered in visual assessment. It is desirable that as much equipment as possible be painted a uniform non-contrasting color if it's going to be painted anyway.

The use of semi-gloss paint in lieu of flat paint will be acceptable.

Exceptions to these requirements may be allowed (exceptions must be approved by BLM and USGS on a case-by-case basis), for the following reasons:

1. Safety as described by the Occupational Safety and Health Administration (OSHA) in part 1910.55, Title 29 of the Code of the Federal Regulations "Safety Color Code for Marking Physical Hazards".

2. Function identification which might aid in the identification of materials conveyed as described in the American National Standards Institute (ANSI) document A13.1 (Scheme for the Identification of Piping Sustems"; or

3. To aid in the functional use of certain types of equipment (i.e., painting equipment a dark color to absorb heat to aid flow of high viscuous liquids or a light color to prevent loss of hydrocarbons by evaporation).

APPLICATION FOR DRILLING

MESA PETROLEUM CO
SALT FEDERAL WELL NO. 1
660' FSL & 1980' FWL, Sec 8, T8S, R23E
CHAVES COUNTY, NEW MEXICO

July 17, 1980

LEASE: NM - 23264

In conjunction with Form 9-331 C, Application for Permit to Drill subject well, the following items of pertinent information are submitted in accordance with U.S.G.S. requirements:

1. The geologic surface formation is San Andres.

2. Estimate tops of geologic markers are as follows:

Glorietta	591
Yeso	774
Abo	2841
Wolfcamp (Hueco)	3440

3. The estimated depths at which anticipated water, oil, or gas formations are expected to be encountered:

   Water - San Andres at approximately 500'
   Gas - Yeso at approximately 1100'
   Gas - Abo at approximately 3300'

4. Casing and Blowout Preventer Program

   Surface: 700' of 8-5/8", 24#, K55, ST&C new casing cemented with 240 sx LW + 100 sx "C" or volume sufficient to circulate cement to surface. Will nipple up 10" API 3000 WP braden head and install 10" API 3000 psi WP BOP stack (consisting of 1 pipe ram, 1 blind ram, and 1 bag type BOP) to drill 7-7/8" hole to total depth.

   Production: 3500' of 4-1/2", 10.5#, K55, ST&C new casing cemented with 310 sx LW + 360 sx 50/50 Poz or volume sufficient to raise top of cement to at least 700' (or base of surface casing). Choke, kill and fill lines are indicated on Exhbiit I. BOPs will be tested prior to drilling below the 8-5/8" casing. A full opening safety valve, to fit the drill string in use, will be kept on the rig floor at all times. The kelly cock, safety valve, choke and kill lines will be tested at the same time that BOPs tests are run. Operations opening and closing checks on all BOPs will be run on each trip, with daily operational check of pipe rams.

5. Circulating medium and control equipment.

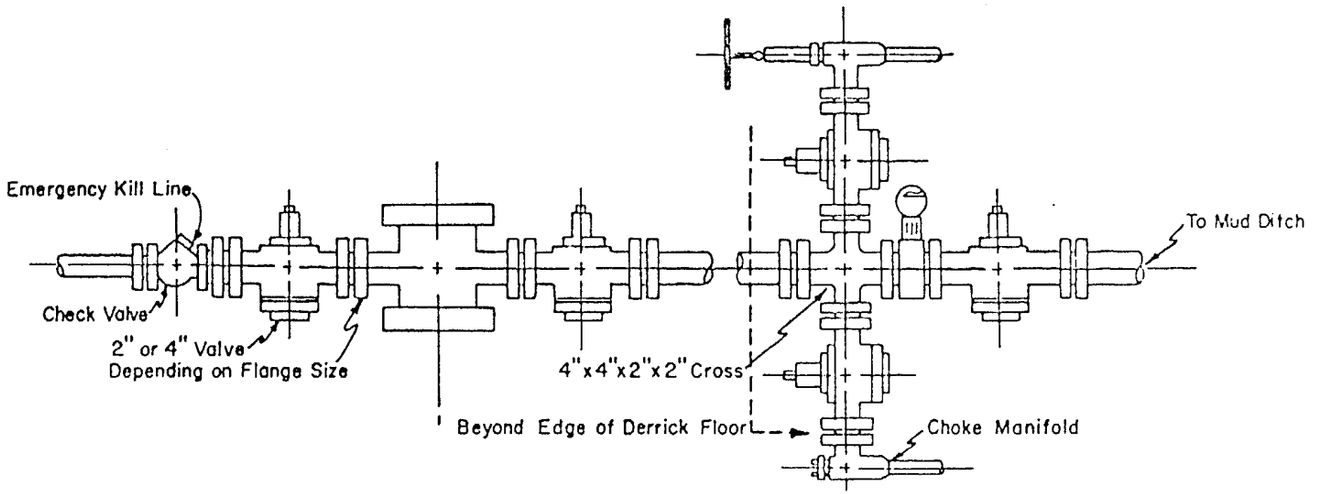
0 - 700'	Use fresh water spud mud with fresh water gel and soda ash or lime treated with lost circulation material (cottonseed hulls, fiber and paper) as hole conditions dictate. If total loss of returns occurs, mix 2 or 3 viscous slugs with LCM and attempt to regain circulation. If unsuccessful, consider drilling without returns to casing point and spot 150± bbls viscous slug treated with LCM on bottom to run pipe.
700 - 2700'	Drill out 8-5/8" casing with fresh water circulating reserve pit with additions of caustic soda for pH = 9.0 - 9.5 and chemicals for corrosion control. Mix paper, as needed, to control seepage and/or to sweep hole.
2700 - T.D.	Go through steel pits utilizing above fluid with fine screen shaker and desilter to control solids. Maintain mud weight less than 10 lb/gal with additions of fresh water while keeping chloride - ion concentration of 40,000-50,000 + ppm and KCL = 3%. At 2800' mud-up with starch and soda ash to control API water loss to 20-25 cc to T.D. Sea mud and salt water gel will be added to sweep hole or to raise viscosity of system sufficiently to clean hole to run logs and casing.

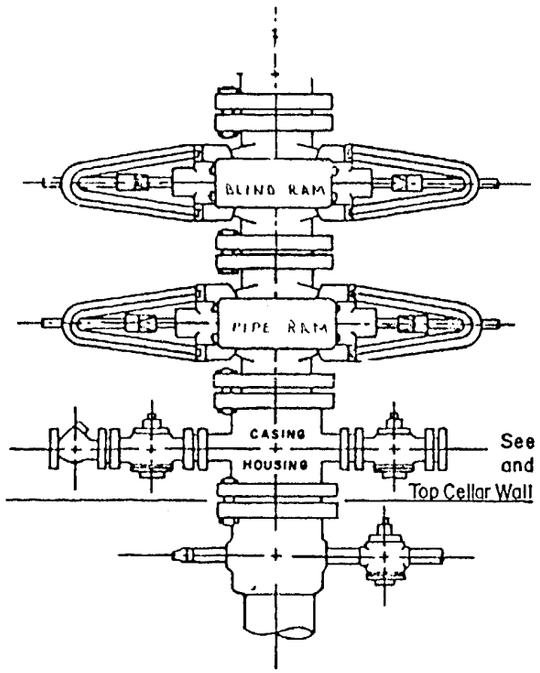
6. There is no coring program or drill stem tests planned for this well. The logging program may consist of a gamma ray log from total depth to surface, compensated neutron-density-caliper log and dual laterolog-micro spherically focused log run from 600' to total depth.

7. Maximum anticipated bottom hole pressure is 2100 psi at 3300' based upon bottom hole pressure gage on offset well. Mud weight required to offset this pressure is 7.0 ppg. It is probable that leaching of expected salt stringers could increase the mud weight to 10.0 - 10.2 ppg. Bottom hole temperature should not exceed 115°F. No sour gas is expected.

8. Anticiapted spud date is August 18, 1980 with completion of drilling operations expected by August 25, 1980 . Completion operations (perforations and stimulation) will immediately follow successful drilling operations.

Blow-out Preventers and choke manifold are all 900 Series





3,000 PSI WORKING PRESSURE
BLOW-OUT PREVENTER HOOK-UP

3,000 PSI WORKING PRESSURE
KILL, CHOKE, AND FILL CONNECTIONS

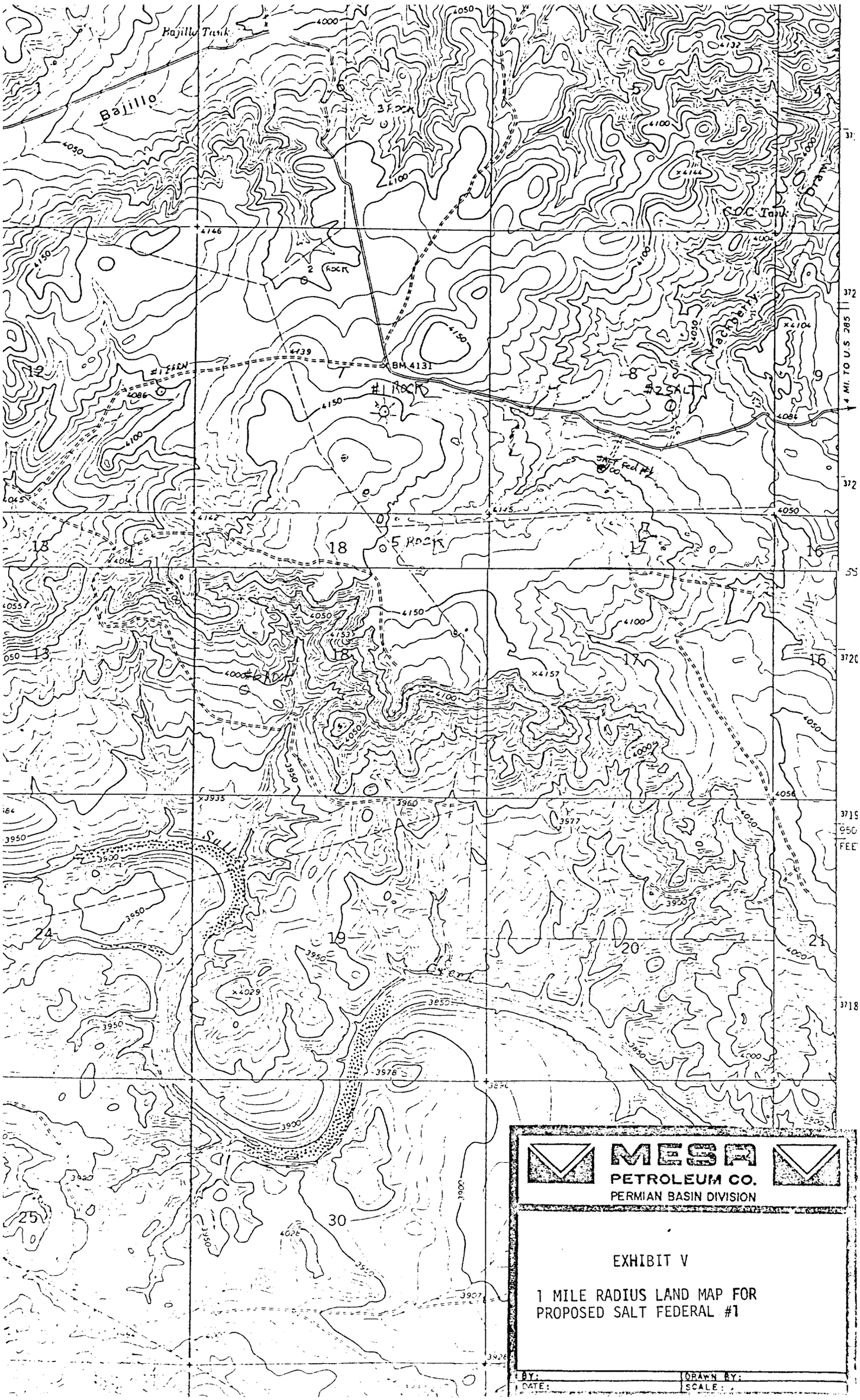
DETAIL OF 4" FLOW LINE CHOKE ASSEMBLY

Minimum assembly for 3,000 PSI working pressure will consist of three preventers. The bottom and middle preventers may be Cameron.

MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT I

BLOWOUT PREVENTER SCHEMATIC FOR
SALT FEDERAL #1

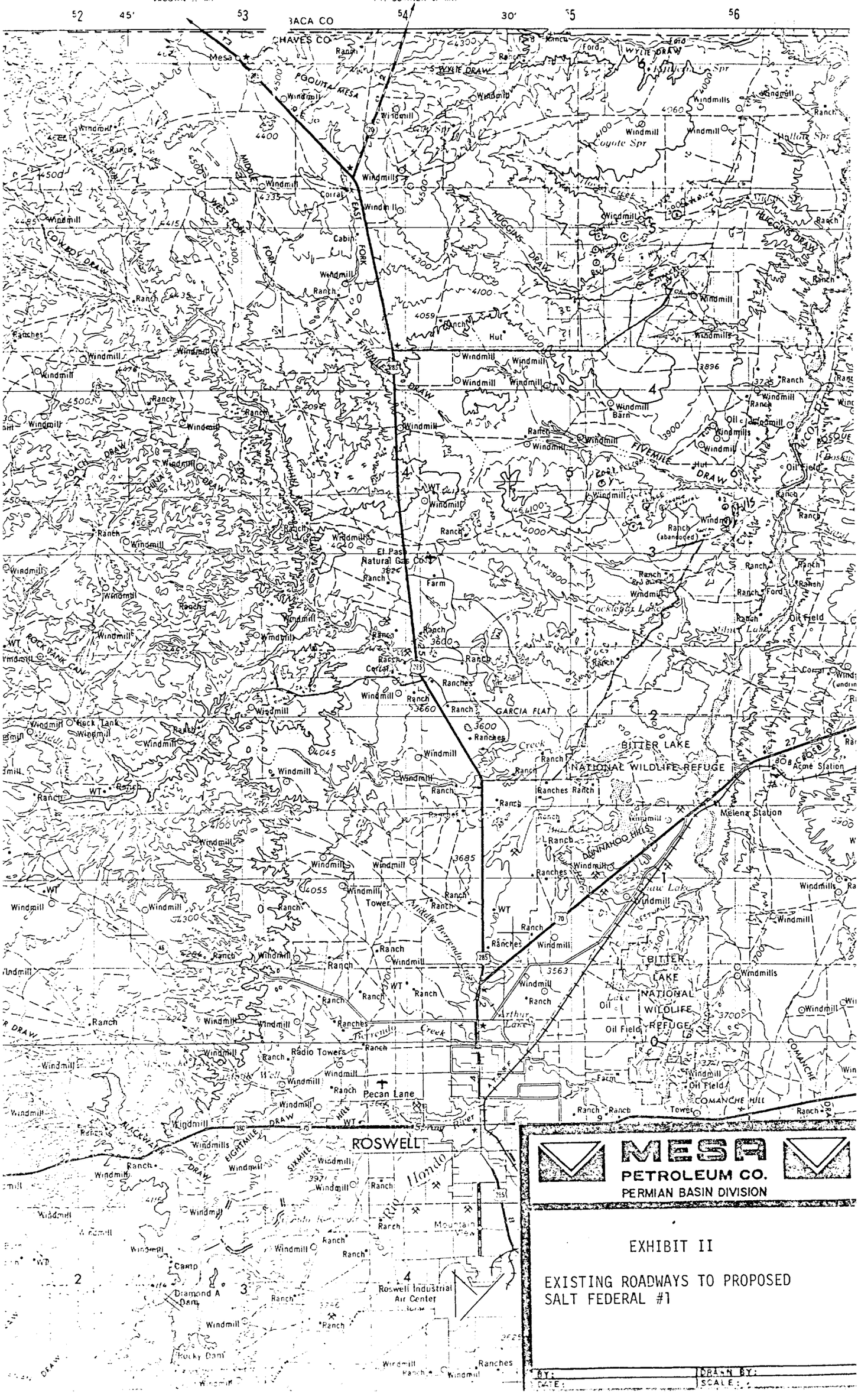


MESA PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT V

1 MILE RADIUS LAND MAP FOR
PROPOSED SALT FEDERAL #1

BY:
DATE:
DRAWN BY:
SCALE:



MESA PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT II

EXISTING ROADWAYS TO PROPOSED
SALT FEDERAL #1

BY:
DRAWN BY:
DATE:
SCALE: