

**N.M. OIL CONS. COM.
P.O. BOX 15388
HOBBES, NEW MEXICO
APPLICATION FOR P**OPER. UGMD NO. 13425
PROPERTY NO. 15388
POOL CODE 37584
EFF. DATE 1-12-95
API NO. 32-025-32818PLICATE*
ons on
2)FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐OTHER ☐NO. 1994
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Mallon Oil Company

3. ADDRESS AND TELEPHONE NO.

P.O. Box 3256, Carlsbad, NM 88220 (505) 885-4596

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

At surface 1980' FSL and 660' FWL (NW SW) Unit L

At proposed prod. zone 1980' FSL and 660' FWL (NW SW) Unit L

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

35 miles SW of Hobbs, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660'

18. DISTANCE FROM PROPOSED LOCATION*

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

1320'

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

19. PROPOSED DEPTH

6300'

20. ROTARY OR CABLE TOOLS

Rotary

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

3678' GR

Capitan Controlled Water Basin

22. APPROX. DATE WORK WILL START*

12/30/94

23.

PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | GRADE SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------------|-----------------|---------------|------------------------------|
| 25" | 20 | 0.25 | 40' | Redi-Mix to surface |
| 14-3/4 | 9-5/8 | 36# | 1500' | CIRCULATE Lite, 200 sx Class |
| 8-3/4 | 5-1/2 | 14 & 15.5# | TD | 800 sx Lite, 200 sx Class |

The Operator proposes to drill to a depth sufficient to test the Delaware formation for oil. If productive, 5-1/2" casing will be cemented. If nonproductive, the well will be plugged and abandoned in a manner consistent with Federal regulations. Specific programs as per Onshore Oil & Gas Order #1 are outlined in the following attachments:

Drilling ProgramSurface Use and Operating Plan

Exhibit #1 - Blow Out Preventor Equipment

Exhibit "A" - Location and Elevation Plat

Exhibit "B" - Existing Roads

Exhibit "C" - Planned Access Roads

Exhibit "C-1"

Exhibit "D" - One Mile Radius Map

Exhibit "E" - Well Site
LayoutExhibit "F" - Production
FacilitiesApproval 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

Duane C. Winkler

TITLE

Production Superintendent

DATE

11/29/94

(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:

APPROVED BY

/s/ Gary Bowers

TITLE

AREA MANAGER

DATE

1-10-95

*See Instructions On Reverse Side

DRILLING PROGRAM

Attached to Form 3160-3
Mallon Oil Company
Mallon "34" Federal No. 16
1980 FSL, 660 FWL, Sec.34 T19S R34E
Lea County, New Mexico

Lease Number: NM-052

1. Geologic Name of Surface Formation is :
Quaternary Alluvium

2. Estimated Tops of Important Geologic Markers

| | |
|---------------------|---------|
| Quaternary Alluvium | Surface |
| Rustler | 1590 |
| Top of Salt | 1720 |
| Base of Salt | 3326 |
| Yates | 3513 |
| Seven Rivers | 3821 |
| Queen | 4516 |
| Delaware | 5800 |
| Total Depth | 6300 |

3. The Estimated Depths of Anticipated Fresh water, Oil or Gas:

| | | |
|---------------------|-------|--------------|
| Quaternary Alluvium | 300' | Fresh Water. |
| Yates | 3513' | Oil |
| Queen | 4516' | Oil |
| Delaware | 5800' | Oil |

No other formations are expected to give up Oil, Gas, or Fresh Water in measurable quantities. The surface fresh water sands will be protected by setting 9 5/8" csg at 1500' and circulating cement back to surface. Potash will be protected by setting 5 1/2" csg at total depth and circulating cement back to 1300' from surface.

4. Proposed Casing Program:

| <u>Hole Size</u> | <u>Interval</u> | <u>Csg OD</u> | <u>Csg weight grade, Jt., Type Cond</u> |
|------------------|-----------------|---------------|---|
| 25" | 0-40' | 20" | Conductor, 0.25" wall thickness |
| 14 3/4" | 0-1500' | 9 5/8" | 36# K-55 STC |
| 8 3/4" | 0-5300 | 5 1/2" | 14# K-55 STC |
| | 5300-TD | 5 1/2" | 15.5# K-55 STC |

Cement Program:

| | |
|------------------------|--|
| 20" Conductor csg: | Cemented with ready-mix to surface |
| 9 5/8" Surface csg: | Cemented to Surface with 700 sx Pacesetter Lite 6.00% Gel (Bentonite)+0.25 lb/sk Cello-Seal 105.% Fresh Water |
| 5 1/2" Production csg. | Cemented with 800 sacks Pacesetter Lite (C) 6.00% Gel (Bentonite)+0.25 lb/sk Cello-Seal 5.00% Salt+105.00% Fresh Water, This cement slurry is designed to bring TOC to 1300'. |

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram type (3000psi WP) preventer. The unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams on bottom. The BOP will be nipped up on the 9-5/8" surface csg and used continuously until TD is reached. BOP and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Pipe rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 2" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve and choke lines and choke manifold with 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine, and polymer/KCL mud system. The applicable depths and properties of this system are as follows:

| Depth | Type | Weight (ppg) | Viscosity (sec) | Waterloss (cc) |
|---------|--------------------|-----------------|--------------------|-------------------|
| 0-40 | Fresh Water (spud) | 8.5 | 40-45 | N.C. |
| 0-1500 | F.W. (Gel/Lime) | 8.5-9.0 | 32-36 | N.C. |
| 1500-TD | Brine Water | 10.0 | 32-34 | 10-12cc |

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- (A) A Kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) The drilling fluids systems will be visually monitored at all times.

8. Testing, Logging and Coring Program:

| | |
|-------------------|--|
| Drill Stem Tests: | None Anticipated |
| Logging: | TD to Surface casing, GR, CNL-FDC, DLL, MSFL |
| Coring: | None Planned |

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressures or temperatures are anticipated. The proposed mud program will be modified to control excess pressure if abnormal pressures are encountered. The estimated bottom hole temperature (BHT) at TD is 150 F and estimated maximum bottom-hole pressure (BHP) is 2800 psig.

No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area.

No major loss circulation zones have been reported in offsetting wells.

10. Anticipated starting date: December 10, 1994

Anticipated completion of Drilling operations: Expected duration of 3 weeks.

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JAN 11 1985

NEW HOBBS
OFFICE

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

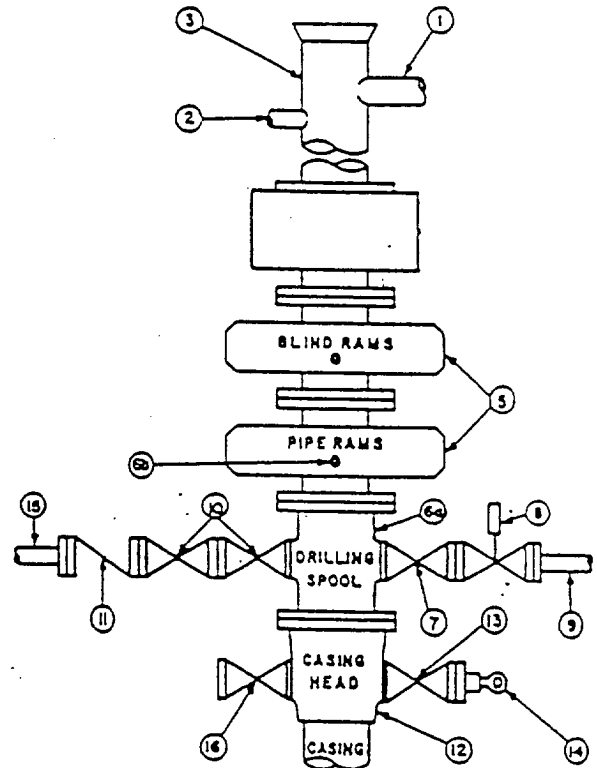
STACK REQUIREMENTS

| No. | Item | Min. I.D. | Min. Nominal |
|-----|---|-----------|--------------|
| 1 | Flowline | | |
| 2 | Fill up line | | 2" |
| 3 | Drilling nipple | | |
| 5 | Two single or one dual hydraulically operated rams | | |
| 6a | Drilling spool with 2" min. kill line and 3" min choke line outlets | | |
| 6b | 2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.) | | |
| 7 | Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> | 3-1/8" | |
| 8 | Gate valve—power operated | 3-1/8" | |
| 9 | Line to choke manifold | | 3" |
| 10 | Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> | 2-1/16" | |
| 11 | Check valve | 2-1/16" | |
| 12 | Casing head | | |
| 13 | Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> | 1-13/16" | |
| 14 | Pressure gauge with needle valve | | |
| 15 | Kill line to rig mud pump manifold | | 2" |

OPTIONAL

| | | | |
|----|---------------|----------|--|
| 16 | Flanged valve | 1-13/16" | |
|----|---------------|----------|--|

CONFIGURATION A



CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings; piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

Exhibit 1

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|----------------------------|-------------------------------------|-------------------------------------|
| API Number 30-025-32818 | Pool Code 37534 | Pool Name Northeast Lea Delaware |
| Property Code 15398 | Property Name MALLON 34 FEDERAL | Well Number 16 |
| OGRID No. 13935 | Operator Name MALLON OIL COMPANY | Elevation 3678' |

Surface Location

| | | | | | | | | | |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| L | 34 | 19S | 34E | | 1980 | SOUTH | 660 | WEST | LEA |

¹¹ Bottom Hole Location If Different From Surface

| | | | | | | | | | |
|-----------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. | | | | | | |
| 4.5 | | | | | | | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

| | | | | | | | |
|--------------------|--|-----------------|---------------|-----|--|-------------------|------|
| | <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; margin: 0;">OPERATOR CERTIFICATION</p> <p style="font-size: small; margin: 5px 0;">I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p style="margin: 5px 0;"><i>Duane C Winkler</i> Signature</p> <p style="margin: 5px 0;">Duane C Winkler Printed Name</p> <p style="margin: 5px 0;">Production Superintendent Title</p> <p style="margin: 5px 0;">11-29-94 Date</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; margin: 0;">SURVEYOR CERTIFICATION</p> <p style="font-size: small; margin: 5px 0;">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 style="text-align: center; margin: 5px 0;"> </p> <p style="margin: 5px 0;">Date Suggested _____ No. _____</p> <p style="margin: 5px 0;">Signature & Seal of Professional Surveyor <i>Ronald J. Eidson</i></p> <p style="margin: 5px 0; text-align: center;">W.O. #1140 8-11-91-1993</p> </div> | | | | | | |
| <p>Exhibit "A"</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Certificate No.</td> <td style="width: 20%;">JOHN W. WEST,</td> <td style="width: 20%; text-align: right;">676</td> </tr> <tr> <td></td> <td>RONALD J. EIDSON,</td> <td style="text-align: right;">3239</td> </tr> </table> | Certificate No. | JOHN W. WEST, | 676 | | RONALD J. EIDSON, | 3239 |
| Certificate No. | JOHN W. WEST, | 676 | | | | | |
| | RONALD J. EIDSON, | 3239 | | | | | |

10/17/01

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JAN 11 1995

CHIEF HUBBS
OFFICE