N. M. OIL CONS. COMMISSION
P. O. BOX 1980
HOBBS, NEW MEXICO 88240

Form 3160-3
(July 1992)

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO: NM-052

1a. TYPE OF WORK: Drill ☐ Deepen ☐ Re-Entry ☒

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A

b. TYPE OF WELL: Oil Well ☐ Gas Well ☒ Other — Single Zone ☐ Multiple Zone ☐

7. UNIT AGREEMENT NAME: N/A

2. NAME OF OPERATOR: Mallon Oil Company

8. FARM OR LEASE NAME, WELL NO.: Mallon 35 Federal No. 2

3. ADDRESS AND TELEPHONE NO.: P.O. Box 3256, Carlsbad, NM 88220 (505) 885-4596

9. API WELL NO.: 30-025-32984

10. FIELD AND POOL, OR WILDCAT: Lea Delaware, NE ~~Delaware~~

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1650' FNL and 660 FWL (SW NW) Unit E
At proposed prod. zone: 1650'FNL and 660 FWL (SW NW) Unit E

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 35, T19S-R34E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE *: 27 miles southwest of Hobbs, NM

12. COUNTY OR PARISH: Lea | 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
660'	240'	40
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**
300'	8,300'	Rotary
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, Etc.) 3708 GR	22. APPROX. DATE WORK WILL START	2-10-98

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
Existing 25"	20"	.25" wall	40'	Redi-mis to surface
xisting 14-3/4"	9-5/8"	36#	1500	Circulate 85 sks cmt to surface
8-3/4"	5-1/2"	15.5#/17#	TD	Stage #1 1320 sks class C
				Stage #2 580 sks pacesetter light, 100 sks

Mallon Oil Company proposes to Re-Enter the well by installing 9-5/8" wellhead to surface an dremove following cmt plugs.

0'-20'	20sks	5044'-5144'	555 sks
1450'-1550'	40 sks	5503'-5603'	35 sks
3300'-3400'	80 sks	5886'-5986'	35 sks
4466'-4881'	155 sks	6283-6383'	35 sks

with a 8-3/4" bit and clean out to original TD 8300', run 5-1/2" csg and cmt 200' into the 9-5/8" csg.

OPER. OGRID NO. 13925
PROPERTY NO. 17172
POOL CODE 37584
EFF. DATE 2/9/98
API NO. 30-025-32984

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: Terry Lindeman TITLE: Production Superintendent DATE 01/19/98

(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.

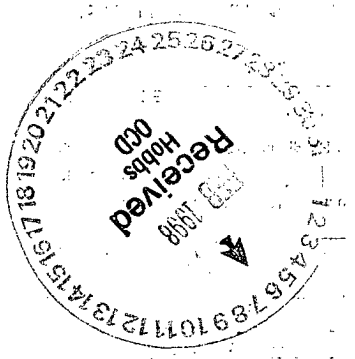
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY (ORIG. SGD.) ARMANDO A. LOPEZ TITLE Acting ADM, MINERALS DATE 2-4-98

*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.

not posted until spud



RECEIVED

1998 JAN 21 A 9:42

BUREAU OF LAND MGMT.
ROSWELL OFFICE

DRILLING PROGRAM

Attached to Form 3160-3
Mallon Oil Company
Mallon "35" Federal No. 2
1650' FNL, 660' FWL, Sec.35, T19S R34E
Lea County, New Mexico

Lease Number: NM-052

1. Geologic Name of Surface Formation :
   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
Bone Springs	8200
Total Depth	8300

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
Bone Springs	8200'	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" casing at 1500' and circulating cement back to surface. Potash will be protected by setting 5 1/2" casing at total depth and circulating cement back to 1300' from surface.

4. Proposed Casing Program:

Hole Size	Interval	Casing OD	Casing weight grade, Jt,, Type Cond
8 3/4"	0-5300	5 1/2"	15.5# K-55 STC
	5300-TD	5 1/2"	17.0# N80 STC

Cement Program:

5 1/2" Production casing: Stage #1 - Cement with 1320 sacks Class "C" + 5 lb/sk CSE + 0.5% CF-14 + 5 lb/sk salt + 5lb/sk Gilsonite + 0.25 lb/sk Cello-Seal + 59.390% fresh water. This cement slurry is designed to bring TOC to 5000'.
Stage #2 - Cement with 580 sacks Pacesetter Lite, 6.0% Gel (Bentonite) + 5.0% salt + 0.25 lb/sk Cello-Seal + 105.0% fresh water followed with 100 sacks Class "C" cement + 5.0 lb/sk CSE + 5 lb/sk salt + 0.25 lb/sk + Cello-Seal + 5.0 lb/sk Gilsonite + 0.5 % CF-14 + 105.0% fresh water. This cement slurry is designed to bring TOC to 1300'.

5. Minimum Specifications for Pressure Control:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a double ram type (3000 psi WP) preventor. The unit will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and drill pipe rams on bottom. The BOP will be nippled up on the 9-5/8" surface casing 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 cmt plugs 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)	Water loss (cc)
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 well site 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:	Existing
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 3200 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: February 10, 1998
Anticipated completion of Drilling operations: Expected duration of 3 weeks.

Multi-Point Surface Use and Operation Plan

Attached to Form 3160-3
Mallon Oil Company
Mallon "35" Federal No.2
1650' FNL, 660' FWL, Sec. 35, T19S R34E
Lea County, New Mexico

Lease Number: NM-052

1. Existing Roads:

   A. The well site and elevation plat for the proposed well is shown in Exhibit "A". It was staked by John West Engineering, Hobbs, NM.

   B. Thel road is existing to the location are shown in Exhibit "B". The existing roads are Illustrated in pink and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.

   C. Directions to location: Go west 27. miles from Hobbs, New Mexico on Hwy. 62/180. Turn south on lease road and go south .5 miles turn west and travel .5 mile to location.

   D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

   Access road is existing.

3. Location of existing wells:

   A. Existing wells within a one mile radius are shown.

4. Location of Existing and/or proposed Facilities:

   A. If the well proved to be commercial, the necessary production facilities and tank battery will be installed on the drilling pad.

5. Location and Type of Water Supply:

   A. It is planned to drill the proposed well with the fresh water that will be obtained from private or commercial sources and will be transported over the existing access roads. No water well will be drilled on the location.

6. Source of Construction Materials:

   A. Caliche for surfacing the proposed access road and well site pad will be obtained from a BLM-approved caliche pit.

7. Methods of Handling Waste Disposal:

   A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.

   B. Drilling fluids will be contained in steel metal tanks. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing, and completion operations. The reserve pit will be an earthen pit, approximately 150' x 125' x 6' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit will be plastic-lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water.

C. Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending on the rates). After the well is permanently placed on production, produced water will be collected in tanks (fiberglass or steel) until hauled by transport to an approved disposal system; produced oil will be collected in steel tanks until sold.

D. A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations.

E Garbage and trash produced during drilling or completion operations will be obtained in portable trash basket and hauled to approved disposal facilities. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or Hazardous chemicals will be produced by this operation.

F. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and flagged and kept closed until it has dried. When the reserve pit is dry enough to breakout and fill and, as weather permits, the unused portion of the well site will be leveled and re-seeded as per BLM specifications. Only that part of the pad required for production facilities will be kept in use. In the event of a dry hole, only a dry marker will remain.

8. Ancillary Facilities:

   A. None required.

9. Well Site Layout:

   A. Exhibit "E" shows the relative location and dimensions of the well pad, reserve pits, and location of major rig components are shown. Top soil, if available, will be stockpiled per BLM specifications as determined at the on site inspection. Because the pad is existing.

B. The reserve pit will be lined with a high-quality plastic sheeting (5-7 mil thickness).

C. Upon completion of the proposed operations, if the well is completed, the reserve pit will be treated as outlined above within the same prescribed time. The caliche from any area of the original drill site not needed for production operations or facilities will be removed and used for construction of thicker pads or firewalls for the tank battery installation. Any additional caliche required for facilities will be obtained from a BLM approved caliche pit. Top soil removed from the drill site will be used to raconteur the pit area and any unused portions of the drill pad to the original natural level and re-seeded as per BLM specifications.

10. Plans for Restoration of the Surface:

A. Upon completion of the proposed operations, if the well is to be abandoned, the caliche will be removed from the location, road and returned to the pit from which it was taken. The pit area, after allowing to dry, will be broken out and leveled. The original top soil will be returned to the entire location which will be leveled and contoured to as nearly the original topography as possible.

All trash, garbage will be hauled away in order to leave the location in an aesthetically pleasing condition.

B. The disturbed area will be re-vegetated as recommended by the BLM.

C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed the reserve pit will be fenced on the rig (fourth) side and flagged to prevent livestock or wildlife from being entrapped. The fencing and flagging will remain in place until the pit area is cleaned-up and leveled. No oil will be left on the surface of the fluid in the pit. The entire reserve pit will be flagged until the fluid has completely evaporated.

11. Surface Ownership:

The well site and lease is located entirely on Federal Surface.

12. Other Information:

A. The top soil is sandy. The vegetation is native yucca, and prickly pear.

B. There is no permanent or live water in the immediate area.

C. Residences and Other Structures: No residences in the immediate area. Oil production facilities on offsetting location.

D. Land Use: Cattle Grazing

E. Surface Ownership: The proposed well site and access road is on Federal surface and Minerals.

F. There is no evidence of any archaeological, historical or cultural sites in the area. An archaeological survey has been conducted by Desert West Archaeological Service, Carlsbad, New Mexico. The reports have been submitted to the appropriate government agencies.

13. Operations Representative:

A. The field representative responsible for ensuring compliance with the approved surface use and operations plan is:

Duane C. Winkler
Mallon Oil Company
PO. Box 3256
Carlsbad, NM 88220
Office Phone: (505) 885-4596
Home Phone: (505) 885-3148

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 the work associated with the operations proposed herein will be performed by Mallon Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date:___1/19/98

Signed:_____

Terry Lindeman
Exploration/Production Superintendent

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-32984	37584	NE Lea Delaware

Property Code	Property Name	Well Number
17172	Mallon 35 FEDERAL	2

OGRID No.	Operator Name	Elevation
13925	MALLON OIL COMPANY	3708

Surface Location

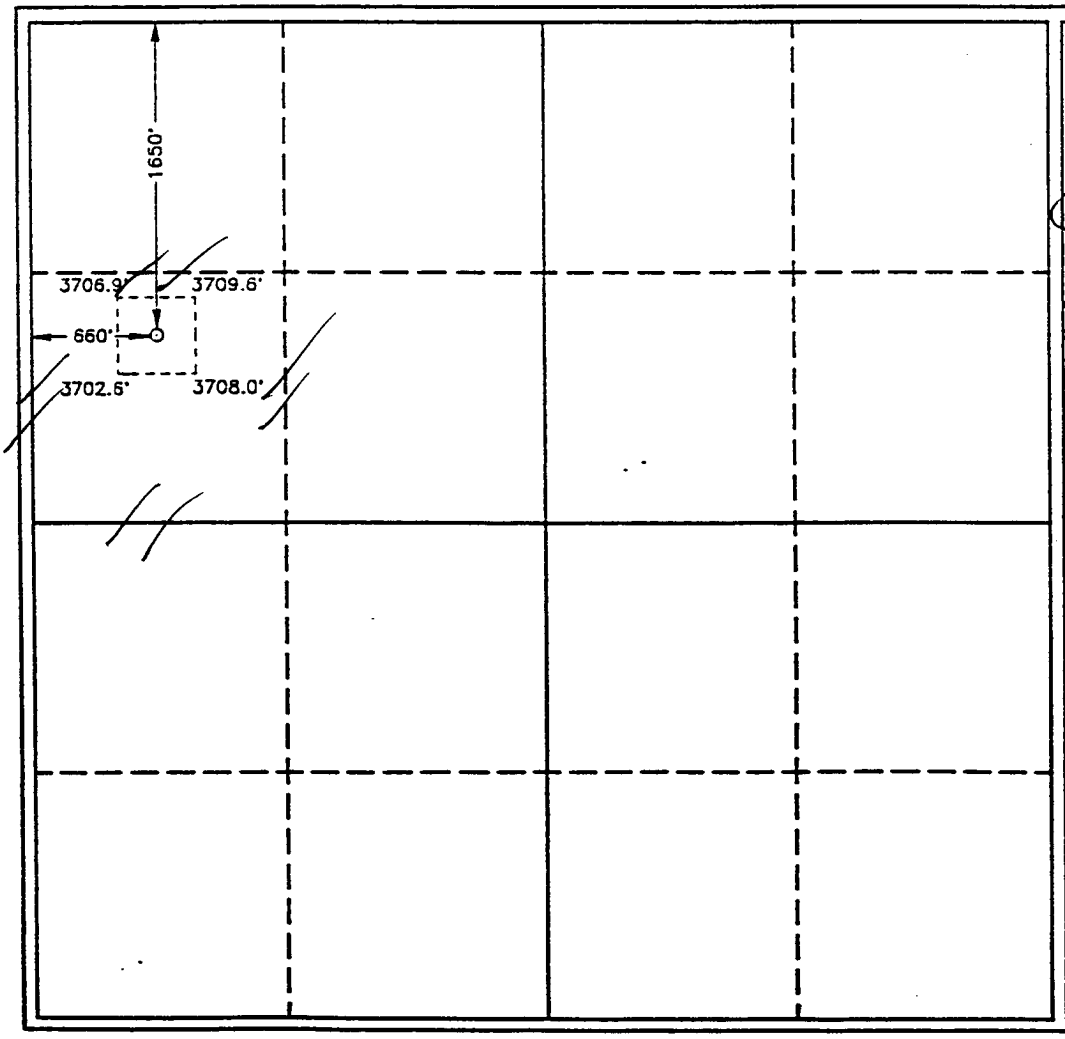
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	35	19 S	34 E		1650	NORTH	660	WEST	LEA

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.
40			

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Duane C Winkler
Signature

Duane C Winkler
Printed Name

Production Superintendent
Title

4-28-95
Date

SURVEYOR CERTIFICATION

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 supervison, and that the same is true and correct to the best of my belief.

APRIL 27, 1995
Date Surveyed JLP

Signature & Seal of Professional Surveyor
RONALD J. EIDSON NEW MEXICO 3239
Gary L. Eidson 4-28-95

W.O. Num. 95-11-0628

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY L. EIDSON 12641

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

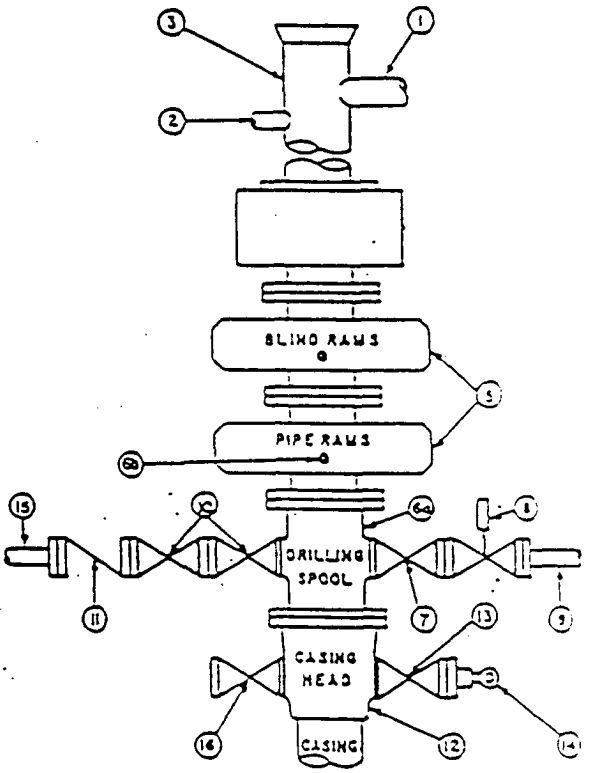
3 MWP

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		
	—or—		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate ☐ Plug ☐	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate ☐ Plug ☐	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate ☐ Plug ☐	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:

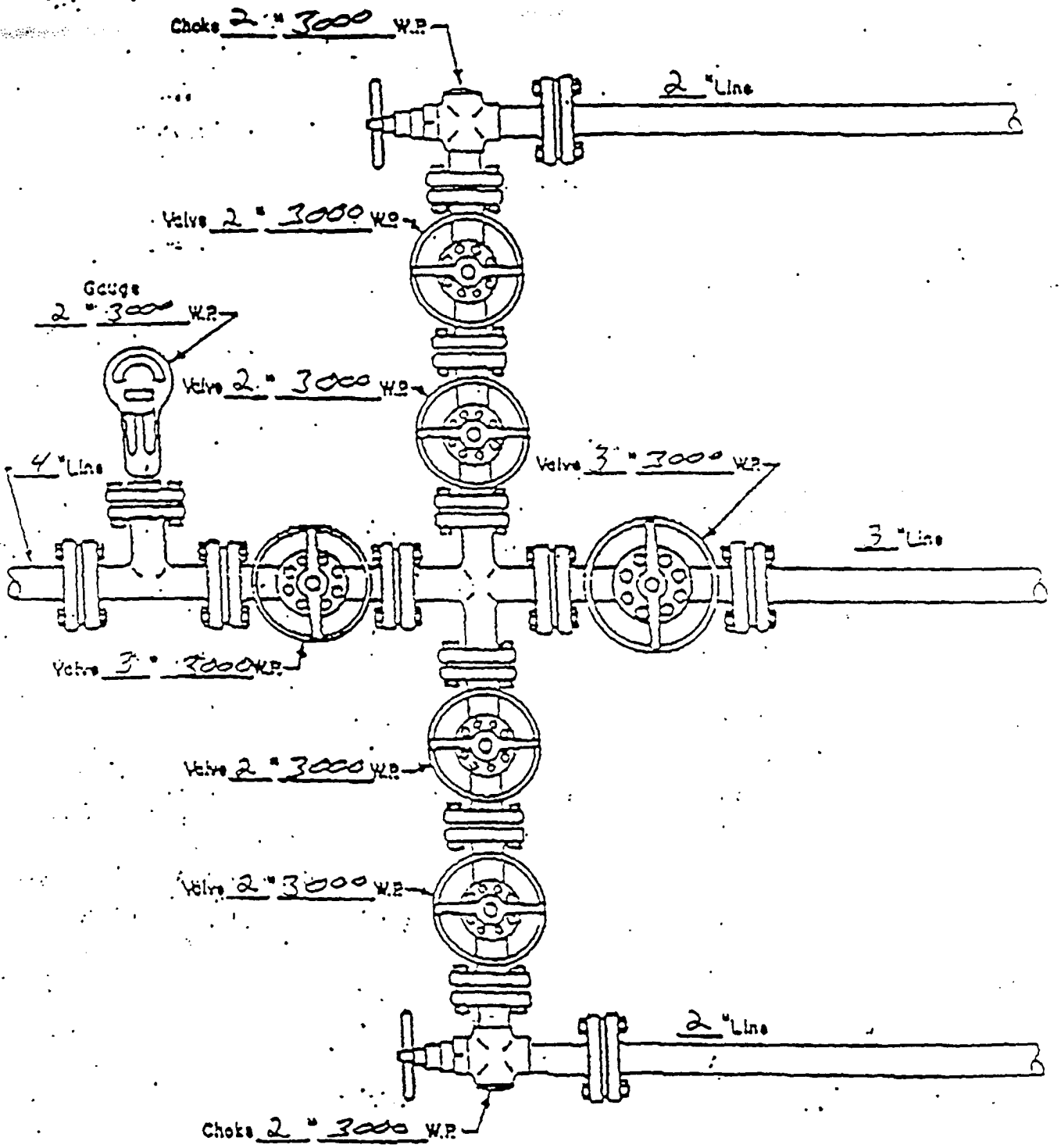
1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

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

Attachment to Exhibit #1
Choke Manifold



MANIFOLD
3000 #W.P

☒ Manuel
☐ Hydraulic

Exhibit 1

Attachment to Exhibit #1
NOTES REGARDING THE BLOWOUT PREVENTERS

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.

2. Wear ring to be properly installed in head.

3. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.

4. All fittings to be flanged.

5. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi W.P. minimum.

6. All choke and fill lines to be securely anchored, especially ends of choke lines.

7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.

8. Kelly cock on kelly.

9. Extension wrenches and hand wheels to be properly installed.

10. Blow out preventer control to be located as close to driller's position as feasible.

11. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.