Submit to Appropriate
District Office
State Lease – 6 copies
Fee Lease – 5 copies

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

State of New Mexico
Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION

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

Form C-101
Revised 1-1-89

API NO. ( assigned by OCD on New Wells) 30-025-31305

5. Indicate Type of Lease STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:
DRILL ☒ RE-ENTER ☐ DEEPEN ☐ PLUG BACK ☐

b. Type of Well:
OIL WELL ☐ GAS WELL ☐ OTHER INJECTOR SINGLE ZONE ☒ MULTIPLE ZONE ☐

7. Lease Name or Unit Agreement Name
ARROWHEAD GRAYBURG UNIT

2. Name of Operator
CHEVRON USA INC.

8. Well No.
139

3. Address of Operator
P.O. Box 1150 Midland Tx 79702 Attn. Rm 4115-A

9. Pool name or Wildcat
ARROWHEAD Grayburg

4. Well Location
Unit Letter O : 660 Feet From The SOUTH Line and 1805 Feet From The EAST Line

Section 35 Township 21 SOUTH Range 36 EAST NMPM LEA County

| 10. Proposed Depth | 11. Formation | 12. Rotary or C.T. |
|---|---|---|
| ± 4500 | GRAYBURG | ROTARY |

| 13. Elevations (Show whether DF, RT, GR, etc.) | 14. Kind & Status Plug. Bond | 15. Drilling Contractor | 16. Approx. Date Work will start |
|---|---|---|---|
| 3570.2 | | CAPROCK | 7-1-91 |

17.
## PROPOSED CASING AND CEMENT PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | SACKS OF CEMENT | EST. TOP |
|---|---|---|---|---|---|
| 12 1/4 | 8 5/8 | 23 M50 | 1350 | 800 | SURF |
| 7 7/8 | 5 1/2 | 15.5 K-55 | 4500 | 900 | SURF. |
| | | | | | |

MUD. PROGRAM: 0' – 1350 FW SPUD MUD 9.0 PPG.
1350' – 4500' BW AIR MIST SYSTEM.

BOPE EQUIPMENT: 3000 PSI WP SEE ATTACHED
CHEVRON CLASS III BOP DRAWING.

per revised C-101

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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

SIGNATURE E.O. Doherty TITLE T.A. Drlg DATE 6/19/91

TYPE OR PRINT NAME E.O. DOHERTY TELEPHONE NO. 687-7812

(This space for State Use)

APPROVED BY ORIGINAL SIGNED BY JERRY SEXTON DISTRICT I SUPERVISOR TITLE DATE JUN 21 1991

CONDITIONS OF APPROVAL, IF ANY:

Permit Expires 6 Months From Approval Date Unless Drilling Underway

R-9483 Inj.

Submit to Appropriate
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Fee Lease - 3 copies

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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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

| Operator | | | Lease | | Well No. |
|---|---|---|---|---|---|
| CHEVRON U.S.A. INC. | | | ARROWHEAD GRAYBURG UNIT | | 139 |
| **Unit Letter** | **Section** | **Township** | **Range** | | **County** |
| O | 35 | 21 SOUTH | 36 EAST | NMPM | LEA |

Actual Footage Location of Well:
660 feet from the SOUTH line and 1805 feet from the EAST line

| Ground level Elev. | Producing Formation | Pool | Dedicated Acreage: |
|---|---|---|---|
| 3570.2 | GRAYBURG | ARROWHEAD | 40 Acres |

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

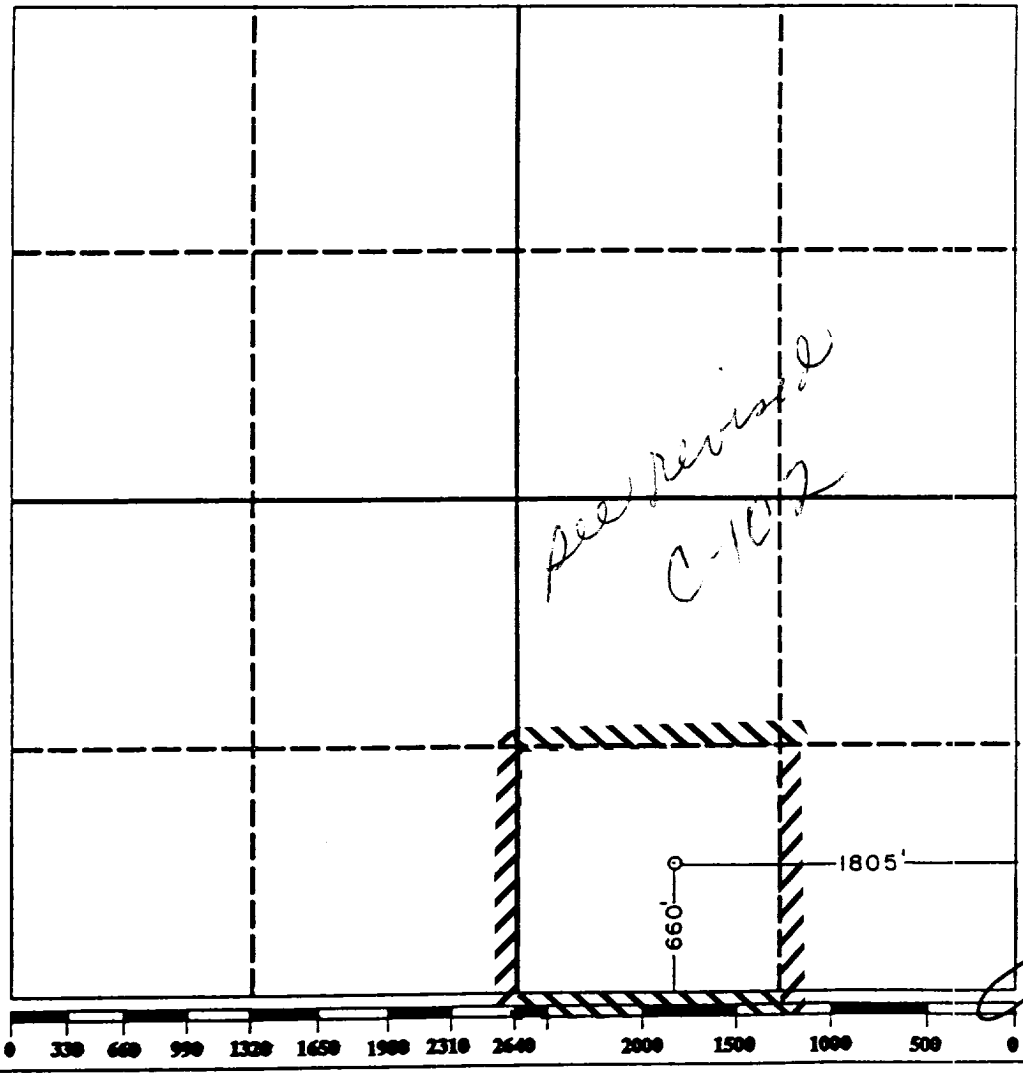
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest 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 interest, has been approved by the Division.




### OPERATOR CERTIFICATION

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

Signature: E.O. Doherty
Printed Name: E.O. DOHERTY
Position: TA / DRLG.
Company: CHEVRON USA
Date: 7-19-91

### 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 knowledge and belief.*

Date Surveyed: 6-5-91

Signature & Seal of Professional Surveyor

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR
NEW MEXICO
JOHN W. WEST

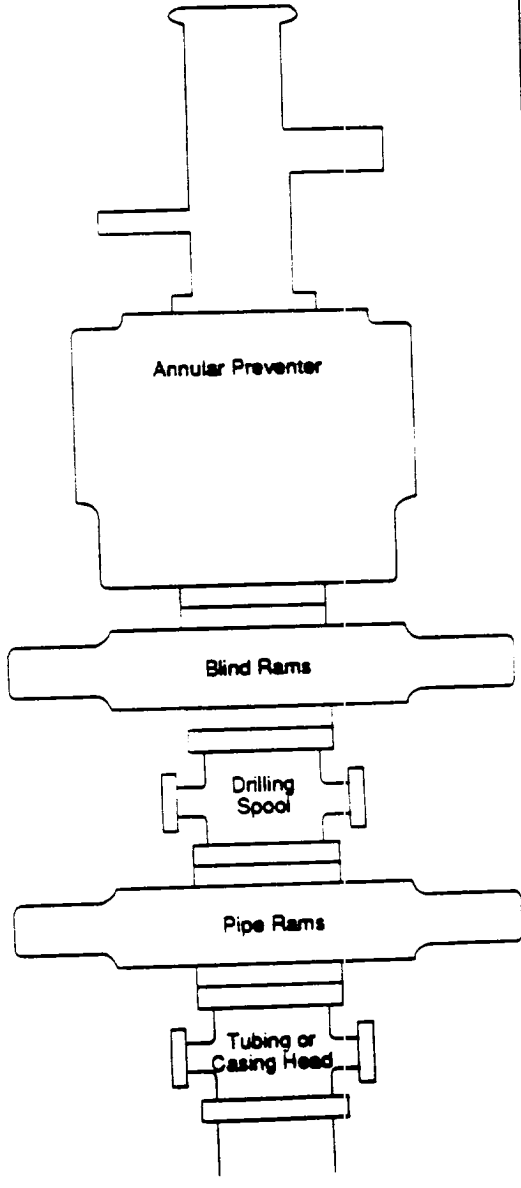
Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

125830

## E. CLASS III BLOWOUT PREVENTER STACK:

The Class III preventer stack is designed for drilling or workover operations. It is composed of a single hydraulically operated annular preventer on top, then a blind ram preventer, a drilling spool, and a single pipe ram preventer on bottom. The choke and kill lines are installed onto the drilling spool and must have a minimum internal diameter of 2". All side outlets on the preventers or drilling spool must be flanged, studded, or clamped. An emergency kill line may be installed on the wellhead. A double ram preventer should only be used when space limitations make it necessary to remove the drilling spool. In these instances, the choke manifold should be connected to a flanged outlet between the preventer rams only. In this hookup, the pipe rams are considered master rams only, and cannot be used to routinely circulate out a kick. The Class III blowout preventer stack is shown to the right in Figure 11J.4.

**Figure 11J.4**
**Class III Blowout Preventer Stack**



## D. CLASS III CHOKE MANIFOLD

The Class III choke manifold is suitable for Class III workovers and drilling operations. The Standard Class III choke manifold is shown in Figure 11J.8 below. Specific design features of the Class III manifold include:

1. The manifold is attached to a drilling spool or the top ram preventer side outlet.

2. The minimun internal diameter is 2" (nominal) for outlets, flanges, valves and lines.

3. Includes two steel gate valves in the choke line at the drilling spool outlet. The inside choke line valve may be remotely controlled (HCR).

4. Includes two manually adjustable chokes which are installed on both side of the manifold cross. Steel isolation gate valves are installed between both chokes and the cross, and also downstream of both chokes.

5. Includes a blooey line which runs straight through the cross and is isolated by a steel gate valve.

6. Includes a valve isolated pressure gauge suitable for drilling service which can display the casing pressure within view of the choke operator.

7. Returns through the choke manifold must be divertible through a mud-gas seperator and then be routed to either the shale shaker or the reserve pit through a buffer tank or manifold arrangement.

8. If the choke manifold is remote from the wellhead, a third master valve should be installed immediately upstream of the manifold cross.

**Figure 11J.8 - Class III Choke Manifold**