Form 3160-3 (December 1990) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR DEEPEN 1a. TYPE OF WORK DRILL X DEEPEN	30-025-31393 E* Form approved. Budget Bureau No. 1004-0136 Expires: December 31, 1991 5. LEASE DESIGNATION AND SEEIAL NO. LC-048295 046295 6. IF INDIAN, ALLOTTER OR TRIBE NAME N/A 7. UNIT AGREEMENT NAME ARROWHEAD GRAYBURG UNIT 8. FARM OR LEASE NAME, WELL NO. ### 148
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1a. TYPE OF WORK	7. UNIT AGREEMENT NAME ARROWHEAD GRAYBURG UNIT 8. FARM OR LEASE NAME, WELL NO.
	7. UNIT AGREEMENT NAME ARROWHEAD GRAYBURG UNIT 8. FARM OR LEASE NAME, WELL NO.
b. TIPE OF WELL	8. FARM OR LEASE NAME, WELL NO.
OIL GAS INJECTOR SINGLE MULTIPLE OTHER ZONE	
2. NAME OF OPERATOR CHEVRON U.S.A. INC.	9. API WELL NO.
3. ADDRESS AND TELEPHONE NO. 1415 682-7812	9. API WELL NO.
P.O. BOX 1150 MIDLAND, TX 79702 ATTN: P.R. MATTHEWS	10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface	ARROWHEAD/GRAYBURG
785 FNL & 1905 FWL	11. SBC., T., R., M., OR BLK. AND SURVEY OR AREA
At proposed prod. zone	V T
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*	SEC. 1, R 36E, T 22S
4.5 MILES SW OF EUNICE NEW MEXICO	12. COUNTY OF PARISH 13. STATE LEA NM
15 DISTANCE BROM DRODUREDS	OF ACRES ASSIGNED
CAlso to nearest drig, unit line, if any) 785' 5922.26 40	THIS WELL
18. DISTANCE FROM PROPORED LOCATION [®] TO DEADEST WELL DEBULING CONDUCTOR DEPTH 20. ROT	CARY OB CABLE TOOLS
OR APPLIED FOR, ON THIS LEASE, FT. 495' ± 4500' ROT	r Ar y
21. ELEVATIONS (Show whether DF, RT, GR, etc.)	22. APPROX. DATE WORK WILL START*
3527.2	10-02-91
PROPOSED CASING AND CEMENTING PROGRAM	
SIZE OF HOLE ORADE SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH	QUANTITY OF CEMENT
<u>7 7/8 " 5 1/2" 15.5 # ± 4500 C1</u>	RC.
MUD PROGRAM: 0-1350 FRESH WATER SPUD MUD 9.0 PPG. 1350-4500 BRINE WATER STARCH 10.0 PPG. BOPE EQUIPMENT: 2000 PSI WORKING PRESSURE, SEE ATTACHED BOP DRAWING. SELECT TO SELECT TO SELECT TO Life Approximation	CHEVRON CLASS II
ATHACHED by State	
N ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and propose deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program	ed new productive zone. If proposal is to drill or n, if any.
SIGNED P.R. Matthews TITLE TECHNICAL ASSISTANT	9-5-91
(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 CONDITIONS OF APPROVAL, IF ANY:	would entitle the applicant to conduct operations thereon
	Q - 2 - GI
APPROVED BY	DATE 9-20-91

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.

District Office State Lease - 4 copies Fee Lease - 3 copies

125630

DISTRICT J P.O. Box 1980, Hobbs, NM \$8240

DISTRICT II P.O. Drawer DD, Artonia, NM \$8210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

perator				Lease	···	Well No.
CHEVRON U.S.A. INC.				GRAYBURG UNIT	148	
	Section	Township		Range	Cou	
C	1		2 SOUTH	36 EAST	NMPM	LEA
ctual Footage Locati	on of Well:					· · · · · · · · · · · · · · · · · · ·
705	feet from the	NORTH	line and	1905	feet from the	WEST line
irouad level Elev.		tucing Formation		Pool		Dedicated Acreage:
3527.2	GRAY	BURG		ARROWHEAD/GRAY	BURG	40 Acres
	the acreage dedi	icated to the subje	ct well by colored pe	scil or incluse marks on th	s plat below.	
`			m .1* 6	• • • · · · · · · · · · · · · · · · · ·		
2. If more t	ihan one lease u	s dedicated to 253	well, outline each an	s identify the ownership the	LOOK (DODE ST IO MOLIZING DIR	ereat and royady).
3. If more t	than one lease o	of different owners	thip is dedicated to th	e well, have the interest of a	all owners been consolidated	by communitization,
	on, force-poolin	- <u> </u>	•• • • •	.		
	Yes "no" list the c		If answer is "yes" ty	pe of consolidation	(line newsme side of	
	BCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC		actificitie winten may	Californity Uccal Collectories		
No allowab	de will be assig			een consolidated (by comm	unitization, unitization, force	ed-pooling, or otherwise)
or until a n	on-standard uni	t, eliminating such	interest, has been ap	proved by the Division.		
			<u> </u>	1	O	PERATOR CERTIFICATION
	N	-!	R N	1		hereby certify that the informatio
	N	785	N	1		and herein in true and complete to th
	2		N	!	best of	my knowledge and belief.
I 905 <u>-</u>	<u> </u>	6		1	Signatu	
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	l		1	ļ	СН	EVRON U.S.A. INC.
				ļ	Dute	o
					9	-3-91
					SI	URVEYOR CERTIFICATION
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	1			I		is plat was plotted from field notes surveys made by me or under 1
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CHEVRON DRILLING REFERENCE SERIES VOLUME ELEVEN WELL CONTROL AND BLOWOUT PREVENTION

C. CLASS II CHOKE MANIFOLD

The Class II choke manifold is suitable for all Class Ii workovers and drilling operations. The Class II choke manifold is shown below in Figure 11J.7. Specific design features of the Class II choke manifold include:

1. The manifold is attached to the tubing/casing head when a Class II-A preventer stack is use. This hook-up is only recommended for Class II workover operations.

2. The manifold is attached to a drilling spool or top ram preventer side outlets when a Class II-B preventer stack is in use.

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

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

5. Includes one manually adjustable choke which is installed on the side of the manually adjustable choke which is installed on the side of the manually adjustable choke which is installed on the side of the manually adjustable choke which is installed on the side of the manually adjustable choke which is installed on the side of the manually adjustable choke which is installed on the side of the manually adjustable choke which is installed on the side of the manually adjustable choke.

6. Includes one bleed line installed on the side of the manifold cross which is isolated by a steel gate valve.

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

8. Screwed connections may be used in lieu of flanges or clamps.



D. CLASS II-B BLOWOUT PREVENTER STACK:



B blowout preventer stack is shown to the must be of steel construction. The Class IInections may be used. All components stack is less than 2000 psi, screwed conmum anticipated surface pressure of this -ixem off an the wellhead. As the maxidiameter of 2". An emergency kill line may lamethi muminim a evad taum bna looqa and kill lines are installed onto the drilling tuted for the annular preventer. The choke single pipe ram preventer may be substibottom. In an atternate configuration, a spool, and a single blind ram preventer on annular preventer on top, then a drilling posed of a single hydraulically operated tor drilling or workover operations. It is com-The Class II-B preventer stack is designed

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Chevron U.S.A. Inc. P.O. Box 1150, Midland, TX 79702

Permian Basin Production Business Unit

September 6, 1991

Application for Permit to Drill Proposed Arrowhead Grayburg Unit Well #148 Lea County, New Mexico

Bureau of Land Management P. O. Box 1778 Carlsbad, NM 88220

Gentlemen:

We are submitting the information requested in NTL-6 which should accompany application for permit to drill.

Well: Arrowhead Grayburg Unit Well #148

- 1. Location: 785' FNL & 1905' FWL Section 1, T-22-S, R-36-E Lea County, New Mexico
- 2. Elevation of unprepared ground: 3,527.2'
- 3. Geologic Name of Surface Formation: Quaternary-Alluvium
- 4. Type Drilling Tools: Rotary
- 5. Proposed Drilling Depth: 4,500'
- 6. Estimated Top of Geologic Markers:

Yates	2,650'
Queen	3,325'
Penrose	3,445'
Grayburg	3,645'

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