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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM 22080	
2. NAME OF OPERATOR ARCO Permian 990		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS AND TELEPHONE NO. P.O. Box 1610, Midland, TX 79702		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1980'FNL, 760'FEL, LOT H At proposed prod. zone SAME		8. FARM OR LEASE NAME, WELL NO. BARCLAY FEDERAL 13 20860	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 21 MILES EAST FROM LOVING		9. API WELL NO. 30-015-30080	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 760'		10. FIELD AND POOL, OR WILDCAT LIVINGSTON RIDGE (DEL) 96149	
16. NO. OF ACRES IN LEASE 1280.81		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 12-23S-31E	
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		12. COUNTY OR PARISH EDDY	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1200'		13. STATE NM	
19. PROPOSED DEPTH 8450'		20. ROTARY OR CABLE TOOLS ROTARY	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3507		22. APPROX. DATE WORK WILL START* 12/97	

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8 H-40	48 ST&C	860	700
11	8-5/8 J-55	32 ST&C	4600	1300
7-7/8	5-1/2 J-55	15.5 # LT&C	0-6700	935
		17# LT&C	6700-8450	

SUBJECT WELL IS PLANNED AS A 8450' STRAIGHT HOLE.
3,000 PSI BOPE WILL BE USED FROM 860' TO TD.

- ATTACHMENTS ARE AS FOLLOWS:
1. CERTIFIED LOCATION PLAT
 2. DRILLING PLAN WITH ATTACHMENTS
 3. SURFACE USE PLAN WITH ATTACHMENTS

*Part IP-1
2-27-98
HPI + LCC*

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 *Elizabeth L. Cochran* TITLE REGULATORY COMPLIANCE DATE 10/22/97

(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/ M J Chavez* TITLE STATE Director DATE 1-22-98

*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.

DEPT. OF LAND & NATURAL RESOURCES
ROOSEVELT OFFICE

OCT 30 A 5:41

RECEIVED

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DISTRICT I

P.O. Box 1888, Hobbs, NM 88241-1888

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

DISTRICT II

P.O. Drawer 88, Artesia, NM 88211-0718

DISTRICT III

1000 Rio Grande Rd., Artesia, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT IV

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 39360	Pool Name LIVINGSTON RIDGE (DEL)
Property Code 20860	Property Name BARCLAY FEDERAL	Well Number 13
OGED No. 000990	Operator Name ARCO PERMIAN	Elevation 3507

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	12	23 S	31 E		1980	NORTH	760	EAST	EDDY

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 40	Joint or Infill	Consolidation Code	Order No.
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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. <i>Laurie Cherry</i> Signature LAURIE CHERRY Printed Name REG. COMP. ASST. Title 11/5/97 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 supervision, and that the same is true and correct to the best of my belief. AUGUST 1, 1997 Date Surveyed <i>Ronald J. Eidson</i> Signature of State of Professional Surveyor W.O. Num. 97-15-1284 Certificate No. JOHN W. WEST, 676 RONALD J. EIDSON, 3239 CARL G. EIDSON, 12641

EXHIBIT 1

DRILLING OPERATIONS

CLASS -1: NORMAL PRESSURE < 10PPG

OPTION - 2: MMS STANDARD; SINGLE SIZE DRILL STRING

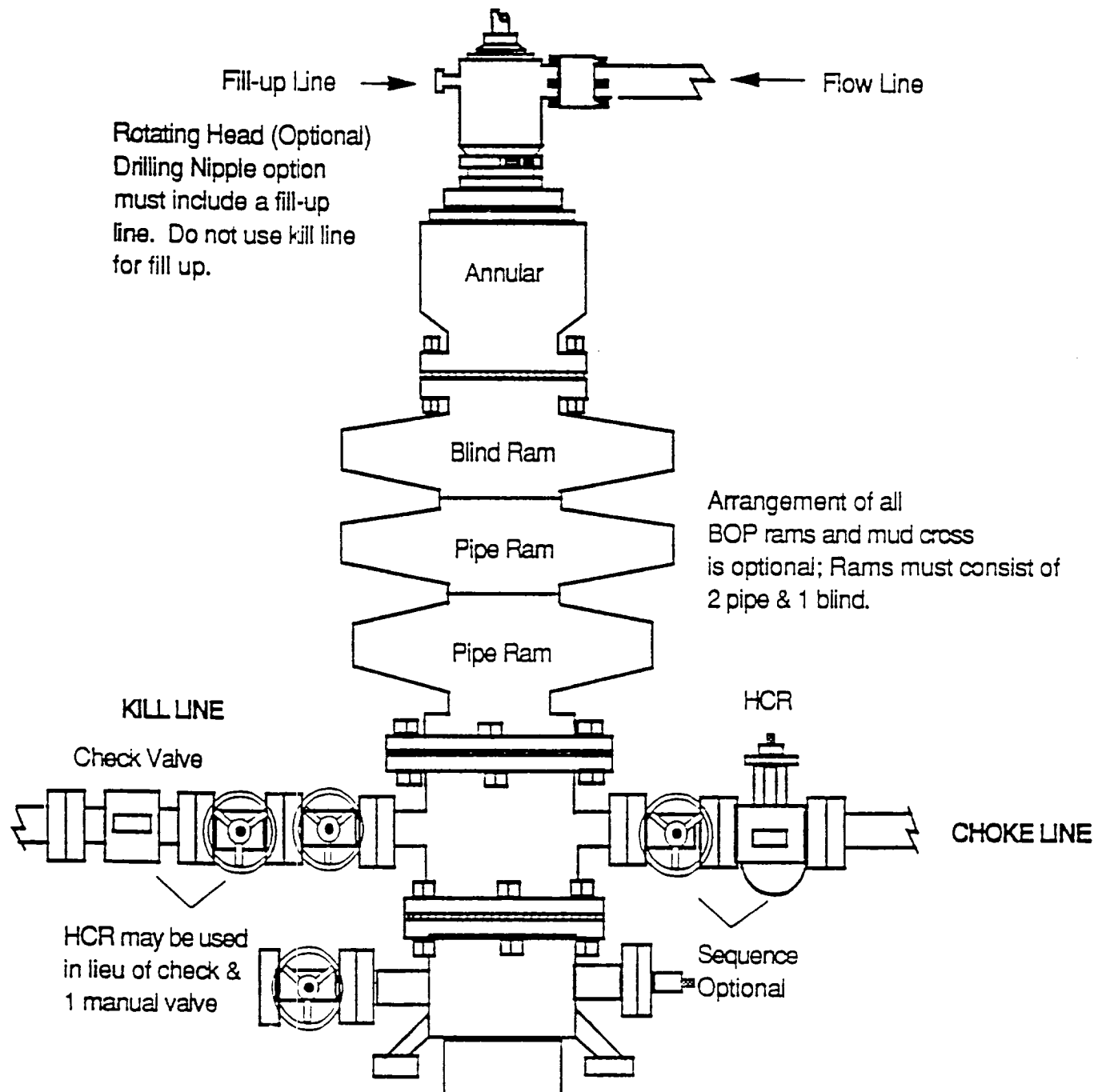
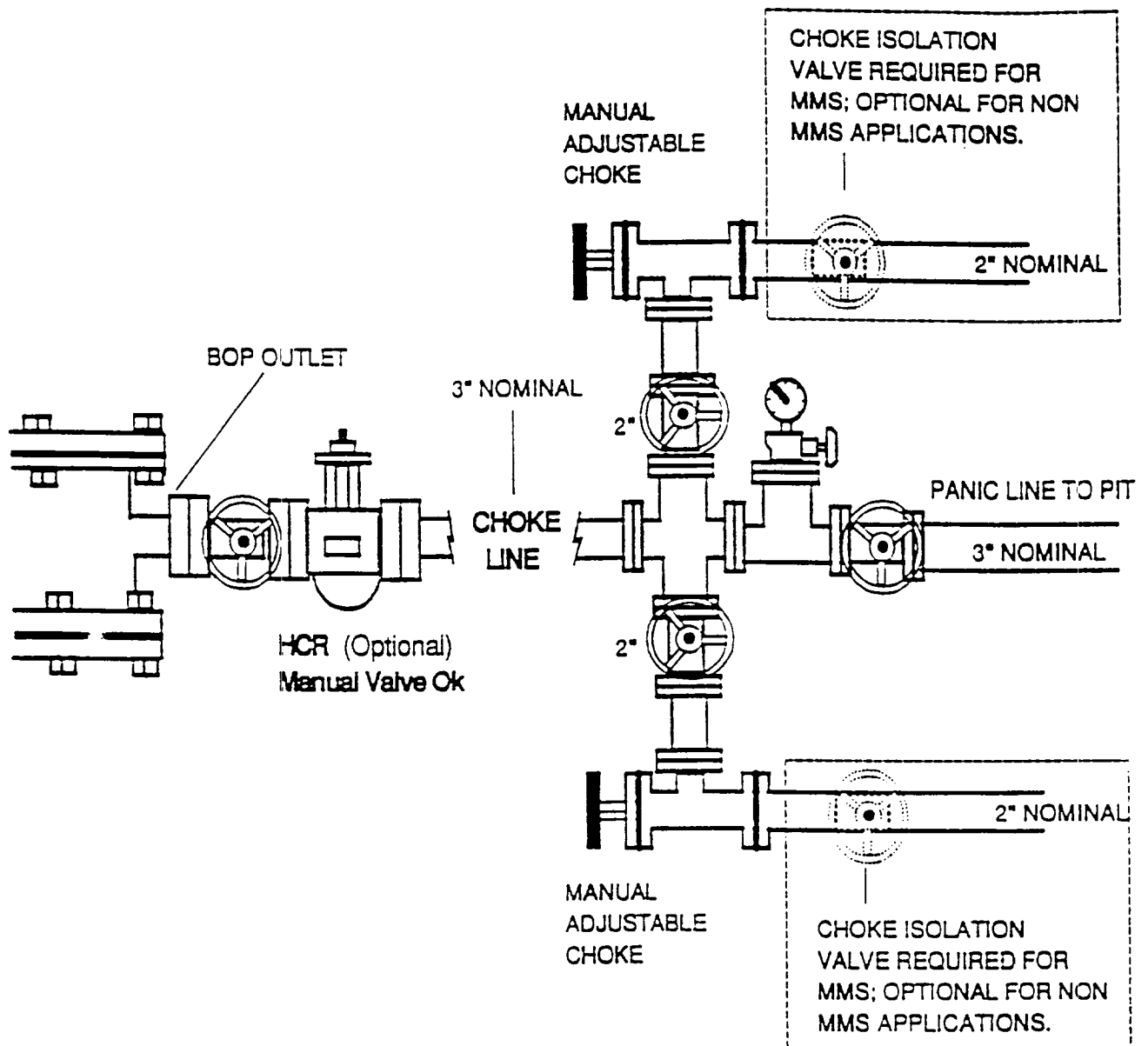


EXHIBIT 2

DRILLING OPERATIONS VS
CHOKE MANIFOLD
2M AND 3M SERVICE



BLOWOUT PREVENTION EQUIPMENT SPECIFICATIONS

1. All BOP equipment shall be fluid and/or mechanically operated.
2. BOP's and all fittings will be in good working condition.
3. Equipment through which the bit must pass shall be at least as large as the casing size being drilled.
4. The nipple above the BOP shall be at least the same size as the last casing set.
5. The upper kelly cock with handle and lower kelly cock shall be rated at the BOP working pressure.
6. A floor safety valve (full opening) or drill string BOP with appropriate pressure ratings shall be available on the rig floor with connections or subs to fit any tool joint in the string.
7. The minimum size choke line shall be 3 inches nominal diameter, with a minimum size for vent lines downstream of chokes of 2 inches nominal, and vent lines which by-pass shall be a minimum of 3 inches nominal and as straight as possible.
8. All valves, fittings and lines between the closing unit and the blowout preventer stack should be of steel construction with rated working pressure at least equal to working pressure rating of the stack. Lines shall be bundled and protected from damage.
9. Minimum size for kill line is 2 inches nominal.
10. Ram type preventers shall be equipped with extension hand wheels or hydraulic locks.