	Form 3160-3		UNITE	STATE	- 2	SUDMIT				
BUREAU OF LANDMARK DATE: BUREAU OF LANDKARK DATE: BUREAU OF L	(December 1990)	DEPARI					INTR" "CATE"		Form approved.	cl
APPLICATION FOR PERMIT TO DRILL OR DEPEN L TYPE OF WORK: DILL DILL DEFPEN 1.5 S. 2000AL MARTINE OR REMIT TO DRILL OR DEPEN L TYPE OF WORK: DILL DILL DEFPEN 1.5 S. 2000AL MARTINE OF RULE 2 NAME OF OPERATOR DEVON ENERCY OPERATING CORPORATION // 3600AL 1.6 None of Mark Mark Mark Mark 3 ADDRESS AND TELEFICINE NOC ZMN RRAOWAY, SUITE 1500, OKC, OK 73102 (405) 552-4560 1.6 1.6 1.6 4 INCATION OF WELL, ORGAN LOOK Y, UNTE 1500, OKC, OK 73102 (405) 552-4560 1.6 1.6 1.6 1.6 4 INCATION OF WELL, ORGAN LOOK Y, UNTE 1500, OKC, OK 73102 (405) 552-4560 1.6 1							nide)			
APPLICATION FOR PERMIT TO UNILLO & SUB1_ 5224, SEE 1.5210 Is TYPE OF WORK: DILLI & DEFPER		DUI					5	LEASE	DESIGNATION AND SEL	RIAL NO.
In TPE OF WORK: DILLI DEFFIN No. Note:					esia ne	<u>88210</u>				
AT ITED WORK DRILL DEPER NA TYPE OF VEL Other INTER OF VELO NA TAME OF OFFARTOR DEPON ENERGY OPERATING CORPORATION / 36.0.15 NA A DORESS AND LEPHONE NO. DEPON ENERGY OPERATING CORPORATION / 36.0.15 NA NA A DORESS AND ELEPHONE NO. A DORESS AND ELEPHONE NO. NA NA NA NA A LOCATION OF WALL Report Account on the state of the state		APPLICATIO	IN FUK PEKI	WIT TO DRILL	OR DEEPEN		6	IF D	DIAN, ALLOTTEE OR TI	RTRF. NAME
The state of		DRILL	\mathbf{X}	DEEPEN						
2 NAME OF OPERATOR Lot IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			0 4						ACREEMENT NAME	
3 ADDRESS AND TELEPHONE NO. 20 VOA ENERGY OPERATING CORPORATION 136.00.4.5 KEEL ***********************************		ATOR	Uner		ZONE	ZONE				
3. ADDRESS AND FELEPINON NO. 20 N. BROADWAY, SUITE 1500, OKC, OK 73102 (405) 552-4560 4. LOCATION OF WELL (Report location clearly and in accordance with any Suite requirements) 4. ADDRESS AND FELEPINON CONTROL OF A CONTROL O		DEVON EN	ERGY OPEH	RATING COR	PORATION	1360			"R" #93	
A DEFAULT TO THE LEASE OF CASES THE DECOMPOSED CASING AND CEMENTING PROCEED AT THE ALL ALL OF CASES AND THE ALL OF THE ALL OF CASES AND THE ALL OF THE AL	3. ADDRESS AND T			TT 1800				API W		
Altop proposed prod zone (SAME) UN O RATE OD OX Altop proposed prod zone (SAME) UN O CATION: Limit Corporation Tormad 20 Miles and 6 miles and the OLD TATION (SAME) USE (SAME) Tormad 20 Miles and 6 miles and for O Los THIS, NM 13 offender RAM Reveeler Reverser 98 LARS LIM., F. 2741 14 miles east 24 miles and for O Los THIS, NM 13 offender RAM Reveeler Reverser 98 LARS LIM., F. 2741 14 miles east 24 miles and for O Los THIS, NM 14 miles east 24 miles and for O Los THIS, NM 15 offender RAM Reverser Reverser 98 LARS LIM., F. 2741 15 miles and 4 miles and for O Los THIS, NM 15 miles and 16 miles and for O Los THIS, NM 15 miles and 16 miles and 10 mi	4. LOCATION OF W	ELL (Report location	clearly and in	TE 1500, OKC	C, OK 73102 (405) 552-456	0		<u>50-015-2</u>	8308
At top proposed prod zone (SAME) UCCATON: Line (Line) (DEPORT 14 orreaded prod zone (SAME) UCCATON: Line (Line) (DEPORT 14 orreade and back top proposed prod zone (SAME) UCCATON: Line (Line) (DEPORT 14 orreade and molecular frame makers (SAME) UCCATON: Line (Line) (DEPORT 15 orreade and molecular frame makers (SAME) UCCATON: Line (Line) (DEPORT 16 orreade and molecular frame makers (SAME) UCCATON: Line) (Line) (DEPORT 17 orreade and molecular frame makers (SAME) UCCATON: Line) (Line) (DEPORT 18 orreade frame makers UCCATON: Line) (Line) (At surface 2741	I' FNL & 1330' FWL	UNO	RTHODO				RAY	BURG-JACKSON	Rus Qu Gh
	At top proposed prod	i zone (SAME)			Sec. 19 19 19 19 19 19 19 19 19 19 19 19 19		1 44	SEC.	T. R. M. OR BLOCK A	ND SURVEY OR AREA
4 miles are & 4 miles north of Lace Hills, N.M. 11. #FARE 11. #FARE 11. #FARE 15 million main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 15 million main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 15 million main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 15 million main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 15 million main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 15 million main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 16 monter main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 15 million main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 16 monter main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 16 monter main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 17 monter main Resonance 11. #FARE 11. #FARE 11. #FARE 11. #FARE 17 monter main Resonance 11. #FARE 11. #FARE 11. #FARE <td></td> <td></td> <td>Un</td> <td>+ (10)</td> <td></td> <td></td> <td></td> <td>ECTI</td> <td>ON 5-T17 S - R31 E</td> <td></td>			Un	+ (10)				ECTI	ON 5-T17 S - R31 E	
Exhibit #1 - Control to DOUT OF LOOK Fills, N.M. Exhibit #1 - Control to DOUT OF LOOK Fills, N.M. Exhibit #1 - Control to BARKER FILLENCE, F. 2741 Exhibit #1 - Control to BARKER FILLENCE, F. 2741 Exhibit #1 - Control to BARKER FILLENCE, F. 2741 Exhibit #1 - Control to BARKER FILLENCE, F. 2741 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - Control to BARKER FILLENCE, F. 200 Exhibit #1 - 200	14. DISTANCE IN MILES 4 miles east & 4 mil	AND DIRECTION FROM	MEAREST TOWN	OR POST OFFICE	·			. cou	NTY OR PARISH	13. STATE
LOCATOR TO REARET 17.80: OF ADDE ANTIONE MORENE OR, LIDE, I.C., CHARTER LIDE, CONTRACT 2741 MARKED TRANSPORT CONTRACT 19.7000000000000000000000000000000000000										
ROUTERY OF LEAR LURE, IT. 2741 To Michael					ACRES IN LEASE		,		17.NO. OF ACRES	ASSIGNED
13. DFROME TRAN ROOMED LOCATION 13. PROPOSED CASING AND CEMERTING PROCEAM 20. ROTAXY OF CALLE TOOLS'. 13. DEPOSITION OW, OF THE DAR, TT. SOO' 4000 20. ROTAXY OF CALLE TOOLS'. 14. DEPOSITION OW, OF THE DAR, TT. SOO' 20. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 14. DEPOSITION OW, OF THE DAR, TT. SOO' 21. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 14. DEPOSITION OW, OF THE OR FOOL 15. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 14. DEPOSITION OW, OF THE OR FOOL 15. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 14. DEPOSITION OW, OF THE OR FOOL 15. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 14. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 15. ROTAXY OF CALLE TOOLS'. 20. ROTAXY OF CALLE TOOLS'. 17. ROTAXY TOOLS'. 15. ROTA			2741	1885.00					TO THIS WELL	
Restance reduction reduction restance reductive restance	18. DISTANCE FROM PROP	OSED LOCATION*			DEPTH		<u>`</u>	_	1	
3811 GR 22. APPROX. BATE WARK WILL START: JANUARY 1, 1995 3. PROPOSED CASING AND CEMENTING PROCRAM 3.147 8.507 J.45 24.000 3.147 51/2 J.55 15.50 4000 Clinic J.1.1 50 or accase vc 37/65 + 500 st Clase vc 70/78 Ve plan to circulate cement to surface on all casing strings. Devon Energy Operating Corporation proposes to drill to 4000° to test wc 37/65 + 500 st Clase vc 37/65 + 500	OR APPLIED FOR, ON	THIS LEASE, FT.	9001	4000		tar ∎				LE TOOLS.
3. PROPOSED CASING AND CEMENTING PROGRAM SILE OF HOLZ GAME, STEE OF CALDEG METHER PRA FOOT SETTING EACH OLIMETTY OF COMPACT 21/4" 8 58" 3.55 14.00 400 SETTING EACH OLIMETTY OF COMPACT 21/4" 8 58" 3.55 14.00 400 SETTING EACH OLIMETTY OF COMPACT 21/4" 8 58" 3.55 14.00 400 SETTING EACH OLIMETTY OF COMPACT 7/8" 51/2" 3.55 15.59 4000 SETTING EACH To at Class CC 35/55 % 50 mt Class We plan to circulate cement to surface on all casing strings. Devon Energy Operating Corporation proposes to drill to 4000' to test 160 mt Class CC 35/55 % 50 mt Class Wellow will be plugged and abandoned per Federal Regulations. Programs to adhere to onshore oil and gas regulations are The undersigned accepts all applicable Exhibit #3/3-A Rod Map and Topo Map conducted on the leased land or portiony Erricions concerning operations Exhibit #3 Production Facilities Plat Lease No. LC022435-B Erricions Section S-T17N-R31E Exhibit #5 Production Facilities Plat Lease No. LC022435-B Erricions and proposed new productive zone. If proposed here applicable to the septiment data on subsurface locations and measured and true vertical deptis. Give blowout pr		other DF, RT, GR, etc.)						22.	APPROX. DATE WORK W.	ILL START+
It of NOLE PROPOSED CASING AND CEMENTING PRORMAM It of NOLE PROPOSED CASING AND CEMENTING PRORMAM DESCRIPTING PRORMAM ALL OF NOLE SECTION DESTRY COMMENTING PRORMAM INTON DESTRY COMMENTING PRORMAM DESCRIPTION DESTRY COMMENTING PRORMAM VERTICAL OF NOLL ON THE CONSTRY COMMENTING PRORMAM VERTICAL OF NOLL ON THE CONSTRY VERTICAL ON THE CONSTRY VERTICAL ON THE CONSTRY CONSTRY CONSTRY VERTICAL ON THE CONSTRY CONSTRY CONSTRY CONSTRY CONSTRY VERTICAL ON THE CONSTRY CONSTRY CONSTRY CONSTRY CONSTRY CONSTRY CONSTRY VERTICAL ON THE CONSTRY CON								Jan	uary 1, 1995	
21/4* Sector Sector Sector CLARK				PROPOSED	ASINC AND OF	MENTENIC				
1.14 438 J.45 24.04 400 CIRCULAT 168 sk hits out + 200 sk Class 'C' 35/63 ' 500		GRADE, SIZE	OF CASING	WEIGH	PER FOOT				OI IANT TTY	
We plan to circulate cement to surface on all casing strings. Devon Energy Operating Corporation proposes to drill to 4000' to test the Grayburg-Jackson formation for commercial quantities of oil. If the Grayburg-Jackson is deemed non-commercial, the wellbort will be plugged and abandoned per Federal Regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments. Drilling Program The undersigned accepts all applicable terms, condition, stipulations and restrictions concerning operations Exhibit #3/3-A = Road Map and Topo Map conducted on the leased land or portions Exhibit #4 = Ucation and Elevation Plat Exhibit #3 = Production Facilities Plat Leskhöt #4 = Wells Within 1 Mile Radius Exhibit #5 = Production Facilities Plat Lesse No. LC029435-B Legal Description: Section 5-T17N-R31E Exhibit #7 = Casing Destartion Structure S				24.0#		400'	CIRCUL			
We plan to circulate cement to surface on all casing strings. Devon Energy Operating Corporation proposes to drill to 4000' to test the Grayburg-Jackson formation for commercial quantities of oil. If the Grayburg-Jackson is deemed non-commercial, the wellbore will be plugged and abandoned per Federal Regulations. Programs to adhere to onshore oil and gas regulations are Drilling Program Exhibits #1/1-A = Blowout Prevention Equipment If the Grayburg-Jackson is deemed non-commercial, the terms, condition, stipulations and gas regulations are concerning operations Exhibits #1/1-A = Blowout Prevention Equipment The undersigned accepts all applicable terms, condition, stipulations and restrictions concerning operations Exhibit #2 = Location and Elevation Plat The undersigned accepts all applicable terms, condition, stipulations and Exhibit #3/3-A = Road Map and Topo Map conducted on the leased land or portions Exhibit #3 = Production Facilities Plat Lease No. LC029435-B Districtions facilities Plat Exhibit #6 = Rotary Rig Layout Legal Description: Section 5-T17N-R31E Districtions and measured and true vertical depths. Give blowout preventer program, if any. H2S Operating Plan Generation and subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. Productive zone. If proposal is to deepen, give data on present productive zone. If proposal firstly is the other topic and measured and true vertical depths. Give blowout preventer program, if any. Prod Deepen directionally, gi	//8	5 1/2" J-55		15.5#		4000'				
We plan to circulate cement to surface on all casing strings. Devon Energy Operating Corporation proposes to drill to 4000' to test the Grayburg-Jackson is deemed non-commercial, the wellsor will be plugged and abandoned per Federal Regulations. Programs to adhere to onshore oil and gas regulations are understanded to the following exhibits and attachments. Drilling Program The undersigned accepts all applicable terms, condition, stipulations and restrictions concerning operations Exhibit #1/1-A = Blowout Prevention Equipment The undersigned accepts all applicable terms, condition, stipulations and restrictions concerning operations Exhibit #3/3-A = Road Map and Topo Map Conducted on the leased land or portions Exhibit #3 = Location and Elevation Plat Exhibit #5 = Production Facilities Plat Exhibit #6 = Rotary Rig Layout Exhibit #7 = Casing Deslips Boot Coverage: Nationwide Special Superations and measured and proposed new productive zone. If proposal to a define directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program. If any. Store all or deepen directionally, give pertinent data on subsurface loca				['C" + 1/4 lb/sk cell	ophane flakes
RANDY JACKSON SIGNED	Drilling Program Exhibits #1/1-A Exhibit #2 Exhibit #3/3-A Exhibit #4 Exhibit #5 Exhibit #6 Exhibit #6 Exhibit #7 H2S Operating P	E Blowout Preve = Blowout Preve = Location and [= Road Map and = Wells Within = Production Fa = Rotary Rig La = Casing Design lan Ga Atta SCRIBE PROPOSE	ention Equip Elevation P d Topo Map 1 Mile Radi cilities Plat ayout torac Paper torac Pape	pment lat) ius ius i Chrocha at o Chrocha at	The unders terms, conc restrictions conducted of thereof, as of Lease No. L Legal Descr Bond Cover	igned accep dition, stipul concerning on the leased described be CO29435-B iption: Sect 'age: Nation No.: CO115	ts all applicable lations and operations l land or portion clow: ion 5-T17N-R3 iwide	IŞ E	B EC (
SIGNED RANDY JACKSON SIGNED RANDY JACKSON TITLE DISTRICT ENGINEER DATE 12/2/94 This space for Federal or State office use) SRMIT NO. APPROVAL DATE plication 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. PROVED BY Scott Powers TITLE TITLE	to arill or deepen dire	ctionally, give pertir	ent data on su	bsurface location	ns and measured	and true vertic	- achemy OIAC DIAA	vuu ni	TVPDIEP broaraw if	0 m r/
Inits space for Federal or State office use) IRMIT NO	-								Po	1 IO-1
BRMIT NO APPROVAL DATE	SIGNED G	the Are bour	~		RANDY	JACKSON)- 1. m	-20-95 Lingt Alt
Image: RMIT NO				TI	TLE <u>DISTRI</u>	UT ENGINE	ER DATE	12.	12194	··· • = • • • • • • • • • • • • • • • •
APPROVAL DATE										
plication 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. PROVED BY Scott Pewers TITLE AN ROAD ADDITIONS OF APPROVAL, IF ANY:						APPROVA	L DATE			
PROVED BY Scott Powers TITLE AN AREA MARIA COM	plication approval does no DNDITIONS OF APPI	ot warrant or certify th ROVAL, IF ANY:	at the applicant l	holds legal or equit	able title to those ri	ghts in the subjec	t lease which would ent	itle the	applicant to conduct or	Crations thereas
TITLE LAV RIGHT TITLE LAV					/ -					
See Instructions On Devices Office DATE /-//-7.	PROVED BY	cott Powers		ТІТІ	E Lar A				111 2	
				See Inc.	structions On Da	<u>ن غيث في مند من </u>		DATI	E <u> </u>	J

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

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

<u>DISTRICT III</u> 1000 Rio Brazos Rd. Aztec, NM 87410

State of New Mexico Ene_y, Minerals, and Natural Resources Department

Form C-102 Revised 02-10-94

Instructions on back

Submit to the Appropriate District Office State Lease – 4 copies Fee Lease – 3 copies

AMENDED REPORT

OIL C	ONSERVATION DIVISIO	N
Santa	P. 0. Box 2088 Fe, New Mexico 87504-2088	ł

Santa Fe, M		07-2088			AND A	CREAGE D	EDICATIO	NI	PLAT		
' API Number			² Pool Code		3 Po	ol Name					
* Property Co	de	⁵ Property N	lame								
'OGRID No.				K	EEL "	B' FEDERA	AL.			• Well Numbe	
VGRUD NO.		* Operator N								* Elevation	
						DPERATIN		NY		381	1'
JL or lot no.	Section	Township	Ran			LOCATION					
	5	17 SOUTH			LOU IDE	2741'	North/South NORTH	line	Feet from the 1330'	East/West line	County
		"BOTTO	OM HOLE	LOCAT	ION IF	DIFFERE		 		WEST	EDDY
L or lot no.	Section	Township	Ran							Bast/West line	County
Dedicated Ac	Tes 13 Jo	int or Infill	¹⁴ Consolidati							MANY WEST TIDE	County
			~ Consolidati	ion Code	¹⁵ Order 1	No.					L
	NO ALI	OWABLE WE	LL BE ASS	IGNED T) THIS	COMPLETION					
	COl	SOLIDATED	OR A NON	-STANDA	RD UNI	T HAS BEEN	APPROVED	IN'I	THE DIVISI	VE BEEN	
								<u>,</u>			
						!			OPERATOR	CERTIFIC	TION
				1					l hereby certil contained here	fy that the info in is true and o	ormation
				i I					to the best of	my knowledge a	complete nd belief.
				1					Signature		
				1					Printed Name	XIDana	
		-+		1				'	Randy Ja		
		2741		* !		+		╡╞┓	htle	ckson	
				 		1			District	Engineer	
									Date		
								=	12/1/94		
			1			1		:	SURVEYOR	CERTIFICA	TION
			i I			1		/ /	hereby cer	tify that the	e woll
	0'	-0	+					1 1 1	ocation show	n on this pla field notes of	t was
								5	urveys made	e by me or	under
			1						ny supervis	ion, and the and correct	11 100
								6	pest of my b	elief.	to the
			1					D	ate of Survey		
		i				ł				2 1994	
		·+	+			·-+		Si Pi	rolenional Vur	ELADE ALE	
		1							A Lillie and		
								1	XAL XAL	YNN	
								.	/ /øez	NER	
		1	1						NO.	7920	
		i I						K	Xiegos	1.53	in
		 				1		V.	L. BEZNED	AND BOOG	7920

JOB #35908-75 / 98 SW / VUD

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

STACK REOUIREMENTS

No.	Item		Min. I.D.	Min. Nominal
1	Flowline			
2	Fill up kne			2*
З	Drilling nipple			
4	Annular preventer			
5	Two single or one dual hy operated rams	draulically		
64	Drilling spool with 2" min 3" min choke line outlets	. kill line and		
6 b	2" min. kill line and 3" mi outlets in ram. (Alternate	n. choke line		
7	Valve	Gale 🗆 Plug 🗆	3-1/8"	
8	Gate valve-power opera	led	3-1/8"	
9	Line to choke manifold			3"
10	Valves	Gate 🖸 Piug 🖸	2-1/16*	
11	Check valve		2-1/16"	
12	Casing head			
13	Vaive	Gate 🗆 Piug 🗅	1-13/16*	
14	Pressure gauge with nee	die valve		
15	Kill line to rig mud pump	manifold		2"



	OF	TIONAL	
16	Flanged valve	1-13/16"	

CONTRACTOR'S OPTION TO FURNISH:

- 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 prevventer 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 Dritting Manager.
- 2.All connections, valves, littings, 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 chore. Valves must be full opening and suitable for high pressure mud service.
- 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 values to be equipped with handwheels or handles ready for immediate use.
- 6. Choke lines must be sultably anchored.

- 7.Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- 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.
- Do not use kill line for routine fill-up operations.

EXHIBIT #1

Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTORS Grayburg-Jackson Field Eddy County, New Mexico

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOPE bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
- 4. All fittings will be flanged.

- 5. A full bore safety valve tested to a minimum 3000 psi W.P. with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventor will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

MINIMUM CHOKE MANIFOLD 3,000, 5,000 and 10,000 PSI Working Pressure



			MINI	MUM REQL	HREMENT	S				
			3.000 MWP		5,000 MWP			10.000 MWP		
No.		I.D.	NOMINAL	RATING	1.D.	NOMINAL	RATING	1.0	NOMINAL	RATING
1	Line from dritting spool		3"	3,000		3.	5.000		3.	10,000
2	Cross 3"x3"x3"x2"			3,000			5.000	l		10,000
	Cross 3"x3"x3"x3"					1			┝───┥	
3	Valves(1) Gate D Plug D(2)	3-1/8*		3,000	3-1/8*		5,000	3-1/8*		10,000
4	Valve Gate [] Plug [](2)	1-13/16*		3,000	1-13/16*		5,000	1-13/16*		10.000
4a	Valves(1)	2-1/16"		3,000	2-1/16*		5.000	3-1/8"		10.000
5	Pressure Gauge			3,000			5.000		<u> </u>	
6	Valves Gate C Plug D(2)	3-1/8"		3.000	3-1/8"	· ·	5,000	3-1/8*		10,000
7	Adjustable Choke(3)	2"		3.000	2"		5.000	2.		
8	Adjustable Choke	1"		3.000	1.	<u> </u>	5.000	2*	<u> </u>	10,000
9	Line		3-	3.000		3.				10,000
10	Line		2"	3,000			5,000		3-	10,000
11	Valves Gate	3-1/8"				2.	5,000		3.	10,000
	Piug (2)	3-110		3,000	3-1/8"		5,000	3-1/8*		10,000
12	Lines		3"	1,000		3*	1,000		3.	2,000
13	Lines		3"	1,000		3.	1.000		3.	2.000
14	Remote reading compound standpipe pressure gauge			3,000			5,000	•	- <u>-</u>	10.000
15	Gas Separator		2'x5'			2'x5'				
16	Line		4*	1,000		4*	1,000		2'x5'	2.000
17	Valves Gate [] Plug [](2)	3-1/8*		3,000	3-1/8*		5,000	3-1/8*	├── <u></u>	10.000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- 1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- 6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
- 7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well