State of New Mexico PO Box 1980, Hobbs, NM 88241-1980 Energy, Minerals & Natural Resourses Departs 811 S. 1st Street Artesia, NM 88210-1404 OIL CONSERVATION D PO Box 2088 District III 1000 Rio Brazos Rd, Aztec, NM 87410 Santa Fe, NM 87504 District IV AMENDED REPORT PO Box 2088, Santa Fe, NM 87504-2088 IGBÁCK, OR ADD A ZONE APPLICATION FOR PERMIT TO DRILL, RE-ENTER, OGRID Number Operator Name and Address Mack Energy Corporation 013837 P.O. Box 960 API Number Artesia, NM 88211-0960 Property Name Property Code 6 State S-19 016394 Surface Location Lot Idn Feet from the North/South line Feet from the East/West line County Township Range UL or lot no. Section 2310 East Eddy 19 17S 29E 1650 South Proposed Bottom Hole Location If Different From Surface East/West line Lot Idn Feet from the North/South line Feet from the County Township Range UL or lot No. Section Proposed Pool 2 Proposed Pool 1 Empire Yeso 96210 Ground Level Elevation Lease Type Code Work Type Code Well Type Code Cable/Rotary 3662' S R N Formation Contractor Spud Date Proposed Depth Multiple LaRue 11/1/02 4350' Yeso No Proposed Casing and Cement Program Sacks of Cement Estimated TOC Setting Depth Casing Size Casing weight/foot Hole Size Surface 13 3/8 48 350 Circ 17 1/2 Surface Sufficient to Circ 24 800' 8 5/8 12 1/4 Sufficient to Circ Surface 17 4350' 5 1/2 7 7/8 Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary Mack Energy Corporation proposes to drill to 350', run 13 3/8" casing and cement. Drill to 800', run 8 5/8" casing and cement. Drill to 4350" and test Paddock Zone, run 5 1/2" casing and cement. Put well on production. Note: On Production string, a fluid caliber will be run, will figure cement, with 25% excess, attempt to circulate. I hereby certify that the information given above is true and complete to the best OIL CONSERVATION DIVISION of my knowledge and belie COLCULAL SIGNED BY TIM W. GUM Approval by: Signature CT II SAIDERVISOR Title: Printed name: Jerry W. Sherrell Approval Date: Expintion Da Title: Production Clerk

Conditions of Approval:

Attached

(505)748-1288

Date:

10/29/02

And the state of the state of

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

#### 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 DB, Artesia, NM 55211-0719

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 OIL CONSERVATION DIVISION DI VISION DIVISION DIVISIONI DIVISIONI

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

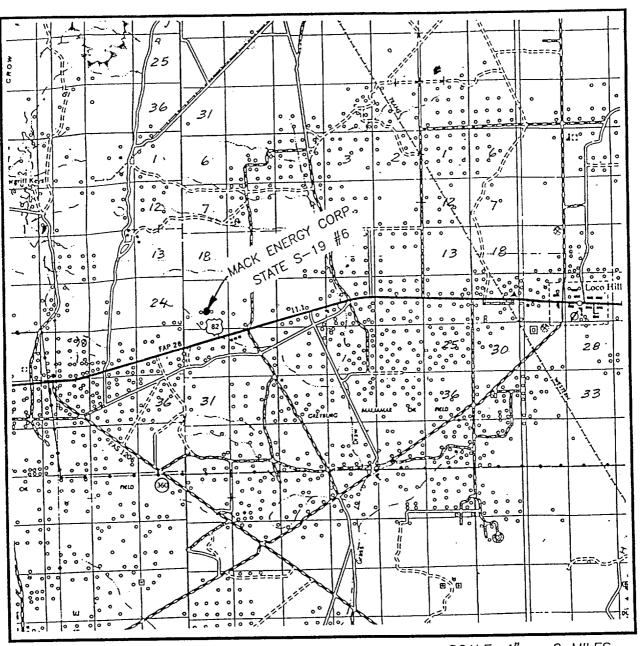
AMENDED REPORT

API	Number			Pool Code	TITO RO	10071	GE DEDICATIO	Pool Name	The second of th	
30-015-29751		g	6210		Empire Yeso					
Property Code 016394			<u> </u>		Property STATE S		e		Well Number	
OGRID No. 013837			Operator Name  MACK ENERGY CORPORATION					Elevation 3662		
					Surface	Loca	tion			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from	the	North/South line	Feet from the	East/West line	County
J	19	17 S	29 E	•	1650		SOUTH	2310	EAST	EDDY
		<u> </u>	Bottom	Hole Lo	cation If	Diffe	rent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from	the	North/South line	Feet from the	East/West line	County
Dedicated Acre			onsolidation		der No.			DECTE HAVE D	EEN CONSOLID	ATED
NO ALL	OWABLE '	WILL BE A	issigned Non—Stai	TO THIS	VIT HAS B	EEN	INTIL ALL INTER APPROVED BY	THE DIVISION	EEN CONSOMD	
						1		11	OR CERTIFICA	

# Malt J. Brower Matt J. Brewer Printed Name Geological Engineer Title 4/1/99 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 APRIL Z.. Date Surveyor Sept 5/030 Million Signatures & Sept 5/030 Million ME 3/-29-97 correct to the best of my belief. -2310' JOHNEN ENEST. Certificate No. Seloson. 676 3239 1264

		1	

# VICINITY MAP



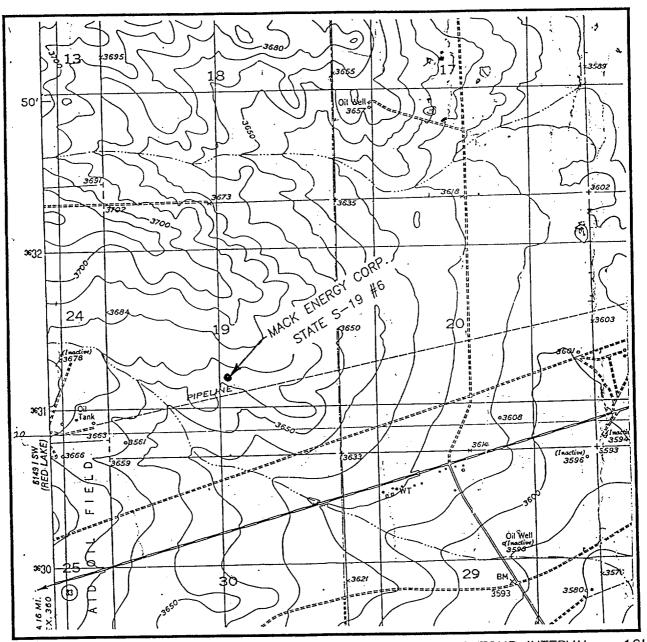
SCALE: 1" = 2 MILES

SEC. 19 T	WP. <u>17-S</u> RGE. <u>29-E</u>	_
SURVEY	N.M.P.M.	_
COUNTY	EDDY	_
DESCRIPTION	1650' FSL & 2310' FE	L
ELEVATION	3662'	_
OPERATOR	MACK ENERGY CORP.	
-	STATE S-19	

JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

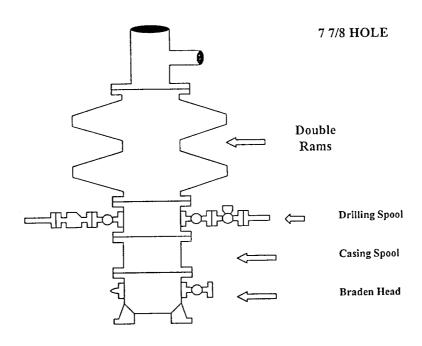
CONTOUR INTERVAL - 10'

SEC. 19 TWP. 17-S RGE. 29-E
SURVEYN.M.P.M.
COUNTYEDDY
DESCRIPTION 1650' FSL & 2310' FEL
ELEVATION3662'
OPERATOR MACK ENERGY CORP.  LEASE STATE S-19
U.S.G.S. TOPOGRAPHIC MAP

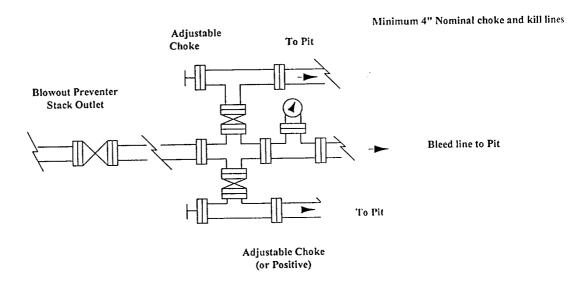
JOHN WEST ENGINEERING HOBBS, NEW MEXICO (505) 393-3117

# **Mack Energy Corporation**

# Exhibit #9 BOPE Schematic



## Choke Manifold Requirement (2000 psi WP) No Annular Required



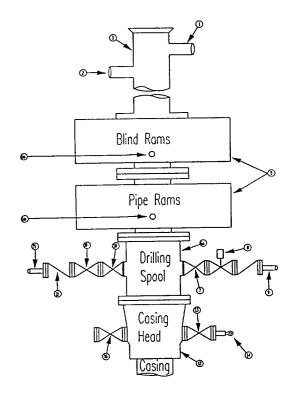
# Mack Energy Corporation

# Minimum Blowout Preventer Requirements

2000 psi Working Pressure 2 MWP EXHIBIT #10

Stack Requirements

NO.	Items	Min.	Min.
1.0.		I.D.	Nominal
1	Flowline		2"
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		2" Choke
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	Valve Gate Plug	2 1/16	
11	Check valve	2 1/16	
12	Casing head	ļ	
13	Valve Gate Plug	1 13/16	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"



#### **OPTIONAL**

		1 13/16	٦
1 16	Flanged Valve	1 13/10	1

### CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 2000 psi minimum.
- 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.
- Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- 7. Plug type blowout preventer tester.
- Extra set pipe rams to fit drill pipe in use on location at all times.
- Type RX ring gaskets in place of Type R.

#### MEC TO FURNISH:

- 1. Bradenhead or casing head and side valves.
- 2. Wear bushing. If required.

#### **GENERAL NOTES:**

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 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.
- 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.

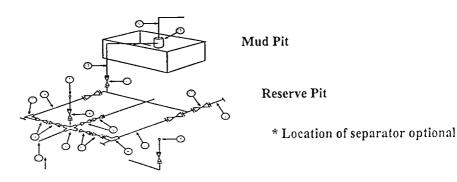
  Replaceable parts for adjustable choke, or bean

- sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with hand-wheels or handles ready for immediate use.
- Choke lines must be suitably anchored.
- 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 (2000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- 11. Do not use kill line for routine fill up operations.

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## **Mack Energy Corporat**

Exhibit #11
MIMIMUM CHOKE MANIFOLD
3,000, 5,000, and 10,000 PSI Working Pressure
2 M will be used or greater
3 MWP - 5 MWP - 10 MWP



**Below Substructure** 

#### Mimimum requirements

			IV.	1imimun	n require	ments				
		3,00	0 MWP		5,000 MWP			10,000 MWP		
No.		I.D.	NOMINAL	Rating	I.D.	Nominal	Rating	I.D.	Nominal	Rating
1	Line from drilling Spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3" x 3" x 3" x 2"			3,000			5,000			
2	Cross 3" x 3" x 3" x 2"									10,000
3	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
4	Valve Gate Plug	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	2 1/16		10,000
5	Pressure Gauge			3,000			5,000		I	10,000
6	Valve Gate Plug	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"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		2"	10,000
11	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
12	Line		3"	1,000		3"	1,000		3"	2,000
13	Line		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound Standpipe pressure quage			3,000			5,000			10,000
15	Gas Separator		2' x5'			2' x5'	1	1	2' x5'	
16	Line	1	4"	1,000		4"	1,000	1	4"	2,000
17	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000

- (1) Only one required in Class 3M
- (2) Gate valves only shall be used for Class 10 M
- (3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

## EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTION

- 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.
- All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 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 bee as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees.