District I PO Box 1980, Hobbs, NM 88241-1980 Revised February 10, 1994 Form C-101, State of New Mexico nergy, Minerals & Natural Resourses Department District II Instructions on back 811 S. 1st Street Artesia, NM 88210-1404 **UIL CONSERVATION DIVISION** Submit to Appropriate District Office State Lease - 6 Copies District III PO Box 2088 1000 Rio Brazos Rd, Aztec, NM 87410 Santa Fe, NM 87504-2088 Fee Lease - 5 Copies District IV PO Box 2088, Santa Fe, NM 87504-2088 AMENDED REPORT APPLICATION FOR PERMIT TO DRILL, RE-ENTER UGBAÇK, OR ADD A ZONE OGRID Number Operator Name and Address Mack Energy Corporation 013837 P.O. Box 960 API Number Artesia, NM 88211-0960 Property Code Property Name 021044 Continental A State 7 Surface Location UL or lot no Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County F 30 17S 29E 2314 North 1968 West Eddy Proposed Bottom Hole Location If Different From Surface UL or lot No. Section Township Lot Idn Feet from the North/South line Feet from the East/West line County Proposed Pool 1 Proposed Pool 2 Empire; Yeso 96210 Work Type Code Well Type Code Cable/Rotary Lease Type Code Ground Level Elevation `R 3643 Multiple Proposed Depth Formation Contractor Spud Date No 4200 Paddock LaRue 12/30/00 Proposed Casing and Cement Program Hole Size Casing Size Casing weight/foot Setting Depth Sacks of Cement Estimated TOC 17 1/2 13 3/8 54.5 350' Circ 12 1/4 8 5/8 24 800' Sufficient to Circ 11 7 7/8 1 5 1/2 17 4200' Sufficient to Circ 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 4200" 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 belief Approval booking MAL SIGNED BY TIM I Signature

Approval Date:

Conditions of Approval Attached

Expintion I

Printed name

12/1/00

Title:

Date:

Crissa D. Carter

**Production Analyst** 

(505)748-1288

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

mit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

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

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

## OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Code	· · · · · · · · · · · · · · · · · · ·	
96210	Empire Yeso	
Property	Well Number	
CONTINENT	7	
Operator	Elevation	
MACK ENERGY	CORPORATION	3643
	96210 Property CONTINENTA	POOL NAM

### Surface Location

ı	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	B-1 4		,	,
ļ	_	70	170	00 -				Feet from the	Bast/West line	County	į
1	Г	30	1/ 5	29 E		2314	NORTH	1968	WEST	ENDY	1
ı		L	<u> </u>			<u></u>		, 500	**L31	ן דטטז ן	

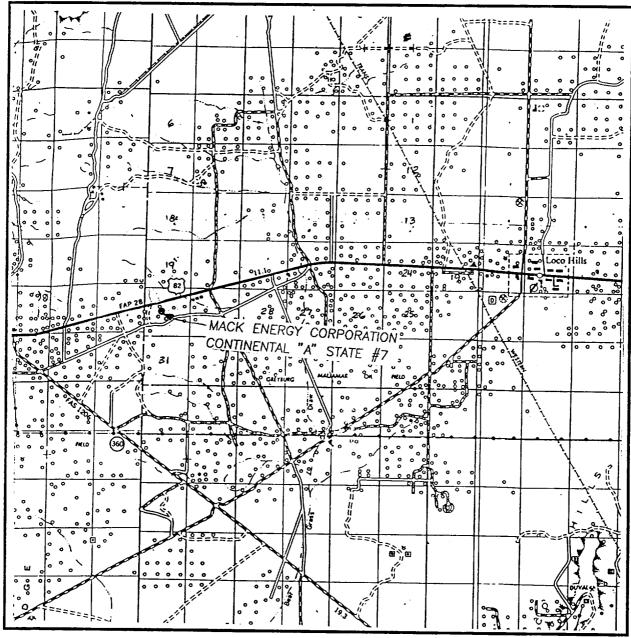
## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint of	Infill Co	nsolidation (	Code Ore	der No.				
40									

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.
27.71 AC.   27.71	Signature Land
2	Crissa D. Carter
	Production Analyst Title /2//00
1968'	Date
27.94 AC.	SURVEYOR CERTIFICATION
3	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 belief.
28.17 AC.	NOVEMBER 17, 2000  Date Surveyed JLP
+	Signature & Seal of Professional Surveyor
	Bonsle L. Edian 11/29/00
	W:0. Num. 00-11-0018  Certificate No. RONALD 4. EIDSON, 3239
28.40 AC.	CARY G. EIDSON, 12841

## VICINITY MAP



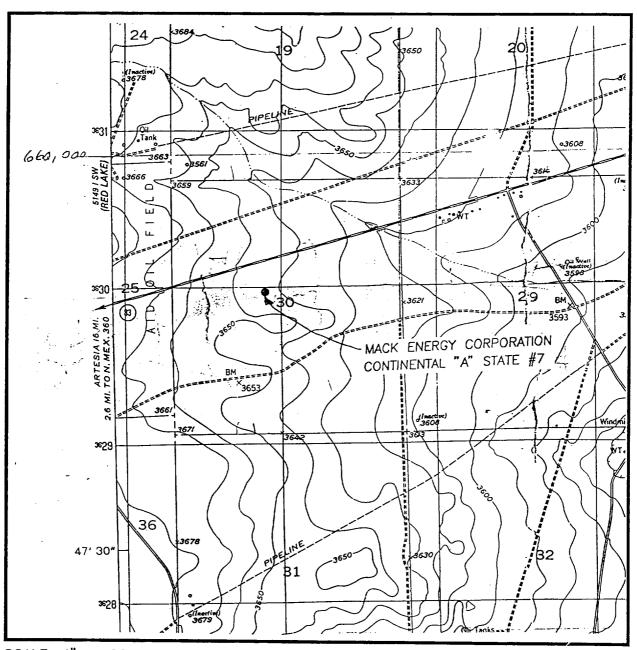
SCALE: 1" = 2 MILES

SEC. 30 1	WP. <u>17-S</u> RGE. <u>29-E</u>
SURVEY	N.M.P.M.
COUNTY	EDDY
DESCRIPTION	1 2314' FNL & 1968' FWL
ELEVATION_	3643
OPERATOR_	MACK ENERGY CORPORATION
L FASE	CONTINENTAL "A" STATE

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



# LOCATION VERIFICATION MAP



SCALE: 1'' = 2000'

CONTOUR INTERVAL - 10'

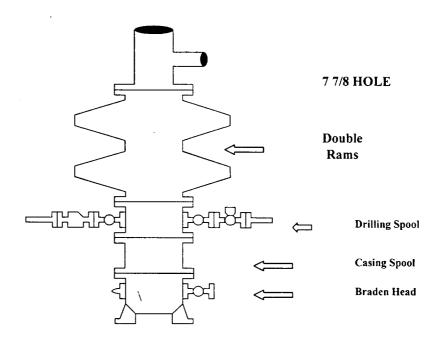
SEC. 30 TWP. 17-S RGE. 29-E
SURVEYN.M.P.M.
COUNTYEDDY
DESCRIPTION 2314' FNL & 1968' FWL
ELEVATION 3643
OPERATOR MACK ENERGY CORPORATION
LEASE CONTINENTAL "A" STATE
U.S.G.S. TOPOGRAPHIC MAP
RED LAKE SE, N.M.

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

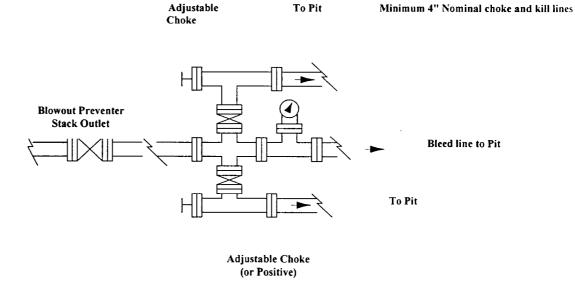


# **Mack Energy Corporation**

# Exhibit #1 BOPE Schematic



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



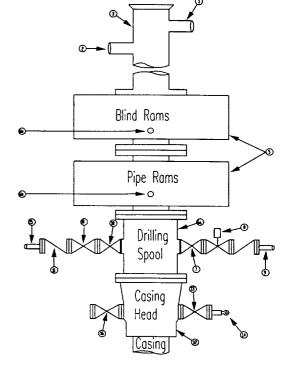
Blowout Preventers Page 1

# Mack Energy Corporation Minimum Blowout Preventer Requirements

2000 psi Working Pressure 2 MWP EXHIBIT #2

### Stack Requirements

NO.	Items	Min.	Min.
		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		
13	Valve Gate Plug	1 13/16	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"



OPTIONAL

1	16	T1	1 12/1/	1
1	10	Flanged Valve	1 1 1.5/10	1
и		- tunger tune	1 15/10	ı
1				I

### 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.
- BOP controls, to be located near drillers' position.
- 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.
- Plug type blowout preventer tester.
- 8. 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:**

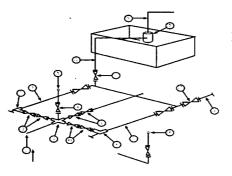
- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure 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
- 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.

Page 3

### **Mack Energy Corporation**

Exhibit #3
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



Mud Pit

Reserve Pit

\* Location of separator optional

#### **Below Substructure**

### Mimimum requirements

		3,0	00 MWP		5,000 MWP				10,000 MWP	
No.		I.D.	NOMINAL	Rating	I.D.	Nominal	Rating	I.D.	Nominal	Rating
ı	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			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	ļ	3*	2,000
13	Line		3"	1,000		3"	1,000		3*	2,000
14	Remote reading compound Standpipe pressure quage			3,000		1	5,000			10,000
15	Gas Separator		2' x5'	1		2' x5'			2' x5'	
16	Line		4"	1,000		4"	1,000		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.
- 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 bee as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees.

Blowout Preventers