District I PO Box 1980, Hobbs, NM 88241-1980 District II 811 S. 1st Street Artesia, NM 88210-1404 District III 1000 Rio Brazos Rd, Aztec, NM 87410 District IV PO Box 2088, Santa Fe, NM 87504-2088				C	Energy, Mir PIL CON	ISERVATI PO Box 2	Resourses Departs	ION	<b>*</b> Subr ECEIVED - ARTESIA	R C nit 2 13 14 15 6	-	Form C-101 Honery 10, 1994 tructions on back (District Office Crase - 6 Copies Lease - 5 Copies DED REPORT		
APPLICATION FOR PERMIT TO DRILL, RE- Operator Name and A Mack Energy Corporati P.O. Box 960 Artesia, NM 88211-09							Address					OR ADD A ZONE OGRID Number 013837 API Number 015 - 32564		
-	rty Code						roperty Name				Well No.			
30	476		<u> </u>				Coyote State				6			
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UL or lot No.	Section	Town		Range	Lot Idn	Feet from the	North/South 1		Feet from the	East/W	est line	County		
Proposed Pool 1 Proposed Pool 2														
	Unde	signat	ed Ma	aljamar (	JB SA		L							
Work Ty	/pe Code		v	Well Type Code Cabl			e/Rotary Lease Type Code			de	Ground Level Elevation			
Nul	tiple		O Proposed Depth			R Formation		S		3840' Spud Date				
N	-		4350'			Grayburg/San Andres		L & M			1/25/2003			
		L			roposed		nd Cement	Prog				2572005		
Hole Si	ze		Casing			g weight/foot	Setting De			f Cement		Estimated TOC		
17 1/2	2		13 3/8		48	800'		Circulated		Surface				
12 1/4	12 1/4		8 5/8			32	2200'		Sufficient to Circ					
7 7/8	7 7/8		51/	<u>′2</u>		17	4350'		Sufficient to Circ		c	Surface		
zone. Describe	the blowou M I cement. Productio	ack E Drill	ntion pr nergy to 434 ng, a	Corpora 50' and te fluid cali	any. Use add tion propo est Graybu ber will be	litional sheets if oses to drill to rg/San Andres e run and will ete to the best	800', run 13 3/ Zone, run 5 1 figure cement	8" cas /2" ca with 2	sing and cemer sing and ceme 25% excess, att 20NSERVAT	nt. Drill nt. Put tempt to	to 2200 well on p circulate	, run 8 5/8" production. e.		
Signature (Mosa) ale.							Approval by: ORIGINAL BIONED BY TIM W. GUM							
Printed name: Crissa D. Carter							Title: DIGTINICT II SUPERVIOOR							
Title: Production Analyst						<i>I</i>	Approval Date: JAN 0 3 2003 Expinition Dstc JAN 0 3 2004							
Date:							Conditions of Appr Attached	oval;	l.					
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DISTRICT I					State	of Ne	w Mexico		_	
DISIRICI I P.O. Box 1980, Hobbs,	NN 88241-1	950		Energ	gy, Minerals a	and Natural	Resources Departme	ent	For Revised Februar	rm C-102 y 10, 1994
DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719			OIL		to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies					
DISTRICT III 1000 Rio Brazos Re	d., Aztec, N	M 87410		Santa	Fe, New	w Mexic	o 87504–20	)88		
DISTRICT IV p.o. box 2088, santa	FE, N.M. 87	504-2088	WELL LO	CATIO	N AND	ACREA	GE DEDIC.	ATION PLAT	AMENDED	REPORT
API	Number			Pool Cod	e			Pool Name		
		1		43329		n antr. Nam		ted Maljamar G	B SA Well Num	aban
Property Code 30476			Property Name COYOTE STATE						6	IDei
OGRID No					-	erator Nam	τ	Elevation		
013837		}		MACK	ENER	GY CO.	N	3840'		
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## VICINITY MAP



SCALE: 1" = 2 MILES

SEC. <u>36</u> TWP.<u>17–S</u> RGE.<u>31–E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>EDDY</u> DESCRIPTION <u>2310' FNL & 990' FEL</u> ELEVATION <u>3840'</u> OPERATOR <u>MACK ENERGY CORPORATION</u> LEASE <u>COYOTE STATE</u>

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

# LOCATION VERIFICATION MAP



SCALE: 1'' = 2000'

- SEC. <u>36</u> TWP. <u>17-S</u> RGE. <u>31-E</u>
- SURVEY\_\_\_\_\_N.M.P.M.
- COUNTY\_\_\_\_EDDY

DESCRIPTION 2310' FNL & 990' FEL

ELEVATION \_\_\_\_\_\_ 3840'

OPERATOR <u>MACK\_ENERGY\_CORPORATION</u> LEASE\_\_\_\_\_COYOTE\_STATE\_\_\_\_

U.S.G.S. TOPOGRAPHIC MAP MALJAMAR, N.M. CONTOUR INTERVAL: 10' MALJAMAR, 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



Adjustable Choke (or Positive)

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#### Mack Energy Corporation Minimum Blowout Preventer Requirements 2000 psi Working Pressure 2 MWP EXHIBIT #2

#### **Stack Requirements**

NO.	ltems	Min.	Min.
		I.D.	Nominal
1	Flowline		2"
2	Fill up line		2"
3	Drilling nipple		L
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**

CONTRACTOR'S OPTION TO FURNISH:

Flanged Valve

16

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

GENERAL NOTES:

1 13/16

- 1. 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.

- 5. All valves to be equipped with hand-wheels or handles ready for immediate use.
- 6. 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.

### 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** 3,000 MWP 5,000 MWP 10.000 MWP No. I.D. NOMINAL Rating I.D. Nominal Rating 1.D. Nominal Rating Line from drilling Spool 3" 3,000 5,000 1 3" 3" 10,000 2 Cross 3" x 3" x 3" x 2" 3.000 5,000 Cross 3" x 3" x 3" x 2" 2 10,000 Valve Gate 3 3 1/8 3,000 3 1/8 5,000 3 1/8 10,000 Plug Valve Gate 1 4 3,000 1 13/16 5,000 1 13/16 10,000 Plug 13/16 Valves (1) 2 1/16 3,000 2 1/16 5.000 2 1/16 10.000 4a 5 3,000 5,000 Pressure Gauge 10,000 Valve Gate 6 3 1/8 3,000 3 1/8 5,000 3 1/8 10.000 Plug 3,000 2" 7 Adjustable Choke (3) 2" 5,000 10,000 2" Adjustable Choke 1" 3,000 1" 5,000 2" 8 10,000 9 3" 3,000 3" Line 5,000 3' 10,000 10 Line 2" 3,000 2" 5,000 2" 10,000 Gate Valve 3 1/8 3,000 3 1/8 11 5,000 31/8 10,000 Plug 12 3" 1,000 3" Line 1.000 3" 2,000 13 Line 3" 1,000 3" 1,000 3" 2,000 Remote reading compound 14 3,000 5,000 10,000 Standpipe pressure quage 15 Gas Separator 2' x5' 2' x5' 2' x5' 16 Line 4" 1,000 4" 1,000 4" 2,000 Valve Gate 17 3 1/8 3,000 3 1/8 5,000 3 1/8 10,000 Plug

(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.