State of New Mexico Revised Februar District I PO Box 1980, Hobbs, NM 88241-1980 Energy, Minerals & Natural Resourses Depar District II OIL CONSERVATION DIVISION 19202 Submit to Appropriate District Of 811 S. 1st Street Artesia, NM 88210-1404 State Lease - 6 Cq PO Box 2088 Fee Lease - 5 Co Santa Fe, NM 87504-2088 1000 Rio Brazos Rd, Aztec, NM 87410 District IV AMENDED REPORT PO Box 2088, Santa Fe, NM 87504-2088 APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEERBNAPTESIGBAYK, OR ADD A ZONE OGRID Number Operator Name and Address Mack Energy Corporation 013837 P.O. Box 960 API Number Artesia, NM 88211-0960 30-015- 3 Well No. Property Name Property Code 3 White Oak State 021114 Surface Location North/South line East/West line County Feet from the Feet from the Lot Idn Township Range UL or lot no Section Eddy South 330 East 1650 17S 28E 23 I Proposed Bottom Hole Location If Different From Surface East/West line County North/South line Feet from the Feet from the Lot Idn UL or lot No. Section Township Proposed Pool 2 Proposed Pool 1 halle Queen Grayburg SA Lease Type Code Ground Level Elevation Cable/Rotary Work Type Code Well Type Code 3699 S Spud Date Formation Contractor Proposed Depth Multiple 10/02/00 LaRue San Andreas 3300 No Proposed Casing and Cement Program Estimated TOC Sacks of Cement Setting Depth Casing weight/foot Casing Size Hole Size Circ 300 8 5/8 24 12 1/4 Sufficient to Circ 3300' 15 4 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 , run 8 5/8" casing and cement. Drill to 3300', run 4 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 ORIGINAL SIGNED BY TIM W. GUM Approval by: Signature

Title

Conditions of Approval:

Attached

Printed name

9/18/00

Title:

Date

Crissa D. Carter

Production Analyst

(505)748-1288

DISTRICT II SUPERVISOR

2001

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

State of New Mex

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 DD, Artesia, NM 88211-0719

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

DISTRICT IV P.O. BOX 2088, SANTA FE, N.M. 87504-2088

API Number

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

halle.

Pool Name Queen Grayburg SA

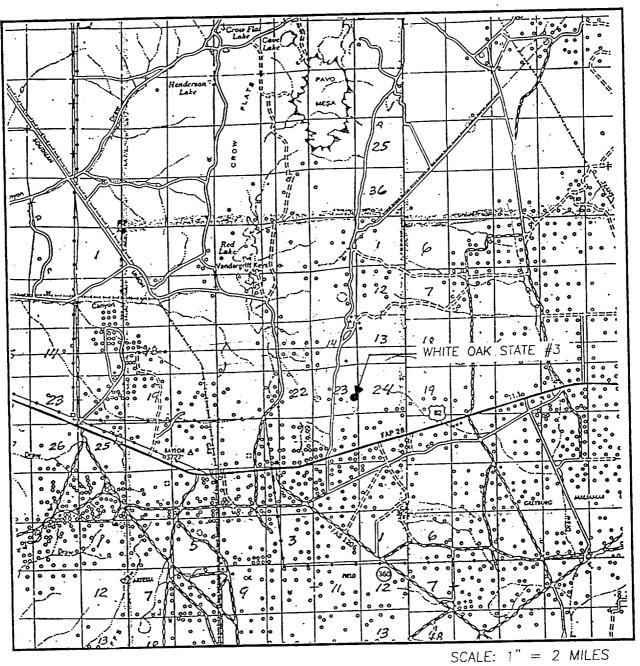
Pool Code

Property Code				W	Property Nam HITE OAK S			Well Number			
ogrid No. 013837				MACK I	Operator Nam ENERGY CO			Elevation 3699			
					Surface Loca	ation					
UL or lot No.	Section 23	Township 17 S	Range 28 E	Lot Idn	Feet from the	North/South line SOUTH	Feet from the	East/West line EAST	county EDDY		
			Bottom	Hole Loc	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	s Joint o	or Infill Con	nsolidation	Code Or	der No.						

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	I hereby certify the the information contained herein is true and complete to the best of my imovledge and belief.
ļ	Signature Cal
	Crissa D. Carter
1	Production Analyst 11110 9/13/00
á _i c •	Date
l .	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 correct to the best of my belief.
330'	SEPTEMBER 12, 2000 Date Surveyed DC Signature & Seal of
1650,	Amold & Surveyor 9/14/00
	Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641

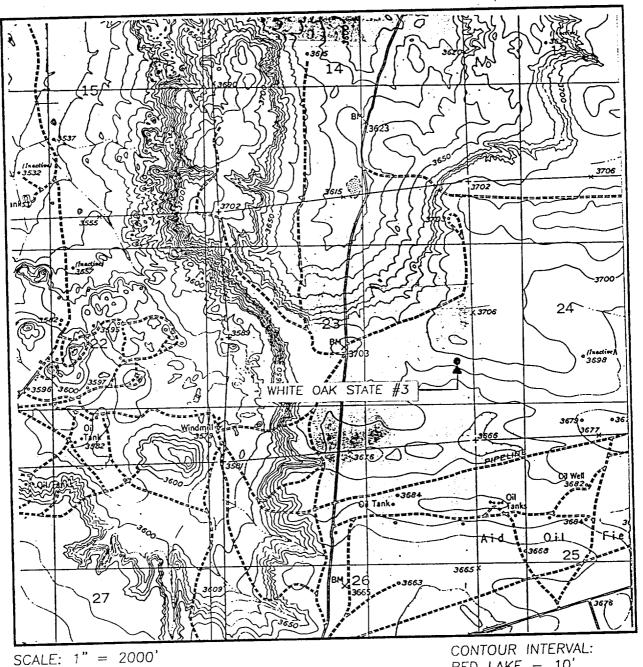
VICINITY M'D



SEC. 23 TW	P. <u>17-S</u> RGE. <u>28-E</u>
SURVEY	N.M.P.M.
COUNTY	EDDY
DESCRIPTION_	1650' FSL & 330' FEL
ELEVATION	3699
OPERATOR _MA	ACK ENERGY CORPORATION
LFASE	WHITE OAK STATE

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

LOCATION VERIFICATION MAP



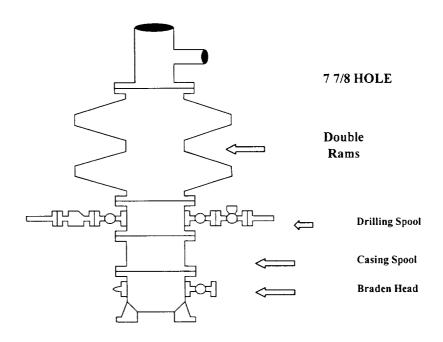
RED LAKE - 10'

SEC. <u>23</u> TWP. <u>17-S</u> RGE. <u>28-E</u>
SURVEYN.M.P.M.
COUNTYEDDY
DESCRIPTION 1650' FSL & 330' FEL
ELEVATION3699
OPERATOR <u>MACK ENERGY CORPORATI</u> ON
LEASE WHITE OAK STATE
U.S.G.S. TOPOGRAPHIC MAP RED LAKE, 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

To Pit Minimum 4" Nominal choke and kill lines

Blowout Preventer
Stack Outlet

To Pit

To Pit

Adjustable Choke (or Positive)

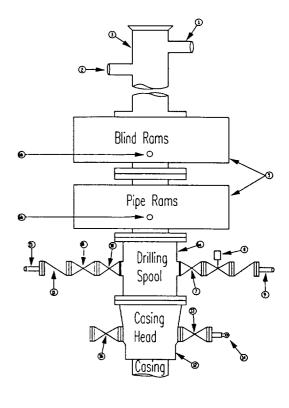
Mack Energy Corpora

Minimum Blowout Preventer Requirements

2000 psi Working Pressure 2 MWP EXHIBIT #2

Stack Requirements

	Stack Requireme		
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

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 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.
- 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.
- 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.

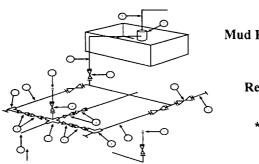
GENERAL NOTES:

- 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.
- 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

				ammun	i require				10,000 MWP	
		3,000 MWP				,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			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	l"		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'			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
- Gate valves only shall be used for Class 10 M (2)
- Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTION

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating. 1.
- 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.
- 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.
- 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.

Page 3 **Blowout Preventers**