District I PO Box 1980, Hobbs, NM 88241-1980 State of New Mexico February 10, 1994 Energy, Minerals & Natural Resourses Department District II Instructions on back 811 S. 1st Street Artesia, NM 88210-1404 OIL CONSERVATION DEVISION priate District Office District III PO Box 2088 Tate Lease - 6 Copies 1000 Rio Brazos Rd, Aztec, NM 87410 Santa Fe, NM 87504, 2088 ee Lease - 5 Copies District IV PO Box 2088, Santa Fe, NM 87504-2088 AMENDED REPORT APPLICATION FOR PERMIT TO DRILL, RE-ENTER BACK, OR ADD A ZONE OGRID Number Operator Name and Address Mack Energy Corporation 013837 P.O. Box 960 API Number Artesia, NM 88211-0960 <u> 30-015-32533</u> Property Code Property Name Well No. 30039 Aoudad State 2 Surface Location UL or lot no. Section Township Lot Idn Feet from the North/South line Range Feet from the East/West line County E 36 17S 31E 1650 North 990 West Eddy Proposed Bottom Hole Location If Different From Surface UL or lot No. Range Lot Idn Feet from the Section Township North/South line Feet from the East/West line County Proposed Pool 1 Proposed Pool 2 Tamano San Andres Work Type Code Well Type Code Cable/Rotary Lease Type Code Ground Level Elevation R 38231 S Multiple Proposed Depth Formation Contractor Spud Date 5000' No San Andres L&M 12/1/02 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 48 800' Circulated Surface 12 1/4 8 5/8 32 2200' Sufficient to Circ Surface 7 7/8 5 1/2 17 5000' Sufficient to Circ Surface 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 800', run 13 3/8" casing and cement. Drill to 2200', run 8 5/8" casing and cement. Drill to 5000' and test San Andres Zone, run 5 1/2" casing and cement. Put well on production. Note: On Production string, a fluid caliber will be run and 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 Signature Approval by: ORIGINAL SIGNED BY TIM W. GUM UT II SUPERVISOR Printed name Title: Jerry W. Sherrell Title: Approval Date **Expintion Dstc** Production Clerk Conditions of Approval: Date: Attached 11/15/02 (505)748-1288

State of New Mexico

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

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

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

OIL CONSERVATION DIVISION

Santa Fe, New Mexico 87504-2088

P.O. Box 2088

DISTRICT IV

DISTRICT II

DISTRICT III

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

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

□ AMENDED REPORT

API Number	Pool Code	•	Pool Name			
	58060	Tama	ano San Andr	res		
Property Code	Prop	Well Number				
30039	AOUDAD STATE 2					
OGRID No.	Operator Name				n	
013837	MACK ENERG	RGY CORPORATION 3823'				
	Surfac	e Location				
or lot No Section Town	shin Range Lot Idn Feet fro	m the North/South line	Feet from the	Foot/West line	County	

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	36	17-S	31-E		1650	NORTH	990	WEST	EDDY

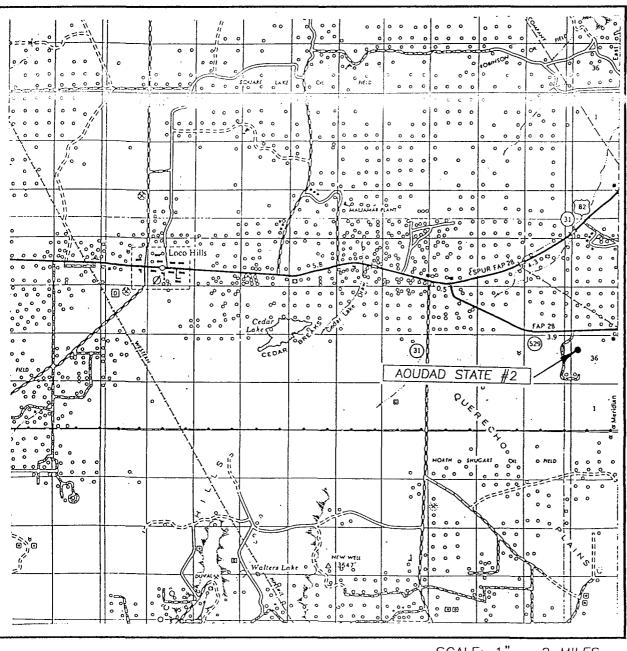
Bottom Hole Location If Different From Surface

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 or	Infill Co	nsolidation (ode Or	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

	OR A NON-STANDARD UNIT HAS E	SEEN APPROVED BY TH	E DIVISION
650,			OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
			Signature W. Sherrell Jerry W. Sherrell
990'			Printed Name Production Clerk Title 11/15/2002 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 correct to the best of my belief. NOVEMBER 12, 2002 Date surveyed from the surveyed to the su
			Signature & Seal of Professional Surveyor Remolal Evilon 16/3/02 02:11.0856
			Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641

VICINITY MAP

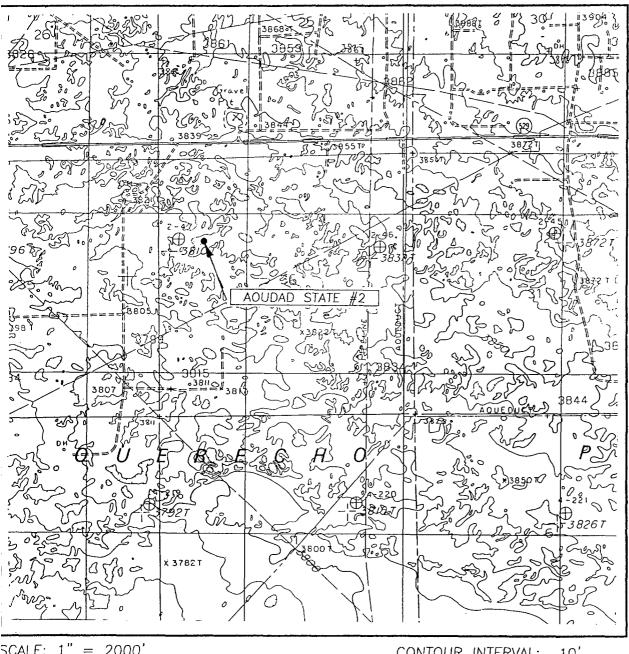


SCALE: 1" = 2 MILES

SEC. 36 TWP. 17-S RGE. 31-E SURVEY_____N.M.P.M. COUNTY____EDDY DESCRIPTION 1650' FNL & 990' FWL ELEVATION ______3823' OPERATOR MACK ENERGY CORPORATION LEASE AOUDAD STATE

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10' MALJAMAR, N.M.

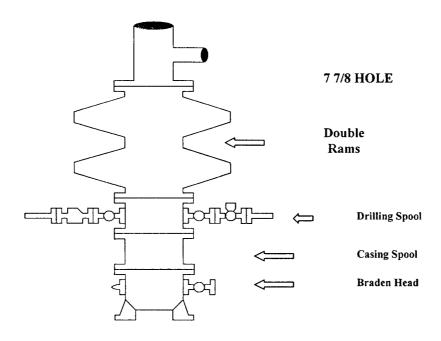
SEC. <u>36</u> TV	VP. <u>17-S</u> RGE	31-E
SURVEY	N.M.P.M.	
COUNTY	EDDY	
DESCRIPTION.	1650' FNL & S	990' FWL
ELEVATION	3823'	

OPERATOR MACK ENERGY CORPORATION LEASE _____AOUDAD_STATE U.S.G.S. TOPOGRAPHIC MAP 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 To Pit Minimum 4" Nominal choke and kill lines Choke

Blowout Preventer Stack Outlet

To Pit

To Pit

Adjustable Choke (or Positive)

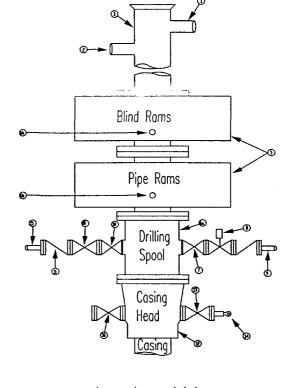
Mack Energy Corporation

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 rains		
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

		11.2.2.	
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.
- 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.
- 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.

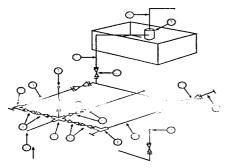
Mack Energy Corporation

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				1	0,000 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"							1		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"	Ţ	5,000	2"		10,000
9	Line	l	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'	<u> </u>
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.