Distnet I

1625 N French Dr., Hobbs, NM 88240

Dstrict 11 1301 W Grand Avenue, Artesia, NM 88210

District III

I 000 Rio Brazos Road, Aztec, NM 87410

District IV

San Andres

State of New Mexico Energy Minerals and Natural Resources OCD

Form C-101 May 27,2004

Oil Conservation Division OCT 0 6 2011 Submit to appropriate District Office

☐ AMENDED REPORT

Santa Fe, NM 87505 1220 S St Francis Dr , Santa Fe, NM 87505 APPLICATION FOR PERMIT TO DRILL Operator Name and Address OGRID Number 013837 Mack Energy Corporation 30- 025-29780 API Number P.O. Box 960 Artesia, NM 88211-0960 s Property Name 3 Property Code 6 Well No 38054 Cherry State 'Proposed Pool I Proposed Pool 2

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 Ε 9 16S 32E 1982 North 662 West Lea 8 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 EastfWest line Range County

Additional Well Information 11 Work Type Code Cable/Rotary 12 Well Type Code 14 Lease Type Code 15 Ground Level Elevation PB Oil Rotary S 4345' GR 16 Multiple Proposed Depth 2 Spud Date " Formation 9 Contractor No 7565' San Andres 10/12/2011 Depth to Groundwater 145' Distance from nearest surface water 1000' Distance from nearest fresh water well 1000' Drdling Method -Liner Synthetic mils thick Clay Pit Pit Volume Closed-Loop System Fresh Water Brine Diesel/Oil-based Gas/Air

²¹ 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	525	700sx	Surface/In place
12 1/4	9 5/8	36	4400	2350sx	Surface/In place
8 3/4	7	28	10,995	1495sx	Surface/In place
6 1/8 horizontal	5 1/2-4 1/2 split string	20-11.6	5 1/2 0-6456', 4 1/2 6456-11,407'	425sx-Open hole packers	Surface/In place

EDescribe 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 Plug-back to the San Andres and re-complete as follows:

Set 4 1/2 CIBP @ 9050' w/35' cmt cap(Top Wofcamp).

Set 5 1/2 CIBP @ 7600' w/35' cmt cap(Top Abo).

Perf San Andres Zone @ 4721.5-4580.5'.

Do 2500gal 15% NEFE acid, swab/test zone.

Permit Expires 2 Years From Apprecial Date Unless Drilling Underway Plugbach

1 hereby certify that the information given above is true and complete to the be	st					
oftny knowledge and belief I further certify that the drilling pit will be constructed according to NMOCD guidelines a general permit or	OIL CONSERVATION DIVISION					
an (attached) alternative OCD-approved plan.	Approved by.					
Signature Juny W. Shenell	Mung					
Printed name Jerry W. Sherrell	Title. PETROLEUM ENGINEER					
Title Production Clerk	Approval Date 2011 Expiration Date					
E-mail Address jerrys@mec.com	OCT 2 4 LOT					
Date 10/5/11 Phone (575)748-1288	Conditions of Approval Attached					

DISTRICT I 1625 N FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

Revised October 12, 2005

State Lease - 4 Copies

OIL CONSERVATION DIVISION Submit to Appropriate District Office 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Fee Lease - 3 Copies

DISTRICT II

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT 1220 S ST FRANCIS DR, SANTA FE, NM 87505

☐ AMENDED REPORT

30-025-29780	Pool Code	Pool Name San Andres
Property Code 38054	Property Name CHERRY STATE	Well Number
OGRID No. 0/3837	Operator Name MACK ENERGY CORPORATION	ON Elevation 4346'

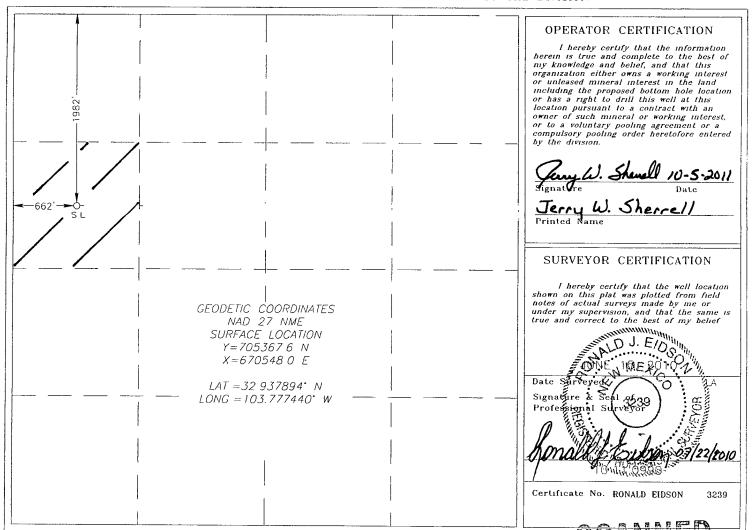
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Ē	9	16-S	32-E		1982	NORTH	662	WEST	LEA

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 o	r Infill Co	nsolidation	Code Ord	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



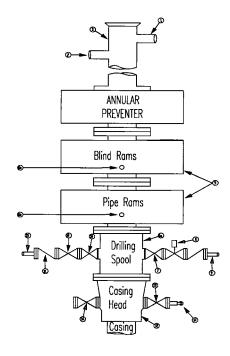
Mack Energy Corporation

Minimum Blowout Preventer Requirements

3000 psi Working Pressure 13 3/8 inch- 3 MWP 11 Inch - 3 MWP EXHIBIT #1

Stack Requirements

	Stack Requireme	HILL	
NO	Items	Mın	Mın
		ID	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	
1 . 0	i idiiged vaive	1 15/10	

10

CONTRACTOR'S OPTION TO CONTRACTOR'S OPTION TO FURNISH

- All equipment and connections above bradenhead or casinghead Working pressure of preventers to be 2000 psi minimum
- 2 Automatic accumulator (80 gallons, 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
- 5 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

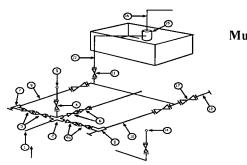
ME GENERAL NOTES

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2 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
- 3 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
- 6 Choke lines must be suitably anchored
- 7 Handwheels and extensions to be connected and ready for use
- 8 Valves adjacent to drilling spool to be kept open Use outside valves except for emergency
- 9 All seamless steel control piping (2000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted
- 10 Casinghead connections shall not be used except in case of emergency
- 11 Does not use kill line for routine fill up operations

Mack Energy Corporation

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



Mud Pit

Reserve Pit

* Location of separator optional

Below Substructure

Mimimum requirements

				IVIIIIII	mum req	uirements						
			3,000 MWP 5,000 MWP							10,000 MWP		
No.		I.D.			l.D.			I.D.				
			Nominal	Rating		Nominal	Rating		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	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	<u> </u>	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
- (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

- 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
- 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