District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
May 27,2004

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address	OGRID Number
Mack Energy Corporation P.O. Box 960 Artesia, NM 88211-0960	013837
	API Number 30- 025-28999

Property Code	Property Name	Well No
36929	Arkansas State	1

Proposed Pool 1	Proposed Pool 2
Arkansas Junction; Bone Spring	Arkansas Junction; San Andres

Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East(West line	County
A	35	18S	36E		660	North	660	East	Lea

Proposed 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

Additional Well Information

Work Type Code	Well Type Code	Cable/Rotary	Lease Type Code	Ground Level Elevation
Add A Zone	Oil	Rotary	S	3766' GR
Multiple	**Proposed Depth**	**Formation**	**Contractor**	**Spud Date**
Yes	6402'			5/1/2012

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water
145'	1000'	1000'

Pit Liner: Synthetic ☐ ____mils thick Clay ☐ Pit Volume _____bbls
Closed-Loop System ☒
Drdling Method -
Fresh Water ☒ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

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	459'	600sx	Surface/In place
12 1/4	9 5/8	36	4500'	3000sx	Surface/In place
7 7/8	5 1/2	15.5	6698'	800sx	2000'

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 commingle Arkansas Junction; San Andres and Arkansas Junction; Bone Spring production in the Arkansas State #1.

1. Drill out CIBP's @ 5050' and 6020'.
2. Acidize existing perfs from 6285-6320'.
3. Swab and evaluate well.
4. Put on Production

Permit Expires 2 Years From Approval Date Unless Drilling Underway
Adding

I hereby certify that the information given above is true and complete to the best oftny knowledge and belief **I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒ a general permit ☐, or an (attached) alternative OCD-approved plan. ☐**

Signature Jerry W. Sherrell

Printed name:	Jerry W. Sherrell
Title:	Production Clerk
E-mail Address:	jerrys@mec.com
Date: 5/21/12	Phone (575)748-1288

OIL CONSERVATION DIVISION

Approved by:

Title: PETROLEUM ENGINEER

Approval Date: MAY 23 2012 Expiration Date

Conditions of Approval Attached ☐

MAY 23 2012

HOBBS OCD

MAY 22 2012

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NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Mack Energy Corporation	Arkansas State	1

Unit Letter	Section	Township	Range	County
A	35	18 SOUTH	36 EAST	LEA

Actual Footage Location of Well:
660 feet from the NORTH line and 660 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3766.0	San Andres	Arkansas Junction	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

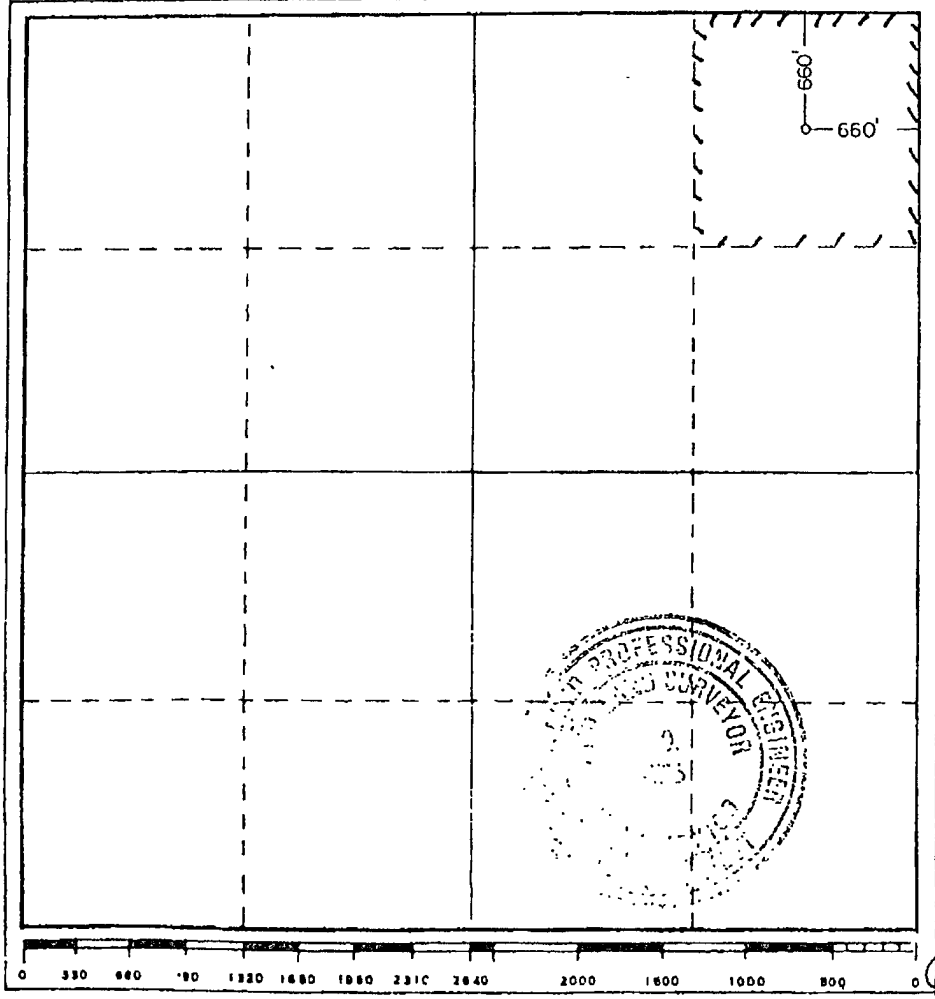
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Jerry W. Sherrell

Name: Jerry W. Sherrell

Position: Production Clerk

Company: Mack Energy Corporation

Date: 5-8-2012

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 supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: OCTOBER 12, 1984

Registered Professional Engineer and/or Land Surveyor

John W West

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

HOBBS OCD

MAY 22 2012

RECEIVED

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

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All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Mack Energy Corporation	Arkansas State	1

Unit Letter	Section	Township	Range	County
A	35	18 SOUTH	36 EAST	LEA

Actual Footage Location of Well:
660 feet from the NORTH line and 660 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3766.0	Bone Spring	Arkansas Junction	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

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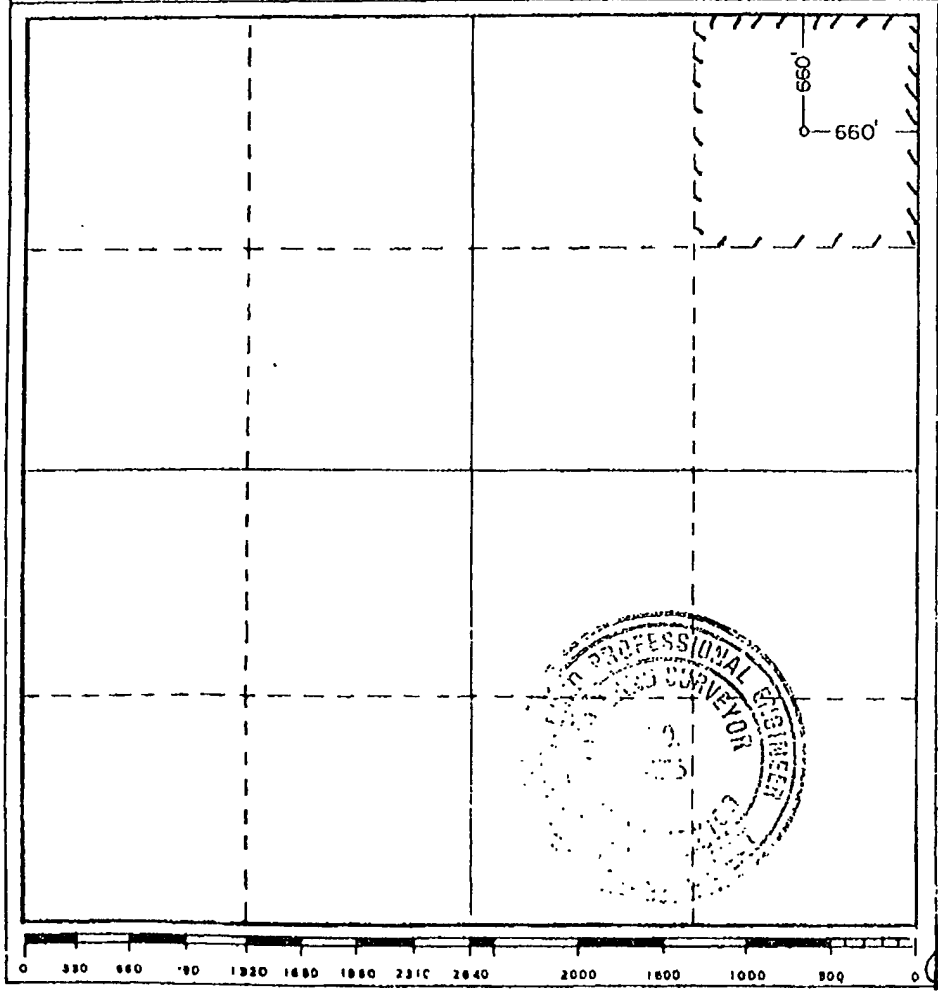

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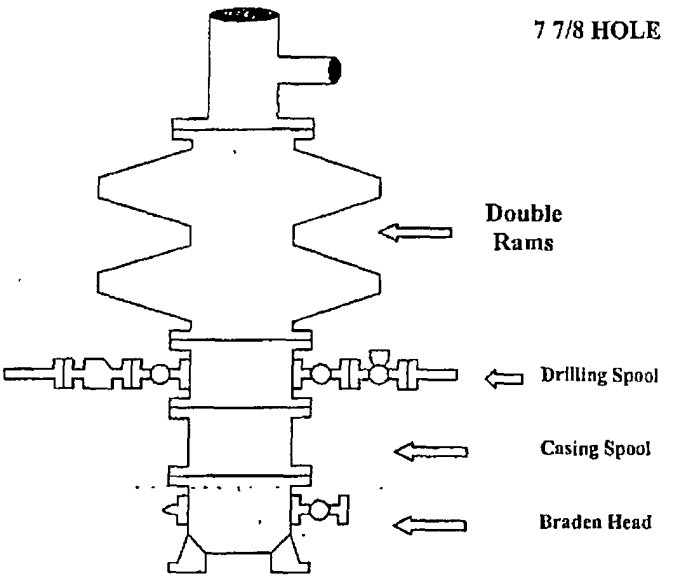
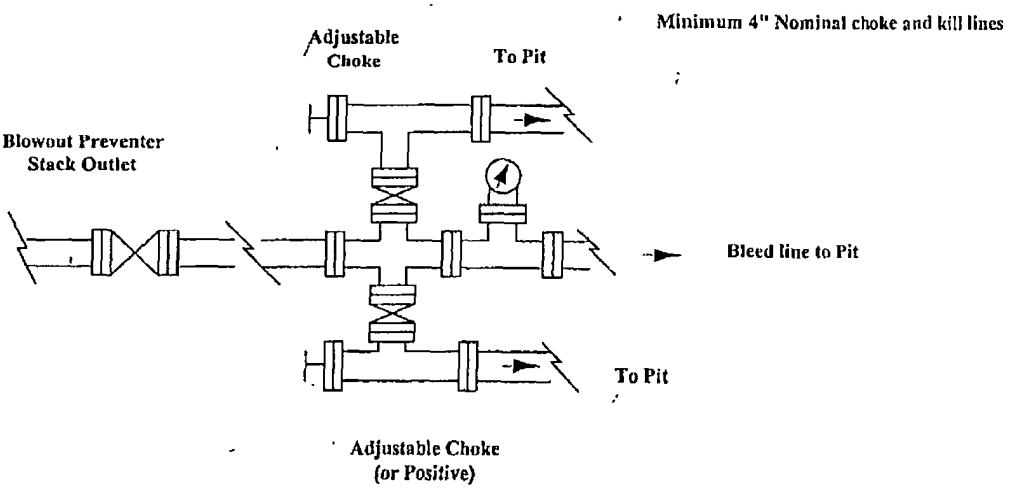
Mack Energy Corporation

Exhibit #1-A

BOPE Schematic



Choke Manifold Requirement (3000 psi WP)
No Annular Required



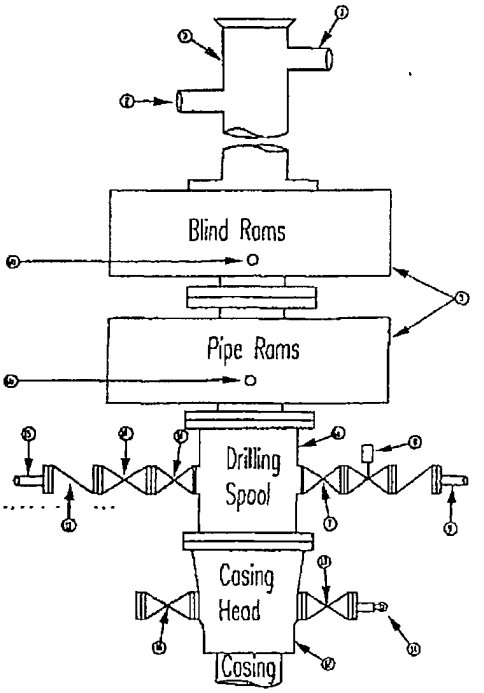
Mack Energy Corporation
Minimum Blowout Preventer Requirements
3000 psi Working Pressure
3 MWP
EXHIBIT #1-A

Stack Requirements

NO	Items	Min. I.D.	Min. 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.

1 All equipment and connections above bradenhead or casinghead Working pressure of preventers to be 3000 psi minimum
2 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.
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.

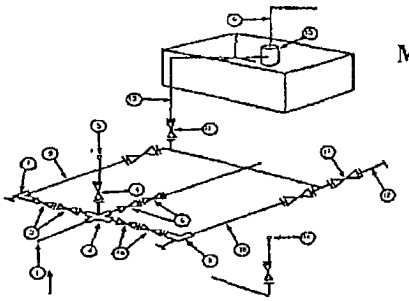
1 Bradenhead or casing head and side valves.
2 Wear bushing, If required

GENERAL NOTES:

1 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.
5. 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. Do not use kill line for routine fill up operations

Mack Energy Corporation

Exhibit #1-A
MIMIMUM CHOKE MANIFOLD
3,000, 5,000, and 10,000 PSI Working Pressure
3 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	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	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		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

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