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District II
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District III
1000 Rio Brazos Road, Aztec NM 87410
Phone: (505) 334-6174 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico

Form C-161
Revised July 18, 2013

HOBBS OGD Energy Minerals and Natural Resources

Oil Conservation Division

☐ AMENDED REPORT

FEB 06 2014

1220 South St. Francis Dr.

Santa Fe, NM 87505

RECEIVED

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

Operator Name and Address Mack Energy Corporation P.O. Box 960, Artesia, NM 88210		OGKID Number 013837
Property Code 300204	State 35	Well No 5

Surface Location

UL - Lot K	Section 35	Township 17S	Range 33E	Lot Idn	Feet from 2310	N/S Line South	Feet From 1980	E/W Line West	County Lea
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Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
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Pool Information

Pool Name Corbin; Queen	Pool Code 13280
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Additional Well Information

Work Type Re-Entry	Well Type Oil Well	Cable/Rotary	Lease Type	Ground Level Elevation 4121' GR
Multiple	Proposed Depth 3965'	Formation Corbin; Queen	Contractor	Spud Date 2/14/2014
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
J-55	12 1/4"	8 5/8"	24	1610'	775sx (existing)	0
J-55	7 7/8"	5 1/2"	15.5	4803'	965sx (existing)	0

Casing/Cement Program: Additional Comments

Set CIBP w/ 35' cmt cap @ 4000', re-complete in the Corbin; Queen

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	

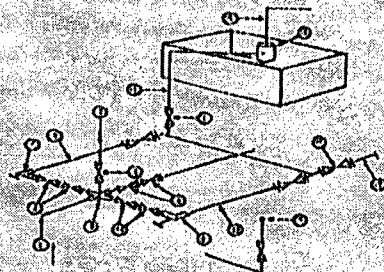
I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☐ if applicable. Signature: <i>Deana Weaver</i>		OIL CONSERVATION DIVISION Approved By: <i>[Signature]</i> Title: Petroleum Engineer	
Printed name: Deana Weaver Title: Production Clerk E-mail Address: dweaver@mec.com Date: 2/6/14		Approved Date: FEB 10 2014 Expiration Date: Conditions of Approval Attached	
Phone: 575-748-1288			

FEB 10 2014

Mack Energy Corporation

Exhibit #2

MINIMUM CHOKES 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

Minimum requirements

No.		3,000 MWP			5,000 MWP			10,000 MWP		
		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			
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 gauge			3,000			5,000			10,000
15	Gas Separator	2' x 5'			2' x 5'					
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 compatible 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. 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 be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees.

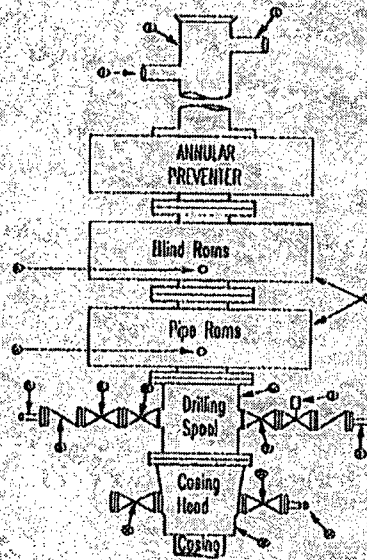
Mack Energy Corporation
Minimum Blowout Preventer Requirements
 3000 psi Working Pressure
 13 3/8 inch- 3 MWJ
 11 Inch- 3 MWJ
EXHIBIT #1

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	Choke 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	Plugged Valve	1 13/16	
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CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above landhead or casinghead. Working pressure of preventers to be 2000 psi minimum.
- Automatic accumulator (80 gallons, 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.
- 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.
- Plug type blowout preventer tester.
- Extra set pipe rams, to fit drill pipe in use on location at all times.
- Type RX ring gaskets in place of Type R.

MFC TO FURNISH:

- Landhead or casing head and side valves.
- Wear bushing, if required.

GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of M.E.C.'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.

Removable 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 in 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.
- Does not use kill line for routine fill up operations.