ATS-11-119

OCD-ARTESIA

Form 3160 -3
(April 2004)

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMNM-03361 BHL: 98171

6 If Indian, Allotee or Tribe Name

Ia Typeofwork-. ☒ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No

Ib Type of Well. ☐ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8, Lease Name and Well No. Super Bowl Federal Com #1H (38696)

2 Name of Operator Mack Energy Corporation (13837)

9 API Well No. 30-015-39192

3a. Address P.O. Box 960 Artesia, NM 88211-0960

3b. PhoneNo. *(include area code)* (575)748-1288

10. Field and Pool, or Exploratory Wildcat; Abo (97018)

4. Location of Well *(Report location clearly and inaccorounce with any State requirements*)*

At surface 355 FSL & 330 FEL

At proposed prod. zone 355 FSL & 1114 FWL

11 Sec., T. R. M or Blk. and Survey or Area Sec. 6 T16S R29E

14. Distance in miles and direction from nearest town or post office*
10 miles northwest of Loco Hills, NM

12. County or Parish Eddy

13. State NM

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
230	440	120
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No on file**
1320	MD 9,992' TVD 6,923'	NMB000286
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22 Approximate date work will start***	**23. Estimated duration**
3685' GR	01/22/2011	35 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form·

1 Well plat certified by a registered surveyor
2. A Drilling Plan.
3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above),
5 Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
Jerry W. Sherrell	Jerry W. Sherrell	12/22/10
Title: Production Clerk		
Approved by *(Signature)*: /s/ Don Peterson	Name *(Printed/Typed)*	Date: MAY 26 2011
Title: FIELD MANAGER	Office: CARLSBAD FIELD OFFICE	

Application approval does not warrantor certify that the applicant holds lega orequitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Tide 43 U S C. Section 1212, make it a crime for any person knowirilly and willfully to make to any department or agency ofthe United States any false, fictitious or fraudulent statements or representations as to any matter within its juris iction.

*(Instructions on page 2)

RECEIVED
MAY 27 2011
NMOCD ARTESIA

Roswell Controlled Water Basin

SEE ATTACHED FOR CONDITIONS OF APPROVAL

KZ 07/06/11

Approval Subject to General Requirements & Special Stipulations Attached

Attached to Form 3160-3
Mack Energy Corporation
Super Bowl Federal #1
SL 355 FSL & 330 FEL, Unit P, Sec. 6 T16S R29E
BHL 355 FSL & 1114 FWL, Unit N, Sec. 6 T16S R29E
Eddy County, NM

DRILLING PROGRAM

1. **Geologic Name of Surface Formation**

   Quaternary

2. **Estimated Tops of Important Geologic Markers:**

Rustler:	160'		
Top Salt:	400'		
Base Salt:	756"		
Yates	1450'	Tubb	5725'
Queen	2250'	Abo	6530'
San Andres	2925'	WC	7700'
Glorieta	4540'	Strawn	9725'

3. **Estimated Depths of Anticipated Fresh Water, Oil and Gas:**

Water Sand	150'	Fresh Water
San Andres	2925'	Oil/Gas
Abo	6530'	Oil/Gas
WC	7700'	Oil/Gas

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 9 5/8" casing to ~~400'~~ and circulating cement back to surface will protect the surface fresh water sand. Salt Section and zones above producing interval will be protected by setting 7" casing to 6200' and circulating cement back to surface. A 4 ½" production casing liner will be set from 6100 to 9992', held in place with a liner hanger and peak completion packer system.

4. **Casing Program:**

Hole Size	Interval	OD Casing	Wt, Grade, Jt, cond, collapse/burst/tension
See COA	250		
12 ¼"	0-~~400~~'	9 5/8"	36#, J-55, ST&C, New, 10.11/6.924/7.04
8 3/4"	0-6200'	7"	26#, HCP-110,Buttress, New,2.509/15.51/15.81
6 1/8"	6100-9992'	4 ½"	11.6# HCP-110,Buttress,New,1.790/3.178/3.317

5. **Cement Program:**

9 5/8" Surface Casing: Class C 35:65 PozC 2%CaCl, Celloflake, 3#sx LCM, 1.5% SMS6, Lead 200sx, excess 100% yield 1.78, Class C 1% CaCl tail 400sx, excess 100% yield 1.34
7" Intermediate Casing: Class H 2.55% R-3, 5#LCM, 4%SMS, Lead 625sx, excess 35%, yield 2.15,Class H 50:50, 2% Salt, 3# LCM-1, 1%FL-62, 0.1% ASA-301, 0.2%SMS tail 200sx, excess 35%, yield 1.19.
4 ½" Production Casing: Set with isolation packers.

6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ram-type (3000 psi WP) minimum preventer. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 4 1/2" drill pipe rams on bottom. **The BOP will be nippled up on the 9 5/8" surface casing and tested ~~to 1000 psi using the rig pump~~.** The BOP will then be nippled up on the 7" intermediate casing and tested by a 3rd party to 2000 psi and used continuously until TD is reached.All BOP's and accessory equipment will be tested to 2000 psi before drilling out of intermediate casing. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment (Exhibit #10) will include a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) with a minimum 3000 psi WP rating.

See COA

7. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine and cut brine mud system. The applicable depths and properties of this system are as follows:

DEPTH	TYPE	WEIGHT	VISCOSITY	WATERLOSS
0-400'250	Fresh Water	8.5	28	N.C.
400-6200'	Brine	10	30	N.C.
6100'-TD	Cut Brine	9.1	29	N.C.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

8. Auxiliary Well Control and Monitoring Equipment:

A. Kelly cock will be kept in the drill string at all times.
B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

9. Logging, Testing and Coring Program: See COA

A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log from T.D. to 8 5/8 casing shoe.
B. Drill Stem test is not anticipated.
C. No conventional coring is anticipated.
D. Further testing procedures will be determined at TD.

10. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

Attached to Form 3160-3
Mack Energy Corporation
Super Bowl Federal #1
SL 355 FSL & 330 FEL, Unit P, Sec. 6 T16S R29E
BHL 355 FSL & 1114 FWL, Unit N, Sec. 6 T16S R29E
Eddy County, NM

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7. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine and polymer mud system. The applicable depths and properties of this system are as follows:

DEPTH	TYPE	WEIGHT	VISCOSITY	WATERLOSS
0-450'	Fresh Water	8.5	28	N.C.
450-3050'	Brine	10	30	N.C.
3050'-TD	Cut Brine	9.1	29	N.C.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

8. Auxiliary Well Control and Monitoring Equipment:

A. Kelly cock will be kept in the drill string at all times.
B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

9. Logging, Testing and Coring Program:

A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log from T.D. to 8 5/8 casing shoe.
B. Drill Stem test is not anticipated.
C. No conventional coring is anticipated.
D. Further testing procedures will be determined at TD.

10. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 120 degrees and estimated maximum bottom hole pressure is 2250 psig. Low levels of Hydrogen sulfide have been monitors in producing wells in the area, so H2S may be present while drilling of the well; a plan is attached to the Drilling program. No major loss of circulation zones has been reported in offsetting wells.

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Mack Energy Corporation
Super Bowl Federal #1
SL 355 FSL & 330 FEL, Unit P, Sec. 6 T16S R29E
BHL 355 FSL & 1114 FWL, Unit N, Sec. 6 T16S R29E
Eddy County, NM

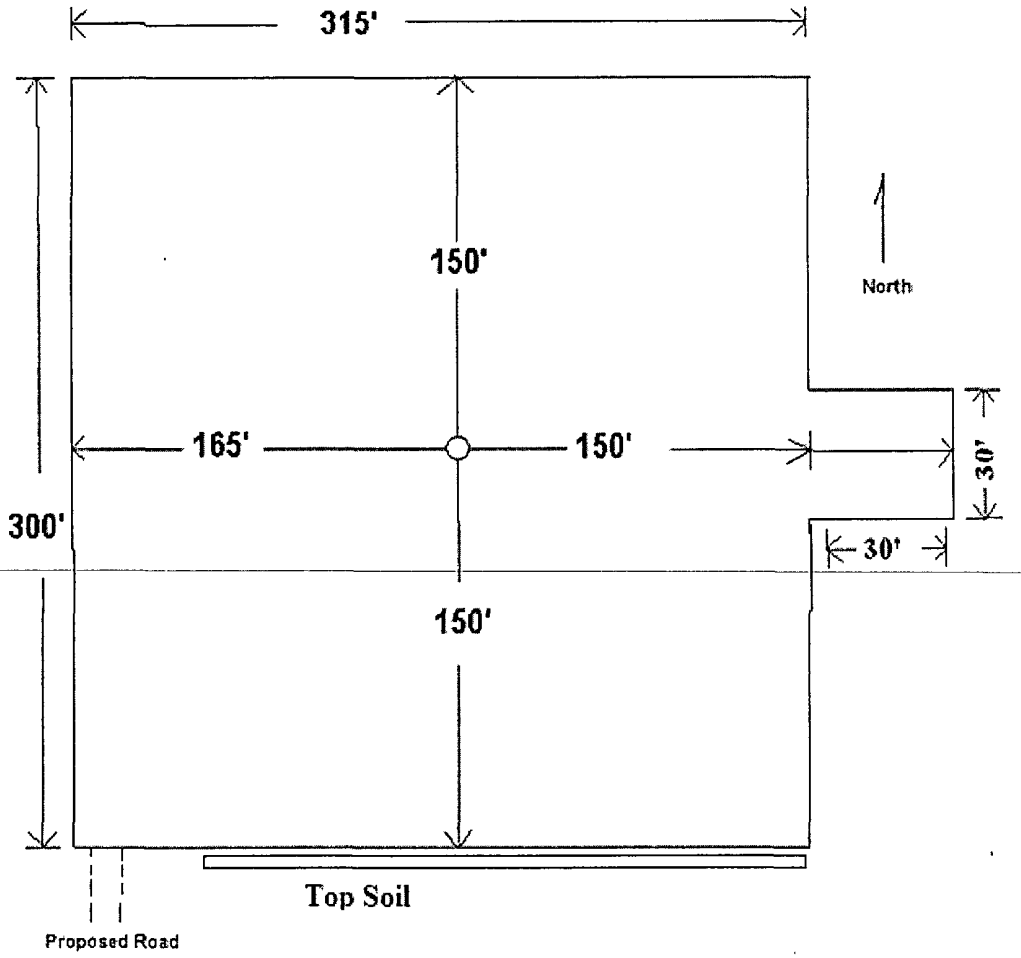
11. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is January 22, 2011. Once commenced, the drilling operation should be finished in approximately 30 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

1. Well Site Layout:

A. The drill pad layout, with elevations staked by John West Engineering, is shown in Exhibit #6. Dimensions of the pad are shown. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level no major cuts will be required.

B. Diagram below shows the proposed orientation of the location. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.



Mack Energy Corporation

Eddy County (NAD27)
Super Bowl Federal Com
#1H
OH

Plan: Design #1

Pathfinder X & Y Planning Report

13 December, 2010

PATHFINDER
A Schlumberger Company

Company:	Mack Energy Corporation	Local Co-ordinate Reference:	Site Super Bowl Federal Com
Project:	Eddy County (NAD27)	TVD Reference:	WELL @ 3702.50usft (17.5' KB Correction)
Site:	Super Bowl Federal Com	MD Reference:	WELL @ 3702.50usft (17.5' KB Correction)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Project Eddy County (NAD27)

Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Super Bowl Federal Com

Site Position:		Northing:	707,337.400 usft	Latitude:	32° 56' 39.618 N
From:	Map	Easting:	569,675.300 usft	Longitude:	104° 6' 22.364 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.12 °

Well #1H

Well Position	+N/-S	0.00 usft	Northing:	707,337.400 usft		Latitude:	32° 56' 39.618 N
	+E/-W	0.00 usft	Easting:	569,675.300 usft		Longitude:	104° 6' 22.364 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft		Ground Level:	3,685.00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/30/10	7.94	60.79	49,076

Design Design #1

Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	269.93

Survey Tool Program Date 12/13/10

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	9,991.75	Design #1 (OH)		

Company:	Mack Energy Corporation	Local Co-ordinate Reference:	Site Super Bowl Federal Com
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Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
0.00	0.00	0.00	0.00	3,702.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
100.00	0.00	0.00	100.00	3,602.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
200.00	0.00	0.00	200.00	3,502.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
300.00	0.00	0.00	300.00	3,402.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
400.00	0.00	0.00	400.00	3,302.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
500.00	0.00	0.00	500.00	3,202.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
600.00	0.00	0.00	600.00	3,102.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
700.00	0.00	0.00	700.00	3,002.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
800.00	0.00	0.00	800.00	2,902.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
900.00	0.00	0.00	900.00	2,802.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,000.00	0.00	0.00	1,000.00	2,702.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,100.00	0.00	0.00	1,100.00	2,602.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,200.00	0.00	0.00	1,200.00	2,502.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,300.00	0.00	0.00	1,300.00	2,402.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,400.00	0.00	0.00	1,400.00	2,302.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,500.00	0.00	0.00	1,500.00	2,202.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,600.00	0.00	0.00	1,600.00	2,102.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,700.00	0.00	0.00	1,700.00	2,002.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,800.00	0.00	0.00	1,800.00	1,902.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
1,900.00	0.00	0.00	1,900.00	1,802.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
2,000.00	0.00	0.00	2,000.00	1,702 50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
2,100.00	0.00	0.00	2,100.00	1,602.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
2,200.00	0.00	0.00	2,200.00	1,502 50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
2,300.00	0.00	0.00	2,300.00	1,402.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
2,400.00	0.00	0.00	2,400.00	1,302.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
2,500.00	0.00	0.00	2,500.00	1,202.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
2,600.00	0.00	0.00	2,600.00	1,102.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30

Company:	Mack Energy Corporation	Local Co-ordinate Reference:	Site Super Bowl Federal Com
Project:	Eddy County (NAD27)	TVD Reference:	WELL @ 3702.50usft (17.5' KB Correction)
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Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
2,700.00	0.00	0.00	2,700.00	1,002.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
2,800.00	0.00	0.00	2,800.00	902.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
2,900.00	0.00	0.00	2,900.00	802.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,000.00	0.00	0.00	3,000.00	702.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,100.00	0.00	0.00	3,100.00	602.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,200.00	0.00	0.00	3,200.00	502.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,300.00	0.00	0.00	3,300.00	402.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,400.00	0.00	0.00	3,400.00	302.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,500.00	0.00	0.00	3,500.00	202.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,600.00	0.00	0.00	3,600.00	102.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,700.00	0.00	0.00	3,700.00	2.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,800.00	0.00	0.00	3,800.00	-97.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
3,900.00	0.00	0.00	3,900.00	-197.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,000.00	0.00	0.00	4,000.00	-297.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,100.00	0.00	0.00	4,100.00	-397.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,200.00	0.00	0.00	4,200.00	-497.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,300.00	0.00	0.00	4,300.00	-597.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,400.00	0.00	0.00	4,400.00	-697 50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,500.00	0.00	0.00	4,500.00	-797.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,600.00	0.00	0.00	4,600.00	-897.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,700.00	0.00	0.00	4,700.00	-997.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,800.00	0.00	0.00	4,800.00	-1,097.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
4,900.00	0.00	0.00	4,900.00	-1,197.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
5,000.00	0.00	0.00	5,000.00	-1,297.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
5,100.00	0.00	0.00	5,100.00	-1,397.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
5,200.00	0.00	0.00	5,200.00	-1,497.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
5,300.00	0.00	0.00	5,300.00	-1,597.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30

Company:	Mack Energy Corporation	Local Co-ordinate Reference:	Site Super Bowl Federal Com
Project:	Eddy County (NAD27)	TVD Reference:	WELL @ 3702.50usft (17.5' KB Correction)
Site:	Super Bowl Federal Com	MD Reference:	WELL @ 3702.50usft (17.5' KB Correction)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
5,400.00	0.00	0.00	5,400.00	-1,697.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
5,500.00	0.00	0.00	5,500.00	-1,797.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
5,600.00	0.00	0.00	5,600.00	-1,897.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
5,700.00	0.00	0.00	5,700.00	-1,997.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
5,800.00	0.00	0.00	5,800.00	-2,097.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
5,900.00	0.00	0.00	5,900.00	-2,197.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
6,000.00	0.00	0.00	6,000.00	-2,297.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
6,100.00	0.00	0.00	6,100.00	-2,397.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
6,200.00	0.00	0.00	6,200.00	-2,497.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
6,300.00	0.00	0.00	6,300.00	-2,597.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
6,384.00	0.00	0.00	6,384.00	-2,681.50	0.00	0.00	0.00	0.00	707,337.40	569,675.30
6,400.00	1.70	269.93	6,400.00	-2,697.50	0.00	-0.24	0.24	10.63	707,337.40	569,675.06
6,450.00	7.01	269.93	6,449.84	-2,747.34	0.00	-4.03	4.03	10.63	707,337.40	569,671.27
6,500.00	12.33	269.93	6,499.11	-2,796.61	-0.02	-12.43	12.43	10.63	707,337.38	569,662.87
6,550.00	17.64	269.93	6,547.39	-2,844.89	-0.03	-25.36	25.36	10.63	707,337.37	569,649.94
6,600.00	22.96	269.93	6,594.27	-2,891.77	-0.05	-42.70	42.70	10.63	707,337.35	569,632.60
6,650.00	28.27	269.93	6,639.34	-2,936.84	-0.08	-64.30	64.30	10.63	707,337.32	569,611.00
6,700.00	33.58	269.93	6,682.21	-2,979.71	-0.11	-89.99	89.99	10.63	707,337.29	569,585.31
6,750.00	38.90	269.93	6,722.53	-3,020.03	-0.15	-119.54	119.54	10.63	707,337.25	569,555.76
6,800.00	44.21	269.93	6,759.93	-3,057.43	-0.19	-152.69	152.69	10.63	707,337.21	569,522.61
6,850.00	49.53	269.93	6,794.10	-3,091.60	-0.23	-189.17	189.17	10.63	707,337.17	569,486.13
6,900.00	54.84	269.93	6,824.75	-3,122.25	-0.28	-228.66	228.66	10.63	707,337.12	569,446.64
6,950.00	60.15	269.93	6,851.60	-3,149.10	-0.33	-270.81	270.81	10.63	707,337.07	569,404.49
7,000.00	65.47	269.93	6,874.44	-3,171.94	-0.39	-315.27	315.27	10.63	707,337.01	569,360.03
7,050.00	70.78	269.93	6,893.06	-3,190.56	-0.44	-361.65	361.65	10.63	707,336.96	569,313.65
7,100.00	76.10	269.93	6,907.31	-3,204.81	-0.50	-409.56	409.56	10.63	707,336.90	569,265.74
7,150.00	81.41	269.93	6,917.06	-3,214.56	-0.56	-458.58	458.58	10.63	707,336.84	569,216.72

Company:	Mack Energy Corporation	Local Co-ordinate Reference:	Site Super Bowl Federal Com
Project:	Eddy County (NAD27)	TVD Reference:	WELL @ 3702.50usft (17.5' KB Correction)
Site:	Super Bowl Federal Com	MD Reference:	WELL @ 3702.50usft (17.5' KB Correction)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
7,200.00	86.72	269.93	6,922.23	-3,219.73	-0.62	-508.30	508.30	10.63	707,336.78	569,167.00
7,241.65	91.15	269.93	6,923.00	-3,220.50	-0.67	-549.93	549.93	10.63	707,336.73	569,125.37
7,300.00	91.15	269.93	6,921.83	-3,219.33	-0.74	-608.27	608.27	0.00	707,336.66	569,067.03
7,400.00	91.15	269.93	6,919.82	-3,217.32	-0.87	-708.25	708.25	0.00	707,336.53	568,967.05
7,500.00	91.15	269.93	6,917.81	-3,215.31	-0.99	-808.23	808.23	0.00	707,336.41	568,867.07
7,600.00	91.15	269.93	6,915.81	-3,213.31	-1.11	-908.21	908.21	0.00	707,336.29	568,767.09
7,700.00	91.15	269.93	6,913.80	-3,211.30	-1.23	-1,008.18	1,008.19	0.00	707,336.17	568,667.12
7,800.00	91.15	269.93	6,911.79	-3,209.29	-1.35	-1,108.16	1,108.17	0.00	707,336.05	568,567.14
7,900.00	91.15	269.93	6,909.79	-3,207.29	-1.48	-1,208.14	1,208.15	0.00	707,335.92	568,467.16
8,000.00	91.15	269.93	6,907.78	-3,205.28	-1.60	-1,308.12	1,308.13	0.00	707,335.80	568,367.18
8,100.00	91.15	269.93	6,905.77	-3,203.27	-1.72	-1,408 10	1,408.11	0.00	707,335.68	568,267.20
8,200.00	91.15	269.93	6,903.77	-3,201.27	-1.84	-1,508.08	1,508.09	0.00	707,335.56	568,167.22
8,300.00	91.15	269.93	6,901.76	-3,199.26	-1.96	-1,608.06	1,608.06	0.00	707,335.44	568,067.24
8,400.00	91.15	269.93	6,899.75	-3,197.25	-2.09	-1,708.04	1,708.04	0.00	707,335.31	567,967.26
8,500.00	91.15	269.93	6,897.75	-3,195.25	-2.21	-1,808.02	1,808.02	0.00	707,335.19	567,867.28
8,600.00	91.15	269.93	6,895.74	-3,193.24	-2.33	-1,908.00	1,908.00	0.00	707,335.07	567,767.30
8,700.00	91.15	269.93	6,893.73	-3,191.23	-2.45	-2,007.98	2,007.98	0.00	707,334.95	567,667.32
8,800.00	91.15	269.93	6,891.72	-3,189.22	-2.58	-2,107.96	2,107.96	0.00	707,334.82	567,567.34
8,900.00	91.15	269.93	6,889.72	-3,187.22	-2.70	-2,207.94	2,207.94	0.00	707,334.70	567,467.36
9,000.00	91.15	269.93	6,887.71	-3,185.21	-2.82	-2,307.92	2,307.92	0.00	707,334.58	567,367.38
9,100.00	91.15	269.93	6,885.70	-3,183.20	-2.94	-2,407.90	2,407.90	0.00	707,334.46	567,267.40
9,200.00	91.15	269.93	6,883.70	-3,181.20	-3.06	-2,507.88	2,507.88	0.00	707,334.34	567,167.42
9,300.00	91.15	269.93	6,881.69	-3,179.19	-3 19	-2,607.86	2,607.86	0.00	707,334.21	567,067.44
9,400.00	91.15	269.93	6,879.68	-3,177.18	-3.31	-2,707.84	2,707.84	0.00	707,334.09	566,967.46
9,500.00	91.15	269.93	6,877.68	-3,175.18	-3.43	-2,807.82	2,807.82	0.00	707,333.97	566,867.48
9,600.00	91.15	269.93	6,875.67	-3,173.17	-3 55	-2,907 80	2,907.80	0.00	707,333.85	566,767.50
9,700.00	91.15	269.93	6,873.66	-3,171.16	-3.67	-3,007.78	3,007 78	0.00	707,333.73	566,667.52

Company:	Mack Energy Corporation	Local Co-ordinate Reference:	Site Super Bowl Federal Com
Project:	Eddy County (NAD27)	TVD Reference:	WELL @ 3702.50usft (17.5' KB Correction)
Site:	Super Bowl Federal Com	MD Reference:	WELL @ 3702.50usft (17.5' KB Correction)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
9,800.00	91.15	269.93	6,871.65	-3,169.15	-3.80	-3,107.76	3,107.76	0.00	707,333.60	566,567.54
9,900.00	91.15	269.93	6,869.65	-3,167.15	-3.92	-3,207.74	3,207.74	0.00	707,333.48	566,467.56
9,992.18	91.15	269.93	6,867.80	-3,165.30	-4 03	-3,299.90	3,299.90	0.00	707,333.37	566,375.40

Checked By: _____ Approved By: _____ Date: _____

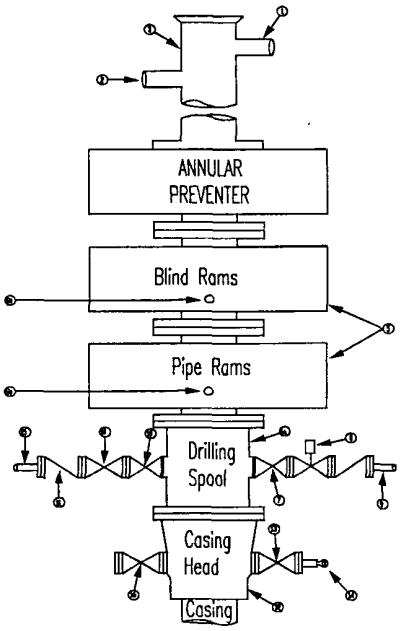
Mack Energy Corporation
Minimum Blowout Preventer Requirements
3000 psi Working Pressure
3 MWP
EXHIBIT #10

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 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.

10.

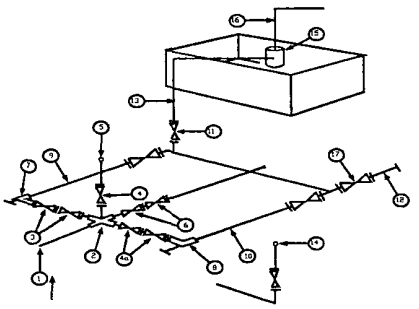
ME

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. Does not use kill line for routine fill up operations.

Mack Energy Corporation

Exhibit #11
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

No.		3,000 MWP I.D.	Nominal	Rating	5,000 MWP I.D.	Nominal	Rating	10,000 MWP 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. 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

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator MACK ENERGY CORP OGRID # 13837

38696 Well Name & # SUPER BOWL FED COM #1H Surface Type (F)(S)(P)

Location: UL P, Sect 6, Twnship 16 s, RNG 29 e, Sub-surface Type (F)(S)(P)

N 6 — 16 — 29

A. Date C101 rec'd ____/____/____ C101 reviewed ____/____/____

B. 1. Check mark, Information is OK on Forms:
OGRID ✓, BONDING FED PROP CODE ✓, WELL # ✓, SIGNATURE ____
2. Inactive Well list as of : 7/6/11 # wells 350, # Inactive wells 0
a. District Grant APD but see number of inactive wells:
No letter required ✓, Sent Letter to Operator ____, to Santa Fe ____
3. Additional Bonding as of: 7/6/11
a. District Denial because operator needs addition bonding:
No Letter required ✓; Sent Letter to Operator ____, To Santa Fe____
b. District Denial because of Inactive well list and Financial Assurance:
No Letter required ✓; Sent Letter to Operator ____, To Santa Fe ___

C. C102 YES ✓, NO ___, Signature ✓
1. Pool WILDCAT; ABO Code 97019
a. Dedicated acreage 120, What Units NSP
b. SUR. Location Standard ✓, Non-Standard Location_____
c. Well shares acres: Yes ___, No ✓, # of wells ____ plus this well #____
2. 2nd. Operator in same acreage, Yes_____, No ✓
Agreement Letter _____, Disagreement letter_____
3. Intent to Directional Drill Yes ✓, No ___
a. Dedicated acreage 120, What Units NSP
b. Bottomhole Location Standard ✓, Non-Standard Bottomhole _____
4. Downhole Commingle: Yes_____, No ✓
a. Pool #2_____,Code_____, Acres_____
Pool #3_____, Code _____, Acres _____
Pool #4_____, Code_____, Acres_____
5. ' POTASH Area Yes _____, No ✓,

D. Blowout Preventer Yes ✓, No _____,

E. H2S Yes ✓, No _____,

F. C144 Pit Registration Yes _____, No _____, need

G. Does APD require Santa Fe Approval:
1. Non-Standard Location: Yes _____, No ✓, NSL #_____
2. Non-Standard Proration: Yes_____, No ✓, NSP # _____
3. Simultaneous Dedication: Yes _____, No ✓, SD # _____
Number of wells _____ Plus #_____
4. Injection order Yes _____, No ✓; PMX #_____ or WFX #_____
5. SWD order Yes _____, NO ✓; SWD # _____
6. DHC from SF_____; DHC-HOB_____; Holding_____

7. OCD Approval Date 7/6/11 API #30-015-39192
8. Reviewers KR