

HIGH CAVEKARST

OCD-ARTESIA

S

ATS-07-363
EA-07-941Form 3160-3
(April 2004)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JAN 15 2008

OCD-ARTESIA

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of work- <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No NM-114960	
1b Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6 If Indian, Allottee or Tribe Name	
2 Name of Operator Mack Energy Corporation		7 If Unit or CA Agreement, Name and No	
3a Address P.O. Box 960 Artesia, NM 88211-0960		8, Lease Name and Well No Robin Federal #2	
3b Phone No (include area code) (505)748-1288		9 API Well No 30-015-36046	
4 Location of Well (Report location clearly and in accordance with any State requirements*) At surface 2635 FSL & 2060 FWL At proposed prod. zone 1980 FSL & 1980 FWL		10 Field and Pool, or Exploratory Wildcat Morrow	
14 Distance in miles and direction from nearest town or post office* 7 miles southwest of Carlsbad, NM		11 Sec, T, R, M. or Blk and Survey or Area Sec. 9 T23S R25E	
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg. unit line, if any) 5'		12 County or Parish Eddy	
16 No. of acres in lease 320		13 State NM	
17 Spacing Unit dedicated to this well 320		18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1320'	
19 Proposed Depth 11,500'		20 BLM/BIA Bond No. on file NMB000286	
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3719' GR		22 Approximate date work will start* 6/25/2007	
		23. Estimated duration 30	

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 | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above), |
| 2 A Drilling Plan. | 5. Operator certification |
| 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) | 6 Such other site specific information and/or plans as may be required by the authorized officer |

25 Signature <i>Jerry W. Sherrell</i>	Name (Printed/Typed) Jerry W. Sherrell	Date 5/16/07
Title Production Clerk		
Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed/Typed) /s/ Don Peterson	Date JAN 11 2008
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable 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 Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on page 2)

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED**

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

RECEIVED

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

1220 S ST FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

MAY 15 2007

☐ AMENDED REPORT

API Number		Pool Code 96c70	Pool Name Wildcat Morrow
Property Code 36091	Property Name ROBIN FEDERAL		Well Number 2
OGRID No 013837	Operator Name MACK ENERGY CORPORATION		Elevation 3719'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	9	23-S	25-E		2635	SOUTH	2060	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
K	9	23-S	25-E		1980	SOUTH	1980	WEST	EDDY
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order 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

<p>PROJECT AREA</p> <p>PRODUCING AREA</p> <p>BOTTOM HOLE Y=479021.7 N X=478304.6 E</p> <p>GEODETIC COORDINATES NAD 27 NME SURFACE Y=479676.3 N X=478360.0 E LAT.=32.318727° N LONG.=104.403384° W</p> <p>GR. AZ.=184°50'13" HORZ. DIST.=657.1'</p> <p>2060' 1980' 3723.6' 3711.2' 3731.8' 3713.1'</p> <p>600' 600'</p> <p>2635'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Jerry W. Sherrell</i> 5/16/07 Signature Date</p> <p>Jerry W. Sherrell Printed Name</p> <p>SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>APRIL 13, 2007</p> <p>Date Surveyed JR</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Gary Eidsen</i> 5/2/07 07 11.0498</p> <p>Certificate No. GARY EIDSON 12641</p>
---	--

United State Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell Resource Area

P.O. Drawer 1857

Roswell, New Mexico 88202-1857

Statement Accepting Responsibility for Operations

Operator name: Mack Energy Corporation
Street or box : P.O. Box 960
City, State : Artesia, NM
Zip Code, : 88211-0960

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

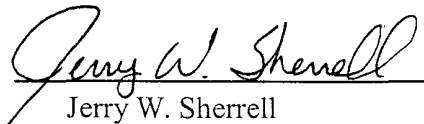
Lease No.: NM-114960 Robin Federal #2

Legal Description of land: Sec. 9 T23S R25E NE/4 SW/4

Formation(s) (if applicable): Morrow

Bond Coverage: (State if individually bonded or another's bond)
Statewide Bond

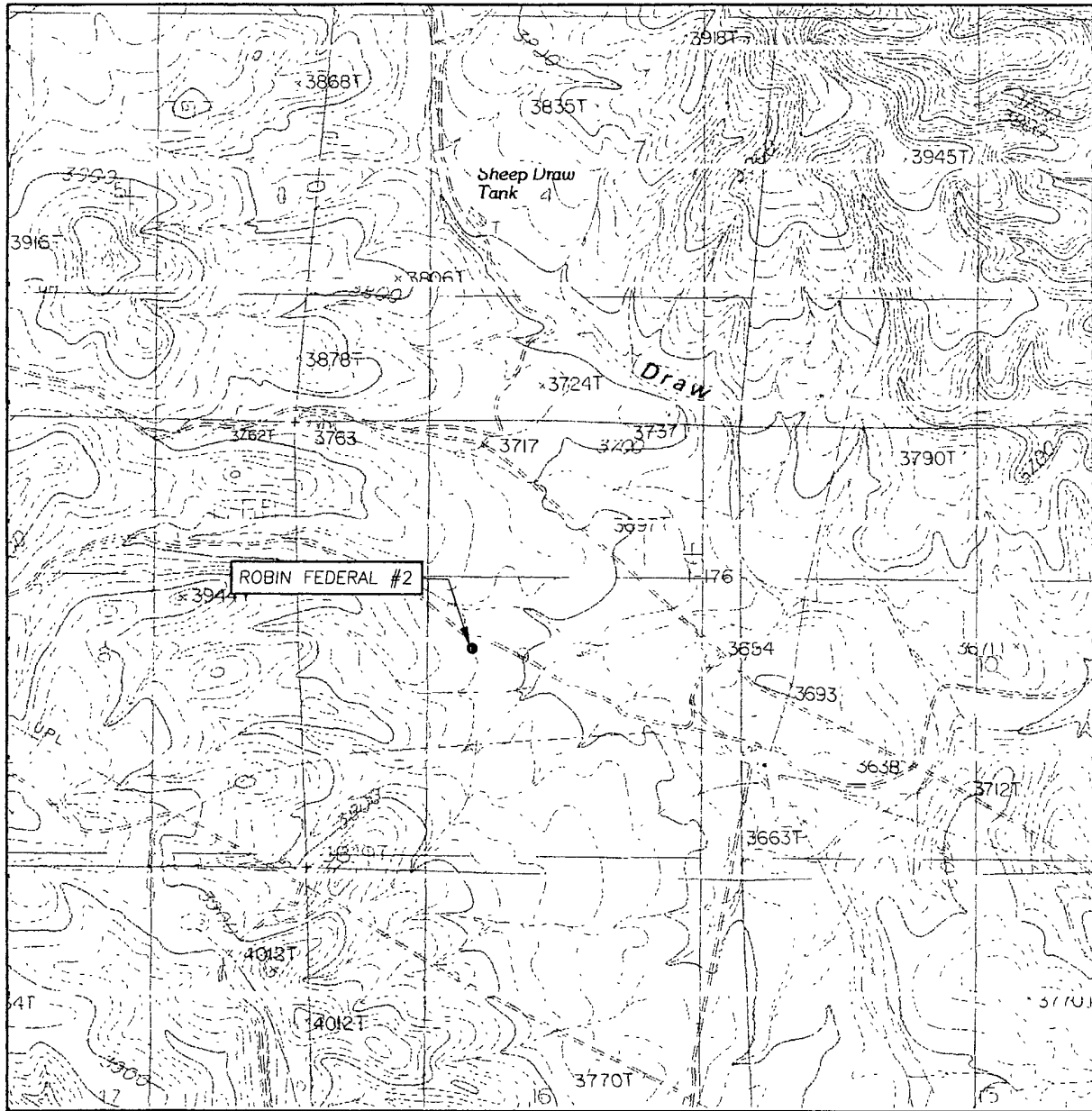
BLM Bond File No.: NMB000286

Authorized Signature: 
Jerry W. Sherrell

Title: Production Clerk

Date: 5/16/2007

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
CARNERO PEAK, N.M. - 20'

SEC. 9 TWP. 23-S RGE. 25-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

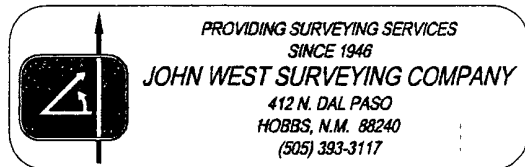
DESCRIPTION 2635' FSL & 2060' FWL

ELEVATION 3719'

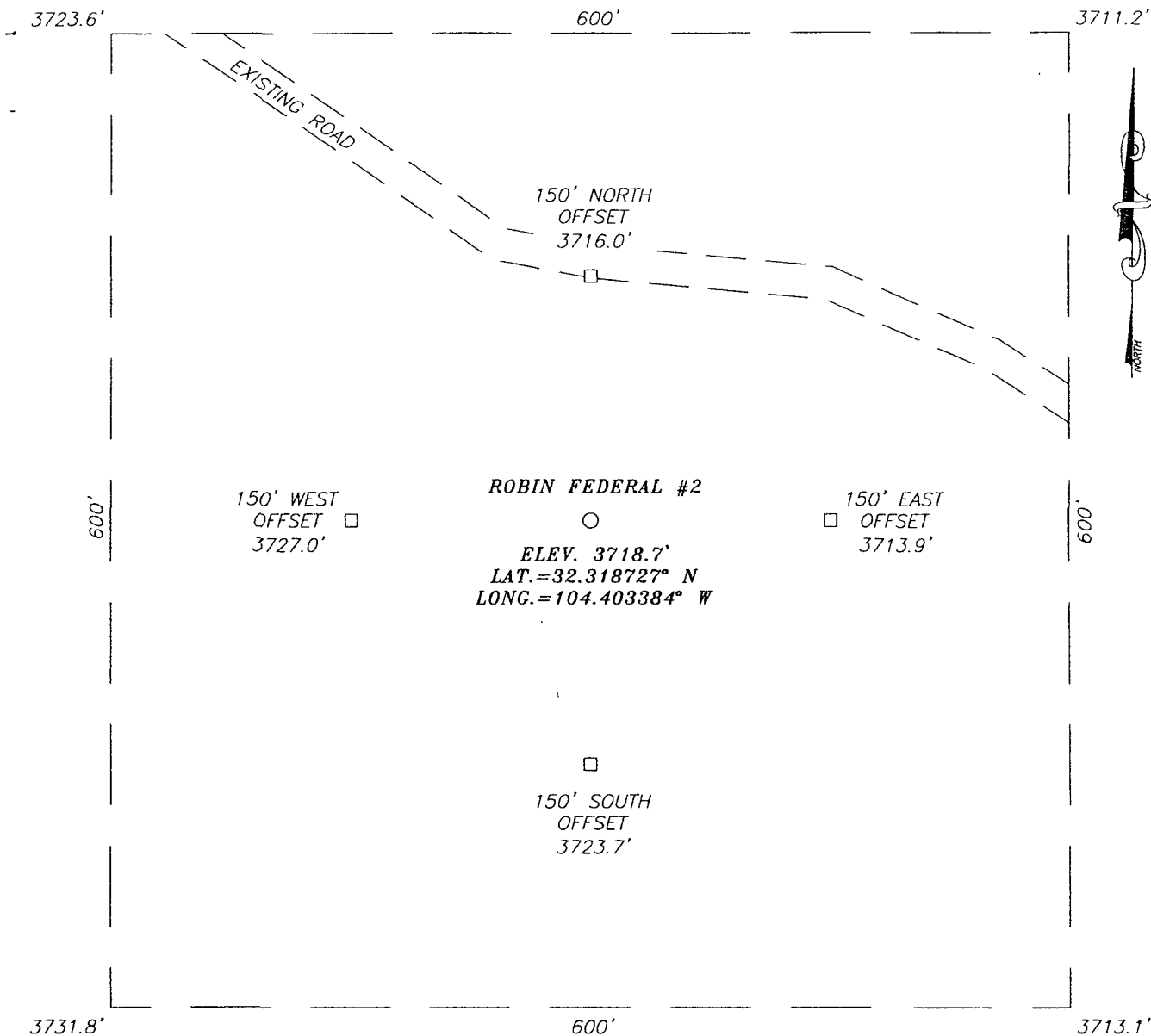
OPERATOR MACK ENERGY CORPORATION

LEASE ROBIN FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
CARNERO PEAK, N.M.

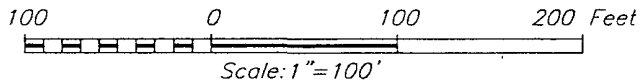


SECTION 9, TOWNSHIP 23 SOUTH, RANGE 25 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION


FROM THE INTERSECTION OF CO. RD. #408 (DARK CANYON RD.) AND CO. RD. #408A (RED JUNIPER RD.) GO WEST ON CO. RD. #408 APPROX. 0.2 MILES. TURN RIGHT AND GO NORTH APPROX. 3.8 MILES. TURN RIGHT AND GO EAST APPROX. 2.2 MILES TO THE EXISTING ROBIN FED. #1 WELL. FOLLOW EXISTING TRAIL ROAD SOUTHEAST APPROX. 0.7 MILES. TURN RIGHT AND GO SOUTH APPROX. 0.2 MILES. TURN RIGHT AND GO NORTHWEST APPROX. 0.5 MILES. THIS LOCATION IS APPROX. 150 FEET SOUTHWEST.



MACK ENERGY CORPORATION

ROBIN FEDERAL #2 WELL
 LOCATED 2635 FEET FROM THE SOUTH LINE
 AND 2060 FEET FROM THE WEST LINE OF SECTION 9,
 TOWNSHIP 23 SOUTH, RANGE 25 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 04/13/07	Sheet .1 of 1 Sheets
W.O. Number. 07.11.0498	Dr By: J.R. Rev 1:N/A
Date: 04/30/07	Disk: CD#7 07110498 Scale: 1"=100'



PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

Attached to Form 3160-3
Mack Energy Corporation
Robin Federal #2
SHL 2635 FSL & 2060 FWL, BHL 1980 FSL & 1980 FWL
NE/4 SW/4, Sec 9 T23S R25E
Eddy County, NM

DRILLING PROGRAM

1. Geologic Name of Surface Formation

Quaternary

2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface		
Wolfcamp	8638'	Atoka	10433'
Penn	9750'	Morrow	10882'
Strawn	9952'		

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

Water Sand	450'	Fresh Water
Strawn	9952'	Gas
Atoka	10433'	Gas
Morrow	10882'	Gas

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 325' and circulating cement back to surface will protect the surface fresh water sand. Capitan Reef Section will be protected by setting 9 5/8" casing to 1590' and circulating cement back to surface. Optional 7" casing could be run prior to TD should hole problems occur. Any shallower zones above TD, which contain commercial quantities of oil and/or gas, will have cement circulated across them by cementing 5 1/2" production casing, which will be run at TD.

4. Casing Program:

Hole Size	Interval	Casing	Wt, Grade, Jt, burst/collapse/tension
13 3/8"	0-325'	13 3/8"	48#, H-40, ST&C, 3.92/1.676/6.71
9 5/8"	0-1590'	9 5/8"	36#, J-55, ST&C, 2.95/2.877/7.91
5 1/2"	0-11500'	5 1/2"	17#, L-80, LT&C, 1.54/1.478/1.81
Optional 7"	0-9200'	7"	26#, HCL-80, LT&C, 1.26/1.569/2.38
Optional 4 1/2"	0-11,500'	4 1/2"	11.6#, N-80, LT&C, 1.30/1.15/1.83

5. Cement Program:

13 3/8" Surface Casing: with Class C, 300sx, yield 1.32.

9 5/8" Intermediate Casing: with Class C, 1180sx, yield 1.32.

7" Optional Casing: with Class C, 1350sx, yield 1.32

Attached to Form 3160-3
Mack Energy Corporation
Robin Federal #2
SHL 2635 FSL & 2060 FWL, BHL 1980 FSL & 1980 FWL
NE/4 SW/4, Sec 9 T23S R25E
Eddy County, NM

5 1/2" Production Casing: with Class C, 2500sx, yield 1.32.

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) 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 nipped up on the 13 3/8" surface casing and tested to 2000 psi by a 3rd party. The BOP will then be nipped up on the 9 5/8" 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 3000 psi WP rating.

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
	0-300'	Fresh Water	8.5	28	N.C.
See COA →	300-1590'	Fresh Water	8.5	30	N.C.
	1590'-TD	Cut Brine	10	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.

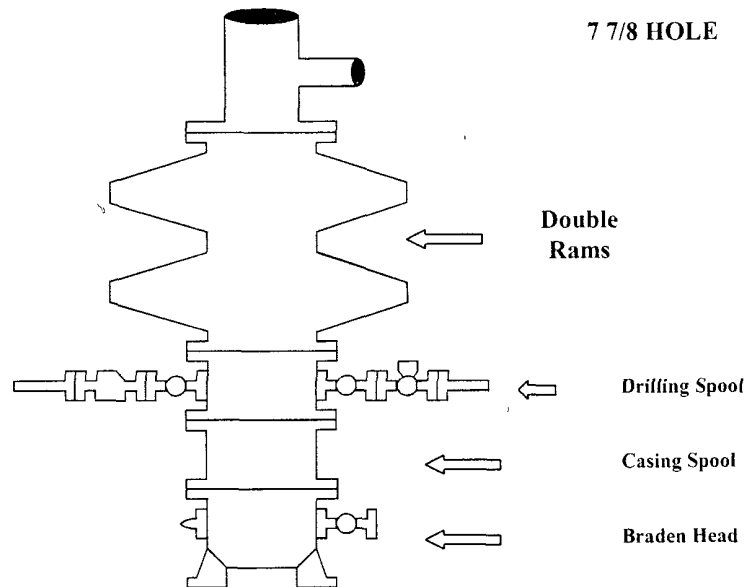
9. Logging, Testing and Coring Program:

- A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be ran from T.D. to 9 5/8 casing shoe.
- B. Drill Stem test is not anticipated.
- C. No conventional coring is anticipated.

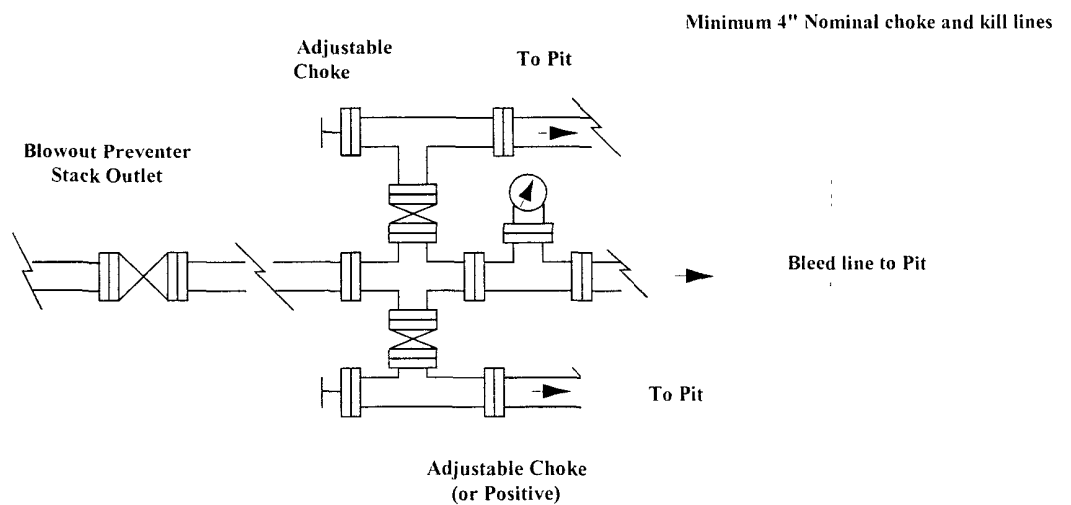
Mack Energy Corporation

Exhibit #9

BOPE Schematic



Choke Manifold Requirement (2000 psi WP)
No Annular Required



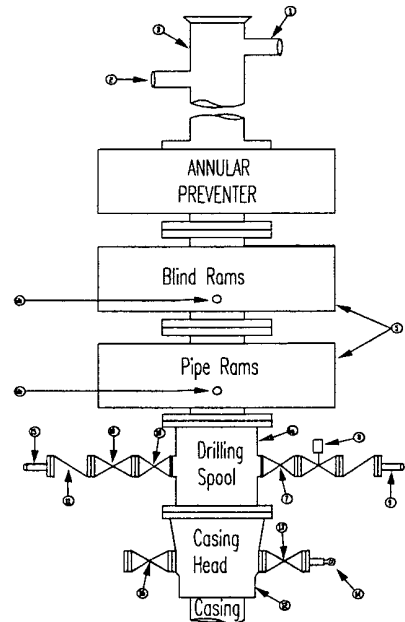
Mack Energy Corporation
Minimum Blowout Preventer Requirements
 3000 psi Working Pressure
 3 MWP
 EXHIBIT #1-A

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 handwheels 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 (3000 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

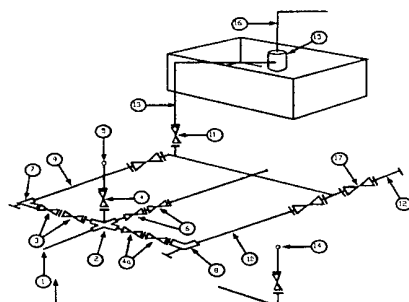
Exhibit #11

MINIMUM 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

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			10,000
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 gauge			3,000			5,000			10,000
15	Gas Separator		2' x 5'			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

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX Use only BX for 10 MWP
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 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
- 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

Attachment to Exhibit #9
NOTES REGARDING THE BLOWOUT PREVENTERS
Robin Federal #2
Eddy County, New Mexico

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 2000 psi WP minimum.
4. All fittings to be flanged.
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 2000 psi WP minimum.
6. All choke and fill lines to be securely anchored especially ends of choke lines.
7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
8. Kelly cock on Kelly.
9. Extension wrenches and hands wheels to be properly installed.
10. Blow out preventer control to be located as close to driller's position as feasible.
11. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation all API specifications.

Mack Energy Corporation

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. **The concentrations of H₂S of wells in this area from surface to TD are low enough that a contingency plan is not required.**

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

1. Well Control Equipment:

- A. Flare line.
- B. Choke manifold.
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

2. Protective equipment for essential personnel:

- A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

3. H2S detection and monitoring equipment:

- A. 1 portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram (Exhibit #8).
- B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

5. Mud program:

- A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- B. All elastomers used for packing and seals shall be H₂S trim.

7. Communication:

- A. Radio communications in company vehicles including cellular telephone and 2-way radio.
- B. Land line (telephone) communication at Office.

8. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

EXHIBIT #7

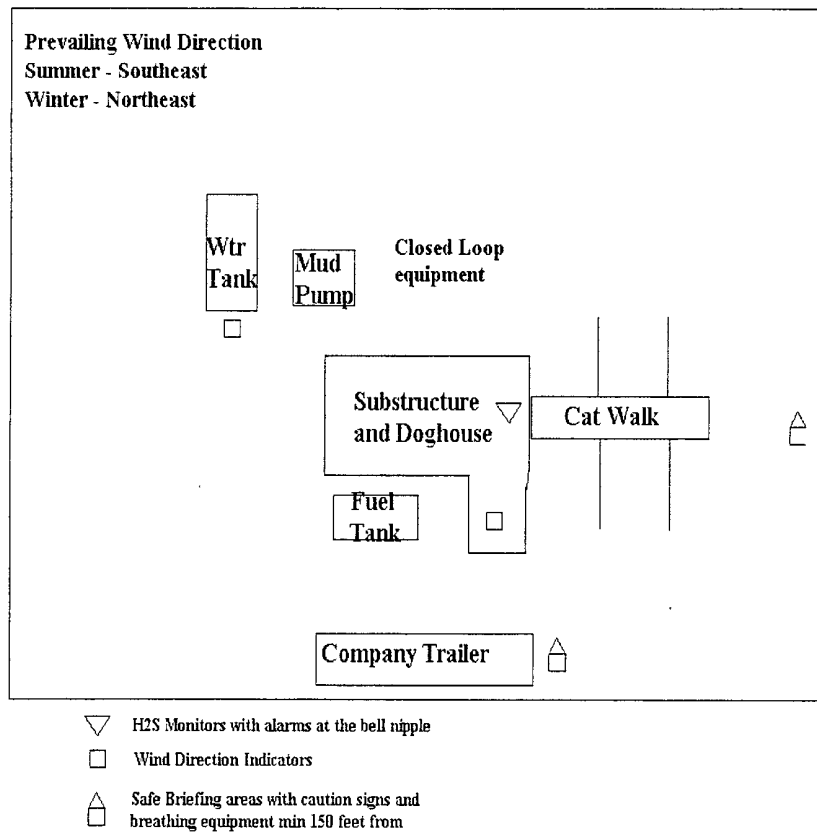
WARNING
YOU ARE ENTERING AN H₂S
AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
- 2. HARD HATS REQUIRED**
- 3. SMOKING IN DESIGNATED AREAS ONLY**
- 4. BE WIND CONSCIOUS AT ALL TIMES**
- 5. CHECK WITH MACK ENERGY FOREMAN AT OFFICE**

MACK ENERGY CORPORATION

1-505-748-1288

DRILLING LOCATION H2S SAFTY EQUIPMENT
Exhibit # 8







Scientific Drilling Planning Report



Database: EDM 2003 16 Single User Db
Company: Mack Energy Corp
Project: Eddy County, NM (NAD 27 NME)
Site: Robin Federal #2
Well: Robin Federal #2
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Robin Federal #2
TVD Reference: WELL @ 3742.00ft (KB Elev)
MD Reference: WELL @ 3742 00ft (KB Elev)
North Reference: Grd
Survey Calculation Method: Minimum Curvature

Project: Eddy County, NM (NAD 27 NME)

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

System Datum: Mean Sea Level

Site: Robin Federal #2

Site Position: Northing: 479,676 30ft Latitude: 32° 19' 7 417 N
From: Map Easting: 478,360 00ft Longitude: 104° 24' 12 184 W
Position Uncertainty: 0 00 ft Slot Radius: ft Grid Convergence: -0 04 °

Well: Robin Federal #2

Well Position: +N/-S 0 00 ft Northing: 479,676 30 ft Latitude: 32° 19' 7 417 N
+E/-W 0 00 ft Easting: 478,360 00 ft Longitude: 104° 24' 12 184 W
Position Uncertainty 0 00 ft Wellhead Elevation: 3,742 00 ft Ground Level: 0 00 ft

Wellbore: OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	5/31/2007	8 44	60 23	48,997

Design: Plan #1

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0 00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0 00	0 00	0 00	185 62

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate ("/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
5,500 00	0 00	0 00	5,500 00	0 00	0 00	0 00	0 00	0 00	0 00	
5,980 94	14 43	185 62	5,975 88	-59 95	-5 90	3 00	3 00	0 00	185 62	
8,056 72	14 43	185 62	7,986 18	-574 88	-56 55	0 00	0 00	0 00	0 00	
8,778 14	0 00	0 00	8,700 00	-664 60	-65 40	2 00	-2 00	0 00	180 00	
11,578 14	0 00	0 00	11,500 00	-664 60	-65 40	0 00	0 00	0 00	0 00	PBHL-RF #2



Scientific Drilling
Planning Report



Database:	EDM 2003 16 Single User Db	Local Co-ordinate Reference:	Well Robin Federal #2
Company:	Mack Energy Corp	TVD Reference:	WELL @ 3742 00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	WELL @ 3742 00ft (KB Elev)
Site:	Robin Federal #2	North Reference:	Grid
Well:	Robin Federal #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
East HL-RF #2 - North HL-RF #2									
1,575 00	0 00	0 00	1,575 00	0 00	0 00	0 00	0 00	0 00	0 00
9 5/8" Casing									
5,500 00	0 00	0 00	5,500 00	0 00	0 00	0 00	0 00	0 00	0 00
KOP 5500' build 3°/100'									
5,600 00	3 00	185 62	5,599 95	-2 60	-0 26	2 62	3 00	3 00	0 00
5,700 00	6 00	185 62	5,699 63	-10 41	-1 02	10 46	3 00	3 00	0 00
5,800 00	9 00	185 62	5,798 77	-23 40	-2 30	23 51	3 00	3 00	0 00
5,900 00	12 00	185 62	5,897 08	-41 53	-4 09	41 74	3 00	3 00	0 00
5,971 30	14 14	185 62	5,966 53	-57 58	-5 67	57 86	3 00	3 00	0 00
EOC hold 14.14°									
5,980 94	14 43	185 62	5,975 88	-59 95	-5 90	60 24	3 00	3 00	0 00
6,000 00	14 43	185 62	5,994 33	-64 67	-6 36	64 98	0 00	0 00	0 00
6,100 00	14 43	185 62	6,091 18	-89 47	-8 80	89 90	0 00	0 00	0 00
6,200 00	14 43	185 62	6,188 02	-114 27	-11 24	114 82	0 00	0 00	0 00
6,300 00	14 43	185 62	6,284 87	-139 06	-13 68	139 74	0 00	0 00	0 00
6,400 00	14 43	185 62	6,381 72	-163 86	-16 12	164 65	0 00	0 00	0 00
6,500 00	14 43	185 62	6,478 56	-188 66	-18 56	189 57	0 00	0 00	0 00
6,600 00	14 43	185 62	6,575 41	-213 45	-21 01	214 49	0 00	0 00	0 00
6,700 00	14 43	185 62	6,672 25	-238 25	-23 45	239 40	0 00	0 00	0 00
6,800 00	14 43	185 62	6,769 10	-263 05	-25 89	264 32	0 00	0 00	0 00
6,900 00	14 43	185 62	6,865 95	-287 85	-28 33	289 24	0 00	0 00	0 00
7,000 00	14 43	185 62	6,962 79	-312 64	-30 77	314 15	0 00	0 00	0 00
7,100 00	14 43	185 62	7,059 64	-337 44	-33 21	339 07	0 00	0 00	0 00
7,200 00	14 43	185 62	7,156 48	-362 24	-35 65	363 99	0 00	0 00	0 00
7,300 00	14 43	185 62	7,253 33	-387 03	-38 09	388 90	0 00	0 00	0 00
7,400 00	14 43	185 62	7,350 18	-411 83	-40 53	413 82	0 00	0 00	0 00
7,500 00	14 43	185 62	7,447 02	-436 63	-42 97	438 74	0 00	0 00	0 00
7,600 00	14 43	185 62	7,543 87	-461 43	-45 41	463 65	0 00	0 00	0 00
7,700 00	14 43	185 62	7,640 71	-486 22	-47 85	488 57	0 00	0 00	0 00
7,800 00	14 43	185 62	7,737 56	-511 02	-50 29	513 49	0 00	0 00	0 00
7,900 00	14 43	185 62	7,834 41	-535 82	-52 73	538 41	0 00	0 00	0 00
8,000 00	14 43	185 62	7,931 25	-560 61	-55 17	563 32	0 00	0 00	0 00
8,056 72	14 43	185 62	7,986 18	-574 68	-56 55	577 46	0 00	0 00	0 00
8,068 50	14 19	185 62	7,997 60	-577 58	-56 84	580 37	2 00	-2 00	0 00
Start drop 2°/100'									
8,100 00	13 56	185 62	8,028 18	-585 10	-57 58	587 92	2 00	-2 00	0 00
8,200 00	11 56	185 62	8,125 78	-606 74	-59 71	609 67	2 00	-2 00	0 00
8,300 00	9 56	185 62	8,224 08	-624 98	-61 50	628 00	2 00	-2 00	0 00
8,400 00	7 56	185 62	8,322 96	-639 80	-62 96	642 89	2 00	-2 00	0 00
8,500 00	5 56	185 62	8,422 30	-651 17	-64 08	654 32	2 00	-2 00	0 00
8,600 00	3 56	185 62	8,521 98	-659 09	-64 86	662 27	2 00	-2 00	0 00
8,700 00	1 56	185 62	8,621 87	-663 54	-65 30	666 74	2 00	-2 00	0 00
8,775 46	0 05	185 62	8,697 32	-664 60	-65 40	667 81	2 00	-2 00	0 00
EOC hold 0.0°									
8,778 14	0 00	0 00	8,700 00	-664 60	-65 40	667 81	2 00	-2 00	0 00
11,578 14	0 00	0 00	11,500 00	-664 60	-65 40	667.81	0 00	0 00	0 00
PBHL-RF #2									



Scientific Drilling Planning Report

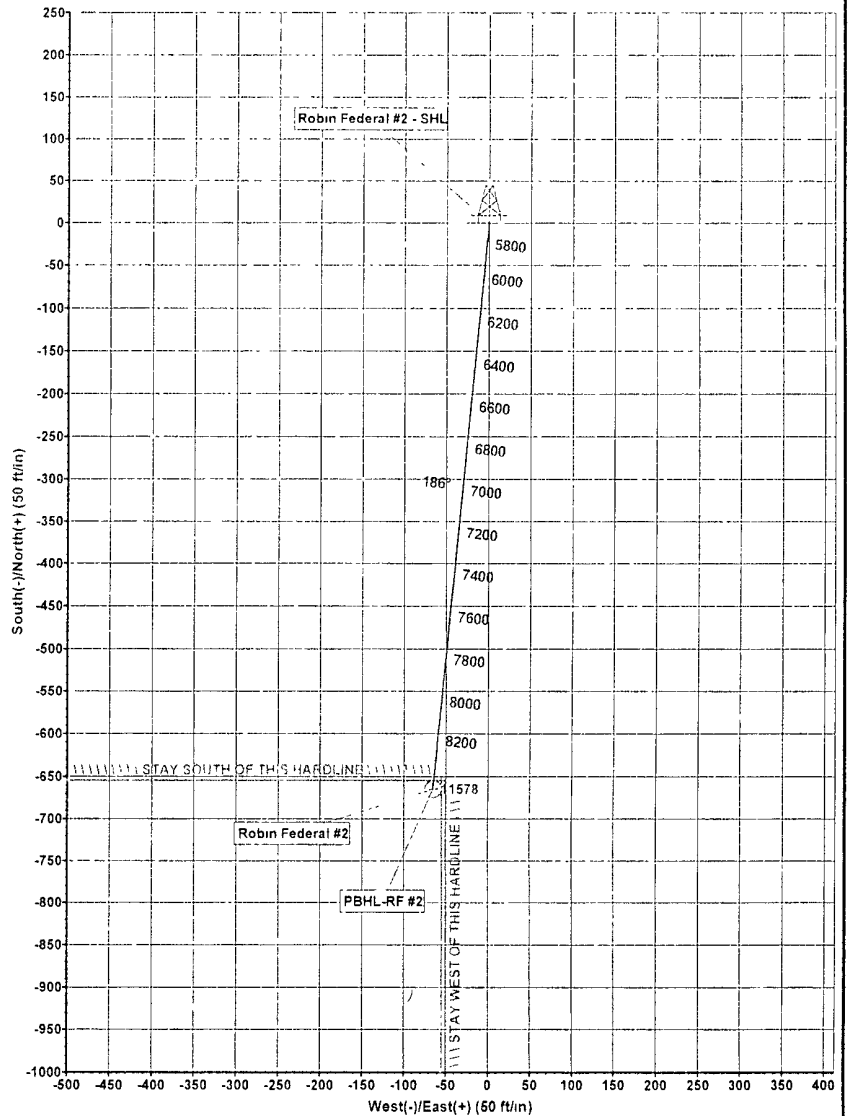
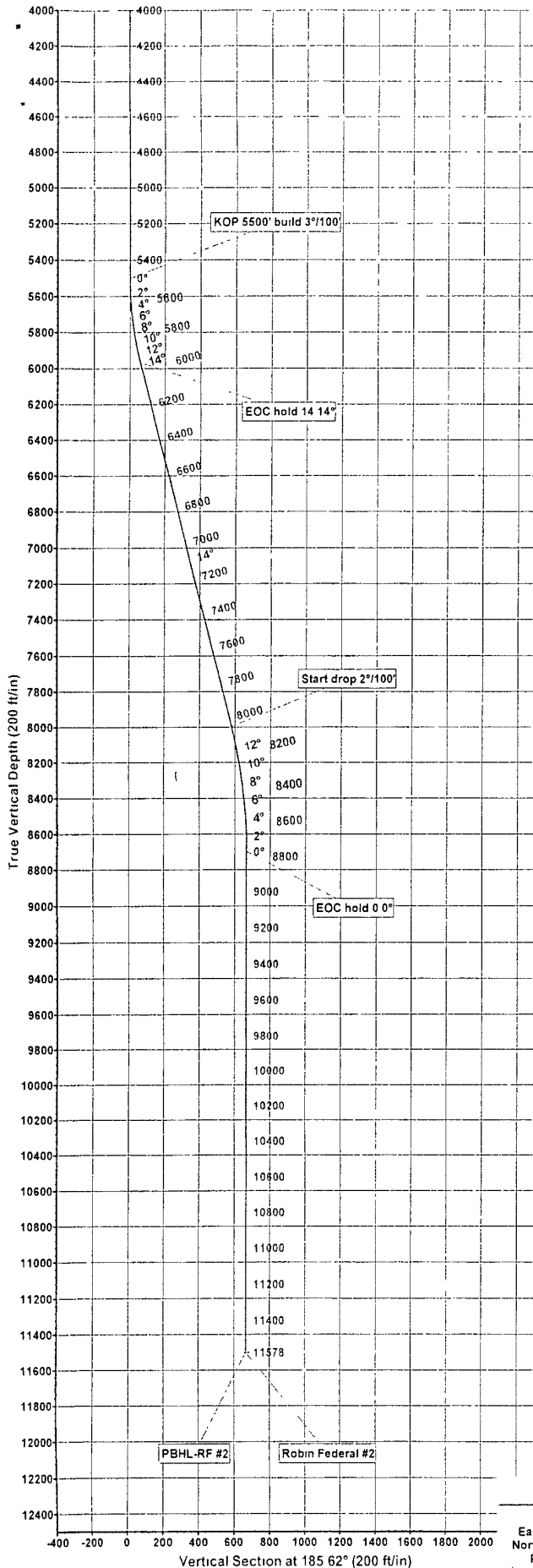


Database:	EDM 2003 16 Single User Db	Local/Co-ordinate/Reference:	Well Robin Federal #2
Company:	Mack Energy Corp	TVD/Reference:	WELL @ 3742 00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	MD/Reference:	WELL @ 3742 00ft (KB Elev)
Site:	Robin Federal #2	North/Reference:	Grid
Well:	Robin Federal #2	Survey/Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

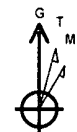
Targets									
Target Name	hit/miss target	Dip/Angle	Dip/Dir	TVD	+N/-S	+E/-W	Northing	Easting	
Shape		(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	
North HL-RF #2		0 00	0 00	0 00	-654 60	-55 40	479,021 70	478,304 60	
- plan misses by 656 94ft at 0 00ft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W0 00 H500 00 D0 00)									
East HL-RF #2		0 00	0 00	0 00	-654 60	-55 40	479,021 70	478,304 60	
- plan misses by 656 94ft at 0 00ft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W500 00 H0 00 D0 00)									
PBHL-RF #2		0 00	0 00	11,500 00	-664 60	-65 40	479,011 70	478,294 60	
- plan hits target									
- Circle (radius 10 00)									

Casing Points				
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(ft)	(ft)		(ft)	(ft)
1,575 00	1,575 00	9 5/8" Casing	9 62500	12.25000

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
5,500 00	5,500 00	0 00	0 00	KOP 5500' build 3°/100'
5,971 30	5,966 53	-57 58	-5 67	EOC hold 14 14°
8,068 50	7,997 60	-577 58	-56 84	Start drop 2°/100'
8,775.46	8,697 32	-664 60	-65 40	EOC hold 0 0°



AZIMUTH CORRECTIONS
ALL AZIMUTHS MUST BE CORRECTED TO GRID
GRID CORRECTIONS MUST BE APPLIED BEFORE PLOTTING
To convert a Magnetic Direction to a Grid Direction, Add 8.47°
To convert a True Direction to a Grid Direction, Add 0.04°



Azimuths to Grid North
True North 0.04°
Magnetic North 8.47°
Magnetic Field
Strength 48997.4 nT
Dip Angle 60.23°
Date 5/31/2007
Model: IGRF200510

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	0.00	
3	5980.94	14.43	185.62	5975.88	-59.95	-5.90	3.00	185.62	60.24	
4	8056.72	14.43	185.62	7986.18	-574.68	-56.55	0.00	0.00	577.46	
5	8778.14	0.00	0.00	8700.00	-664.60	-65.40	2.00	180.00	667.81	
6	11578.14	0.00	0.00	11500.00	-664.60	-65.40	0.00	0.00	667.81	PBHL-RF #2

WELL DETAILS Robin Federal #2

+N/-S	+E/-W	Northing	Ground Level	Latitude	Longitude	Slot
0.00	0.00	479676.30	478360.00	32° 19' 7.417 N	104° 24' 12.184 W	

PROJECT DETAILS Eddy County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

Plan Plan #1 (Robin Federal #2/OH)

Created By: Julio Pina Date: 31-May-07
Checked: Date:
Reviewed: Date:
Approved: Date:

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
East HL-RF #2	0.00	-654.60	-55.40	479021.70	478304.60	32° 19' 0.938 N	104° 24' 12.824 W	Rectangle (Sides: L500.00 W0.00)
North HL-RF #2	0.00	-654.60	-55.40	479021.70	478304.60	32° 19' 0.938 N	104° 24' 12.824 W	Rectangle (Sides: L0.00 W500.00)
PBHL-RF #2	11500.00	-664.60	-65.40	479011.70	478294.60	32° 19' 0.839 N	104° 24' 12.941 W	Circle (Radius: 10.00)

Attached to Form 3160-3
Mack Energy Corporation
Robin Federal #2
SHL 2635 FSL & 2060 FWL, BHL 1980 FSL & 1980 FWL
NE/4 SW/4, Sec 9 T23S R25E
Eddy County, NM

- B. There is no permanent or live water in the immediate area.
- C. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

12. Lessee's and Operator's Representative:

The Mack Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:

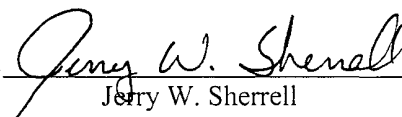
Jerry W. Sherrell
Mack Energy Corporation
P.O. Box 960
Artesia, NM 88211-0960
Phone (505) 748-1288 (office)

CERTIFICATION

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mack Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 5-16-2007

Signed: _____


Jerry W. Sherrell

Conditions of Approval Cave and Karst

EA#: NM-520-07-941

Lease #: NM-114960

Mack Energy Corporation

Robin Federal # 2

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Closed Mud System Using Steel Tanks with All Fluids and Cuttings Hauled Off.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

Directional Drilling:

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone as identified in the geologic report.

Casing:

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (bit drops) of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in

any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Delayed Blasting:

Any blasting will be a phased and time delayed.

Abandonment Cementing:

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Pressure Tests:

Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

Differential Shut-off Systems:

A leak detection system and differential shut off systems will be installed for pipelines and tanks used in production or drilling.

Record Keeping:

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence or absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: MACK ENERGY CORPORATION
Well Name & No. 2 – ROBIN FEDERAL
Location: 2635' FSL & 2060' FWL – SEC 9 – T23S – R25E – EDDY (SHL)
1980' FSL & 1980' FWL – SEC 9 – T23S – R25E – EDDY (BHL)
Lease: NM-114960

.....

I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
1. Spudding well
 2. Setting and/or Cementing of all casing strings
 3. BOPE tests
- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- C. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

II. CASING:

- A. The 13-3/8 inch surface casing shall be set at 325 feet and cemented to the surface.
1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
 3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
 4. If cement falls back, remedial action will be done prior to drilling out that string.
- B. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is circulate cement to the surface. If cement does not circulate see A.1 thru 4. **Casing to be set at approximately 1650 feet near the base of the Capitan and before the Delaware Mountain Group is encountered.**
- C. The minimum required fill of cement behind the 5-1/2 inch production casing is tie back 200 feet into the 9-5/8 inch casing.

- D. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool I joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and Chap. 17 - API RP 53.
- B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 (2M) PSI.
- C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 surface / Intermediate casing shoe shall be 5000 (5M) PSI.
- D. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
1. The tests shall be done by an independent service company.
 2. The results of the test shall be reported to the appropriate BLM office.
 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well

LBabyak / /07