Distnct I
1625 N. French Dr., Hobbs, NM 88240
Dstrict II
1301 W. Grand Avenue, Artesia, NM 88210
District III
I 000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

1 Operator Name and Address	2 OGRID Number
Mack Energy Corporation P.O. Box 960 Artesia, NM 88211-0960	013837
	3 API Number 30- 005-29186

4 Property Code	5 Property Name	6 Well No.
37603	Jerry State	1

9 Proposed Pool 1	Proposed Pool 2
Wilcat Abo-Wolfcamp (97722)	

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	21	15S	31E		2285	South	330	East	Chaves

8 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
L	21	15S	31E		2285	South	330	West	Chaves

Additional Well Information

11 Work Type Code	12 Well Type Code	13 Cable/Rotary	14 Lease Type Code	15 Ground Level Elevation
New	Oil	Rotary	S	4409'
16 Multiple	**17 Proposed Depth**	**18 Formation**	**19 Contractor**	**20 Spud Date**
No	13,215'	Abo/Wolfcamp		5/30/2011

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 Drdling Method -
Closed-Loop System ☒ Fresh Water ☒ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
~~12 1/4~~ 14 3/4 per SS	9 5/8	36N	1400	750sx	Surface
8 3/4	7	26	8650	1200sx	Surface
6 1/8	4 1/2	11.6	8100-13215'	Open hole packers	

22 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 proposes to drill a 12 1/4 hole to 1400', run 9 5/8 casing and cement to surface. Drill a 8 3/4 hole to 8650', run 7" casing and cement. Drill a 6 1/8 hole to 13,185', run 4 1/2 casing from 8100-13,185' set using Liner Hange and Open hole Packer System.

Permit Expires 2 Years From Approval Date Unless Drilling Underway

23 I hereby certify that the information given above is true and complete to the best of my 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: 5/25/2011 Phone: (575)748-1288

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date: 05/25/11 Expiration Date: 05/25/13

Conditions of Approval Attached ☐

MAY 26 2011

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

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-005-29186	97722	Wildcat Abo Wolfcamp

Property Code	Property Name	Well Number
37603	JERRY STATE	1

OGRID No.	Operator Name	Elevation
013837	MACK ENERGY CORPORATION	4409'

Surface Location

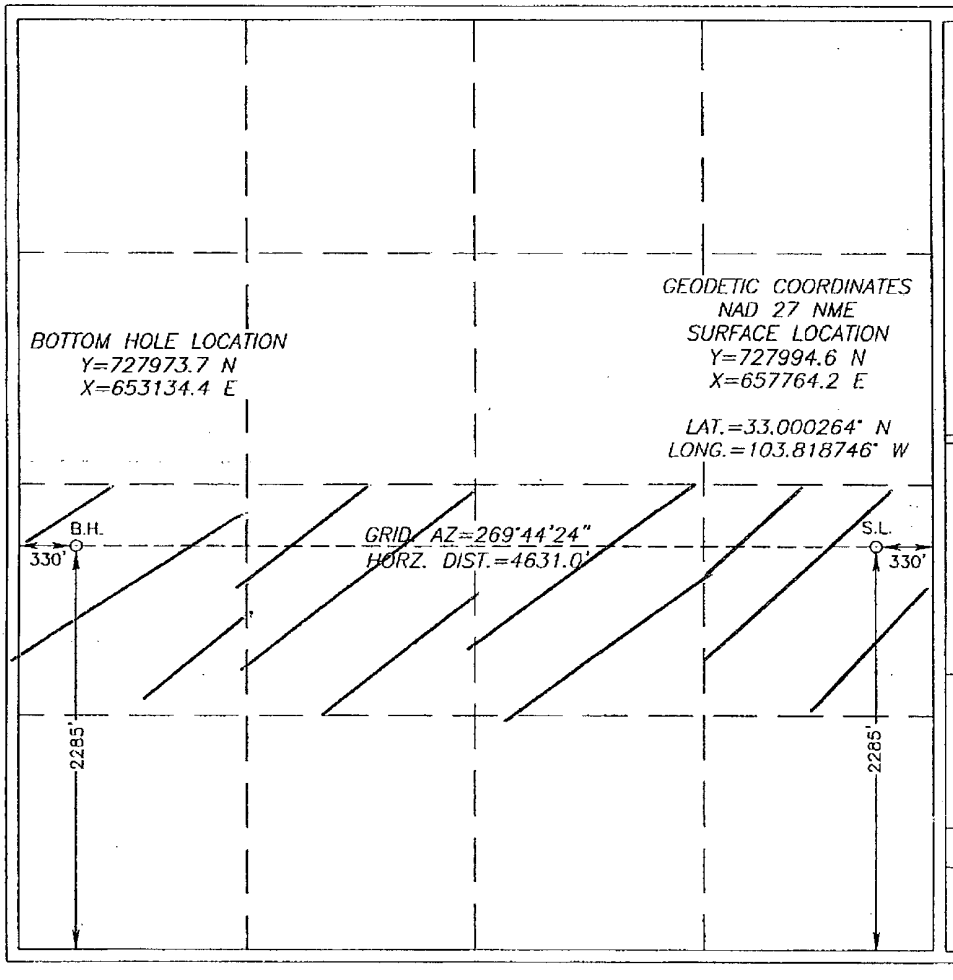
Ul. or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	21	15-S	31-E		2285	SOUTH	330	EAST	CHAVES

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
L	21	15-S	31-E		2285	SOUTH	330	WEST	CHAVES

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



OPERATOR CERTIFICATION

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.

Jerry W. Sherrell 5-25-2011
Signature Date

Jerry W. Sherrell
Printed Name

SURVEYOR CERTIFICATION

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.

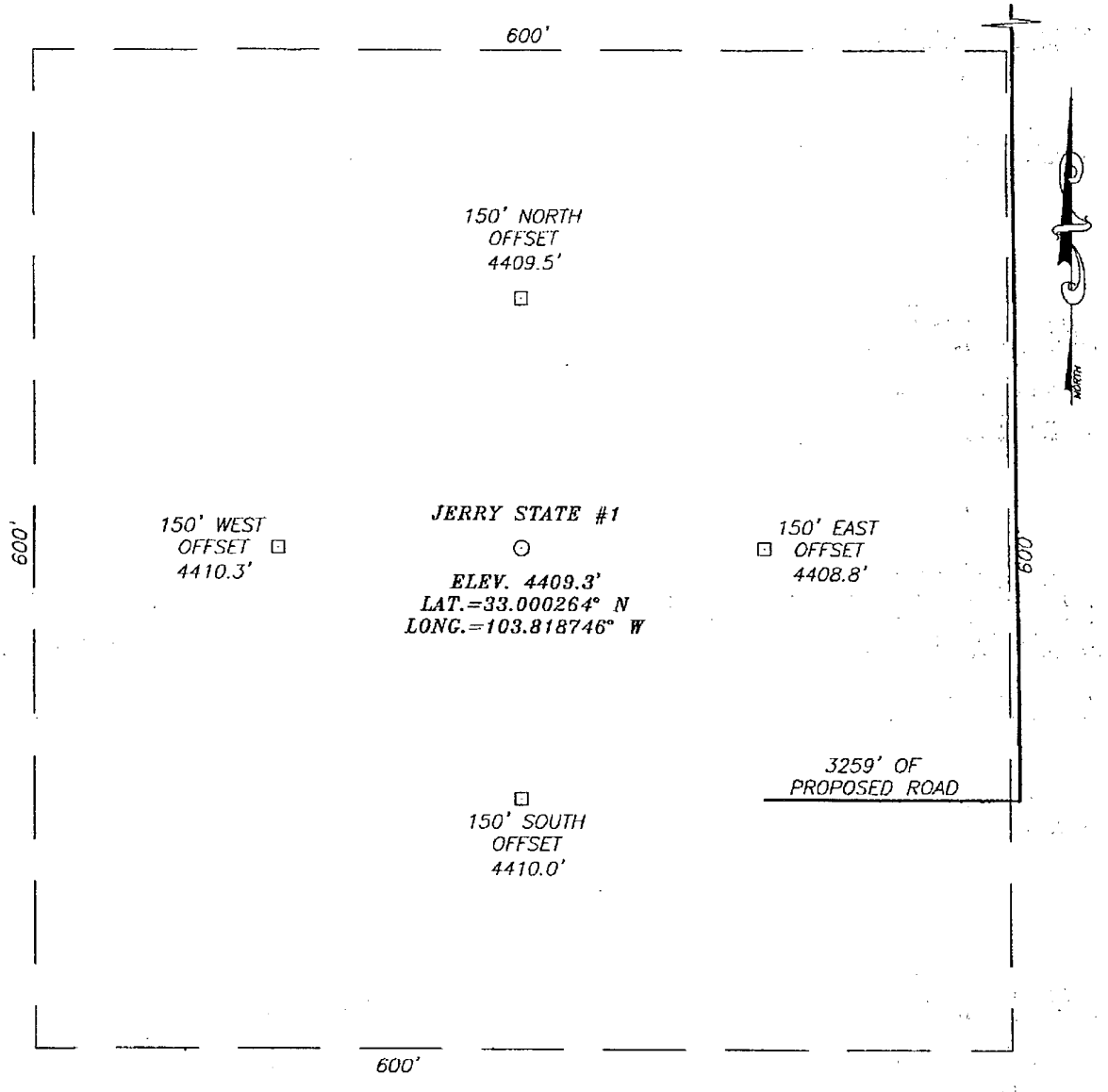
RONALD J. EIDSON
JANUARY 20, 2009
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

Date Surveyed
Signature & Seal of Professional Surveyor
Ronald J. Eidson 01/29/09
NM PS 3239

Certificate No. RONALD EIDSON 3239

SECTION 21, TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,

CHAVES COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF HIGHWAY #249 AND HIGHWAY #172, GO WEST ON HIGHWAY #249 APPROX. 1.0 MILES. TURN LEFT AND GO SOUTH APPROX. 0.4 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SRUVEY SOUTH APPROX. 3103 FEET, THEN WEST APPROX. 155 FEET TO THIS LOCATION.

100 0 100 200 Feet

Scale:1"=100'

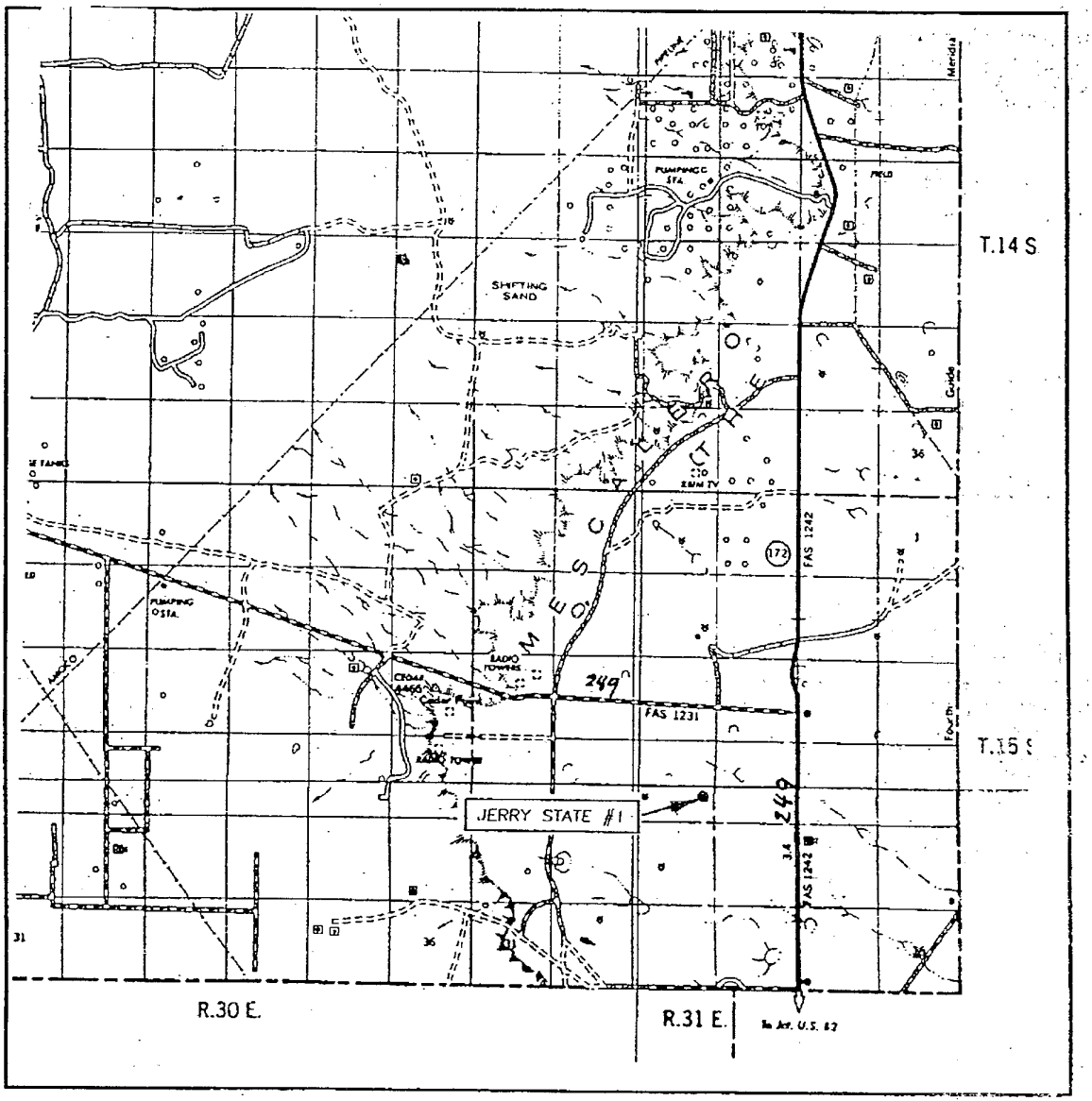
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

MACK ENERGY CORPORATION

JERRY STATE #1 WELL
LOCATED 2285 FEET FROM THE SOUTH LINE
AND 330 FEET FROM THE EAST LINE OF SECTION 21,
TOWNSHIP 15 SOUTH, RANGE 31 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.

Survey Date: 1/20/09	Sheet 1 of 1 Sheets		
W.O. Number: 08.11.2138	Dr. By: LA	Rev: 1	
Date: 1/28/09		08.11.2138	Scale: 1" = 100'

VICINITY MAP



SEC. 21 TWP. 15-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 2285' FSL & 330' FEL

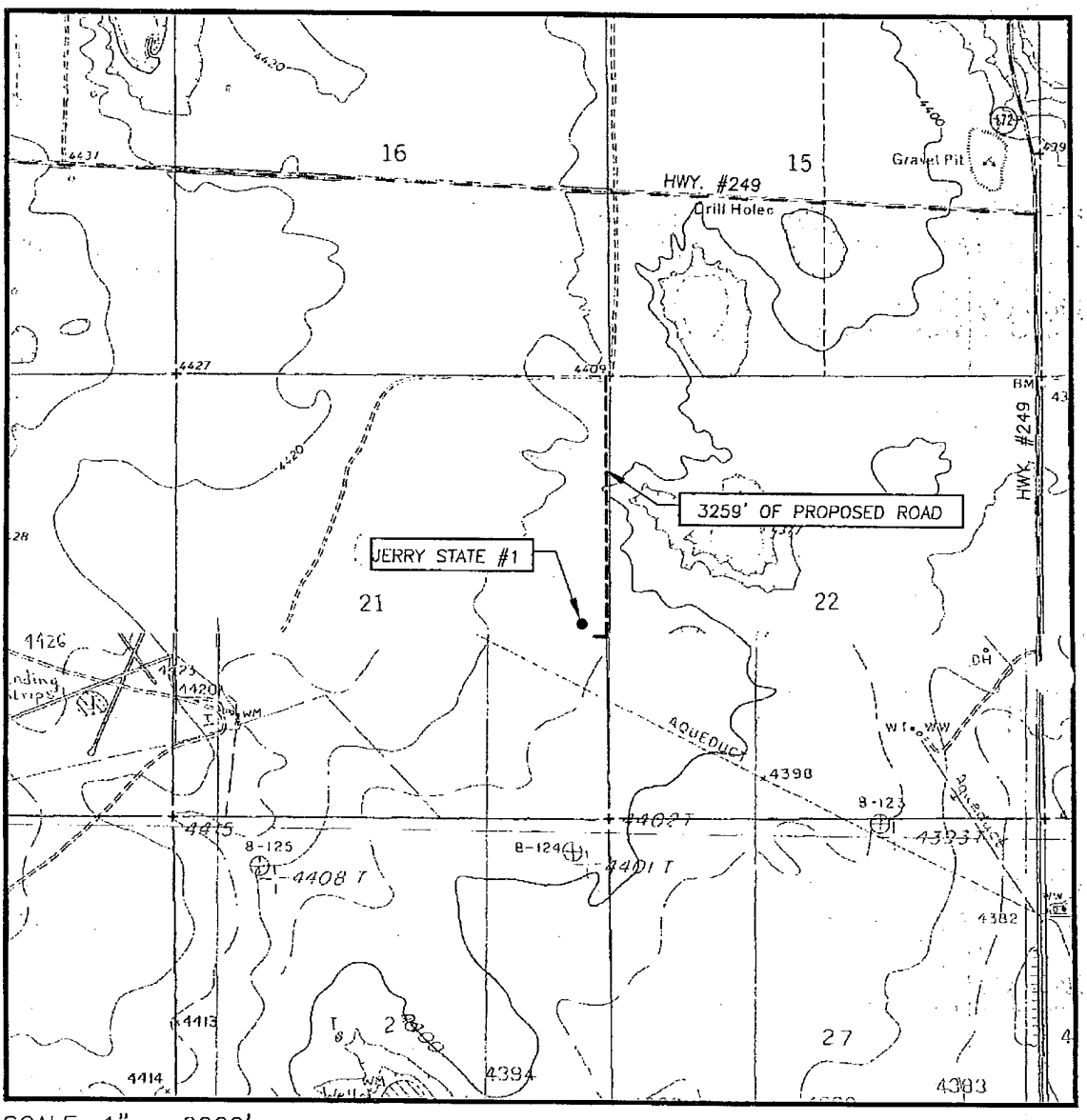
ELEVATION 4409'

OPERATOR MACK ENERGY CORPORATION

LEASE JERRY STATE

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
CEDAR POINT, N.M. – 10'
MALJAMAR NE, N.M. – 5'

SEC. 21 TWP. 15-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 2285' FSL & 330' FEL

ELEVATION 4409'

OPERATOR MACK ENERGY CORPORATION

LEASE JERRY STATE

U.S.G.S. TOPOGRAPHIC MAP
CEDAR POINT, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

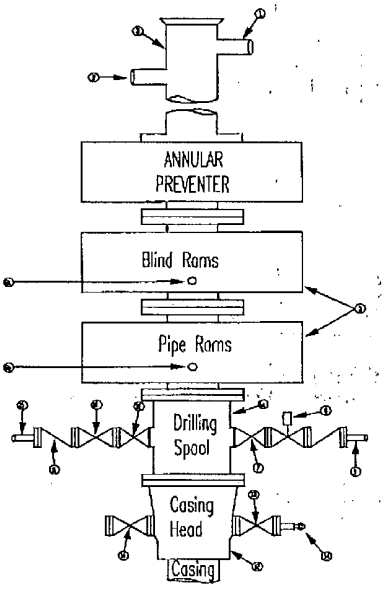
Mack Energy Corporation
Minimum Blowout Preventer Requirements
3000 psi Working Pressure
13 3/8 inch- 3 MWP
11 Inch - 3 MWP
EXHIBIT #10

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 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.
10.

ME

MEC TO FURNISH:

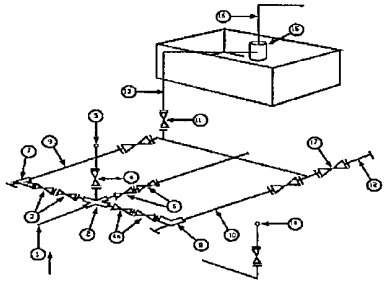
1. Bradenhead or casing head and side valves.
2. Wear bushing. If required.

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. 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			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			
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

Mack Energy

Chaves County
Jerry State
Jerry State #1
OH

RECEIVED
FEB 25 2009
HOBBSOCD

Plan: Plan #1

Pathfinder X & Y Survey Report

17 February, 2009

PATHFINDER
ENERGY SERVICES

Company:	Mack Energy	**Local Co-ordinate Reference:**	Well Jerry State #1
Project:	Chaves County	**TVD Reference:**	WELL @ 4427.00ft (18' RKB)
Site:	Jerry State	**MD Reference:**	WELL @ 4427.00ft (18' RKB)
Well:	Jerry State #1	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Project Chaves County

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 Jerry State

Site Position:		**Northing:**	727,994.600 ft	**Latitude:**	33° 0' 0.949 N
From:	Map	**Easting:**	657,764.200 ft	**Longitude:**	103° 49' 7.486 W
Position Uncertainty:	0.00 ft	**Slot Radius:**		**Grid Convergence:**	0.28 °

Well Jerry State #1

Well Position	**+N/-S**	0.00 ft	**Northing:**	727,994.600 ft	**Latitude:**	33° 0' 0.949 N
	+E/-W	0.00 ft	**Easting:**	657,764.200 ft	**Longitude:**	103° 49' 7.486 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,409.00 ft

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	02/17/2009	8.03	60.93	49,308

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	269.74

Survey Tool Program Date 02/17/2009

From (ft)	**To (ft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
0.00	13,215.46	Plan #1 (OH)	MWD	MWD - Standard

Company:	Mack Energy	**Local Co-ordinate Reference:**	Well Jerry State #1
Project:	Chaves County	**TVD Reference:**	WELL @ 4427.00ft (18' RKB)
Site:	Jerry State	**MD Reference:**	WELL @ 4427.00ft (18' RKB)
Well:	Jerry State #1	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
0.00	0.00	0.00	0.00	-4,427.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
100.00	0.00	0.00	100.00	-4,327.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
200.00	0.00	0.00	200.00	-4,227.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
300.00	0.00	0.00	300.00	-4,127.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
400.00	0.00	0.00	400.00	-4,027.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
500.00	0.00	0.00	500.00	-3,927.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
600.00	0.00	0.00	600.00	-3,827.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
700.00	0.00	0.00	700.00	-3,727.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
800.00	0.00	0.00	800.00	-3,627.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
900.00	0.00	0.00	900.00	-3,527.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,000.00	0.00	0.00	1,000.00	-3,427.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,100.00	0.00	0.00	1,100.00	-3,327.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,200.00	0.00	0.00	1,200.00	-3,227.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,300.00	0.00	0.00	1,300.00	-3,127.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,400.00	0.00	0.00	1,400.00	-3,027.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,500.00	0.00	0.00	1,500.00	-2,927.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,600.00	0.00	0.00	1,600.00	-2,827.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,700.00	0.00	0.00	1,700.00	-2,727.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,800.00	0.00	0.00	1,800.00	-2,627.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
1,900.00	0.00	0.00	1,900.00	-2,527.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
2,000.00	0.00	0.00	2,000.00	-2,427.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
2,100.00	0.00	0.00	2,100.00	-2,327.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
2,200.00	0.00	0.00	2,200.00	-2,227.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
2,300.00	0.00	0.00	2,300.00	-2,127.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
2,400.00	0.00	0.00	2,400.00	-2,027.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
2,500.00	0.00	0.00	2,500.00	-1,927.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
2,600.00	0.00	0.00	2,600.00	-1,827.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20

Company:	Mack Energy	**Local Co-ordinate Reference:**	Well Jerry State #1
Project:	Chaves County	**TVD Reference:**	WELL @ 4427.00ft (18' RKB)
Site:	Jerry State	**MD Reference:**	WELL @ 4427.00ft (18' RKB)
Well:	Jerry State #1	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
2,700.00	0.00	0.00	2,700.00	-1,727.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
2,800.00	0.00	0.00	2,800.00	-1,627.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
2,900.00	0.00	0.00	2,900.00	-1,527.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,000.00	0.00	0.00	3,000.00	-1,427.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,100.00	0.00	0.00	3,100.00	-1,327.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,200.00	0.00	0.00	3,200.00	-1,227.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,300.00	0.00	0.00	3,300.00	-1,127.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,400.00	0.00	0.00	3,400.00	-1,027.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,500.00	0.00	0.00	3,500.00	-927.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,600.00	0.00	0.00	3,600.00	-827.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,700.00	0.00	0.00	3,700.00	-727.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,800.00	0.00	0.00	3,800.00	-627.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
3,900.00	0.00	0.00	3,900.00	-527.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,000.00	0.00	0.00	4,000.00	-427.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,100.00	0.00	0.00	4,100.00	-327.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,200.00	0.00	0.00	4,200.00	-227.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,300.00	0.00	0.00	4,300.00	-127.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,400.00	0.00	0.00	4,400.00	-27.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,500.00	0.00	0.00	4,500.00	73.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,600.00	0.00	0.00	4,600.00	173.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,700.00	0.00	0.00	4,700.00	273.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,800.00	0.00	0.00	4,800.00	373.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
4,900.00	0.00	0.00	4,900.00	473.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
5,000.00	0.00	0.00	5,000.00	573.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
5,100.00	0.00	0.00	5,100.00	673.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
5,200.00	0.00	0.00	5,200.00	773.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
5,300.00	0.00	0.00	5,300.00	873.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20

Company:	Mack Energy	Local Co-ordinate Reference:	Well Jerry State #1
Project:	Chaves County	TVD Reference:	WELL @ 4427.00ft (18' RKB)
Site:	Jerry State	MD Reference:	WELL @ 4427.00ft (18' RKB)
Well:	Jerry State #1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
5,400.00	0.00	0.00	5,400.00	973.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
5,500.00	0.00	0.00	5,500.00	1,073.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
5,600.00	0.00	0.00	5,600.00	1,173.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
5,700.00	0.00	0.00	5,700.00	1,273.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
5,800.00	0.00	0.00	5,800.00	1,373.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
5,900.00	0.00	0.00	5,900.00	1,473.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,000.00	0.00	0.00	6,000.00	1,573.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,100.00	0.00	0.00	6,100.00	1,673.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,200.00	0.00	0.00	6,200.00	1,773.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,300.00	0.00	0.00	6,300.00	1,873.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,400.00	0.00	0.00	6,400.00	1,973.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,500.00	0.00	0.00	6,500.00	2,073.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,600.00	0.00	0.00	6,600.00	2,173.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,700.00	0.00	0.00	6,700.00	2,273.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,800.00	0.00	0.00	6,800.00	2,373.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
6,900.00	0.00	0.00	6,900.00	2,473.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,000.00	0.00	0.00	7,000.00	2,573.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,100.00	0.00	0.00	7,100.00	2,673.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,200.00	0.00	0.00	7,200.00	2,773.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,300.00	0.00	0.00	7,300.00	2,873.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,400.00	0.00	0.00	7,400.00	2,973.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,500.00	0.00	0.00	7,500.00	3,073.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,600.00	0.00	0.00	7,600.00	3,173.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,700.00	0.00	0.00	7,700.00	3,273.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,800.00	0.00	0.00	7,800.00	3,373.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
7,900.00	0.00	0.00	7,900.00	3,473.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
8,000.00	0.00	0.00	8,000.00	3,573.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20

Company:	Mack Energy	Local Co-ordinate Reference:	Well Jerry State #1
Project:	Chaves County	TVD Reference:	WELL @ 4427.00ft (18' RKB)
Site:	Jerry State	MD Reference:	WELL @ 4427.00ft (18' RKB)
Well:	Jerry State #1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
8,100.00	0.00	0.00	8,100.00	3,673.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
8,200.00	0.00	0.00	8,200.00	3,773.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
8,300.00	0.00	0.00	8,300.00	3,873.00	0.00	0.00	0.00	0.00	727,994.60	657,764.20
8,312.50	0.00	0.00	8,312.50	3,885.50	0.00	0.00	0.00	0.00	727,994.60	657,764.20
KOP-8312.50'MD,0.00°INC,0.00°AZI										
8,325.00	1.50	269.74	8,325.00	3,898.00	0.00	-0.16	0.16	12.00	727,994.60	657,764.04
8,350.00	4.50	269.74	8,349.96	3,922.96	-0.01	-1.47	1.47	12.00	727,994.59	657,762.73
8,375.00	7.50	269.74	8,374.82	3,947.82	-0.02	-4.08	4.08	12.00	727,994.58	657,760.12
8,400.00	10.50	269.74	8,399.51	3,972.51	-0.04	-7.99	7.99	12.00	727,994.56	657,756.21
8,425.00	13.50	269.74	8,423.96	3,996.96	-0.06	-13.19	13.19	12.00	727,994.54	657,751.01
8,450.00	16.50	269.74	8,448.11	4,021.11	-0.09	-19.66	19.66	12.00	727,994.51	657,744.54
8,475.00	19.50	269.74	8,471.88	4,044.88	-0.12	-27.38	27.38	12.00	727,994.48	657,736.82
8,500.00	22.50	269.74	8,495.22	4,068.22	-0.16	-36.34	36.34	12.00	727,994.44	657,727.86
8,525.00	25.50	269.74	8,518.06	4,091.06	-0.21	-46.51	46.51	12.00	727,994.39	657,717.69
8,550.00	28.50	269.74	8,540.33	4,113.33	-0.26	-57.85	57.85	12.00	727,994.34	657,706.35
8,575.00	31.50	269.74	8,561.98	4,134.98	-0.32	-70.35	70.35	12.00	727,994.28	657,693.85
8,600.00	34.50	269.74	8,582.94	4,155.94	-0.38	-83.96	83.96	12.00	727,994.22	657,680.24
8,625.00	37.49	269.74	8,603.17	4,176.17	-0.45	-98.65	98.65	12.00	727,994.15	657,665.55
8,650.00	40.49	269.74	8,622.60	4,195.60	-0.52	-114.38	114.38	12.00	727,994.08	657,649.82
8,675.00	43.49	269.74	8,641.17	4,214.17	-0.59	-131.11	131.11	12.00	727,994.01	657,633.09
8,700.00	46.49	269.74	8,658.85	4,231.85	-0.68	-148.78	148.78	12.00	727,993.92	657,615.42
8,725.00	49.49	269.74	8,675.58	4,248.58	-0.76	-167.35	167.36	12.00	727,993.84	657,596.85
8,750.00	52.49	269.74	8,691.31	4,264.31	-0.85	-186.78	186.78	12.00	727,993.75	657,577.42
8,775.00	55.49	269.74	8,706.01	4,279.01	-0.94	-207.00	207.00	12.00	727,993.66	657,557.20
8,800.00	58.49	269.74	8,719.63	4,292.63	-1.03	-227.96	227.96	12.00	727,993.57	657,536.24
8,825.00	61.49	269.74	8,732.13	4,305.13	-1.13	-249.61	249.61	12.00	727,993.47	657,514.59
8,850.00	64.49	269.74	8,743.48	4,316.48	-1.23	-271.88	271.88	12.00	727,993.37	657,492.32

Company:	Mack Energy	Local Co-ordinate Reference:	Well Jerry State #1
Project:	Chaves County	TVD Reference:	WELL @ 4427.00ft (18' RKB)
Site:	Jerry State	MD Reference:	WELL @ 4427.00ft (18' RKB)
Well:	Jerry State #1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
8,875.00	67.49	269.74	8,753.65	4,326.65	-1.34	-294.71	294.72	12.00	727,993.26	657,469.49
8,900.00	70.49	269.74	8,762.61	4,335.61	-1.44	-318.05	318.05	12.00	727,993.16	657,446.15
8,925.00	73.49	269.74	8,770.34	4,343.34	-1.55	-341.82	341.82	12.00	727,993.05	657,422.38
8,950.00	76.49	269.74	8,776.82	4,349.82	-1.66	-365.96	365.97	12.00	727,992.94	657,398.24
8,975.00	79.49	269.74	8,782.02	4,355.02	-1.77	-390.41	390.42	12.00	727,992.83	657,373.79
9,000.00	82.49	269.74	8,785.93	4,358.93	-1.88	-415.10	415.11	12.00	727,992.72	657,349.10
9,025.00	85.49	269.74	8,788.55	4,361.55	-2.00	-439.96	439.96	12.00	727,992.60	657,324.24
9,050.00	88.49	269.74	8,789.87	4,362.87	-2.11	-464.92	464.93	12.00	727,992.49	657,299.28
9,068.19	90.67	269.74	8,790.00	4,363.00	-2.19	-483.11	483.12	12.00	727,992.41	657,281.09
EOC-9068.19'MD,90.67°INC,269.74°AZI,12.00°DLS, 483.12'VS, -2.19'N, -483.11'E										
9,100.00	90.67	269.74	8,789.63	4,362.63	-2.34	-514.92	514.92	0.01	727,992.26	657,249.28
9,137.68	90.66	269.74	8,789.19	4,362.19	-2.51	-552.60	552.60	0.02	727,992.09	657,211.60
9,200.00	90.66	269.74	8,788.47	4,361.47	-2.79	-614.91	614.92	0.00	727,991.81	657,149.29
9,300.00	90.66	269.74	8,787.31	4,360.31	-3.25	-714.90	714.91	0.00	727,991.35	657,049.30
9,400.00	90.66	269.74	8,786.15	4,359.15	-3.70	-814.90	814.90	0.00	727,990.90	656,949.30
9,500.00	90.66	269.74	8,784.99	4,357.99	-4.15	-914.89	914.90	0.00	727,990.45	656,849.31
9,585.12	90.66	269.74	8,784.00	4,357.00	-4.54	-1,000.00	1,000.01	0.00	727,990.06	656,764.20
LT#1 -9585.12'MD,90.67°INC,269.74°AZI, 8784.00'TVD, 1000.01'VS, -4.54'N, -1000.00'E - LT1(JS1) - 1000'VS										
9,597.80	90.92	269.74	8,783.82	4,356.82	-4.60	-1,012.68	1,012.69	2.00	727,990.00	656,751.52
9,600.00	90.92	269.74	8,783.79	4,356.79	-4.61	-1,014.88	1,014.89	0.00	727,989.99	656,749.32
9,700.00	90.92	269.74	8,782.19	4,355.19	-5.06	-1,114.87	1,114.88	0.00	727,989.54	656,649.33
9,800.00	90.92	269.74	8,780.58	4,353.58	-5.52	-1,214.85	1,214.86	0.00	727,989.08	656,549.35
9,900.00	90.92	269.74	8,778.98	4,351.98	-5.97	-1,314.84	1,314.85	0.00	727,988.63	656,449.36
10,000.00	90.92	269.74	8,777.38	4,350.38	-6.42	-1,414.82	1,414.84	0.00	727,988.18	656,349.38
10,100.00	90.92	269.74	8,775.78	4,348.78	-6.88	-1,514.81	1,514.83	0.00	727,987.72	656,249.39
10,200.00	90.92	269.74	8,774.17	4,347.17	-7.33	-1,614.80	1,614.81	0.00	727,987.27	656,149.40
10,300.00	90.92	269.74	8,772.57	4,345.57	-7.79	-1,714.78	1,714.80	0.00	727,986.81	656,049.42

Company:	Mack Energy	Local Co-ordinate Reference:	Well Jerry State #1
Project:	Chaves County	TVD Reference:	WELL @ 4427.00ft (18' RKB)
Site:	Jerry State	MD Reference:	WELL @ 4427.00ft (18' RKB)
Well:	Jerry State #1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
10,400.00	90.92	269.74	8,770.97	4,343.97	-8.24	-1,814.77	1,814.79	0.00	727,986.36	655,949.43
10,500.00	90.92	269.74	8,769.37	4,342.37	-8.69	-1,914.75	1,914.77	0.00	727,985.91	655,849.45
10,585.26	90.92	269.74	8,768.00	4,341.00	-9.08	-2,000.00	2,000.02	0.00	727,985.52	655,764.20
LT#2 -10585.26'MD,90.92°INC,269.74°AZI, 8768.00'TVD, 2000.02'VS, -9.08'N, -2000.00'E - LT2(JS1)- 2000'VS										
10,599.76	90.63	269.74	8,767.80	4,340.80	-9.15	-2,014.51	2,014.53	2.00	727,985.45	655,749.69
10,700.00	90.63	269.74	8,766.71	4,339.71	-9.60	-2,114.73	2,114.76	0.00	727,985.00	655,649.47
10,800.00	90.63	269.74	8,765.61	4,338.61	-10.05	-2,214.73	2,214.75	0.00	727,984.55	655,549.47
10,900.00	90.63	269.74	8,764.51	4,337.51	-10.51	-2,314.72	2,314.74	0.00	727,984.09	655,449.48
11,000.00	90.63	269.74	8,763.42	4,336.42	-10.96	-2,414.71	2,414.74	0.00	727,983.64	655,349.49
11,100.00	90.63	269.74	8,762.32	4,335.32	-11.41	-2,514.71	2,514.73	0.00	727,983.19	655,249.49
11,200.00	90.63	269.74	8,761.22	4,334.22	-11.86	-2,614.70	2,614.73	0.00	727,982.74	655,149.50
11,300.00	90.63	269.74	8,760.13	4,333.13	-12.32	-2,714.69	2,714.72	0.00	727,982.28	655,049.51
11,400.00	90.63	269.74	8,759.03	4,332.03	-12.77	-2,814.68	2,814.71	0.00	727,981.83	654,949.52
11,500.00	90.63	269.74	8,757.94	4,330.94	-13.22	-2,914.68	2,914.71	0.00	727,981.38	654,849.52
11,585.33	90.63	269.74	8,757.00	4,330.00	-13.61	-3,000.00	3,000.03	0.00	727,980.99	654,764.20
LT#3 -11585.33'MD,90.63°INC,269.74°AZI, 8757.00'TVD, 3000.03'VS, -13.61'N, -3000.00'E - LT3(JS1)- 3000'VS										
11,600.00	90.92	269.74	8,756.80	4,329.80	-13.68	-3,014.67	3,014.70	2.00	727,980.92	654,749.53
11,614.50	91.21	269.74	8,756.53	4,329.53	-13.74	-3,029.17	3,029.20	2.00	727,980.86	654,735.03
11,700.00	91.21	269.74	8,754.72	4,327.72	-14.13	-3,114.65	3,114.68	0.00	727,980.47	654,649.55
11,800.00	91.21	269.74	8,752.61	4,325.61	-14.58	-3,214.62	3,214.66	0.00	727,980.02	654,549.58
11,900.00	91.21	269.74	8,750.50	4,323.50	-15.04	-3,314.60	3,314.63	0.00	727,979.56	654,449.60
12,000.00	91.21	269.74	8,748.38	4,321.38	-15.49	-3,414.58	3,414.61	0.00	727,979.11	654,349.62
12,100.00	91.21	269.74	8,746.27	4,319.27	-15.95	-3,514.55	3,514.59	0.00	727,978.65	654,249.65
12,200.00	91.21	269.74	8,744.15	4,317.15	-16.40	-3,614.53	3,614.57	0.00	727,978.20	654,149.67
12,300.00	91.21	269.74	8,742.04	4,315.04	-16.85	-3,714.51	3,714.55	0.00	727,977.75	654,049.69
12,400.00	91.21	269.74	8,739.92	4,312.92	-17.31	-3,814.48	3,814.52	0.00	727,977.29	653,949.72
12,500.00	91.21	269.74	8,737.81	4,310.81	-17.76	-3,914.46	3,914.50	0.00	727,976.84	653,849.74

Company:	Mack Energy	**Local Co-ordinate Reference:**	Well Jerry State #1
Project:	Chaves County	**TVD Reference:**	WELL @ 4427.00ft (18' RKB)
Site:	Jerry State	**MD Reference:**	WELL @ 4427.00ft (18' RKB)
Well:	Jerry State #1	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
12,585.56	91.21	269.74	8,736.00	4,309.00	-18.15	-4,000.00	4,000.04	0.00	727,976.45	653,764.20
LT#4 -12585.56'MD,91.21°INC,269.74°AZI, 8736.00'TVD, 4000.04'VS, -18.15'N, -4000.00'E - LT4(JS1) - 4000'VS										
12,596.21	91.00	269.75	8,735.79	4,308.79	-18.20	-4,010.65	4,010.69	2.00	727,976.40	653,753.55
12,600.00	91.00	269.75	8,735.73	4,308.73	-18.21	-4,014.44	4,014.48	0.00	727,976.39	653,749.76
12,700.00	91.00	269.75	8,733.99	4,306.99	-18.65	-4,114.42	4,114.46	0.00	727,975.95	653,649.78
12,800.00	91.00	269.75	8,732.24	4,305.24	-19.09	-4,214.41	4,214.45	0.00	727,975.51	653,549.79
12,900.00	91.00	269.75	8,730.50	4,303.50	-19.52	-4,314.39	4,314.43	0.00	727,975.08	653,449.81
13,000.00	91.00	269.75	8,728.76	4,301.76	-19.96	-4,414.37	4,414.42	0.00	727,974.64	653,349.83
13,100.00	91.00	269.75	8,727.01	4,300.01	-20.40	-4,514.36	4,514.40	0.00	727,974.20	653,249.84
13,200.00	91.00	269.75	8,725.27	4,298.27	-20.83	-4,614.34	4,614.39	0.00	727,973.77	653,149.86
13,215.46	91.00	269.75	8,725.00	4,298.00	-20.90	-4,629.80	4,629.85	0.00	727,973.70	653,134.40
TD at 13215.46 - PBHL OH(JS#1)										

Company:	Mack Energy	**Local Co-ordinate Reference:**	Well Jerry State #1
Project:	Chaves County	**TVD Reference:**	WELL @ 4427.00ft (18' RKB)
Site:	Jerry State	**MD Reference:**	WELL @ 4427.00ft (18' RKB)
Well:	Jerry State #1	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan #1	**Database:**	Midland Database

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL OH(JS#1) - plan hits target - Point	0.00	0.00	8,725.00	-20.90	-4,629.80	727,973.700	653,134.400	33° 0' 0.963 N	103° 50' 1.850 W
LT3(JS1)- 3000'VS - plan hits target - Point	0.00	0.00	8,757.00	-13.61	-3,000.00	727,980.990	654,764.200	33° 0' 0.959 N	103° 49' 42.713 W
LT1(JS1)- 1000'VS - plan hits target - Point	0.00	0.00	8,784.00	-4.54	-1,000.00	727,990.060	656,764.200	33° 0' 0.953 N	103° 49' 19.229 W
LT2(JS1)- 2000'VS - plan hits target - Point	0.00	0.00	8,768.00	-9.08	-2,000.00	727,985.520	655,764.200	33° 0' 0.956 N	103° 49' 30.971 W
LT4(JS1)- 4000'VS - plan hits target - Point	0.00	0.00	8,736.00	-18.15	-4,000.00	727,976.450	653,764.200	33° 0' 0.961 N	103° 49' 54.455 W

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
8,312.50	8,312.50	0.00	0.00	KOP-8312.50'MD,0.00°INC,0.00°AZI
9,068.19	8,790.00	-2.19	-483.11	EOC-9068.19'MD,90.67°INC,269.74°AZI,12.00°DLS, 483.12'VS, -2.19'I
9,585.12	8,784.00	-4.54	-1,000.00	LT#1 -9585.12'MD,90.67°INC,269.74°AZI, 8784.00'TVD, 1000.01'VS, -
10,585.26	8,768.00	-4.60	-1,012.41	LT#2 -10585.26'MD,90.92°INC,269.74°AZI, 8768.00'TVD, 2000.02'VS,
11,585.33	8,757.00	-9.08	-2,000.00	LT#3 -11585.33'MD,90.63°INC,269.74°AZI, 8757.00'TVD, 3000.03'VS,
12,585.56	8,736.00	-9.15	-2,014.50	LT#4 -12585.56'MD,91.21°INC,269.74°AZI, 8736.00'TVD, 4000.04'VS,
13,215.46	8,725.00	-13.61	-3,000.00	TD at 13215.46

Checked By: _____ Approved By: _____ Date: _____

MACK Energy Corporation

Azimuths to Grid North
True North: -0.28°
Magnetic North: 7.75°

Magnetic Field
Strength: 49308.2snT
Dip Angle: 60.93°
Date: 02/17/2009
Model: IGRF200510

PATHFINDER ENERGY SERVICES

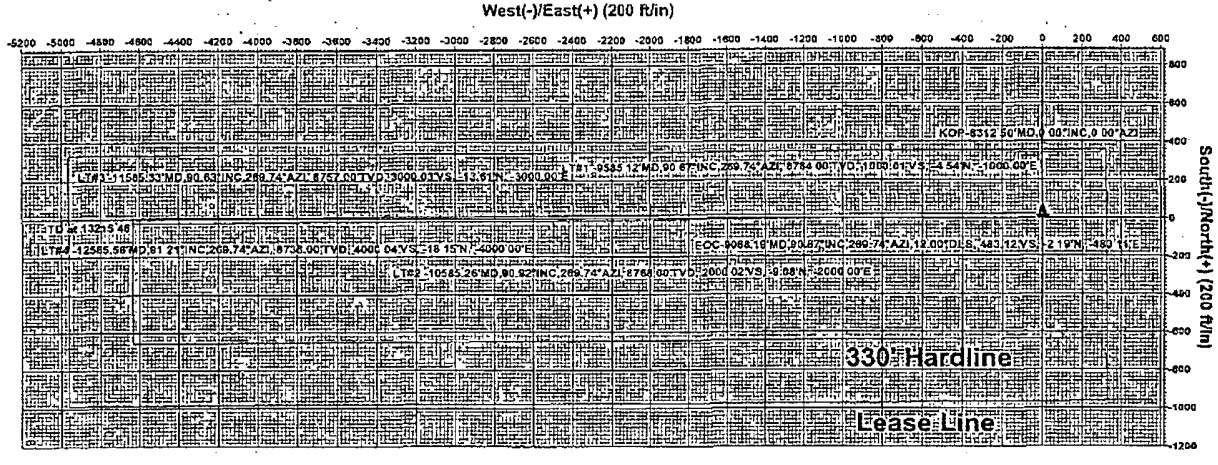
PROJECT DETAILS: Chaves County
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level
Local North: Grid

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	8312.50	0.00	0.00	8312.50	0.00	0.00	0.00	0.00	0.00	
3	9068.19	90.67	269.74	8790.00	-2.19	-483.11	12.00	269.74	483.12	
4	9137.68	90.66	269.74	8789.19	-2.51	-552.60	0.01	0.00	552.60	
5	9585.12	90.66	269.74	8784.00	-4.54	-1000.00	0.00	0.00	1000.01	LT1(JS1)- 1000'VS
6	9597.69	90.92	269.74	8783.82	-4.80	-1012.55	2.00	0.03	1012.69	
7	10585.26	90.92	269.74	8768.00	-9.08	-2000.00	0.00	0.00	2000.02	LT2(JS1)- 2000'VS
8	10599.76	90.63	269.74	8767.80	-9.15	-2014.51	2.00	179.89	2014.53	
9	11585.33	90.63	269.74	8757.00	-13.61	-3000.00	0.00	0.00	3000.03	LT3(JS1)- 3000'VS
10	11614.59	91.21	269.74	8756.53	-13.74	-3029.17	2.00	-0.06	3029.20	
11	12585.56	91.21	269.74	8738.00	-18.15	-4000.00	0.00	0.00	4000.04	LT4(JS1)- 4000'VS
12	12598.21	91.00	269.75	8735.79	-18.20	-4012.65	2.00	177.30	4012.69	
13	13215.46	91.00	269.75	8725.00	-20.90	-4629.85	0.00	0.00	4629.85	PBHL OH(JS#1)

WELLBORE TARGET DETAILS

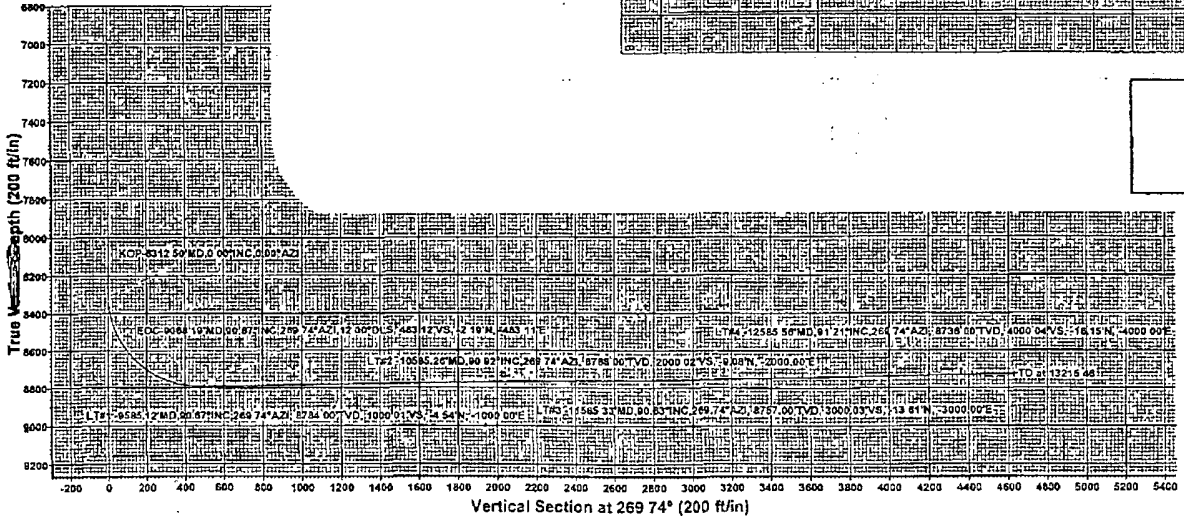
Name	TVD	+N/-S	+E/-W	Shape
PBHL OH(JS#1)	8725.00	-20.90	-4629.80	Point
LT4(JS1)- 4000'VS	8738.00	-18.15	-4000.00	Point
LT3(JS1)- 3000'VS	8757.00	-13.61	-3000.00	Point
LT2(JS1)- 2000'VS	8768.00	-9.08	-2000.00	Point
LT1(JS1)- 1000'VS	8784.00	-4.54	-1000.00	Point



WELL DETAILS: Jerry State #1

Ground Elevation: 4400.00
RKB Elevation: WELL @ 4427.00ft (18' RKB)
Rig Name: 18' RKB

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	727994.600	657784.200	33° 0' 0.949 N	103° 49' 7.488 W	



Project: Chaves County
Site: Jerry State
Well: Jerry State #1
Wellbore: OH
Plan: Plan #1 (Jerry State #1/OH)

Plan: Plan #1 (Jerry State #1/OH)
Created By: Nate Bingham Date: 10:26, February 17 2009
Checked _____ Date _____