

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

FEB 07 2008
OCD-ARTESIA

Form C-102

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30 005 64010	Pool Code 97662	Pool Name Wildcat, San Andres, South
Property Code 36691	Property Name FALCON STATE	Well Number 4
OGRID No. 013837	Operator Name MACK ENERGY CORPORATION	Elevation 3720'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/EAST line	County
G	16	14-S	29-E		1675	NORTH	2340	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/EAST line	County
H	16	14-S	29-E		1675	NORTH	330	EAST	CHAVES

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80			

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. <i>Jerry W. Sherrell</i> 2/6/08 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. JANUARY 24 2008 NEW MEXICO Date Surveyed Signature & Seal of Professional Surveyor 12641 RECEIVED GARY G. EIDSON 2/13/08 RONALD J. EIDSON 3239
	Certificate No. GARY G. EIDSON 12641 RONALD J. EIDSON 3239



Mack Energy Corp.

Chaves County, NM (NAD 27 NME)

Falcon #4

Falcon #4

OH

Plan: Plan #1

Standard Planning Report

05 February, 2008





Scientific Drilling Planning Report



Database:	EDM 2003 16 Single User Db	Local Co-ordinate Reference:	Well Falcon #4H
Company:	Mack Energy Corp.	TVD Reference:	KB Elev @ 3737 50ft
Project:	Chaves County, NM (NAD 27 NME)	MD Reference:	KB Elev @ 3737.50ft
Site:	Falcon #4H	North Reference:	Grd
Well:	Falcon #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Chaves County, NM (NAD 27 NME)		
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	Falcon #4H		
Site Position:	Map	Northing:	766,058 80 ft
From:		Easting:	592,331 80 ft
Position Uncertainty:	0 00 ft	Slot Radius:	"
		Latitude:	33° 6' 20 102 N
		Longitude:	104° 1' 54 517 W
		Grid Convergence:	0 16 °

Well	Falcon #4H		
Well Position	+N/-S	0 00 ft	Northing:
	+E/-W	0 00 ft	Easting:
Position Uncertainty	0 00 ft	Wellhead Elevation:	3,737 50 ft
		Latitude:	33° 6' 20 102 N
		Longitude:	104° 1' 54 517 W
		Ground Level:	3,720 00 ft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF200510	2/5/2008	8 26
			Dip Angle
			(°)
			61 01
			Field Strength
			(nT)
			49,452

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0 00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0 00	0 00	0 00
			Direction
			(°)
			89 48

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
2,400 00	0 00	0 00	2,400 00	0 00	0 00	0 00	0 00	0 00	0 00	
3,183 27	89 39	89 48	2,902 00	4 50	496.69	11 41	11.41	0 00	89 48	
4,696 22	89 39	89 48	2,918 00	18 20	2,009 50	0 00	0 00	0 00	0 00	PBHL-Falcon #4H



Scientific Drilling Planning Report



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well Falcon #4H
Company:	Mack Energy Corp	TVD Reference:	KB Elev @ 3737 50ft
Project:	Chaves County, NM (NAD 27 NME)	MD Reference:	KB Elev @ 3737 50ft
Site:	Falcon #4H	North Reference:	Grid
Well:	Falcon #4H	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
EHL-Falcon #4H - NHL-Falcon #4H									
2,400 00	0 00	0 00	2,400 00	0 00	0 00	0 00	0 00	0 00	0 00
KOP Start 11.41°/100'									
2,500.00	11 41	89 48	2,499 34	0 09	9 93	9 93	11 41	11 41	0 00
2,600.00	22 83	89 48	2,594 75	0 36	39 31	39 31	11 41	11 41	0 00
2,700.00	34.24	89.48	2,682 46	0 79	87 00	87 00	11 41	11 41	0 00
2,800 00	45.65	89.48	2,759 00	1 37	151 09	151 10	11 41	11 41	0.00
2,900 00	57 06	89 48	2,821 34	2 07	229 07	229.08	11 41	11.41	0 00
3,000 00	68 48	89 48	2,867 02	2 88	317 84	317 85	11 41	11 41	0 00
3,100 00	79 89	89 48	2,894 23	3 75	413 89	413 90	11 41	11 41	0 00
3,183 27	89 39	89 48	2,902 00	4.50	496 70	496 72	11 41	11 41	0 00
EOC hold 89.39°									
3,200 00	89 39	89 48	2,902 17	4 65	513 42	513 44	0 00	0.00	0 00
3,300 00	89 39	89.48	2,903 23	5 56	613.41	613 44	0 00	0 00	0 00
3,400 00	89 39	89 48	2,904 29	6 46	713 40	713 43	0 00	0.00	0 00
3,500 00	89.39	89 48	2,905 35	7 37	813 39	813 43	0 00	0 00	0 00
3,600 00	89 39	89 48	2,906 40	8 27	913 39	913 42	0 00	0 00	0 00
3,700 00	89 39	89 48	2,907 46	9.18	1,013 38	1,013 42	0 00	0.00	0 00
3,800 00	89 39	89.48	2,908 52	10 08	1,113.37	1,113 41	0 00	0 00	0 00
3,900 00	89 39	89 48	2,909 58	10 99	1,213 36	1,213.41	0 00	0.00	0 00
4,000 00	89 39	89 48	2,910 64	11 89	1,313 35	1,313.40	0 00	0 00	0 00
4,100.00	89 39	89 48	2,911 69	12.80	1,413 34	1,413 39	0 00	0 00	0 00
4,200 00	89 39	89 48	2,912 75	13.71	1,513 33	1,513 39	0 00	0.00	0 00
4,300 00	89.39	89 48	2,913 81	14.61	1,613 32	1,613 38	0 00	0 00	0 00
4,400 00	89 39	89 48	2,914 87	15 52	1,713 31	1,713 38	0 00	0 00	0 00
4,500 00	89 39	89 48	2,915 92	16 42	1,813 30	1,813 37	0 00	0 00	0 00
4,600 00	89 39	89 48	2,916 98	17 33	1,913 29	1,913 37	0 00	0 00	0 00
4,696 22	89 39	89 48	2,918 00	18 20	2,009 50	2,009.58	0 00	0 00	0 00
PBHL-Falcon #4H									

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
NHL-Falcon #4H	0 00	0 00	0 00	43 20	2,009 27	766,102 00	594,341.07	33° 6' 20.472 N	104° 1' 30.895 W
- plan misses by 2009 73ft at 0 00ft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W0 00 H1,000 00 D0 00)									
EHL-Falcon #4H	0 00	0 00	0 00	43.20	2,009 27	766,102.00	594,341 07	33° 6' 20 472 N	104° 1' 30 895 W
- plan misses by 2009 73ft at 0 00ft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W1,000 00 H0 00 D0 00)									
PBHL-Falcon #4H	0.00	0.00	2,918 00	18 20	2,009 50	766,077 00	594,341 30	33° 6' 20 224 N	104° 1' 30 893 W
- plan hits target									
- Circle (radius 10 00)									



Scientific Drilling
Planning Report



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well Falcon #4H
Company:	Mack Energy Corp	TVD Reference:	KB Elev @ 3737 50ft
Project:	Chaves County, NM (NAD 27 NME)	MD Reference:	KB Elev @ 3737 50ft
Site:	Falcon #4H	North Reference:	Grid
Well:	Falcon #4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,400 00	2,400 00	0 00	0 00	KOP Start 11 41°/100°
3,183 27	2,902 00	4 50	496 70	EOC hold 89 39°



Scientific Drilling for Mack Energy Corp.
 Site: Chaves County, NM (NAD 27 NME)
 Well: Falcon #4H
 Wellbore: OH
 Design: Plan #1



WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
EHL-Falcon #4H	0.00	43.20	2009.27	766102.00	594341.07	33° 6' 20.472 N	104° 1' 30.895 W	Rectangle (Sides L1000.00 W0.00)
NHL-Falcon #4H	0.00	43.20	2009.27	766102.00	594341.07	33° 6' 20.472 N	104° 1' 30.895 W	Rectangle (Sides L0.00 W1000.00)
PBHL-Falcon #4H	2918.00	18.20	2009.50	766077.00	594341.30	33° 6' 20.224 N	104° 1' 30.893 W	Circle (Radius: 10.00)

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	2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	
3	3183.27	89.39	89.48	2902.00	4.50	496.70	11.41	89.48	496.72	
4	4696.22	89.39	89.48	2918.00	18.20	2009.50	0.00	0.00	2009.58	PBHL-Falcon #4H

WELL DETAILS: Falcon #4H

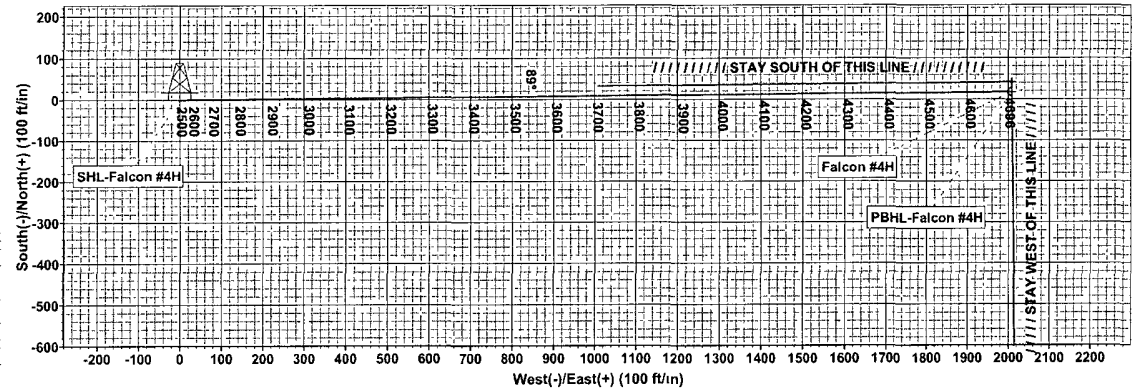
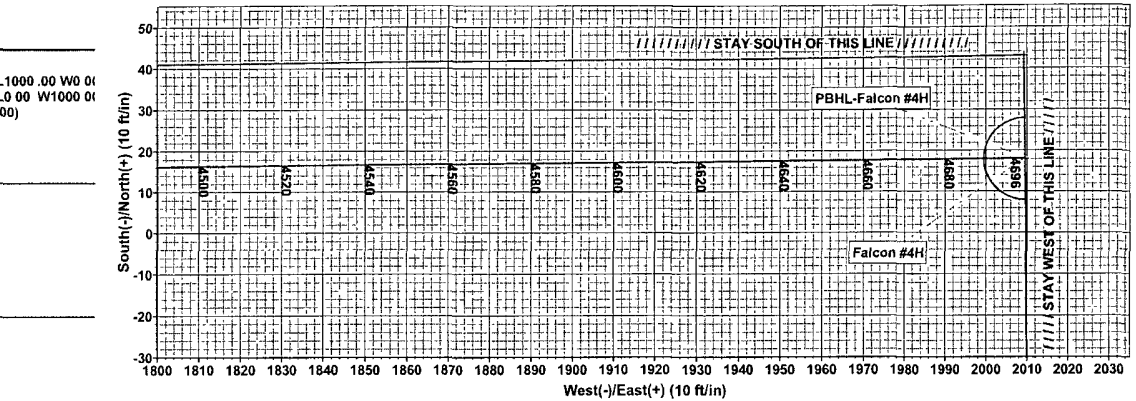
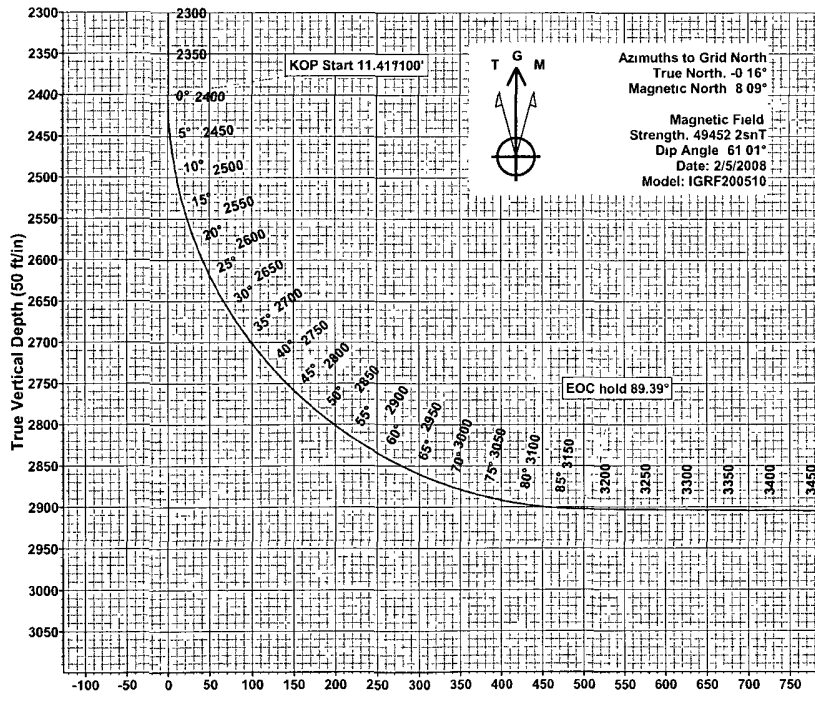
Ground Level:	3720.00
+N/-S	0.00
+E/-W	0.00
Northing	766058.80
Easting	592331.80
Latitude	33° 6' 20.102 N
Longitude	104° 1' 54.517 W
Slot	

PROJECT DETAILS: Chaves 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 (Falcon #4H/OH)

Created By: Julio Pina Date: 05-Feb-08
 Checked: Date:
 Reviewed: Date:
 Approved: Date:



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 8.09°
 To convert a True Direction to a Grid Direction, Subtract 0.16°

Falcon #4H
 PBHL-Falcon #4H