

30005 64009



Mack Energy Corp.

Chaves County, NM (NAD 27 NME)

Falcon #2

Falcon #2.

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 #2H
Company:	Mack Energy Corp.	TVD Reference:	KB Elev @ 3729 50ft
Project:	Chaves County, NM (NAD 27 NME)	MD Reference:	KB Elev @ 3729 50ft
Site:	Falcon #2H	North Reference:	Grid
Well:	Falcon #2H	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 #2H		
Site Position:		Northing:	767,374 70 ft
From:	Map	Easting:	591,751 50 ft
Position Uncertainty:	0 00 ft	Slot Radius:	"
		Latitude:	33° 6' 33 139 N
		Longitude:	104° 2' 1 295 W
		Grid Convergence:	0 16 °

Well	Falcon #2H		
Well Position	+N/-S	0 00 ft	Northing:
	+E/-W	0 00 ft	Easting:
Position Uncertainty	0 00 ft	Wellhead Elevation:	3,729 50 ft
		Latitude:	33° 6' 33.139 N
		Longitude:	104° 2' 1 295 W
		Ground Level:	3,712 00 ft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF200510	2/5/2008	8 26
			Dip Angle
			(°)
			61 02
			Field Strength
			(nT)
			49,454

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
			(°)
			269 77

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	
3,178 13	90 07	269 77	2,894 97	-2 02	-495 60	11 58	11 58	0 00	269.77	
4,721 05	90 07	269 77	2,893 00	-8 30	-2,038 50	0 00	0 00	0 00	0 00	PBHL-Falcon #2H



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Site:	Falcon #2H	North Reference:	Grd
Well:	Falcon #2H	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
NHL-Falcon #2H - WHL-Falcon #2H									
2,400 00	0 00	0 00	2,400 00	0 00	0 00	0 00	0 00	0 00	0 00
KOP Start 11.57°/100'									
2,500 00	11 58	269 77	2,499 32	-0.04	-10 07	10 07	11 58	11 58	0 00
2,600 00	23 15	269 77	2,594.60	-0 16	-39 86	39 86	11 58	11 58	0 00
2,700 00	34 73	269 77	2,681 97	-0 36	-88 16	88 16	11 58	11 58	0 00
2,800 00	46 30	269 77	2,757 86	-0 62	-153 02	153 02	11 58	11 58	0 00
2,900 00	57 88	269 77	2,819 20	-0 94	-231 78	231 78	11 58	11 58	0 00
3,000 00	69 45	269 77	2,863 49	-1 31	-321 25	321 25	11 58	11 58	0 00
3,100 00	81 03	269.77	2,888 92	-1 70	-417.78	417 79	11.58	11 58	0 00
3,178 13	90 07	269 77	2,894 97	-2 02	-495 60	495 60	11 58	11 58	0 00
3,178 19	90 07	269 77	2,894 97	-2 02	-495 65	495 65	0 00	0 00	0 00
EOC hold 90.07°									
3,200 00	90 07	269 77	2,894 94	-2 11	-517 46	517 47	0 00	0 00	0 00
3,300 00	90 07	269 77	2,894 81	-2 51	-617 46	617 47	0 00	0 00	0 00
3,400 00	90 07	269 77	2,894 68	-2 92	-717 46	717 47	0 00	0 00	0 00
3,500 00	90 07	269 77	2,894 56	-3 33	-817 46	817 47	0 00	0 00	0 00
3,600 00	90.07	269.77	2,894 43	-3 74	-917 46	917 47	0 00	0 00	0 00
3,700 00	90 07	269 77	2,894 30	-4 14	-1,017 46	1,017 47	0 00	0 00	0 00
3,800 00	90 07	269 77	2,894 17	-4 55	-1,117 46	1,117 47	0 00	0 00	0 00
3,900.00	90 07	269 77	2,894 05	-4.96	-1,217 46	1,217 47	0 00	0 00	0 00
4,000 00	90 07	269 77	2,893 92	-5 36	-1,317 45	1,317 47	0 00	0 00	0 00
4,100 00	90 07	269 77	2,893.79	-5 77	-1,417.45	1,417 47	0 00	0 00	0 00
4,200 00	90 07	269 77	2,893 66	-6 18	-1,517 45	1,517 47	0 00	0 00	0 00
4,300 00	90 07	269 77	2,893 54	-6 59	-1,617 45	1,617 46	0 00	0 00	0 00
4,400 00	90 07	269 77	2,893 41	-6 99	-1,717 45	1,717 46	0 00	0 00	0 00
4,500 00	90 07	269 77	2,893 28	-7.40	-1,817 45	1,817 46	0 00	0 00	0 00
4,600 00	90 07	269 77	2,893 15	-7 81	-1,917 45	1,917 46	0 00	0 00	0 00
4,700 00	90.07	269 77	2,893 03	-8 21	-2,017 45	2,017 46	0 00	0 00	0 00
4,721 05	90 07	269 77	2,893 00	-8 30	-2,038 50	2,038 52	0 00	0 00	0 00
PBHL-Falcon #2H									

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL-Falcon #2H	0 00	0 00	2,893 00	-8.30	-2,038 50	767,366 40	589,713 00	33° 6' 33 114 N	104° 2' 25 262 W
- hit/miss target									
- Shape									
- plan hits target									
- Circle (radius 10 00)									
NHL-Falcon #2H	0 00	0 00	0 00	16 70	-2,038 60	767,391 40	589,712 90	33° 6' 33 361 N	104° 2' 25 262 W
- plan misses by 2038 67ft at 0 00ft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W0 00 H1,000 00 D0 00)									
WHL-Falcon #2H	0 00	0 00	0 00	16 70	-2,038.60	767,391.40	589,712.90	33° 6' 33 361 N	104° 2' 25.262 W
- plan misses by 2038 67ft at 0.00ft MD (0 00 TVD, 0 00 N, 0 00 E)									
- Rectangle (sides W1,000.00 H0 00 D0 00)									



Scientific Drilling
Planning Report



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Site:	Falcon #2H	North Reference:	Grd
Well:	Falcon #2H	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 11.57°/100'
3,178 19	2,894.87	-2 02	-495 71	EOC hold 90 07°



Scientific Drilling for Mack Energy Corp.
Site: Chaves County, NM (NAD 27 NME)
Well: Falcon #2H
Wellbore: OH
Design: Plan #1



WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
NHL-Falcon #2H	0.00	16 70	-2038 60	767391.40	589712.90	33°6' 33.361 N	104°2' 25.262 W	Rectangle (Sides: L0.0 0 W1000 00)
WHL-Falcon #2H	0.00	16 70	-2038.60	767391.40	589712.90	33°6' 33.361 N	104°2' 25.262 W	Rectangle (Sides: L100 0.00 W0 00)
PBHL-Falcon #2H	2893.00	-8 30	-2038.50	767366.40	589713.00	33°6' 33.114 N	104°2' 25.262 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	3178.19	90 07	269.77	2895.00	-2.02	-495 63	11.57	269 77	495 64	
4	4721.07	90 07	269.77	2893.00	-8.30	-2038 50	0.00	0.00	2038 52	PBHL-Falcon #2H

WELL DETAILS: Falcon #2H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0 00	0.00	767374.70	591751.50	33°6' 33.139 N	104°2' 1.295 W	

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 #2H/OH)

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

