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HOBBSUCD

Mack Energy Corporation

Eddy County (NAD27)

Nighthawk State Com

#1H

OH

Plan: Design #1

Pathfinder X & Y Planning Report

13 December, 2010

PATHFINDER
A Schlumberger Company



Pathfinder
Pathfinder X & Y Planning Report



Company:	Mack Energy Corporation	Local Co-ordinate Reference:	Site Nighthawk State Com
Project:	Eddy County (NAD27)	TVD Reference:	WELL @ 4304.00usft (19' KB Correction)
Site:	Nighthawk State Com	MD Reference:	WELL @ 4304.00usft (19' KB Correction)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Project: Eddy County (NAD27)			
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site: Nighthawk State Com			
Site Position:		Northing:	741,446.700 usft
From:	Map	Easting:	695,847.900 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	33° 2' 11.985 N
		Longitude:	103° 41' 39.358 W
		Grid Convergence:	0.35 °

Well: #1H					
Well Position	+N/-S	0.00 usft	Northing:	741,446.700 usft	
	+E/-W	0.00 usft	Easting:	695,847.900 usft	
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,285.00 usft

Wellbore: OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/07/10	7.75	60.95	49,171

Design: Design #1				
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	89.77

Survey Tool Program		Date: 12/13/10		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	13,063.40	Design #1 (OH)		



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Planned Survey											
MD (usft)	Inc (")	Azi (")	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (*/100usft)	Northing (usft)	Easting (usft)	
0.00	0.00	0.00	0.00	4,304.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
100.00	0.00	0.00	100.00	4,204.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
200.00	0.00	0.00	200.00	4,104.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
300.00	0.00	0.00	300.00	4,004.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
400.00	0.00	0.00	400.00	3,904.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
500.00	0.00	0.00	500.00	3,804.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
600.00	0.00	0.00	600.00	3,704.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
700.00	0.00	0.00	700.00	3,604.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
800.00	0.00	0.00	800.00	3,504.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
900.00	0.00	0.00	900.00	3,404.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,000.00	0.00	0.00	1,000.00	3,304.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,100.00	0.00	0.00	1,100.00	3,204.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,200.00	0.00	0.00	1,200.00	3,104.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,300.00	0.00	0.00	1,300.00	3,004.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,400.00	0.00	0.00	1,400.00	2,904.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,500.00	0.00	0.00	1,500.00	2,804.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,600.00	0.00	0.00	1,600.00	2,704.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,700.00	0.00	0.00	1,700.00	2,604.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,800.00	0.00	0.00	1,800.00	2,504.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
1,900.00	0.00	0.00	1,900.00	2,404.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
2,000.00	0.00	0.00	2,000.00	2,304.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
2,100.00	0.00	0.00	2,100.00	2,204.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
2,200.00	0.00	0.00	2,200.00	2,104.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
2,300.00	0.00	0.00	2,300.00	2,004.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
2,400.00	0.00	0.00	2,400.00	1,904.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
2,500.00	0.00	0.00	2,500.00	1,804.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
2,600.00	0.00	0.00	2,600.00	1,704.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
2,700.00	0.00	0.00	2,700.00	1,604.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
2,800.00	0.00	0.00	2,800.00	1,504.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
2,900.00	0.00	0.00	2,900.00	1,404.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,000.00	0.00	0.00	3,000.00	1,304.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,100.00	0.00	0.00	3,100.00	1,204.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,200.00	0.00	0.00	3,200.00	1,104.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,300.00	0.00	0.00	3,300.00	1,004.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,400.00	0.00	0.00	3,400.00	904.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,500.00	0.00	0.00	3,500.00	804.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,600.00	0.00	0.00	3,600.00	704.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,700.00	0.00	0.00	3,700.00	604.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,800.00	0.00	0.00	3,800.00	504.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
3,900.00	0.00	0.00	3,900.00	404.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,000.00	0.00	0.00	4,000.00	304.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,100.00	0.00	0.00	4,100.00	204.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,200.00	0.00	0.00	4,200.00	104.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,300.00	0.00	0.00	4,300.00	4.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,400.00	0.00	0.00	4,400.00	-96.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,500.00	0.00	0.00	4,500.00	-196.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,600.00	0.00	0.00	4,600.00	-296.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,700.00	0.00	0.00	4,700.00	-396.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,800.00	0.00	0.00	4,800.00	-496.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
4,900.00	0.00	0.00	4,900.00	-596.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
5,000.00	0.00	0.00	5,000.00	-696.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
5,100.00	0.00	0.00	5,100.00	-796.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
5,200.00	0.00	0.00	5,200.00	-896.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
5,300.00	0.00	0.00	5,300.00	-996.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90



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Project: Eddy County (NAD27)
Site: Nighthawk State Corn
Well: #1H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference: Site Nighthawk State Corn
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MD Reference: WELL @ 4304.00usft (19' KB Correction)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (")	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLog ("/100usft)	Northing (usft)	Easting (usft)
5,400.00	0.00	0.00	5,400.00	-1,096.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
5,500.00	0.00	0.00	5,500.00	-1,196.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
5,600.00	0.00	0.00	5,600.00	-1,296.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
5,700.00	0.00	0.00	5,700.00	-1,396.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
5,800.00	0.00	0.00	5,800.00	-1,496.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
5,900.00	0.00	0.00	5,900.00	-1,596.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,000.00	0.00	0.00	6,000.00	-1,696.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,100.00	0.00	0.00	6,100.00	-1,796.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,200.00	0.00	0.00	6,200.00	-1,896.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,300.00	0.00	0.00	6,300.00	-1,996.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,400.00	0.00	0.00	6,400.00	-2,096.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,500.00	0.00	0.00	6,500.00	-2,196.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,600.00	0.00	0.00	6,600.00	-2,296.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,700.00	0.00	0.00	6,700.00	-2,396.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,800.00	0.00	0.00	6,800.00	-2,496.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
6,900.00	0.00	0.00	6,900.00	-2,596.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,000.00	0.00	0.00	7,000.00	-2,696.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,100.00	0.00	0.00	7,100.00	-2,796.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,200.00	0.00	0.00	7,200.00	-2,896.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,300.00	0.00	0.00	7,300.00	-2,996.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,400.00	0.00	0.00	7,400.00	-3,096.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,500.00	0.00	0.00	7,500.00	-3,196.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,600.00	0.00	0.00	7,600.00	-3,296.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,700.00	0.00	0.00	7,700.00	-3,396.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,800.00	0.00	0.00	7,800.00	-3,496.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
7,900.00	0.00	0.00	7,900.00	-3,596.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90
8,000.00	0.00	0.00	8,000.00	-3,696.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90



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8,100.00	0.00	0.00	8,100.00	-3,796.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
8,200.00	0.00	0.00	8,200.00	-3,896.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
8,300.00	0.00	0.00	8,300.00	-3,996.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
8,400.00	0.00	0.00	8,400.00	-4,096.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
8,445.00	0.00	0.00	8,445.00	-4,141.00	0.00	0.00	0.00	0.00	741,446.70	695,847.90	
8,450.00	0.48	89.77	8,450.00	-4,146.00	0.00	0.02	0.02	9.51	741,446.70	695,847.92	
8,500.00	5.23	89.77	8,499.92	-4,195.92	0.01	2.51	2.51	9.51	741,446.71	695,850.41	
8,550.00	9.99	89.77	8,549.47	-4,245.47	0.04	9.13	9.13	9.51	741,446.74	695,857.03	
8,600.00	14.74	89.77	8,598.30	-4,294.30	0.08	19.83	19.83	9.51	741,446.78	695,867.73	
8,650.00	19.49	89.77	8,646.07	-4,342.07	0.14	34.54	34.54	9.51	741,446.84	695,882.44	
8,700.00	24.25	89.77	8,692.46	-4,388.46	0.21	53.16	53.16	9.51	741,446.91	695,901.06	
8,750.00	29.00	89.77	8,737.14	-4,433.14	0.30	75.56	75.56	9.51	741,447.00	695,923.46	
8,800.00	33.76	89.77	8,779.81	-4,475.81	0.41	101.59	101.59	9.51	741,447.11	695,949.49	
8,850.00	38.51	89.77	8,820.18	-4,516.18	0.53	131.07	131.07	9.51	741,447.23	695,978.97	
8,900.00	43.27	89.77	8,857.97	-4,553.97	0.66	163.79	163.79	9.51	741,447.36	696,011.69	
8,950.00	48.02	89.77	8,892.91	-4,588.91	0.80	199.53	199.53	9.51	741,447.50	696,047.43	
9,000.00	52.78	89.77	8,924.78	-4,620.78	0.96	238.05	238.05	9.51	741,447.66	696,085.95	
9,050.00	57.53	89.77	8,953.34	-4,649.34	1.12	279.07	279.07	9.51	741,447.82	696,126.97	
9,100.00	62.29	89.77	8,978.40	-4,674.40	1.29	322.32	322.32	9.51	741,447.99	696,170.22	
9,150.00	67.04	89.77	8,999.79	-4,695.79	1.48	367.50	367.50	9.51	741,448.18	696,215.40	
9,200.00	71.80	89.77	9,017.36	-4,713.36	1.66	414.29	414.29	9.51	741,448.36	696,262.19	
9,250.00	76.55	89.77	9,030.99	-4,726.99	1.86	462.38	462.39	9.51	741,448.56	696,310.28	
9,300.00	81.31	89.77	9,040.59	-4,736.59	2.05	511.44	511.44	9.51	741,448.75	696,359.34	
9,336.42	84.77	89.77	9,045.00	-4,741.00	2.20	547.58	547.59	9.51	741,448.90	696,395.48	
9,400.00	84.77	89.77	9,050.80	-4,746.80	2.45	610.90	610.90	0.00	741,449.15	696,458.80	
9,500.00	84.77	89.77	9,059.91	-4,755.91	2.85	710.48	710.49	0.00	741,449.55	696,558.38	
9,600.00	84.77	89.77	9,069.03	-4,765.03	3.25	810.06	810.07	0.00	741,449.95	696,657.96	



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Project:	Eddy County (NAD27)	TVD Reference:	WELL @ 4304.00usft (19' KB Correction)
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Planned Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
9,700.00	84.77	89.77	9,078.14	-4,774.14	3.65	909.65	909.65	0.00	741,450.35	696,757.55	
9,800.00	84.77	89.77	9,087.26	-4,783.26	4.05	1,009.23	1,009.24	0.00	741,450.75	696,857.13	
9,900.00	84.77	89.77	9,096.37	-4,792.37	4.45	1,108.81	1,108.82	0.00	741,451.15	696,956.71	
10,000.00	84.77	89.77	9,105.49	-4,801.49	4.85	1,208.39	1,208.40	0.00	741,451.55	697,056.29	
10,100.00	84.77	89.77	9,114.60	-4,810.60	5.25	1,307.98	1,307.99	0.00	741,451.95	697,155.88	
10,200.00	84.77	89.77	9,123.72	-4,819.72	5.65	1,407.56	1,407.57	0.00	741,452.35	697,255.46	
10,300.00	84.77	89.77	9,132.83	-4,828.83	6.05	1,507.14	1,507.16	0.00	741,452.75	697,355.04	
10,400.00	84.77	89.77	9,141.95	-4,837.95	6.45	1,606.73	1,606.74	0.00	741,453.15	697,454.63	
10,500.00	84.77	89.77	9,151.06	-4,847.06	6.85	1,706.31	1,706.32	0.00	741,453.55	697,554.21	
10,600.00	84.77	89.77	9,160.18	-4,856.18	7.25	1,805.89	1,805.91	0.00	741,453.95	697,653.79	
10,700.00	84.77	89.77	9,169.30	-4,865.30	7.65	1,905.47	1,905.49	0.00	741,454.35	697,753.37	
10,800.00	84.77	89.77	9,178.41	-4,874.41	8.05	2,005.06	2,005.07	0.00	741,454.75	697,852.96	
10,900.00	84.77	89.77	9,187.53	-4,883.53	8.45	2,104.64	2,104.66	0.00	741,455.15	697,952.54	
11,000.00	84.77	89.77	9,196.64	-4,892.64	8.85	2,204.22	2,204.24	0.00	741,455.55	698,052.12	
11,100.00	84.77	89.77	9,205.76	-4,901.76	9.25	2,303.81	2,303.82	0.00	741,455.95	698,151.71	
11,200.00	84.77	89.77	9,214.87	-4,910.87	9.65	2,403.39	2,403.41	0.00	741,456.35	698,251.29	
11,300.00	84.77	89.77	9,223.99	-4,919.99	10.05	2,502.97	2,502.99	0.00	741,456.75	698,350.87	
11,400.00	84.77	89.77	9,233.10	-4,929.10	10.45	2,602.55	2,602.58	0.00	741,457.15	698,450.45	
11,500.00	84.77	89.77	9,242.22	-4,938.22	10.85	2,702.14	2,702.16	0.00	741,457.55	698,550.04	
11,600.00	84.77	89.77	9,251.33	-4,947.33	11.25	2,801.72	2,801.74	0.00	741,457.95	698,649.62	
11,700.00	84.77	89.77	9,260.45	-4,956.45	11.65	2,901.30	2,901.33	0.00	741,458.35	698,749.20	
11,800.00	84.77	89.77	9,269.57	-4,965.57	12.05	3,000.89	3,000.91	0.00	741,458.75	698,848.79	
11,900.00	84.77	89.77	9,278.68	-4,974.68	12.45	3,100.47	3,100.49	0.00	741,459.15	698,948.37	
12,000.00	84.77	89.77	9,287.80	-4,983.80	12.85	3,200.05	3,200.08	0.00	741,459.55	699,047.95	
12,100.00	84.77	89.77	9,296.91	-4,992.91	13.25	3,299.63	3,299.66	0.00	741,459.95	699,147.53	
12,200.00	84.77	89.77	9,306.03	-5,002.03	13.65	3,399.22	3,399.25	0.00	741,460.35	699,247.12	
12,300.00	84.77	89.77	9,315.14	-5,011.14	14.05	3,498.80	3,498.83	0.00	741,460.75	699,346.70	



Pathfinder
Pathfinder X & Y Planning Report



Company:	Mack Energy Corporation	Local Co-ordinate Reference:	Site Nighthawk State Com
Project:	Eddy County (NAD27)	TVD Reference:	WELL @ 4304.00usft (19' KB Correction)
Site:	Nighthawk State Com	MD Reference:	WELL @ 4304.00usft (19' KB Correction)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	EDM 5000.1 Single User Db

Planned Survey											
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
12,400.00	84.77	89.77	9,324.26	-5,020.26	14.44	3,598.38	3,598.41	0.00	741,461.14	699,446.28	
12,500.00	84.77	89.77	9,333.37	-5,029.37	14.84	3,697.97	3,698.00	0.00	741,461.54	699,545.87	
12,600.00	84.77	89.77	9,342.49	-5,038.49	15.24	3,797.55	3,797.58	0.00	741,461.94	699,645.45	
12,700.00	84.77	89.77	9,351.60	-5,047.60	15.64	3,897.13	3,897.16	0.00	741,462.34	699,745.03	
12,800.00	84.77	89.77	9,360.72	-5,056.72	16.04	3,996.72	3,996.75	0.00	741,462.74	699,844.62	
12,900.00	84.77	89.77	9,369.83	-5,065.83	16.44	4,096.30	4,096.33	0.00	741,463.14	699,944.20	
13,000.00	84.77	89.77	9,378.95	-5,074.95	16.84	4,195.88	4,195.91	0.00	741,463.54	700,043.78	
13,063.58	84.77	89.77	9,384.75	-5,080.75	17.10	4,259.20	4,259.23	0.00	741,463.80	700,107.10	

Checked By: _____ Approved By: _____ Date: _____



Azimuths to Grid North
True North: -0.35°
Magnetic North: 7.41°

Magnetic Field
Strength: 49171.0nT
Dip Angle: 60.95°
Date: 12/07/2010
Model: IGRF200510

PATHFINDER
A Schlumberger Company

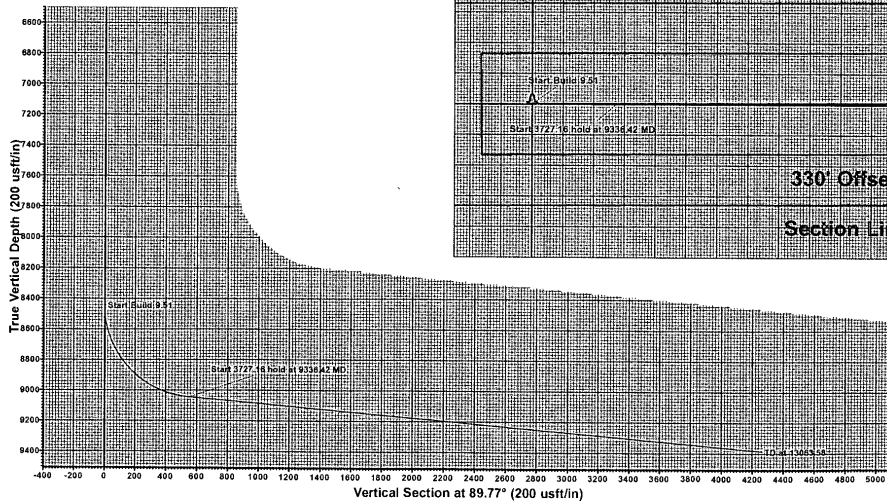
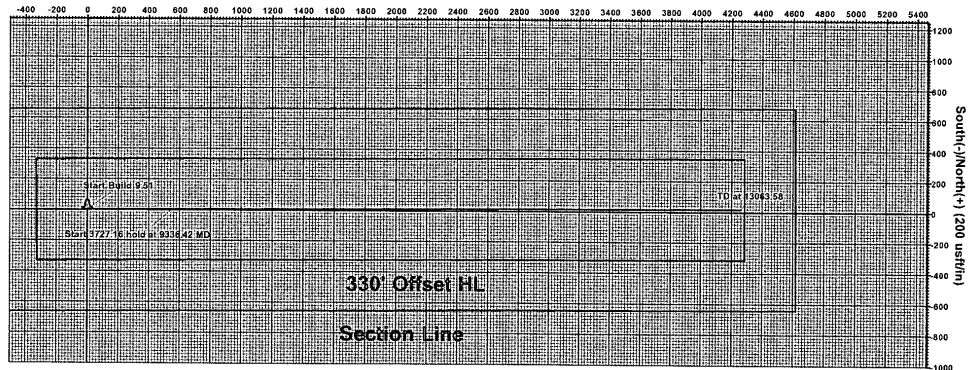
WELL DETAILS: #1H						
Ground Elevation: 4285.00						
RKB Elevation: WELL @ 4304.00uR (19' KB Correction)						
Rip Name: 19' KB Correction						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	741446.700	695547.900	33° 2' 11.985 N	103° 41' 38.358 W	

PROJECT DETAILS: Eddy County (NAD27)
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

WELLBORE TARGET DETAILS			
Name	TVD	+N/-S	+E/-W Shape
PBHL(NSC#1)9385.00	17.20	4259.20	Point

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V/Sect Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	8445.00	0.00	0.00	8445.00	0.00	0.00	0.00	0.00	0.00
3	9336.42	84.77	89.77	8945.00	2.20	547.88	9.51	89.77	547.88
	413063.58	84.77	89.77	9334.75	17.10	4259.20	0.00	0.00	4259.23 PBHL(NSC#1)

West(-)/East(+) (200 usft/in)



Project: Eddy County (NAD27)
Site: Nighthawk State Com
Well: #1H
Wellbore: OH
Plan: Design #1 (#1H/OH)

Plan: Design #1 (#1H/OH)	
Created By: Nate Singshaas	Date: 10-13, December 13, 2010
Checked: _____	Date: _____