

Nadel & Gussman Permian, LLC

**Eddy County, NM (NAD-83)
Sec 24, T18S, R25E (NEW SHL)
Super Chief #1H**

Wellbore #1

Plan: Design #1

DDC Well Planning Report

29 October, 2012

Ex. No. 9



DDC
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Super Chief #1H
Company:	Nadel & Gussman Permian, LLC	TVD Reference:	WELL @ 3296.0usft (Patriot #1)
Project:	Eddy County, NM (NAD-83)	MD Reference:	WELL @ 3296.0usft (Patriot #1)
Site:	Sec 24, T18S, R25E (NEW SHL)	North Reference:	Grid
Well:	Super Chief #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Eddy County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Sec 24, T18S, R25E (NEW SHL)			
Site Position:		Northing:	628,099.09 usft	Latitude:	32° 43' 36.061 N
From:	Map	Easting:	539,724.12 usft	Longitude:	104° 20' 18.887 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.00 °

Well		Super Chief #1H				
Well Position	+N/-S	0.0 usft	Northing:	628,099.09 usft	Latitude:	32° 43' 36.061 N
	+E/-W	0.0 usft	Easting:	539,724.12 usft	Longitude:	104° 20' 18.887 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,296.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/29/2012	7.81	60.49	48,697

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	0.69

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,516.3	0.00	0.00	2,516.3	0.0	0.0	0.00	0.00	0.00	0.00	
3,166.3	65.00	5.00	3,035.6	329.6	28.8	10.00	10.00	0.00	5.00	
3,430.1	90.97	0.23	3,090.0	585.1	40.0	10.00	9.85	-1.81	-10.79	
7,557.9	90.97	0.23	3,020.0	4,712.2	56.4	0.00	0.00	0.00	0.00	PBHL Super Chief #1

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Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Build 10° / 100'									
2,516.3	0.00	0.00	2,516.3	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	8.37	5.00	2,599.7	6.1	0.5	6.1	10.00	10.00	0.00
2,700.0	18.37	5.00	2,696.9	29.1	2.5	29.1	10.00	10.00	0.00
2,800.0	28.37	5.00	2,788.5	68.6	6.0	68.6	10.00	10.00	0.00
2,900.0	38.37	5.00	2,872.0	123.3	10.8	123.4	10.00	10.00	0.00
3,000.0	48.37	5.00	2,944.6	191.6	16.8	191.8	10.00	10.00	0.00
3,100.0	58.37	5.00	3,004.1	271.4	23.7	271.7	10.00	10.00	0.00
Build & Turn 10° / 100'									
3,166.3	65.00	5.00	3,035.6	329.6	28.8	329.9	10.00	10.00	0.00
3,200.0	68.31	4.32	3,048.9	360.4	31.3	360.7	10.00	9.83	-2.01
3,300.0	78.15	2.46	3,077.7	455.9	37.0	456.3	10.00	9.84	-1.86
3,400.0	88.01	0.74	3,089.8	555.0	39.7	555.4	10.00	9.85	-1.73
End of Curve / 90.97° Inc / .23° Azm / 3090' TVD									
3,430.1	90.97	0.23	3,090.0	585.1	40.0	585.5	10.00	9.85	-1.70
3,500.0	90.97	0.23	3,088.9	654.9	40.3	655.4	0.00	0.00	0.00
3,600.0	90.97	0.23	3,087.2	754.9	40.6	755.4	0.00	0.00	0.00
3,700.0	90.97	0.23	3,085.5	854.9	41.0	855.3	0.00	0.00	0.00
3,800.0	90.97	0.23	3,083.8	954.9	41.4	955.3	0.00	0.00	0.00
3,900.0	90.97	0.23	3,082.1	1,054.9	41.8	1,055.3	0.00	0.00	0.00
4,000.0	90.97	0.23	3,080.4	1,154.9	42.2	1,155.3	0.00	0.00	0.00
4,100.0	90.97	0.23	3,078.7	1,254.9	42.6	1,255.3	0.00	0.00	0.00
4,200.0	90.97	0.23	3,077.0	1,354.8	43.0	1,355.3	0.00	0.00	0.00
4,300.0	90.97	0.23	3,075.3	1,454.8	43.4	1,455.2	0.00	0.00	0.00
4,400.0	90.97	0.23	3,073.6	1,554.8	43.8	1,555.2	0.00	0.00	0.00
4,500.0	90.97	0.23	3,071.9	1,654.8	44.2	1,655.2	0.00	0.00	0.00
4,600.0	90.97	0.23	3,070.2	1,754.8	44.6	1,755.2	0.00	0.00	0.00
4,700.0	90.97	0.23	3,068.5	1,854.8	45.0	1,855.2	0.00	0.00	0.00
4,800.0	90.97	0.23	3,066.8	1,954.7	45.4	1,955.1	0.00	0.00	0.00
4,900.0	90.97	0.23	3,065.1	2,054.7	45.8	2,055.1	0.00	0.00	0.00
5,000.0	90.97	0.23	3,063.4	2,154.7	46.2	2,155.1	0.00	0.00	0.00
5,100.0	90.97	0.23	3,061.7	2,254.7	46.6	2,255.1	0.00	0.00	0.00
5,200.0	90.97	0.23	3,060.0	2,354.7	47.0	2,355.1	0.00	0.00	0.00
5,300.0	90.97	0.23	3,058.3	2,454.7	47.4	2,455.1	0.00	0.00	0.00
5,400.0	90.97	0.23	3,056.6	2,554.7	47.8	2,555.0	0.00	0.00	0.00
5,500.0	90.97	0.23	3,054.9	2,654.6	48.2	2,655.0	0.00	0.00	0.00
5,600.0	90.97	0.23	3,053.2	2,754.6	48.6	2,755.0	0.00	0.00	0.00
5,700.0	90.97	0.23	3,051.5	2,854.6	49.0	2,855.0	0.00	0.00	0.00
5,800.0	90.97	0.23	3,049.8	2,954.6	49.4	2,955.0	0.00	0.00	0.00
5,900.0	90.97	0.23	3,048.1	3,054.6	49.8	3,055.0	0.00	0.00	0.00
6,000.0	90.97	0.23	3,046.4	3,154.6	50.2	3,154.9	0.00	0.00	0.00
6,100.0	90.97	0.23	3,044.7	3,254.5	50.6	3,254.9	0.00	0.00	0.00
6,200.0	90.97	0.23	3,043.0	3,354.5	51.0	3,354.9	0.00	0.00	0.00
6,300.0	90.97	0.23	3,041.3	3,454.5	51.4	3,454.9	0.00	0.00	0.00
6,400.0	90.97	0.23	3,039.6	3,554.5	51.8	3,554.9	0.00	0.00	0.00
6,500.0	90.97	0.23	3,038.0	3,654.5	52.2	3,654.8	0.00	0.00	0.00
6,600.0	90.97	0.23	3,036.3	3,754.5	52.6	3,754.8	0.00	0.00	0.00
6,700.0	90.97	0.23	3,034.6	3,854.5	53.0	3,854.8	0.00	0.00	0.00
6,800.0	90.97	0.23	3,032.9	3,954.4	53.4	3,954.8	0.00	0.00	0.00
6,900.0	90.97	0.23	3,031.2	4,054.4	53.8	4,054.8	0.00	0.00	0.00
7,000.0	90.97	0.23	3,029.5	4,154.4	54.2	4,154.8	0.00	0.00	0.00
7,100.0	90.97	0.23	3,027.8	4,254.4	54.6	4,254.7	0.00	0.00	0.00
7,200.0	90.97	0.23	3,026.1	4,354.4	55.0	4,354.7	0.00	0.00	0.00

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Wellbore:	Wellbore #1		
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Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,300.0	90.97	0.23	3,024.4	4,454.4	55.4	4,454.7	0.00	0.00	0.00
7,400.0	90.97	0.23	3,022.7	4,554.3	55.8	4,554.7	0.00	0.00	0.00
7,500.0	90.97	0.23	3,021.0	4,654.3	56.2	4,654.7	0.00	0.00	0.00
TD @ 7558' MD / 3020' TVD									
7,557.9	90.97	0.23	3,020.0	4,712.2	56.4	4,712.5	0.00	0.00	0.00

Design Targets										
Target Name										
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude		Longitude
- Shape										
PBHL Super Chief #1	89.03	0.23	3,020.0	4,712.2	56.4	632,811.29	539,780.52	32° 44' 22.689 N		104° 20' 18.230 W
- plan hits target center										
- Rectangle (sides W50.0 H0.0 D4,127.8)										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,516.3	2,516.3	0.0	0.0	Build 10° / 100'	
3,166.3	3,035.6	329.6	28.8	Build & Turn 10° / 100'	
3,430.1	3,090.0	585.1	40.0	End of Curve / 90.97° Inc / .23° Azm / 3090' TVD	
7,557.9	3,020.0	4,712.2	56.4	TD @ 7558' MD / 3020' TVD	

NADEL & GUSSMAN PERMIAN

Eddy County, NM (NAD-83)

Super Chief #1H

