



Sheridan Production Company

Lea County, NM (NAD27 NME)

NVANU 19-#8^{#196}

NVANU 19-#6^{#196}

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APR 26 2010

HOBBSOCD

OH

Plan: Plan #2 - 7-7/8" Hole

Standard Planning Report

21 April, 2010



Scientific Drilling
Directional Drilling Operations



Scientific Drilling Planning Report



Database:	EDM 5000 1 Single User Db	Local Co-ordinate Reference:	Site NVANU 19 #6
Company:	Sheridan Production Company	TVD Reference:	GL Elev @ 4048.00ft
Project:	Lea County, NM (NAD27 NME)	MD Reference:	GL Elev @ 4048.00ft
Site:	NVANU 19 #6	North Reference:	Grid
Well:	NVANU 19 #6	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 - 7-7/8" Hole		

Project	Lea County, NM (NAD27 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	NVANU 19 #6		
Site Position:		Northing:	679,334 48 ft
From:	Map	Easting:	747,673 72 ft
Position Uncertainty:	0 00 ft	Slot Radius:	0 "
		Latitude:	32° 51' 53.902 N
		Longitude:	103° 31' 36 190 W
		Grid Convergence:	0 44 °

Well	NVANU 19 #6		
Well Position	+N/-S	0 00 ft	Northing:
	+E/-W	0 00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	Ground Level:
			4,048 00 ft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	2010/04/21	7.74
			Dip Angle
			60 84
			Field Strength
			49,150

Design	Plan #2 - 7-7/8" Hole		
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
			141 39

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	
4,600.00	0.00	0 00	4,600 00	0 00	0 00	0 00	0 00	0 00	0 00	
5,193 89	11.88	141 39	5,189 64	-47 93	38 28	2.00	2 00	0 00	141.39	
6,441 31	11 88	141.39	6,410.36	-248.55	198.51	0 00	0 00	0 00	0 00	
7,035.20	0 00	0 00	7,000 00	-296 47	236 78	2 00	-2 00	0.00	180.00	TG1-NVANU 19 #6
9,035 20	0.00	0 00	9,000 00	-296 47	236 78	0 00	0 00	0.00	0 00	PBHL-NVANU 19 #6



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Wellbore: OH
Design: Plan #2 - 7-7/8" Hole

Local Co-ordinate Reference: Site NVANU 19 #6
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MD Reference: GL Elev @ 4048.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start Build 2.00°/100'									
4,700.00	2.00	141.39	4,699.98	-1.36	1.09	1.75	2.00	2.00	0.00
4,800.00	4.00	141.39	4,799.84	-5.45	4.35	6.98	2.00	2.00	0.00
4,900.00	6.00	141.39	4,899.45	-12.26	9.79	15.69	2.00	2.00	0.00
5,000.00	8.00	141.39	4,998.70	-21.78	17.40	27.88	2.00	2.00	0.00
5,100.00	10.00	141.39	5,097.47	-34.01	27.16	43.52	2.00	2.00	0.00
5,193.89	11.88	141.39	5,189.64	-47.93	38.28	61.34	2.00	2.00	0.00
EOC hold 11.88°									
5,200.00	11.88	141.39	5,195.62	-48.91	39.06	62.60	0.00	0.00	0.00
5,300.00	11.88	141.39	5,293.48	-64.99	51.91	83.18	0.00	0.00	0.00
5,400.00	11.88	141.39	5,391.34	-81.08	64.75	103.76	0.00	0.00	0.00
5,500.00	11.88	141.39	5,489.20	-97.16	77.60	124.34	0.00	0.00	0.00
5,600.00	11.88	141.39	5,587.06	-113.24	90.44	144.93	0.00	0.00	0.00
5,700.00	11.88	141.39	5,684.92	-129.32	103.29	165.51	0.00	0.00	0.00
5,800.00	11.88	141.39	5,782.78	-145.41	116.13	186.09	0.00	0.00	0.00
5,900.00	11.88	141.39	5,880.64	-161.49	128.98	206.67	0.00	0.00	0.00
6,000.00	11.88	141.39	5,978.50	-177.57	141.82	227.26	0.00	0.00	0.00
6,100.00	11.88	141.39	6,076.35	-193.65	154.67	247.84	0.00	0.00	0.00
6,200.00	11.88	141.39	6,174.21	-209.74	167.51	268.42	0.00	0.00	0.00
6,300.00	11.88	141.39	6,272.07	-225.82	180.35	289.00	0.00	0.00	0.00
6,400.00	11.88	141.39	6,369.93	-241.90	193.20	309.58	0.00	0.00	0.00
6,441.31	11.88	141.39	6,410.36	-248.55	198.51	318.09	0.00	0.00	0.00
Start Drop 2.00°/100'									
6,500.00	10.70	141.39	6,467.91	-257.52	205.68	329.58	2.00	-2.00	0.00
6,600.00	8.70	141.39	6,566.47	-270.69	216.19	346.43	2.00	-2.00	0.00
6,700.00	6.70	141.39	6,665.57	-281.17	224.56	359.84	2.00	-2.00	0.00
6,800.00	4.70	141.39	6,765.07	-288.93	230.76	369.78	2.00	-2.00	0.00
6,900.00	2.70	141.39	6,864.85	-293.98	234.79	376.24	2.00	-2.00	0.00
7,000.00	0.70	141.39	6,964.80	-296.31	236.65	379.21	2.00	-2.00	0.00
7,035.20	0.00	0.00	7,000.00	-296.47	236.78	379.43	2.00	-2.00	0.00
EOC hold 0.00° - TG1-NVANU 19 #6									
9,035.20	0.00	0.00	9,000.00	-296.47	236.78	379.43	0.00	0.00	0.00
PBHL-NVANU 19 #6									

Design 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									
TG1-NVANU 19 #6	0.00	0.00	7,000.00	-296.47	236.78	679,038.01	747,910.50	32° 51' 50.950 N	103° 31' 33.440 W
- plan hits target center									
- Point									
PBHL-NVANU 19 #6	0.00	0.00	9,000.00	-296.47	236.78	679,038.01	747,910.50	32° 51' 50.950 N	103° 31' 33.440 W
- plan hits target center									
- Point									



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Company: Sheridan Production Company
Project: Lea County, NM (NAD27 NME)
Site: NVANU 19 #6
Well: NVANU 19 #6
Wellbore: OH
Design: Plan #2 - 7-7/8" Hole

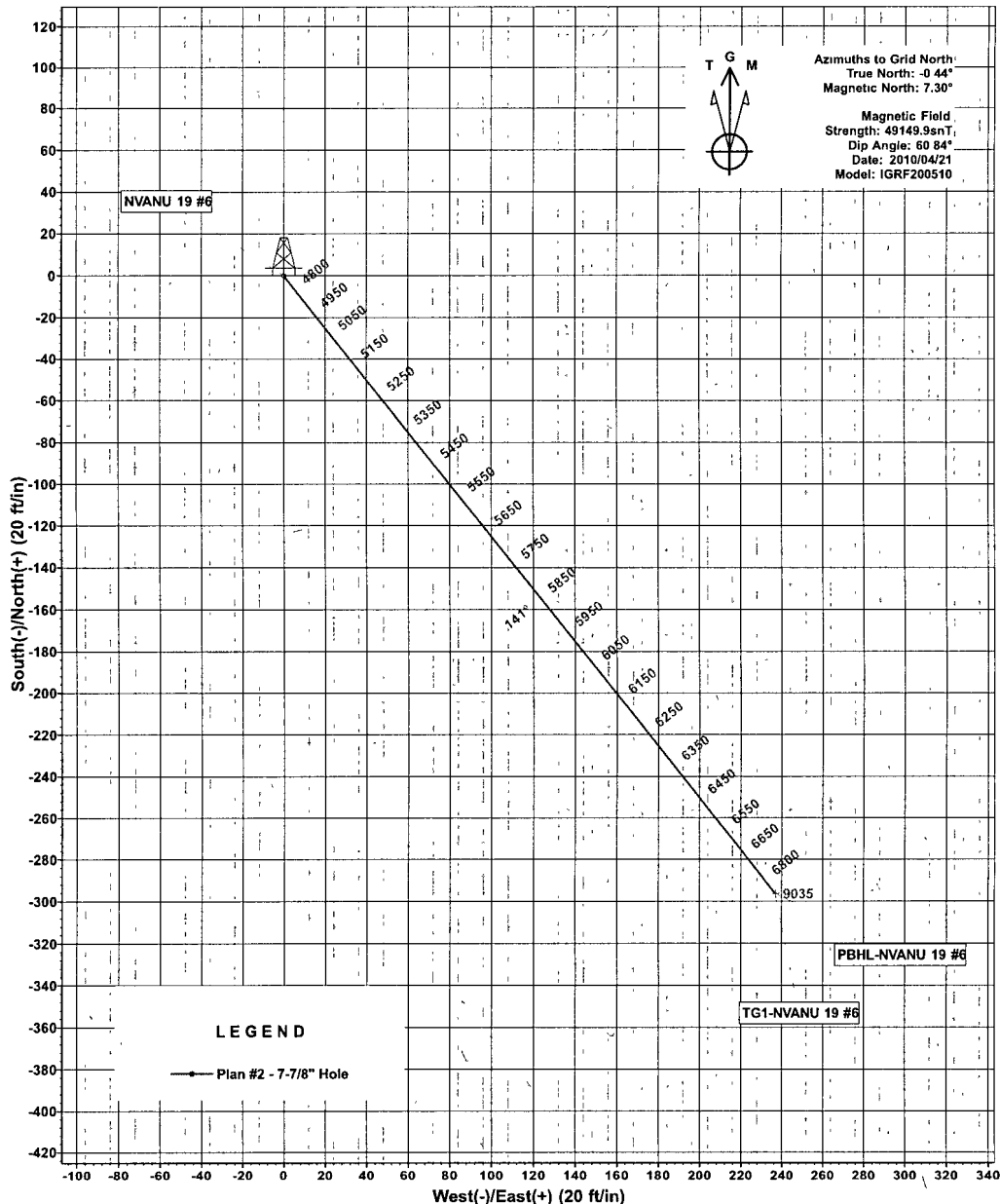
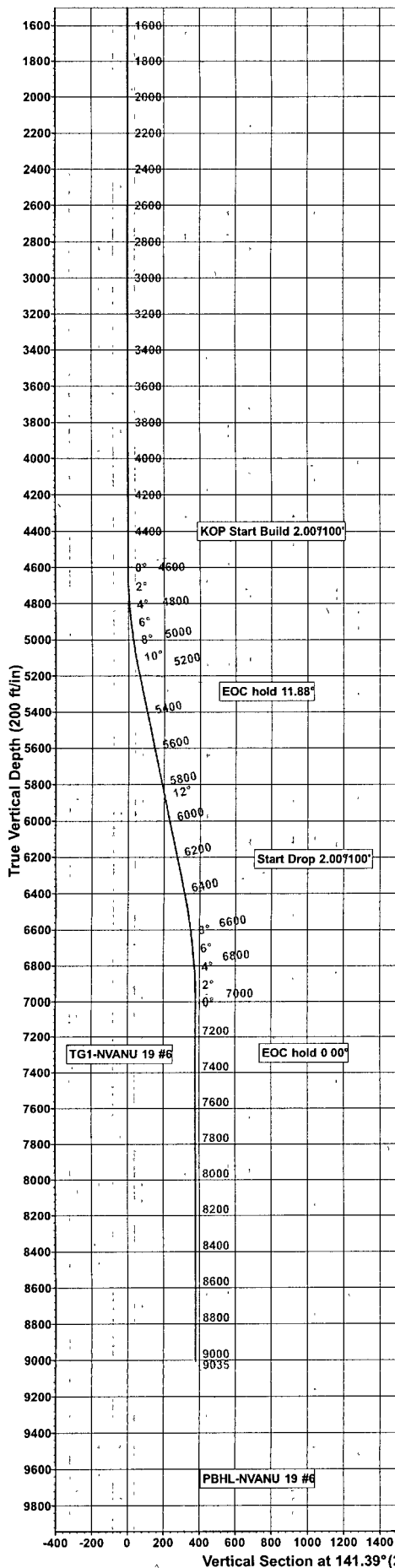
Local Co-ordinate Reference: Site NVANU 19 #6
TVD Reference: GL Elev @ 4048 00ft
MD Reference: GL Elev @ 4048 00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,600 00	4,600.00	0.00	0.00	KOP Start Build 2 00°/100'
5,193 89	5,189 64	-47 93	38 28	EOC hold 11 88°
6,441 31	6,410 36	-248 55	198 51	Start Drop 2 00°/100'
7,035.20	7,000 00	-296 47	236 78	EOC hold 0 00°



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Well: NVANU 19 #6
Wellbore: OH
Design: Plan #2 - 7-7/8" Hole



Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TG1-NVANU 19 #6	7000.00	-296.47	236.78	679038.01	747910.51	32°51' 50.950 N	103°31' 33.440 W	Point
PBHL-NVANU 19 #6	9000.00	-296.47	236.78	679038.01	747910.51	32°51' 50.950 N	103°31' 33.440 W	Point

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	0.00
3	5193.89	11.88	141.39	5189.64	-47.93	38.28	2.00	141.39	61.34
4	6441.31	11.88	141.39	6410.36	-248.55	198.51	0.00	0.00	318.09
5	7035.20	0.00	0.00	7000.00	-296.47	236.78	2.00	180.00	379.43
6	9035.20	0.00	0.00	9000.00	-296.47	236.78	0.00	0.00	379.43

WELL DETAILS: NVANU 19 #6

		Ground Level:		4048.00	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0 00	0 00	679334 49	747673.72	32°51' 53.902 N	103°31' 36 190 W

PROJECT DETAILS: Lea County, NM (NAD27 NME)

Plan: Plan #2 - 7-7/8" Hole (NVANU 19 #6/OH)

Geodetic System: US State Plane 1927 (Exact solution)	Created By: Julio Pina	Date: 21-Apr-10
Datum: NAD 1927 (NADCON CONUS)	Checked: _____	Date: _____
Ellipsoid: Clarke 1866	Reviewed: _____	Date: _____
Zone: New Mexico East 3001	Approved: _____	Date: _____
System Datum: Mean Sea Level		