

Murchison Oil & Gas

Eddy County

Carbon Valley '25' Fed Com

#4H

Original Hole

Plan: Plan #4

Pathfinder X & Y Planning Report

28 August, 2009

PATHFINDER

30.015.37250

Pathfinder Energy Services
Pathfinder X & Y Planning Report



Company:	Murchison Oil & Gas	Local Co-ordinate Reference:	Well #4H
Project:	Eddy County	TVD Reference:	WELL1 @ 3523.00ft (18' KB Correction)
Site:	Carbon Valley '25' Fed Com	MD Reference:	WELL1 @ 3523.00ft (18' KB Correction)
Well:	#4H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	Midland Database

Project:	Eddy County	System Datum:	Mean Sea Level
Map System:	US State Plane 1983		
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Carbon Valley '25' Fed Com		
Site Position:		Northing:	688,624.502 ft
From:	Map	Easting:	574,796.208 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	32° 53' 34.798 N
		Longitude:	104° 13' 27.581 W
		Grid Convergence:	0.06 °

Well	#4H					
Well Position	+N-S	0.00 ft	Northing:	688,624.502 ft	Latitude:	32° 53' 34.798 N
	+E-W	0.00 ft	Easting:	574,796.208 ft	Longitude:	104° 13' 27.581 W
Position Uncertainty	0.00 ft		Wellhead Elevation:	ft	Ground Level:	3,505.00 ft

Wellbore:	Original Hole		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	06/18/2009	8.16	60.76	49,173

Design:	Plan #4		
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Audit Notes:			
Version:		Phase:	PLAN
		Tie On Depth:	5,812.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	275.66

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Site:	Carbon Valley '25' Fed Com	MD Reference:	WELL1 @ 3523.00ft (18' KB Correction)
Well:	#4H	North Reference:	Gnd
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	Midland Database

Survey Tool Program	Date	From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
	08/28/2009	3,523.00	5,812.00	Plan #1 (Pilot Hole)		
		5,812.00	11,034.49	Plan #4 (Original Hole)		

Planned Survey											
MD (ft)	Inc (")	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
0.00	0.00	0.00	0.00	-3,523.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
3,523.00	0.00	0.00	3,523.00	0.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
3,623.00	0.00	0.00	3,623.00	100.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
3,723.00	0.00	0.00	3,723.00	200.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
3,823.00	0.00	0.00	3,823.00	300.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
3,923.00	0.00	0.00	3,923.00	400.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,023.00	0.00	0.00	4,023.00	500.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,123.00	0.00	0.00	4,123.00	600.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,223.00	0.00	0.00	4,223.00	700.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,323.00	0.00	0.00	4,323.00	800.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,423.00	0.00	0.00	4,423.00	900.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,523.00	0.00	0.00	4,523.00	1,000.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,623.00	0.00	0.00	4,623.00	1,100.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,723.00	0.00	0.00	4,723.00	1,200.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,823.00	0.00	0.00	4,823.00	1,300.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
4,923.00	0.00	0.00	4,923.00	1,400.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
5,023.00	0.00	0.00	5,023.00	1,500.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
5,123.00	0.00	0.00	5,123.00	1,600.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
5,223.00	0.00	0.00	5,223.00	1,700.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
5,323.00	0.00	0.00	5,323.00	1,800.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	
5,423.00	0.00	0.00	5,423.00	1,900.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21	

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Well:	#4H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
5,523.00	0.00	0.00	5,523.00	2,000.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21
5,623.00	0.00	0.00	5,623.00	2,100.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21
5,723.00	0.00	0.00	5,723.00	2,200.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21
5,812.00	0.00	0.00	5,812.00	2,289.00	0.00	0.00	0.00	0.00	688,624.50	574,796.21
KOP-5812.00°MD,0.00°INC,0.00°AZI,5812.00°TVD										
5,850.00	4.18	306.25	5,849.97	2,326.97	0.82	-1.12	1.19	11.00	688,625.32	574,795.09
5,900.00	9.68	306.25	5,899.58	2,376.58	4.38	-5.98	6.38	11.00	688,628.89	574,790.23
5,950.00	15.17	306.25	5,948.39	2,425.39	10.74	-14.65	15.64	11.00	688,635.24	574,781.56
6,000.00	20.67	306.25	5,995.95	2,472.95	19.84	-27.05	28.88	11.00	688,644.34	574,769.15
6,050.00	26.17	306.25	6,041.81	2,518.81	31.58	-43.07	45.98	11.00	688,656.08	574,753.13
6,100.00	31.67	306.25	6,085.56	2,562.56	45.87	-62.56	66.78	11.00	688,670.38	574,733.64
6,150.00	37.16	306.25	6,126.79	2,603.79	62.58	-85.34	91.10	11.00	688,687.08	574,710.86
6,200.00	42.66	306.25	6,165.13	2,642.13	81.54	-111.21	118.71	11.00	688,706.04	574,685.00
6,250.00	48.16	306.25	6,200.22	2,677.22	102.59	-139.91	149.35	11.00	688,727.09	574,656.30
6,300.00	53.66	306.25	6,231.74	2,708.74	125.52	-171.19	182.74	11.00	688,750.03	574,625.01
6,350.00	59.15	306.25	6,259.39	2,736.39	150.14	-204.77	218.58	11.00	688,774.64	574,591.44
6,400.00	64.65	306.25	6,282.93	2,759.93	176.21	-240.32	256.53	11.00	688,800.71	574,555.88
6,450.00	70.15	306.25	6,302.14	2,779.14	203.50	-277.54	296.25	11.00	688,828.00	574,518.67
6,500.00	75.65	306.25	6,316.84	2,793.84	231.74	-316.06	337.37	11.00	688,856.25	574,480.15
6,550.00	81.14	306.25	6,326.89	2,803.89	260.69	-355.54	379.52	11.00	688,885.20	574,440.67
6,600.00	86.64	306.25	6,332.21	2,809.21	290.08	-395.62	422.30	11.00	688,914.58	574,400.59
6,639.23	90.95	306.25	6,333.03	2,810.03	313.27	-427.24	456.06	11.00	688,937.77	574,368.96
EOC-6639.23°MD,90.96°INC,306.25°AZI,6333.00°TVD,11.00°DLS, 457.39°VS, 313.28°N, -427.26°E										
6,640.92	91.14	306.25	6,333.00	2,810.00	314.26	-428.60	457.51	11.00	688,938.77	574,367.61
6,650.00	91.14	305.70	6,332.82	2,809.82	319.60	-435.95	465.35	6.00	688,944.10	574,360.26
6,700.00	91.16	302.70	6,331.81	2,808.81	347.70	-477.29	509.26	6.00	688,972.20	574,318.92
6,750.00	91.18	299.70	6,330.79	2,807.79	373.59	-520.04	554.35	6.00	688,998.10	574,276.16

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Design:	Plan #4	Database:	Midland Database

Planned Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
6,800.00	91.19	296.70	6,329.76	2,806.76	397.22	-564.09	600.52	6.00	689,021.72	574,232.12	
6,850.00	91.19	293.70	6,328.72	2,805.72	418.50	-609.32	647.62	6.00	689,043.00	574,186.89	
6,900.00	91.20	290.70	6,327.68	2,804.68	437.39	-655.60	695.54	6.00	689,061.89	574,140.61	
6,950.00	91.20	287.70	6,326.63	2,803.63	453.83	-702.80	744.13	6.00	689,078.33	574,093.41	
7,000.00	91.20	284.70	6,325.58	2,802.58	467.77	-750.80	793.27	6.00	689,092.27	574,045.41	
7,050.00	91.19	281.70	6,324.54	2,801.54	479.19	-799.46	842.82	6.00	689,103.69	573,996.75	
7,100.00	91.19	278.70	6,323.50	2,800.50	488.04	-848.65	892.65	6.00	689,112.54	573,947.55	
7,150.00	91.17	275.70	6,322.47	2,799.47	494.30	-898.24	942.61	6.00	689,118.80	573,897.97	
7,200.00	91.16	272.70	6,321.45	2,798.45	497.96	-948.09	992.58	6.00	689,122.46	573,848.12	
7,243.31	91.14	270.10	6,320.58	2,797.58	499.02	-991.38	1,035.76	6.00	689,123.52	573,804.83	
Start 3794.89 hold at 7243.31 MD											
7,251.29	91.14	269.62	6,320.43	2,797.43	499.00	-999.36	1,043.70	6.00	689,123.50	573,796.85	
7,300.00	91.14	269.62	6,319.46	2,796.46	498.67	-1,048.05	1,092.13	0.00	689,123.18	573,748.15	
7,400.00	91.14	269.62	6,317.47	2,794.47	498.01	-1,148.03	1,191.55	0.00	689,122.51	573,648.18	
7,500.00	91.14	269.62	6,315.48	2,792.48	497.35	-1,248.01	1,290.98	0.00	689,121.85	573,548.20	
7,600.00	91.14	269.62	6,313.49	2,790.49	496.69	-1,347.99	1,390.40	0.00	689,121.19	573,448.22	
7,700.00	91.14	269.62	6,311.50	2,788.50	496.02	-1,447.97	1,489.83	0.00	689,120.52	573,348.24	
7,800.00	91.14	269.62	6,309.51	2,786.51	495.36	-1,547.95	1,589.25	0.00	689,119.86	573,248.26	
7,900.00	91.14	269.62	6,307.52	2,784.52	494.70	-1,647.92	1,688.68	0.00	689,119.20	573,148.28	
8,000.00	91.14	269.62	6,305.53	2,782.53	494.03	-1,747.90	1,788.10	0.00	689,118.53	573,048.31	
8,100.00	91.14	269.62	6,303.54	2,780.54	493.37	-1,847.88	1,887.53	0.00	689,117.87	572,948.33	
8,200.00	91.14	269.62	6,301.55	2,778.55	492.71	-1,947.86	1,986.95	0.00	689,117.21	572,848.35	
8,300.00	91.14	269.62	6,299.56	2,776.56	492.04	-2,047.84	2,086.38	0.00	689,116.55	572,748.37	
8,400.00	91.14	269.62	6,297.57	2,774.57	491.38	-2,147.81	2,185.80	0.00	689,115.88	572,648.39	
8,500.00	91.14	269.62	6,295.58	2,772.58	490.72	-2,247.79	2,285.23	0.00	689,115.22	572,548.42	
8,600.00	91.14	269.62	6,293.59	2,770.59	490.05	-2,347.77	2,384.65	0.00	689,114.56	572,448.44	
8,700.00	91.14	269.62	6,291.60	2,768.60	489.39	-2,447.75	2,484.08	0.00	689,113.89	572,348.46	

Pathfinder Energy Services
Pathfinder X & Y Planning Report



Company: Murchison Oil & Gas	Local Co-ordinate Reference: Well #4H
Project: Eddy County	WELL1 @ 3523.00ft (18' KB Correction)
Site: Carbon Valley '25' Fed Com	WELL1 @ 3523.00ft (18' KB Correction)
Well: #4H	Grid
Wellbore: Original Hole	Minimum Curvature
Design: Plan #4	Midland Database

Planned Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
8,800.00	91.14	269.62	6,289.61	2,766.61	488.73	-2,547.73	2,583.50	0.00	689,113.23	572,248.48
8,900.00	91.14	269.62	6,287.62	2,764.62	488.06	-2,647.70	2,682.93	0.00	689,112.57	572,148.50
9,000.00	91.14	269.62	6,285.63	2,762.63	487.40	-2,747.68	2,782.36	0.00	689,111.90	572,048.53
9,100.00	91.14	269.62	6,283.64	2,760.64	486.74	-2,847.66	2,881.78	0.00	689,111.24	571,948.55
9,200.00	91.14	269.62	6,281.65	2,758.65	486.08	-2,947.64	2,981.21	0.00	689,110.58	571,848.57
9,300.00	91.14	269.62	6,279.67	2,756.67	485.41	-3,047.62	3,080.63	0.00	689,109.91	571,748.59
9,400.00	91.14	269.62	6,277.68	2,754.68	484.75	-3,147.59	3,180.06	0.00	689,109.25	571,648.61
9,500.00	91.14	269.62	6,275.69	2,752.69	484.09	-3,247.57	3,279.48	0.00	689,108.59	571,548.64
9,600.00	91.14	269.62	6,273.70	2,750.70	483.42	-3,347.55	3,378.91	0.00	689,107.93	571,448.66
9,700.00	91.14	269.62	6,271.71	2,748.71	482.76	-3,447.53	3,478.33	0.00	689,107.26	571,348.68
9,800.00	91.14	269.62	6,269.72	2,746.72	482.10	-3,547.51	3,577.76	0.00	689,106.60	571,248.70
9,900.00	91.14	269.62	6,267.73	2,744.73	481.43	-3,647.48	3,677.18	0.00	689,105.94	571,148.72
10,000.00	91.14	269.62	6,265.74	2,742.74	480.77	-3,747.46	3,776.61	0.00	689,105.27	571,048.75
10,100.00	91.14	269.62	6,263.75	2,740.75	480.11	-3,847.44	3,876.03	0.00	689,104.61	570,948.77
10,200.00	91.14	269.62	6,261.76	2,738.76	479.44	-3,947.42	3,975.46	0.00	689,103.95	570,848.79
10,300.00	91.14	269.62	6,259.77	2,736.77	478.78	-4,047.40	4,074.88	0.00	689,103.28	570,748.81
10,400.00	91.14	269.62	6,257.78	2,734.78	478.12	-4,147.37	4,174.31	0.00	689,102.62	570,648.83
10,500.00	91.14	269.62	6,255.79	2,732.79	477.46	-4,247.35	4,273.73	0.00	689,101.96	570,548.86
10,600.00	91.14	269.62	6,253.80	2,730.80	476.79	-4,347.33	4,373.16	0.00	689,101.29	570,448.88
10,700.00	91.14	269.62	6,251.81	2,728.81	476.13	-4,447.31	4,472.58	0.00	689,100.63	570,348.90
10,800.00	91.14	269.62	6,249.82	2,726.82	475.47	-4,547.29	4,572.01	0.00	689,099.97	570,248.92
10,900.00	91.14	269.62	6,247.83	2,724.83	474.80	-4,647.26	4,671.43	0.00	689,099.31	570,148.94
11,000.00	91.14	269.62	6,245.84	2,722.84	474.14	-4,747.24	4,770.86	0.00	689,098.64	570,048.97
11,034.58	91.14	269.62	6,245.16	2,722.16	473.91	-4,781.81	4,805.24	0.00	689,098.41	570,014.40

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Project:	Eddy County	TVD Reference:	WELL1 @ 3523.00ft (18' KB Correction)
Site:	Carbon Valley '25' Fed Com	MD Reference:	WELL1 @ 3523.00ft (18' KB Correction)
Well:	#4H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	Midland Database

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL#3(#4H) - plan hits target - Point	0.00	0.00	6,245.00	474.00	-4,781.80	689,098.502	570,014.408	32° 53' 39.534 N	104° 14' 23.660 W
PP(300'West) - plan hits target - Point	0.00	0.00	6,333.00	313.28	-427.26	688,937.782	574,368.948	32° 53' 37.902 N	104° 13' 32.589 W
PBHL #2 - plan misses by 175.28ft at 11029.29ft MD (6245.26 TVD, 473.95 N, -4776.52 E) - Point	0.00	0.00	6,410.00	533.70	-4,780.20	689,158.205	570,016.009	32° 53' 40.124 N	104° 14' 23.640 W
PBHL - plan misses by 329.77ft at 11030.78ft MD (6245.23 TVD, 473.94 N, -4778.02 E) - Point	0.00	0.00	6,245.00	803.70	-4,780.20	689,428.205	570,016.009	32° 53' 42.796 N	104° 14' 23.637 W
PP(#3H) - plan misses by 125.31ft at 6472.10ft MD (6309.20 TVD, 215.88 N, -294.42 E) - Point	0.00	0.00	6,280.00	319.20	-229.80	688,943.702	574,566.408	32° 53' 37.959 N	104° 13' 30.273 W

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,393.25	6,280.00	Top of Wolfcamp		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
5,812.00	5,812.00	0.00	0.00	KOP-5812.00°MD,0.00°INC,0.00°AZI,5812.00°TVD
6,639.23	6,333.03	313.27	-427.24	EOC-6639.23°MD,90.96°INC,306.25°AZI,6333.00°TVD,11.00°DLS, 457
7,243.31	6,320.58	499.02	-991.38	Start 3794.89 hold at 7243.31 MD
11,038.20				TD at 11038.20

Pathfinder Energy Services
Pathfinder X & Y Planning Report



Company:	Murchison Oil & Gas	Local Co-ordinate Reference:	Well #4H
Project:	Eddy County	TVD Reference:	WELL1 @ 3523.00ft (18' KB Correction)
Site:	Carbon Valley '25' Fed Com	MD Reference:	WELL1 @ 3523.00ft (18' KB Correction)
Well:	#4H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Plan #4	Database:	Midland Database

Targets

Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL#3(#4H)	- plan hits target - Point	0.00	0.00	6,245.00	474.00	-4,781.80	689,098.502	570,014.408	32° 53' 39.534 N	104° 14' 23.660 W
PP(300'West)	- plan hits target - Point	0.00	0.00	6,333.00	313.28	-427.26	688,937.782	574,368.948	32° 53' 37.902 N	104° 13' 32.589 W
PBHL #2	- plan misses by 175.28ft at 11029.29ft MD (6245.26 TVD, 473.95 N, -4776.52 E) - Point	0.00	0.00	6,410.00	533.70	-4,780.20	689,158.205	570,016.009	32° 53' 40.124 N	104° 14' 23.640 W
PBHL	- plan misses by 329.77ft at 11030.78ft MD (6245.23 TVD, 473.94 N, -4778.02 E) - Point	0.00	0.00	6,245.00	803.70	-4,780.20	689,428.205	570,016.009	32° 53' 42.796 N	104° 14' 23.637 W
PP(#3H)	- plan misses by 125.31ft at 6472.10ft MD (6309.20 TVD, 215.88 N, -294.42 E) - Point	0.00	0.00	6,280.00	319.20	-229.80	688,943.702	574,566.408	32° 53' 37.959 N	104° 13' 30.273 W

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,393.25	6,280.00	Top of Wolfcamp		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
5,812.00	5,812.00	0.00	0.00	KOP-5812.00°MD,0.00°INC,0.00°AZI,5812.00°TVD
6,639.23	6,333.03	313.27	-427.24	EOC-6639.23°MD,90.96°INC,306.25°AZI,6333.00°TVD,11.00°DLS, 457
7,243.31	6,320.58	499.02	-991.38	Start 3794.89 hold at 7243.31 MD
11,038.20				TD at 11038.20

Pathfinder Energy Services
Pathfinder X & Y Planning Report



Company: Murchison Oil & Gas	Local Co-ordinate Reference: Well #4H
Project: Eddy County	TVD Reference: WELL1 @ 3523.00ft (18' KB Correction)
Site: Carbon Valley '25' Fed Com	MD Reference: WELL1 @ 3523.00ft (18' KB Correction)
Well: #4H	North Reference: Grid
Wellbore: Original Hole	Survey Calculation Method: Minimum Curvature
Design: Plan #4	Database: Midland Database

Targets

Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL#3(#4H)	- plan hits target	0.00	0.00	6,245.00	474.00	-4,781.80	689,098.502	570,014.408	32° 53' 39.534 N	104° 14' 23.660 W
	- Point									
PP(300'West)	- plan hits target	0.00	0.00	6,333.00	313.28	-427.26	688,937.782	574,368.948	32° 53' 37.902 N	104° 13' 32.589 W
	- Point									
PBHL #2	- plan misses by 175.28ft at 11029.29ft MD (6245.26 TVD, 473.95 N, -4776.52 E)	0.00	0.00	6,410.00	533.70	-4,780.20	689,158.205	570,016.009	32° 53' 40.124 N	104° 14' 23.640 W
	- Point									
PBHL	- plan misses by 329.77ft at 11030.78ft MD (6245.23 TVD, 473.94 N, -4778.02 E)	0.00	0.00	6,245.00	803.70	-4,780.20	689,428.205	570,016.009	32° 53' 42.796 N	104° 14' 23.637 W
	- Point									
PP(#3H)	- plan misses by 125.31ft at 6472.10ft MD (6309.20 TVD, 215.88 N, -294.42 E)	0.00	0.00	6,280.00	319.20	-229.80	688,943.702	574,566.408	32° 53' 37.959 N	104° 13' 30.273 W
	- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,393.25	6,280.00	Top of Wolfcamp		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
5,812.00	5,812.00	0.00	0.00	KOP-5812.00°MD,0.00°INC,0.00°AZI,5812.00°TVD
6,639.23	6,333.03	313.27	-427.24	EOC-6639.23°MD,90.96°INC,306.25°AZI,6333.00°TVD,11.00°DLS, 457
7,243.31	6,320.58	499.02	-991.38	Start 3794.89 hold at 7243.31 MD
11,038.20				TD at 11038.20

Checked By: _____ Approved By: _____ Date: _____