

30 015 35715



COG Operating LLC

Eddy County
Donner 30 Fed
#4
OH

Survey: MWD #1

Pathfinder X & Y Survey Report

08 April, 2010

PATHFINDER



Pathfinder
Pathfinder X & Y Survey Report



Company:	COG Operating LLC	Local Co-ordinate Reference:	Well #4
Project:	Eddy County	TVD Reference:	WELL @ 3570.00ft (Permian #6)
Site:	Donner 30 Fed	MD Reference:	WELL @ 3570.00ft (Permian #6)
Well:	#4	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland Database

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

Site:	Donner 30 Fed		
Site Position:		Northing:	690,634.044 ft
From:	Map	Easting:	578,802.165 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	32° 53' 54.639 N
		Longitude:	104° 12' 40.571 W
		Grid Convergence:	0.07 °

Well	#4					
Well Position	+N-S	0.00 ft	Northing:	690,634.044 ft	Latitude:	32° 53' 54.639 N
	+E-W	0.00 ft	Easting:	578,802.165 ft	Longitude:	104° 12' 40.571 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,545.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	03/26/2010	8.08	60.73	49,072

Design:	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	274.84



Pathfinder
Pathfinder X & Y Survey Report



Company: COG Operating LLC
Project: Eddy County
Site: Donner 30 Fed
Well: #4
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #4
TVD Reference: WELL @ 3570.00ft (Permian #6)
MD Reference: WELL @ 3570.00ft (Permian #6)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey Program	Date	04/08/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	5,721.00	GYRO (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s	
5,819.00	9,745.00	MWD #1 (OH)	MWD	MWD - Standard	

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	Northing (ft)	Easting (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
5,721.00	1.11	54.97	5,720.89	2,150.89	690,649.817	578,803.964	-0.46	0.00	690,649.82	578,803.96
5,819.00	1.06	188.50	5,818.88	2,248.88	690,649.465	578,804.608	-1.13	2.03	690,649.47	578,804.61
5,850.00	1.32	53.76	5,849.88	2,279.88	690,649.393	578,804.853	-1.38	7.09	690,649.39	578,804.85
5,882.00	0.97	55.84	5,881.87	2,311.87	690,649.763	578,805.375	-1.87	1.10	690,649.76	578,805.37
5,909.00	1.32	294.58	5,908.87	2,338.87	690,650.021	578,805.281	-1.76	7.42	690,650.02	578,805.28
5,946.00	3.96	274.28	5,945.82	2,375.82	690,650.293	578,803.619	-0.08	7.46	690,650.29	578,803.62
5,978.00	6.42	271.02	5,977.69	2,407.69	690,650.408	578,800.728	2.81	7.74	690,650.41	578,800.73
6,010.00	8.71	273.64	6,009.41	2,439.41	690,650.593	578,796.521	7.02	7.24	690,650.59	578,796.52
6,042.00	11.87	274.42	6,040.89	2,470.89	690,651.001	578,790.820	12.74	9.88	690,651.00	578,790.82
6,074.00	15.83	276.54	6,071.96	2,501.96	690,651.752	578,783.199	20.39	12.47	690,651.75	578,783.20
6,106.00	20.05	273.48	6,102.39	2,532.39	690,652.582	578,773.383	30.24	13.51	690,652.58	578,773.38
6,138.00	23.74	273.30	6,132.08	2,562.08	690,653.286	578,761.473	42.17	11.53	690,653.29	578,761.47
6,170.00	27.17	273.36	6,160.97	2,590.97	690,654.086	578,747.745	55.92	10.72	690,654.09	578,747.74
6,202.00	30.25	274.25	6,189.03	2,619.03	690,655.111	578,732.409	71.28	9.72	690,655.11	578,732.41
6,233.00	34.21	274.15	6,215.25	2,645.25	690,656.321	578,715.924	87.81	12.78	690,656.32	578,715.92
6,265.00	38.34	272.04	6,241.04	2,671.04	690,657.326	578,697.024	106.73	13.48	690,657.33	578,697.02
6,297.00	42.65	271.77	6,265.37	2,695.37	690,658.015	578,676.260	127.48	13.48	690,658.01	578,676.26
6,329.00	45.90	270.50	6,288.28	2,718.28	690,658.450	578,653.929	149.77	10.53	690,658.45	578,653.93
6,361.00	50.12	269.73	6,309.69	2,739.69	690,658.492	578,630.150	173.46	13.31	690,658.49	578,630.15
6,393.00	52.76	270.19	6,329.63	2,759.63	690,658.477	578,605.130	198.39	8.33	690,658.48	578,605.13
6,424.00	56.01	270.80	6,347.68	2,777.68	690,658.697	578,579.933	223.52	10.61	690,658.70	578,579.93



Pathfinder
Pathfinder X & Y Survey Report



Company: COG Operating LLC
Project: Eddy County
Site: Donner 30 Fed
Well: #4
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well #4
WELL @ 3570.00ft (Permian #6)
WELL @ 3570.00ft (Permian #6)
Grid
Minimum Curvature
Midland Database

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	Northing (ft)	Easting (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
6,455.00	60.32	272.65	6,364.03	2,794.03	690,659.499	578,553.617	249.81	14.80	690,659.50	578,553.62
6,487.00	62.34	273.88	6,379.38	2,809.38	690,661.101	578,525.588	277.87	7.16	690,661.10	578,525.59
6,519.00	64.63	275.37	6,393.67	2,823.67	690,663.414	578,497.050	306.50	8.28	690,663.41	578,497.05
6,551.00	66.48	277.31	6,406.91	2,836.91	690,666.634	578,468.101	335.62	7.99	690,666.63	578,468.10
6,583.00	68.85	278.36	6,419.07	2,849.07	690,670.671	578,438.781	365.18	8.00	690,670.67	578,438.78
6,615.00	72.98	278.98	6,429.53	2,859.53	690,675.230	578,408.892	395.35	13.04	690,675.23	578,408.89
6,647.00	77.38	278.80	6,437.71	2,867.71	690,680.009	578,378.336	426.20	13.76	690,680.01	578,378.34
6,679.00	80.72	278.89	6,443.79	2,873.79	690,684.840	578,347.296	457.53	10.44	690,684.84	578,347.30
6,710.00	83.80	278.45	6,447.97	2,877.97	690,689.469	578,316.933	488.18	10.03	690,689.47	578,316.93
6,742.00	85.91	279.24	6,450.84	2,880.84	690,694.370	578,285.443	519.97	7.04	690,694.37	578,285.44
6,774.00	87.67	279.68	6,452.63	2,882.63	690,699.621	578,253.929	551.81	5.67	690,699.62	578,253.93
6,806.00	88.90	279.94	6,453.59	2,883.59	690,705.071	578,222.412	583.68	3.93	690,705.07	578,222.41
6,838.00	91.10	279.77	6,453.59	2,883.59	690,710.547	578,190.886	615.55	6.90	690,710.55	578,190.89
6,870.00	91.45	279.86	6,452.87	2,882.87	690,716.001	578,159.362	647.43	1.13	690,716.00	578,159.36
6,902.00	91.71	279.77	6,451.99	2,881.99	690,721.454	578,127.843	679.29	0.86	690,721.45	578,127.84
6,937.00	90.75	278.80	6,451.24	2,881.24	690,727.099	578,093.310	714.18	3.90	690,727.10	578,093.31
6,965.00	90.57	278.45	6,450.92	2,880.92	690,731.298	578,065.629	742.12	1.41	690,731.30	578,065.63
6,997.00	90.84	278.98	6,450.52	2,880.52	690,736.146	578,034.001	774.04	1.86	690,736.15	578,034.00
7,029.00	91.28	278.10	6,449.93	2,879.93	690,740.897	578,002.361	805.97	3.07	690,740.90	578,002.36
7,061.00	91.36	277.13	6,449.19	2,879.19	690,745.137	577,970.652	837.92	3.04	690,745.14	577,970.65
7,092.00	91.28	276.43	6,448.48	2,878.48	690,748.796	577,939.877	868.89	2.27	690,748.80	577,939.88
7,124.00	89.34	275.73	6,448.31	2,878.31	690,752.185	577,908.060	900.89	6.45	690,752.18	577,908.06
7,156.00	88.11	275.90	6,449.02	2,879.02	690,755.426	577,876.233	932.87	3.88	690,755.43	577,876.23
7,188.00	88.20	275.73	6,450.05	2,880.05	690,758.666	577,844.414	964.85	0.60	690,758.67	577,844.41
7,220.00	88.99	275.20	6,450.83	2,880.83	690,761.713	577,812.569	996.84	2.97	690,761.71	577,812.57
7,252.00	89.96	274.23	6,451.13	2,881.13	690,764.343	577,780.680	1,028.84	4.29	690,764.34	577,780.68
7,284.00	90.48	273.61	6,451.00	2,881.00	690,766.531	577,748.755	1,060.83	2.53	690,766.53	577,748.76



Pathfinder
Pathfinder X & Y Survey Report



Company: COG Operating LLC
Project: Eddy County
Site: Donner 30 Fed
Well: #4
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #4
TVD Reference: WELL @ 3570.00ft (Permian #6)
MD Reference: WELL @ 3570.00ft (Permian #6)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	Northing (ft)	Easting (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
7,316.00	91.10	273.79	6,450.56	2,880.56	690,768.596	577,716.825	1,092.82	2.02	690,768.60	577,716.83	
7,348.00	91.45	273.44	6,449.85	2,879.85	690,770.613	577,684.897	1,124.81	1.55	690,770.61	577,684.90	
7,380.00	91.54	273.18	6,449.02	2,879.02	690,772.460	577,652.961	1,156.78	0.86	690,772.46	577,652.96	
7,412.00	89.52	273.00	6,448.72	2,878.72	690,774.185	577,621.011	1,188.77	6.34	690,774.18	577,621.01	
7,444.00	88.72	273.00	6,449.21	2,879.21	690,775.859	577,589.058	1,220.75	2.50	690,775.86	577,589.06	
7,476.00	87.14	272.39	6,450.37	2,880.37	690,777.363	577,557.116	1,252.70	5.29	690,777.36	577,557.12	
7,507.00	87.14	272.21	6,451.91	2,881.91	690,778.605	577,526.179	1,283.63	0.58	690,778.61	577,526.18	
7,539.00	88.29	272.21	6,453.19	2,883.19	690,779.838	577,494.229	1,315.57	3.59	690,779.84	577,494.23	
7,571.00	90.66	273.18	6,453.48	2,883.48	690,781.343	577,462.269	1,347.55	8.00	690,781.34	577,462.27	
7,602.00	91.63	273.35	6,452.86	2,882.86	690,783.108	577,431.325	1,378.53	3.18	690,783.11	577,431.33	
7,634.00	92.42	273.53	6,451.73	2,881.73	690,785.027	577,399.403	1,410.50	2.53	690,785.03	577,399.40	
7,666.00	92.95	273.44	6,450.23	2,880.23	690,786.970	577,367.498	1,442.45	1.68	690,786.97	577,367.50	
7,698.00	92.95	273.61	6,448.59	2,878.59	690,788.935	577,335.601	1,474.40	0.53	690,788.93	577,335.60	
7,730.00	91.45	274.49	6,447.36	2,877.36	690,791.193	577,303.705	1,506.38	5.43	690,791.19	577,303.71	
7,762.00	90.31	275.20	6,446.87	2,876.87	690,793.896	577,271.824	1,538.37	4.20	690,793.90	577,271.82	
7,794.00	89.34	275.29	6,446.96	2,876.96	690,796.821	577,239.959	1,570.37	3.04	690,796.82	577,239.96	
7,826.00	89.69	275.11	6,447.24	2,877.24	690,799.721	577,208.092	1,602.37	1.23	690,799.72	577,208.09	
7,858.00	90.57	275.29	6,447.16	2,877.16	690,802.621	577,176.224	1,634.37	2.81	690,802.62	577,176.22	
7,890.00	91.89	274.41	6,446.48	2,876.48	690,805.326	577,144.347	1,666.36	4.96	690,805.33	577,144.35	
7,922.00	92.33	273.09	6,445.30	2,875.30	690,807.417	577,112.438	1,698.33	4.35	690,807.42	577,112.44	
7,954.00	92.68	272.91	6,443.90	2,873.90	690,809.091	577,080.512	1,730.28	1.23	690,809.09	577,080.51	
7,986.00	93.39	272.82	6,442.20	2,872.20	690,810.688	577,048.597	1,762.22	2.24	690,810.69	577,048.60	
8,017.00	94.00	272.03	6,440.21	2,870.21	690,811.997	577,017.690	1,793.13	3.22	690,812.00	577,017.69	
8,050.00	94.18	271.59	6,437.85	2,867.85	690,813.036	576,984.790	1,826.00	1.44	690,813.04	576,984.79	
8,081.00	92.33	271.59	6,436.09	2,866.09	690,813.895	576,953.853	1,856.90	5.97	690,813.90	576,953.85	
8,113.00	91.80	271.68	6,434.94	2,864.94	690,814.808	576,921.887	1,888.82	1.68	690,814.81	576,921.89	
8,145.00	92.68	272.03	6,433.69	2,863.69	690,815.843	576,889.929	1,920.76	2.96	690,815.84	576,889.93	



Pathfinder
Pathfinder X & Y Survey Report



Company: COG Operating LLC
Project: Eddy County
Site: Donner 30 Fed
Well: #4
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #4
TVD Reference: WELL @ 3570.00ft (Permian #6)
MD Reference: WELL @ 3570.00ft (Permian #6)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	Northing (ft)	Easting (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
8,177.00	93.65	272.21	6,431.92	2,861.92	690,817.025	576,858.000	1,952.67	3.08	690,817.02	576,858.00	
8,209.00	94.18	271.95	6,429.74	2,859.74	690,818.183	576,826.096	1,984.56	1.84	690,818.18	576,826.10	
8,241.00	94.26	271.42	6,427.38	2,857.38	690,819.122	576,794.196	2,016.42	1.67	690,819.12	576,794.20	
8,271.00	94.18	271.24	6,425.18	2,855.18	690,819.816	576,764.286	2,046.29	0.66	690,819.82	576,764.29	
8,303.00	93.39	271.51	6,423.06	2,853.06	690,820.582	576,732.365	2,078.16	2.61	690,820.58	576,732.37	
8,335.00	93.12	271.07	6,421.25	2,851.25	690,821.302	576,700.425	2,110.05	1.61	690,821.30	576,700.42	
8,367.00	91.71	271.16	6,419.90	2,849.90	690,821.924	576,668.460	2,141.95	4.42	690,821.92	576,668.46	
8,399.00	90.57	271.59	6,419.26	2,849.26	690,822.691	576,636.476	2,173.88	3.81	690,822.69	576,636.48	
8,431.00	90.04	272.65	6,419.09	2,849.09	690,823.875	576,604.499	2,205.85	3.70	690,823.88	576,604.50	
8,463.00	91.10	273.70	6,418.77	2,848.77	690,825.647	576,572.551	2,237.83	4.66	690,825.65	576,572.55	
8,495.00	89.78	272.21	6,418.53	2,848.53	690,827.297	576,540.596	2,269.81	6.22	690,827.30	576,540.60	
8,527.00	87.67	271.42	6,419.24	2,849.24	690,828.310	576,508.622	2,301.76	7.04	690,828.31	576,508.62	
8,559.00	85.82	271.51	6,421.06	2,851.06	690,829.127	576,476.686	2,333.65	5.79	690,829.13	576,476.69	
8,591.00	85.82	271.24	6,423.39	2,853.39	690,829.893	576,444.780	2,365.50	0.84	690,829.89	576,444.78	
8,623.00	85.47	272.56	6,425.82	2,855.82	690,830.951	576,412.891	2,397.37	4.26	690,830.95	576,412.89	
8,655.00	86.00	274.23	6,428.20	2,858.20	690,832.840	576,381.036	2,429.27	5.46	690,832.84	576,381.04	
8,687.00	88.46	274.58	6,429.74	2,859.74	690,835.295	576,349.171	2,461.23	7.76	690,835.30	576,349.17	
8,719.00	89.43	274.58	6,430.33	2,860.33	690,837.850	576,317.279	2,493.22	3.03	690,837.85	576,317.28	
8,751.00	88.99	274.32	6,430.77	2,860.77	690,840.333	576,285.378	2,525.22	1.60	690,840.33	576,285.38	
8,783.00	88.46	274.76	6,431.49	2,861.49	690,842.865	576,253.487	2,557.21	2.15	690,842.86	576,253.49	
8,815.00	88.64	274.76	6,432.30	2,862.30	690,845.519	576,221.607	2,589.20	0.56	690,845.52	576,221.61	
8,847.00	89.25	274.58	6,432.89	2,862.89	690,848.124	576,189.719	2,621.19	1.99	690,848.12	576,189.72	
8,879.00	89.34	274.85	6,433.28	2,863.28	690,850.755	576,157.830	2,653.19	0.89	690,850.75	576,157.83	
8,911.00	88.64	275.29	6,433.84	2,863.84	690,853.582	576,125.960	2,685.18	2.58	690,853.58	576,125.96	
8,943.00	88.11	274.32	6,434.75	2,864.75	690,856.261	576,094.086	2,717.17	3.45	690,856.26	576,094.09	
8,975.00	86.97	274.14	6,436.12	2,866.12	690,858.620	576,062.203	2,749.14	3.61	690,858.62	576,062.20	
9,007.00	87.23	274.05	6,437.74	2,867.74	690,860.902	576,030.326	2,781.10	0.86	690,860.90	576,030.33	



Pathfinder
Pathfinder X & Y Survey Report



Company: COG Operating LLC
Project: Eddy County
Site: Donner 30 Fed
Well: #4
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #4
TVD Reference: WELL @ 3570.00ft (Permian #6)
MD Reference: WELL @ 3570.00ft (Permian #6)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	Northing (ft)	Easting (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
9,039.00	87.85	273.88	6,439.12	2,869.12	690,863.112	575,998.432	2,813.06	2.01	690,863.11	575,998.43
9,071.00	87.76	273.79	6,440.34	2,870.34	690,865.251	575,966.527	2,845.03	0.40	690,865.25	575,966.53
9,103.00	85.56	274.23	6,442.21	2,872.21	690,867.485	575,934.662	2,876.97	7.01	690,867.48	575,934.66
9,135.00	84.77	274.58	6,444.90	2,874.90	690,869.934	575,902.870	2,908.86	2.70	690,869.93	575,902.87
9,167.00	85.03	274.58	6,447.75	2,877.75	690,872.479	575,871.099	2,940.73	0.81	690,872.48	575,871.10
9,199.00	85.38	275.20	6,450.42	2,880.42	690,875.197	575,839.327	2,972.62	2.22	690,875.20	575,839.33
9,231.00	85.82	275.29	6,452.88	2,882.88	690,878.114	575,807.555	3,004.52	1.40	690,878.11	575,807.55
9,263.00	86.09	274.93	6,455.14	2,885.14	690,880.957	575,775.762	3,036.44	1.40	690,880.96	575,775.76
9,295.00	86.53	275.46	6,457.20	2,887.20	690,883.848	575,743.959	3,068.38	2.15	690,883.85	575,743.96
9,327.00	86.88	276.16	6,459.03	2,889.03	690,887.082	575,712.177	3,100.32	2.44	690,887.08	575,712.18
9,358.00	87.05	275.64	6,460.68	2,890.68	690,890.264	575,681.384	3,131.27	1.76	690,890.26	575,681.38
9,390.00	86.79	274.23	6,462.40	2,892.40	690,893.013	575,649.550	3,163.22	4.47	690,893.01	575,649.55
9,422.00	86.26	273.70	6,464.34	2,894.34	690,895.222	575,617.685	3,195.16	2.34	690,895.22	575,617.69
9,454.00	85.47	273.97	6,466.64	2,896.64	690,897.356	575,585.840	3,227.07	2.61	690,897.36	575,585.84
9,486.00	85.12	273.86	6,469.27	2,899.27	690,899.534	575,554.022	3,258.96	1.15	690,899.53	575,554.02
9,518.00	85.91	273.82	6,471.77	2,901.77	690,901.670	575,522.192	3,290.86	2.47	690,901.67	575,522.19
9,550.00	86.97	273.56	6,473.76	2,903.76	690,903.726	575,490.321	3,322.79	3.41	690,903.73	575,490.32
9,582.00	86.61	273.32	6,475.55	2,905.55	690,905.643	575,458.429	3,354.73	1.35	690,905.64	575,458.43
9,614.00	87.32	273.22	6,477.24	2,907.24	690,907.466	575,426.526	3,386.67	2.24	690,907.47	575,426.53
9,646.00	87.49	273.07	6,478.69	2,908.69	690,909.220	575,394.607	3,418.63	0.71	690,909.22	575,394.61
9,676.00	87.58	272.90	6,479.98	2,909.98	690,910.780	575,364.675	3,448.58	0.64	690,910.78	575,364.68
9,745.00	87.58	272.90	6,482.90	2,912.90	690,914.268	575,295.825	3,517.48	0.00	690,914.27	575,295.83

PBHL(DON4)



Pathfinder
Pathfinder X & Y Survey Report



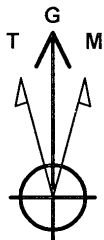
Company: COG Operating LLC
Project: Eddy County
Site: Donner 30 Fed
Well: #4
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #4
TVD Reference: WELL @ 3570.00ft (Permian #6)
MD Reference: WELL @ 3570.00ft (Permian #6)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

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									
PBHL(DON4)	0.00	0.00	6,435.00	298.17	-3,517.74	690,932.213	575,284.422	32° 53' 57.628 N	104° 13' 21.827 W
- survey misses target center by 52.40ft at 9745.00ft MD (6482.90 TVD, 280.22 N, -3506.34 E)									
- Point									

Checked By: _____ Approved By: _____ Date: _____



Azimuths to Grid North
True North: -0.07°
Magnetic North: 8.01°

Magnetic Field
Strength: 49071.9snT
Dip Angle: 60.73°
Date: 03/26/2010
Model: IGRF2010

PATHFINDER

Project: Eddy County
Site: Donner 30 Fed
Well: #4
Wellbore: OH
Plan: Plan #2 (#4/OH)

WELL DETAILS: #4

Ground Elevation:: 3545.00
RKB Elevation: WELL @ 3570.00ft (Permian #6)
Rig Name: Permian #6

Y-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0	0.00	690634.044	578802.165	32° 53' 54.639 N	104° 12' 40.571 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	5721.00	1.11	54.97	5720.89	15.77	1.80	0.00	0.00	-0.46	
2	5930.00	1.11	54.97	5929.85	18.10	5.11	0.00	0.00	-3.57	
3	6754.00	90.38	274.44	6455.00	64.91	-513.66	11.07	-140.52	517.30	
4	9767.20	90.38	274.44	6435.02	298.17	-3517.74	0.00	0.00	3530.36	PBHL(DON4)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL(DON4)	6435.00	298.17	-3517.74	690932.213	575284.422	Point

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

