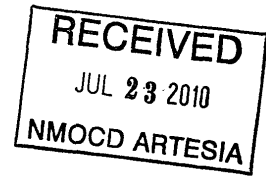


30 015 36287



Marbob

Eddy County
Bawh State Com
#1
OH

Plan: Plan #2

Pathfinder X & Y Planning Report

12 July, 2010

PATHFINDER



Pathfinder
Pathfinder X & Y Planning Report



Company:	Marbob	Local Co-ordinate Reference:	Well #1
Project:	Eddy County	TVD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Site:	Bawh State Com	MD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Well:	#1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	Midland Database

Project	Eddy County		
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		Bawh State Com			
Site Position:		Northing:	426,223.300 ft	Latitude:	32° 10' 18.471 N
From:	Map	Easting:	486,588.300 ft	Longitude:	104° 22' 36.043 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	-0.02 °

Well		#1				
Well Position	+N/-S	0.00 ft	Northing:	426,223.300 ft	Latitude:	32° 10' 18.471 N
	+E/-W	0.00 ft	Easting:	486,588.300 ft	Longitude:	104° 22' 36.043 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,644.00 ft

Wellbore	OH
----------	----

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	07/11/2010	8.05	60.04	48,644

Design	Plan #2
--------	---------

Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	9,289.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	358.36



Pathfinder

Pathfinder X & Y Planning Report



Company:	Marbob	Local Co-ordinate Reference:	Well #1
Project:	Eddy County	TVD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Site:	Bawh State Com	MD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Well:	#1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	Midland Database

Survey Tool Program		Date	07/12/2010	
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
100.00	9,289.00	GYRO (OH)	CB-GYRO-MS	Camera based gyro multishot
9,289.00	12,208.57	Plan #2 (OH)	MWD	MWD - Standard

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	-3,661.00	0.00	0.00	0.00	0.00	426,223.30	486,588.30	
100.00	0.23	123.14	100.00	-3,561.00	-0.11	0.17	-0.11	0.23	426,223.19	486,588.47	
200.00	0.26	78.34	200.00	-3,461.00	-0.17	0.56	-0.19	0.19	426,223.13	486,588.86	
300.00	0.54	77.53	300.00	-3,361.00	-0.03	1.24	-0.06	0.28	426,223.27	486,589.54	
400.00	0.70	71.89	399.99	-3,261.01	0.27	2.28	0.20	0.17	426,223.57	486,590.58	
500.00	0.93	51.31	499.98	-3,161.02	0.96	3.50	0.86	0.37	426,224.26	486,591.80	
600.00	2.08	37.95	599.94	-3,061.06	2.90	5.24	2.75	1.19	426,226.20	486,593.54	
700.00	2.84	36.76	699.85	-2,961.15	6.32	7.84	6.09	0.76	426,229.62	486,596.14	
800.00	2.08	27.06	799.76	-2,861.24	9.92	10.15	9.62	0.86	426,233.22	486,598.45	
900.00	1.71	4.04	899.71	-2,761.29	13.02	11.08	12.70	0.84	426,236.32	486,599.38	
1,000.00	2.49	17.21	999.64	-2,661.36	16.59	11.83	16.24	0.91	426,239.89	486,600.13	
1,100.00	2.75	19.85	1,099.53	-2,561.47	20.92	13.29	20.53	0.29	426,244.22	486,601.59	
1,200.00	1.35	340.04	1,199.47	-2,461.53	24.28	13.70	23.88	1.92	426,247.58	486,602.00	
1,300.00	2.03	342.50	1,299.43	-2,361.57	27.08	12.77	26.70	0.68	426,250.38	486,601.07	
1,400.00	2.11	336.20	1,399.36	-2,261.64	30.45	11.49	30.11	0.24	426,253.75	486,599.79	
1,500.00	2.13	335.22	1,499.29	-2,161.71	33.82	9.97	33.52	0.04	426,257.12	486,598.27	
1,600.00	1.89	328.06	1,599.23	-2,061.77	36.91	8.32	36.66	0.35	426,260.21	486,596.62	
1,700.00	1.33	311.63	1,699.19	-1,961.81	39.08	6.58	38.88	0.72	426,262.38	486,594.88	
1,800.00	1.40	307.72	1,799.16	-1,861.84	40.60	4.74	40.45	0.12	426,263.90	486,593.04	
1,900.00	1.45	317.17	1,899.13	-1,761.87	42.27	2.92	42.17	0.24	426,265.57	486,591.22	
2,000.00	1.11	290.66	1,999.11	-1,661.89	43.54	1.15	43.49	0.67	426,266.84	486,589.45	



Pathfinder
Pathfinder X & Y Planning Report



Company:	Marbob	Local Co-ordinate Reference:	Well #1
Project:	Eddy County	TVD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Site:	Bawh State Com	MD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Well:	#1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	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)
2,100.00	0.70	256.15	2,099.10	-1,561.90	43.74	-0.35	43.73	0.66	426,267.04	486,587.95
2,200.00	0.74	258.29	2,199.09	-1,461.91	43.46	-1.57	43.49	0.05	426,266.76	486,586.73
2,300.00	0.81	266.47	2,299.08	-1,361.92	43.29	-2.91	43.35	0.13	426,266.59	486,585.39
2,400.00	0.87	270.23	2,399.07	-1,261.93	43.25	-4.38	43.35	0.08	426,266.55	486,583.92
2,500.00	0.96	273.46	2,499.06	-1,161.94	43.30	-5.97	43.45	0.10	426,266.60	486,582.33
2,600.00	0.97	274.48	2,599.04	-1,061.96	43.42	-7.65	43.62	0.02	426,266.72	486,580.65
2,700.00	1.00	275.86	2,699.03	-961.97	43.57	-9.36	43.82	0.04	426,266.87	486,578.94
2,800.00	0.96	296.42	2,799.01	-861.99	44.03	-10.98	44.33	0.35	426,267.33	486,577.32
2,900.00	1.07	293.35	2,899.00	-762.00	44.78	-12.59	45.12	0.12	426,268.08	486,575.71
3,000.00	1.00	291.17	2,998.98	-662.02	45.46	-14.26	45.85	0.08	426,268.76	486,574.04
3,100.00	0.98	295.37	3,098.97	-562.03	46.14	-15.85	46.58	0.08	426,269.44	486,572.45
3,200.00	1.01	292.70	3,198.95	-462.05	46.85	-17.43	47.33	0.06	426,270.15	486,570.87
3,300.00	1.13	286.57	3,298.93	-362.07	47.47	-19.19	48.00	0.17	426,270.77	486,569.11
3,400.00	1.28	278.91	3,398.91	-262.09	47.92	-21.24	48.51	0.22	426,271.22	486,567.06
3,500.00	1.15	279.54	3,498.89	-162.11	48.26	-23.33	48.91	0.13	426,271.56	486,564.97
3,600.00	1.05	236.42	3,598.87	-62.13	47.92	-25.09	48.62	0.81	426,271.22	486,563.21
3,700.00	1.12	205.96	3,698.86	37.86	46.54	-26.28	47.27	0.57	426,269.84	486,562.02
3,800.00	1.19	201.11	3,798.84	137.84	44.69	-27.08	45.45	0.12	426,267.99	486,561.22
3,900.00	1.29	201.95	3,898.81	237.81	42.68	-27.87	43.46	0.10	426,265.98	486,560.43
4,000.00	1.38	199.95	3,998.79	337.79	40.50	-28.71	41.31	0.10	426,263.80	486,559.59
4,100.00	0.81	153.78	4,098.77	437.77	38.74	-28.80	39.55	1.01	426,262.04	486,559.50
4,200.00	0.86	139.59	4,198.76	537.76	37.53	-28.01	38.32	0.21	426,260.83	486,560.29
4,300.00	0.87	142.75	4,298.75	637.75	36.35	-27.06	37.11	0.05	426,259.65	486,561.24
4,400.00	0.84	135.81	4,398.74	737.74	35.22	-26.09	35.96	0.11	426,258.52	486,562.21
4,500.00	0.90	134.85	4,498.72	837.72	34.15	-25.02	34.85	0.06	426,257.45	486,563.28
4,600.00	1.04	128.02	4,598.71	937.71	33.03	-23.75	33.70	0.18	426,256.33	486,564.55
4,700.00	1.03	133.69	4,698.69	1,037.69	31.85	-22.38	32.48	0.10	426,255.15	486,565.92



Pathfinder
Pathfinder X & Y Planning Report



Company:	Marbob	Local Co-ordinate Reference:	Well #1
Project:	Eddy County	TVD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Site:	Bawh State Com	MD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Well:	#1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	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)	
4,800.00	1.01	130.32	4,798.68	1,137.68	30.66	-21.06	31.25	0.06	426,253.96	486,567.24	
4,900.00	0.95	130.28	4,898.66	1,237.66	29.56	-19.76	30.11	0.06	426,252.86	486,568.54	
5,000.00	0.97	127.77	4,998.65	1,337.65	28.50	-18.46	29.02	0.05	426,251.80	486,569.84	
5,100.00	0.99	124.90	5,098.63	1,437.63	27.49	-17.08	27.97	0.05	426,250.79	486,571.22	
5,200.00	0.51	136.18	5,198.63	1,537.63	26.67	-16.06	27.12	0.50	426,249.97	486,572.24	
5,300.00	0.44	132.67	5,298.62	1,637.62	26.09	-15.47	26.52	0.08	426,249.39	486,572.83	
5,400.00	0.41	202.44	5,398.62	1,737.62	25.50	-15.33	25.93	0.49	426,248.80	486,572.97	
5,500.00	1.48	261.64	5,498.61	1,837.61	24.98	-16.74	25.45	1.32	426,248.28	486,571.56	
5,600.00	2.80	269.72	5,598.53	1,937.53	24.78	-20.46	25.36	1.35	426,248.08	486,567.84	
5,700.00	2.12	254.59	5,698.44	2,037.44	24.28	-24.69	24.98	0.93	426,247.58	486,563.61	
5,800.00	0.70	293.88	5,798.41	2,137.41	24.03	-27.03	24.80	1.64	426,247.33	486,561.27	
5,900.00	0.86	279.79	5,898.40	2,237.40	24.41	-28.33	25.21	0.25	426,247.71	486,559.97	
6,000.00	0.90	235.15	5,998.39	2,337.39	24.09	-29.71	24.93	0.67	426,247.39	486,558.59	
6,100.00	1.44	217.38	6,098.37	2,437.37	22.64	-31.12	23.52	0.64	426,245.94	486,557.18	
6,200.00	1.54	213.13	6,198.34	2,537.34	20.52	-32.61	21.44	0.15	426,243.82	486,555.69	
6,300.00	1.40	215.36	6,298.30	2,637.30	18.40	-34.06	19.36	0.15	426,241.70	486,554.24	
6,400.00	1.20	193.22	6,398.28	2,737.28	16.38	-35.00	17.38	0.54	426,239.68	486,553.30	
6,500.00	1.25	192.21	6,498.26	2,837.26	14.29	-35.47	15.30	0.05	426,237.59	486,552.83	
6,600.00	1.13	198.77	6,598.23	2,937.23	12.30	-36.02	13.32	0.18	426,235.60	486,552.28	
6,700.00	0.43	203.70	6,698.22	3,037.22	11.02	-36.49	12.06	0.70	426,234.32	486,551.81	
6,800.00	0.39	235.68	6,798.22	3,137.22	10.48	-36.92	11.54	0.23	426,233.78	486,551.38	
6,900.00	0.37	279.42	6,898.22	3,237.22	10.34	-37.52	11.41	0.28	426,233.64	486,550.78	
7,000.00	0.44	266.96	6,998.22	3,337.22	10.38	-38.22	11.47	0.11	426,233.68	486,550.08	
7,100.00	0.47	305.27	7,098.21	3,437.21	10.59	-38.94	11.70	0.30	426,233.89	486,549.36	
7,200.00	0.85	279.40	7,198.21	3,537.21	10.95	-40.01	12.09	0.47	426,234.25	486,548.29	
7,300.00	0.71	289.73	7,298.20	3,637.20	11.28	-41.32	12.46	0.20	426,234.58	486,546.98	
7,400.00	0.80	307.71	7,398.19	3,737.19	11.92	-42.46	13.13	0.25	426,235.22	486,545.84	



Pathfinder
Pathfinder X & Y Planning Report



Company:	Marbob	Local Co-ordinate Reference:	Well #1
Project:	Eddy County	TVD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Site:	Bawh State Com	MD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Well:	#1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	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)	
7,500.00	0.94	311.96	7,498.18	3,837.18	12.89	-43.62	14.14	0.15	426,236.19	486,544.68	
7,600.00	1.61	324.23	7,598.15	3,937.15	14.58	-45.05	15.86	0.72	426,237.88	486,543.25	
7,700.00	1.91	321.55	7,698.11	4,037.11	17.03	-46.91	18.36	0.31	426,240.33	486,541.39	
7,800.00	1.08	251.72	7,798.08	4,137.08	18.04	-48.84	19.43	1.84	426,241.34	486,539.46	
7,900.00	1.20	230.27	7,898.06	4,237.06	17.07	-50.54	18.51	0.44	426,240.37	486,537.76	
8,000.00	1.30	233.32	7,998.04	4,337.04	15.72	-52.26	17.21	0.12	426,239.02	486,536.04	
8,100.00	1.41	239.79	8,098.01	4,437.01	14.43	-54.23	15.97	0.19	426,237.73	486,534.07	
8,200.00	1.77	221.30	8,197.97	4,536.97	12.65	-56.31	14.25	0.62	426,235.95	486,531.99	
8,300.00	1.63	219.94	8,297.93	4,636.93	10.40	-58.24	12.06	0.15	426,233.70	486,530.06	
8,400.00	0.82	227.46	8,397.90	4,736.90	8.82	-59.68	10.53	0.82	426,232.12	486,528.62	
8,500.00	0.88	231.84	8,497.89	4,836.89	7.86	-60.81	9.60	0.09	426,231.16	486,527.49	
8,600.00	1.06	221.90	8,597.88	4,936.88	6.70	-62.04	8.48	0.25	426,230.00	486,526.26	
8,700.00	1.37	225.55	8,697.85	5,036.85	5.18	-63.51	6.99	0.32	426,228.48	486,524.79	
8,800.00	1.42	225.38	8,797.82	5,136.82	3.47	-65.24	5.34	0.05	426,226.77	486,523.06	
8,900.00	1.18	229.90	8,897.80	5,236.80	1.93	-66.91	3.85	0.26	426,225.23	486,521.39	
9,000.00	1.07	226.89	8,997.78	5,336.78	0.63	-68.38	2.59	0.12	426,223.93	486,519.92	
9,100.00	1.02	222.59	9,097.76	5,436.76	-0.66	-69.67	1.34	0.09	426,222.64	486,518.63	
9,200.00	1.04	213.68	9,197.75	5,536.75	-2.07	-70.77	-0.04	0.16	426,221.23	486,517.53	
9,289.00	0.76	218.72	9,286.74	5,625.74	-3.21	-71.59	-1.15	0.32	426,220.09	486,516.71	
9,300.00	0.87	326.61	9,297.73	5,636.73	-3.19	-71.68	-1.14	12.00	426,220.11	486,516.62	
9,325.00	3.76	352.70	9,322.71	5,661.71	-2.22	-71.89	-0.16	12.00	426,221.08	486,516.41	
9,350.00	6.74	355.96	9,347.60	5,686.60	0.05	-72.10	2.12	12.00	426,223.35	486,516.20	
9,375.00	9.74	357.22	9,372.34	5,711.34	3.63	-72.30	5.70	12.00	426,226.93	486,516.00	
9,400.00	12.74	357.89	9,396.86	5,735.86	8.50	-72.51	10.57	12.00	426,231.80	486,515.79	
9,425.00	15.74	358.30	9,421.09	5,760.09	14.64	-72.71	16.72	12.00	426,237.94	486,515.59	
9,450.00	18.74	358.59	9,444.97	5,783.97	22.05	-72.91	24.13	12.00	426,245.35	486,515.39	
9,475.00	21.74	358.80	9,468.42	5,807.42	30.69	-73.10	32.77	12.00	426,253.99	486,515.20	



Pathfinder

Pathfinder X & Y Planning Report



Company:	Marbob	Local Co-ordinate Reference:	Well #1
Project:	Eddy County	TVD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Site:	Bawh State Com	MD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Well:	#1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	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)
9,500.00	24.74	358.96	9,491.39	5,830.39	40.55	-73.30	42.63	12.00	426,263.85	486,515.00
9,525.00	27.74	359.09	9,513.81	5,852.81	51.60	-73.48	53.68	12.00	426,274.90	486,514.82
9,550.00	30.74	359.20	9,535.62	5,874.62	63.81	-73.66	65.89	12.00	426,287.11	486,514.64
9,575.00	33.74	359.28	9,556.77	5,895.77	77.14	-73.84	79.22	12.00	426,300.44	486,514.46
9,600.00	36.74	359.36	9,577.18	5,916.18	91.56	-74.01	93.64	12.00	426,314.86	486,514.29
9,625.00	39.74	359.43	9,596.82	5,935.82	107.03	-74.17	109.11	12.00	426,330.33	486,514.13
9,650.00	42.74	359.48	9,615.61	5,954.61	123.51	-74.33	125.59	12.00	426,346.81	486,513.97
9,675.00	45.74	359.53	9,633.52	5,972.52	140.95	-74.48	143.03	12.00	426,364.25	486,513.82
9,700.00	48.74	359.58	9,650.49	5,989.49	159.30	-74.62	161.37	12.00	426,382.60	486,513.68
9,725.00	51.74	359.62	9,666.48	6,005.48	178.52	-74.76	180.59	12.00	426,401.82	486,513.54
9,750.00	54.74	359.66	9,681.44	6,020.44	198.55	-74.88	200.61	12.00	426,421.85	486,513.42
9,775.00	57.74	359.70	9,695.33	6,034.33	219.33	-75.00	221.39	12.00	426,442.63	486,513.30
9,800.00	60.74	359.73	9,708.11	6,047.11	240.81	-75.10	242.86	12.00	426,464.11	486,513.20
9,825.00	63.74	359.76	9,719.75	6,058.75	262.93	-75.20	264.98	12.00	426,486.23	486,513.10
9,850.00	66.75	359.79	9,730.22	6,069.22	285.63	-75.29	287.67	12.00	426,508.93	486,513.01
9,875.00	69.75	359.82	9,739.49	6,078.49	308.85	-75.36	310.88	12.00	426,532.15	486,512.94
9,900.00	72.75	359.85	9,747.52	6,086.52	332.52	-75.43	334.54	12.00	426,555.82	486,512.87
9,925.00	75.75	359.88	9,754.31	6,093.31	356.57	-75.49	358.59	12.00	426,579.87	486,512.81
9,950.00	78.75	359.90	9,759.83	6,098.83	380.96	-75.53	382.96	12.00	426,604.26	486,512.77
9,975.00	81.75	359.93	9,764.06	6,103.06	405.59	-75.57	407.59	12.00	426,628.89	486,512.73
10,000.00	84.75	359.96	9,767.00	6,106.00	430.42	-75.59	432.40	12.00	426,653.72	486,512.71
10,025.00	87.75	359.98	9,768.63	6,107.63	455.36	-75.61	457.34	12.00	426,678.66	486,512.69
10,043.73	90.00	360.00	9,769.00	6,108.00	474.09	-75.61	476.06	12.00	426,697.39	486,512.69
10,100.00	90.00	360.00	9,769.00	6,108.00	530.35	-75.61	532.30	0.00	426,753.65	486,512.69
10,200.00	90.00	360.00	9,769.00	6,108.00	630.35	-75.61	632.26	0.00	426,853.65	486,512.69
10,300.00	90.00	360.00	9,769.00	6,108.00	730.35	-75.61	732.22	0.00	426,953.65	486,512.69
10,400.00	90.00	360.00	9,769.00	6,108.00	830.35	-75.61	832.18	0.00	427,053.65	486,512.69



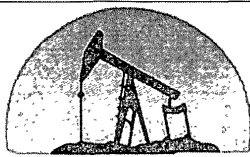
Pathfinder
Pathfinder X & Y Planning Report



Company:	Marbob	Local Co-ordinate Reference:	Well #1
Project:	Eddy County	TVD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Site:	Bawh State Com	MD Reference:	Patriot #2 @ 3661.00ft (17' KB Correction)
Well:	#1	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #2	Database:	Midland Database

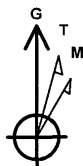
Planned Survey											
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)	
10,500.00	90.00	360.00	9,769.00	6,108.00	930.35	-75.61	932.14	0.00	427,153.65	486,512.69	
10,600.00	90.00	360.00	9,769.00	6,108.00	1,030.35	-75.61	1,032.10	0.00	427,253.65	486,512.69	
10,700.00	90.00	360.00	9,769.00	6,108.00	1,130.35	-75.61	1,132.06	0.00	427,353.65	486,512.69	
10,800.00	90.00	360.00	9,769.00	6,108.00	1,230.35	-75.61	1,232.01	0.00	427,453.65	486,512.69	
10,900.00	90.00	360.00	9,769.00	6,108.00	1,330.35	-75.61	1,331.97	0.00	427,553.65	486,512.69	
11,000.00	90.00	360.00	9,769.00	6,108.00	1,430.35	-75.61	1,431.93	0.00	427,653.65	486,512.69	
11,100.00	90.00	360.00	9,769.00	6,108.00	1,530.35	-75.61	1,531.89	0.00	427,753.65	486,512.69	
11,200.00	90.00	360.00	9,769.00	6,108.00	1,630.35	-75.61	1,631.85	0.00	427,853.65	486,512.69	
11,300.00	90.00	360.00	9,769.00	6,108.00	1,730.35	-75.61	1,731.81	0.00	427,953.65	486,512.69	
11,400.00	90.00	360.00	9,769.00	6,108.00	1,830.35	-75.61	1,831.77	0.00	428,053.65	486,512.69	
11,500.00	90.00	360.00	9,769.00	6,108.00	1,930.35	-75.61	1,931.73	0.00	428,153.65	486,512.69	
11,600.00	90.00	360.00	9,769.00	6,108.00	2,030.35	-75.61	2,031.69	0.00	428,253.65	486,512.69	
11,700.00	90.00	360.00	9,769.00	6,108.00	2,130.35	-75.61	2,131.65	0.00	428,353.65	486,512.69	
11,800.00	90.00	360.00	9,769.00	6,108.00	2,230.35	-75.61	2,231.60	0.00	428,453.65	486,512.69	
11,900.00	90.00	360.00	9,769.00	6,108.00	2,330.35	-75.61	2,331.56	0.00	428,553.65	486,512.69	
12,000.00	90.00	360.00	9,769.00	6,108.00	2,430.35	-75.61	2,431.52	0.00	428,653.65	486,512.69	
12,100.00	90.00	360.00	9,769.00	6,108.00	2,530.35	-75.61	2,531.48	0.00	428,753.65	486,512.69	
12,208.57	90.00	360.00	9,769.00	6,108.00	2,638.93	-75.61	2,640.01	0.00	428,862.23	486,512.69	

Checked By: _____ Approved By: _____ Date: _____



marbob
energy corporation
Artesia, N.M.

Project: Eddy County
Site: Bawh State Com
Well: #1
Wellbore: OH
Plan: Plan #2 (#1/OH)



Azimuths to Grid North
- True North: 0.02°
Magnetic North: 8.07°

Magnetic Field
Strength: 48644.2snT
Dip Angle: 60.04°
Date: 07/11/2010
Model: IGRF200510

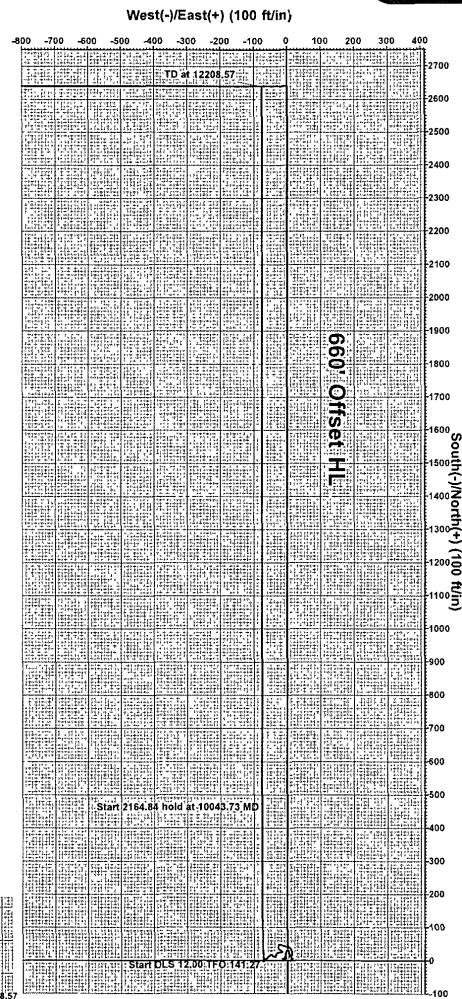
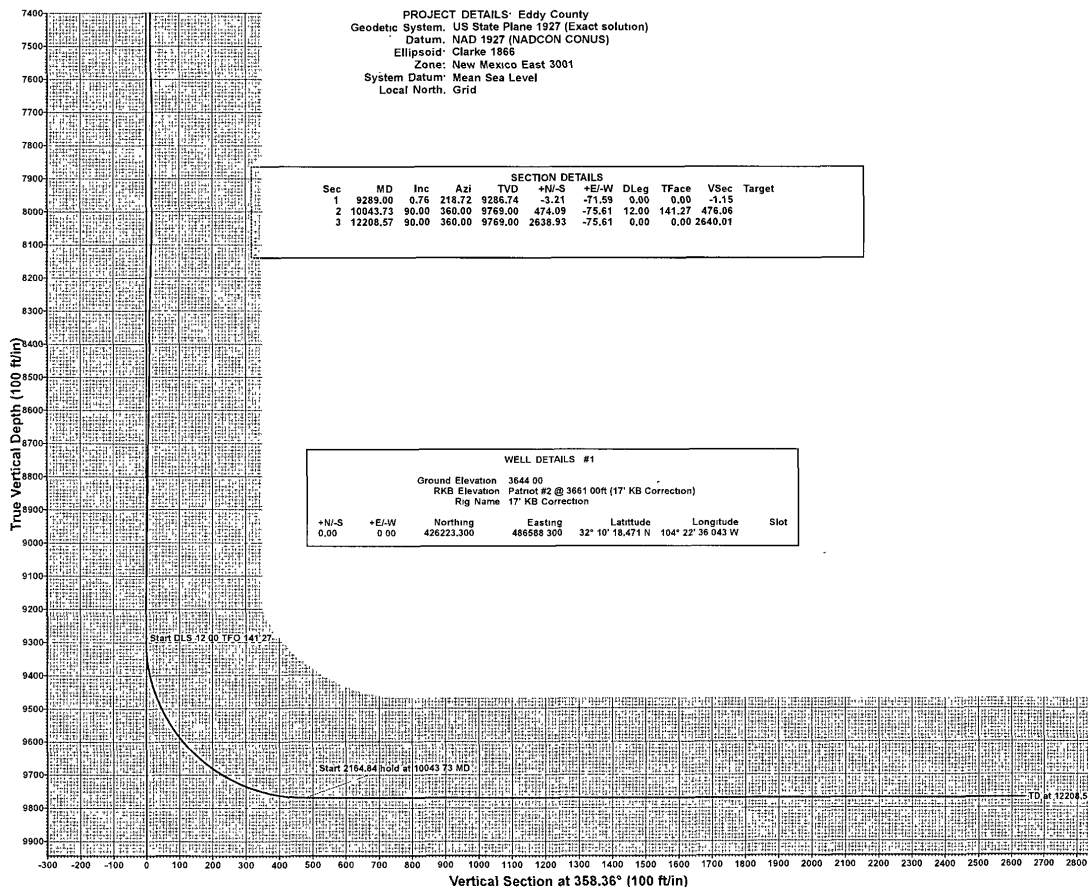
PATHFINDER

PROJECT DETAILS: Eddy County
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

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	9289.00	0.76	218.72	9286.74	-3.21	-71.59	0.00	0.00	-1.15	
2	10043.73	90.00	360.00	8769.00	474.09	-75.61	12.00	141.27	476.06	
3	12208.57	90.00	360.00	9769.00	2638.93	-75.61	0.00	0.00	2640.01	

WELL DETAILS #1

Ground Elevation		3644.00			
RKB Elevation		Patnot #2 @ 3661.00ft (17" KB Correction)			
Rig Name		17" KB Correction			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	426223.300	486689.300	32° 10' 18.471 N	104° 22' 36.943 W
				Slot	



Plan Plan #2 (#1/OH)
Created By: Nate Bingham Date: 14.03. July 12 2010