

Pathfinder Energy

Planning Report

Company: Marbob Energy Field: High Net Federal #1 Site: High Net Federal #1 Well: High Net Federal #1 Wellpath: OH	Date: 3/20/2007 Time: 12:39:55 Page: 2 Co-ordinate(NE) Reference: High Net Federal #1, Grid North Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N,0.00E,180 18Azi) Plan: Plan #1 3-20-07
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Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	
2800.00	0.00	0.00	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2900.00	0.00	0.00	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	
3000.00	0.00	0.00	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	
3200.00	0.00	0.00	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	
3300.00	0.00	0.00	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	
3400.00	0.00	0.00	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3600.00	0.00	0.00	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	
3900.00	0.00	0.00	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	
4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4100.00	0.00	0.00	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	
4200.00	0.00	0.00	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	
4300.00	0.00	0.00	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	
4400.00	0.00	0.00	4400.00	0.00	0.00	0.00	0.00	0.00	0.00	
4500.00	0.00	0.00	4500.00	0.00	0.00	0.00	0.00	0.00	0.00	
4522.54	0.00	0.00	4522.54	0.00	0.00	0.00	0.00	0.00	0.00	KOP @ 4522' MD/TVD
4600.00	9.30	180.18	4599.66	-6.27	-0.02	6.27	12.00	12.00	0.00	
4700.00	21.30	180.18	4695.94	-32.60	-0.10	32.60	12.00	12.00	0.00	
4800.00	33.30	180.18	4784.65	-78.37	-0.24	78.37	12.00	12.00	0.00	
4900.00	45.30	180.18	4861.89	-141.59	-0.44	141.59	12.00	12.00	0.00	
5000.00	57.30	180.18	4924.31	-219.48	-0.69	219.49	12.00	12.00	0.00	
5100.00	69.30	180.18	4969.17	-308.65	-0.96	308.66	12.00	12.00	0.00	
5200.00	81.30	180.18	4994.51	-405.20	-1.27	405.20	12.00	12.00	0.00	
5272.54	90.00	180.18	5000.00	-477.46	-1.49	477.47	12.00	12.00	0.00	EOC @ 5272' MD, 5000' TVD
5300.00	90.00	180.18	5000.00	-504.92	-1.58	504.92	0.00	0.00	0.00	
5400.00	90.00	180.18	5000.00	-604.92	-1.89	604.92	0.00	0.00	0.00	
5500.00	90.00	180.18	5000.00	-704.92	-2.20	704.92	0.00	0.00	0.00	
5600.00	90.00	180.18	5000.00	-804.92	-2.52	804.92	0.00	0.00	0.00	
5700.00	90.00	180.18	5000.00	-904.92	-2.83	904.92	0.00	0.00	0.00	
5800.00	90.00	180.18	5000.00	-1004.92	-3.14	1004.92	0.00	0.00	0.00	
5900.00	90.00	180.18	5000.00	-1104.92	-3.45	1104.92	0.00	0.00	0.00	
6000.00	90.00	180.18	5000.00	-1204.92	-3.77	1204.92	0.00	0.00	0.00	
6100.00	90.00	180.18	5000.00	-1304.92	-4.08	1304.92	0.00	0.00	0.00	
6200.00	90.00	180.18	5000.00	-1404.92	-4.39	1404.92	0.00	0.00	0.00	
6300.00	90.00	180.18	5000.00	-1504.92	-4.70	1504.92	0.00	0.00	0.00	
6400.00	90.00	180.18	5000.00	-1604.92	-5.02	1604.92	0.00	0.00	0.00	
6500.00	90.00	180.18	5000.00	-1704.92	-5.33	1704.92	0.00	0.00	0.00	
6600.00	90.00	180.18	5000.00	-1804.92	-5.64	1804.92	0.00	0.00	0.00	
6700.00	90.00	180.18	5000.00	-1904.92	-5.95	1904.92	0.00	0.00	0.00	

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Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6800.00	90.00	180.18	5000.00	-2004.92	-6.27	2004.92	0.00	0.00	0.00	
6900.00	90.00	180.18	5000.00	-2104.91	-6.58	2104.92	0.00	0.00	0.00	
7000.00	90.00	180.18	5000.00	-2204.91	-6.89	2204.92	0.00	0.00	0.00	
7100.00	90.00	180.18	5000.00	-2304.91	-7.20	2304.92	0.00	0.00	0.00	
7194.49	90.00	180.18	5000.00	-2399.40	-7.50	2399.41	0.00	0.00	0.00	PBHL

Targets

Name	Description	Dir.	TVD ft	+N-S ft	+E-W ft	Map Northing ft	Map Easting ft	<---- Latitude ---->			<---- Longitude ---->				
								Deg	Min	Sec	Deg	Min	Sec		
PBHL			5000.00	-2399.40	-7.50	421863.30	585872.90	32	9	34.253	N	104	3	21.018	W

Annotation

MD ft	TVD ft	
4522.54	4522.54	KOP @ 4522' MD/TVD
5272.54	5000.00	EOC @ 5272' MD, 5000' TVD

MARBOB

Field: High Net Federal #1
 Site: High Net Federal #1
 Well: High Net Federal #1
 Wellpath: OH
 Plan: Plan #1 3-20-07

PATHFINDER

SITE DETAILS

High Net Federal #1

Site Centre Northing 424262.70
 Easting 585880.40

Ground Level 2960.00
 Positional Uncertainty 0.00
 Convergence 0.15

ANNOTATIONS

No	TVD	MD	Annotation
1	4522.54	4522.54	KOP @ 4522' MD/TVD
2	5000.00	5272.54	EOC @ 5272' MD, 5000' TVD

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
PBHL	5000.00	-2399.40	-7.50	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4522.54	0.00	0.00	4522.54	0.00	0.00	0.00	0.00	0.00	
3	5272.54	90.00	180.18	5000.00	-477.46	-1.49	12.00	180.18	477.47	
4	7194.49	90.00	180.18	5000.00	-2399.40	-7.50	0.00	0.00	2399.41	PBHL

WELLPATH DETAILS

OH			
Rig	SITE 0 00ft		
Ref Datum			
V Section Angle	Origin +N/-S	Origin +E/-W	Starting From TVD
180 18°	0 00	0 00	5000 00

