

Pathfinder Energy Planning Report

Company: Marbob Energy Field: Y Energy State Com #1H Site: Y Energy State Com Well: Y Energy State Com #1H Wellpath: Original Hole				Date: 01/10/2008 Co-ordinate(NE) Reference: Y Energy State Com, Grid North Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N,0.00E,182.77Azi) Plan: Plan #1 1/10/08				Time: 11:06:07 Page: 1	
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Field: Y Energy State Com #1H Eddy County, NM			
Map System: US State Plane Coordinate System 1927 Geo Datum: NAD27 (Clarke 1866) Sys Datum: Mean Sea Level		Map Zone: New Mexico, Eastern Zone Coordinate System: Site Centre Geomagnetic Model: igrf2005	

Site: Y Energy State Com Eddy County, NM Section 32 T-18S, R30E			
Site Position: From: Map Position Uncertainty: 0 00 ft Ground Level: 3400.00 ft		Northing: 619531.80 ft Easting: 602849.00 ft Latitude: 32 42 9.882 N Longitude: 103 59 56.336 W North Reference: Grid Grid Convergence: 0.18 deg	

Well: Y Energy State Com #1H				Slot Name:			
Well Position: +N/-S 0 00 ft +E/-W 0 00 ft Position Uncertainty: 0 00 ft		Northing: 619531.80 ft Easting: 602849.00 ft		Latitude: 32 42 9.882 N Longitude: 103 59 56.336 W			

Wellpath: Original Hole				Drilled From: Surface			
Current Datum: SITE Magnetic Data: 01/10/2008 Field Strength: 49249 nT Vertical Section: Depth From (TVD) ft		Height 0 00 ft +N/-S ft		Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 8.22 deg Mag Dip Angle: 60.65 deg +E/-W ft		Direction deg	
7200.00		0.00		0.00		182.77	

Plan: Plan #1 1/10/08 Principal: No				Date Composed: 01/10/2008 Version: 1 Tied-to: From Surface			
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Plan Section Information										
MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6722.50	0.00	0.00	6722.50	0.00	0.00	0.00	0.00	0.00	0.00	
7472.56	90.00	182.77	7200.00	-476.94	-23.08	12.00	12.00	0.00	182.77	
8901.88	90.00	182.76	7200.00	-1904.60	-92.00	0.00	0.00	0.00	-89.99	Y Energy State Com #1H PB

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1600.00	0.00	0.00	1600.00	0.00	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
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	
4600.00	0.00	0.00	4600.00	0.00	0.00	0.00	0.00	0.00	0.00	
4700.00	0.00	0.00	4700.00	0.00	0.00	0.00	0.00	0.00	0.00	
4800.00	0.00	0.00	4800.00	0.00	0.00	0.00	0.00	0.00	0.00	
4900.00	0.00	0.00	4900.00	0.00	0.00	0.00	0.00	0.00	0.00	
5000.00	0.00	0.00	5000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5100.00	0.00	0.00	5100.00	0.00	0.00	0.00	0.00	0.00	0.00	
5200.00	0.00	0.00	5200.00	0.00	0.00	0.00	0.00	0.00	0.00	
5300.00	0.00	0.00	5300.00	0.00	0.00	0.00	0.00	0.00	0.00	
5400.00	0.00	0.00	5400.00	0.00	0.00	0.00	0.00	0.00	0.00	
5500.00	0.00	0.00	5500.00	0.00	0.00	0.00	0.00	0.00	0.00	
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	0.00	0.00	
5700.00	0.00	0.00	5700.00	0.00	0.00	0.00	0.00	0.00	0.00	
5800.00	0.00	0.00	5800.00	0.00	0.00	0.00	0.00	0.00	0.00	
5900.00	0.00	0.00	5900.00	0.00	0.00	0.00	0.00	0.00	0.00	
6000.00	0.00	0.00	6000.00	0.00	0.00	0.00	0.00	0.00	0.00	
6100.00	0.00	0.00	6100.00	0.00	0.00	0.00	0.00	0.00	0.00	
6200.00	0.00	0.00	6200.00	0.00	0.00	0.00	0.00	0.00	0.00	
6300.00	0.00	0.00	6300.00	0.00	0.00	0.00	0.00	0.00	0.00	
6400.00	0.00	0.00	6400.00	0.00	0.00	0.00	0.00	0.00	0.00	
6500.00	0.00	0.00	6500.00	0.00	0.00	0.00	0.00	0.00	0.00	
6600.00	0.00	0.00	6600.00	0.00	0.00	0.00	0.00	0.00	0.00	
6700.00	0.00	0.00	6700.00	0.00	0.00	0.00	0.00	0.00	0.00	
6722.50	0.00	0.00	6722.50	0.00	0.00	0.00	0.00	0.00	0.00	
6800.00	9.30	182.77	6799.66	-6.27	-0.30	6.28	12.00	12.00	0.00	KOP @ 6722 5' MD/TVD w/12

Pathfinder Energy

Planning Report

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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
6900.00	21.30	182.77	6895.94	-32.57	-1.58	32.61	12.00	12.00	0.00	
7000.00	33.30	182.77	6984.64	-78.30	-3.79	78.39	12.00	12.00	0.00	
7100.00	45.30	182.77	7061.89	-141.44	-6.84	141.61	12.00	12.00	0.00	
7200.00	57.30	182.77	7124.30	-219.25	-10.61	219.51	12.00	12.00	0.00	
7300.00	69.29	182.77	7169.16	-308.32	-14.92	308.68	12.00	12.00	0.00	
7400.00	81.29	182.77	7194.50	-404.75	-19.58	405.22	12.00	12.00	0.00	
7472.56	90.00	182.77	7200.00	-476.94	-23.08	477.50	12.00	12.00	0.00	EOC @ 7473' MD / 7200' TVD
7500.00	90.00	182.77	7200.00	-504.35	-24.40	504.94	0.00	0.00	0.00	
7600.00	90.00	182.77	7200.00	-604.24	-29.23	604.94	0.00	0.00	0.00	
7700.00	90.00	182.77	7200.00	-704.12	-34.06	704.94	0.00	0.00	0.00	
7800.00	90.00	182.77	7200.00	-804.00	-38.89	804.94	0.00	0.00	0.00	
7900.00	90.00	182.77	7200.00	-903.89	-43.72	904.94	0.00	0.00	0.00	
8000.00	90.00	182.77	7200.00	-1003.77	-48.55	1004.94	0.00	0.00	0.00	
8100.00	90.00	182.76	7200.00	-1103.66	-53.37	1104.94	0.00	0.00	0.00	
8200.00	90.00	182.76	7200.00	-1203.54	-58.19	1204.94	0.00	0.00	0.00	
8300.00	90.00	182.76	7200.00	-1303.42	-63.01	1304.94	0.00	0.00	0.00	
8400.00	90.00	182.76	7200.00	-1403.31	-67.83	1404.94	0.00	0.00	0.00	
8500.00	90.00	182.76	7200.00	-1503.19	-72.65	1504.94	0.00	0.00	0.00	
8600.00	90.00	182.76	7200.00	-1603.07	-77.47	1604.94	0.00	0.00	0.00	
8700.00	90.00	182.76	7200.00	-1702.96	-82.28	1704.94	0.00	0.00	0.00	
8800.00	90.00	182.76	7200.00	-1802.84	-87.10	1804.94	0.00	0.00	0.00	
8900.00	90.00	182.76	7200.00	-1902.73	-91.91	1904.94	0.00	0.00	0.00	
8901.88	90.00	182.76	7200.00	-1904.60	-92.00	1906.82	0.05	0.00	-0.05	Y Energy State Com #1H PB

Targets

Name	Description	TVD	+N/-S	+E/-W	Map	Map	<---- Latitude ---->			<---- Longitude ---->						
	Dip. Dir.	ft	ft	ft	Northing	Easting	Deg.	Min	Sec	Deg.	Min	Sec				
Y Energy State Com #1H PBHL		7200.00	-1904.60	-92.00	617627.20	602757.00	32	41	51	038	N	103	59	57	483	W

Annotation

MD ft	TVD ft	
6722.50	6722.50	KOP @ 6722.5' MD/TVD w/12° DLS
7472.56	7200.00	EOC @ 7473' MD / 7200' TVD

Marbob Energy

Field: Y Energy State Com #1H

Site: Y Energy State Com

Well: Y Energy State Com #1H

Wellpath: Original Hole

Plan: Plan #1 1/10/08

COMPANY DETAILS

Marbob Energy
2208 W Main St
Artesia, New Mexico

Calculation Method	Minimum Curvature
Error System	Systematic Ellipse
Scan Method	Closest Approach 3D
Error Surface	Elliptical Conic
Warning Method	Error Ratio

PATHFINDER

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	6722 50	0 00	0 00	6722 50	0 00	0 00	0 00	0 00	0 00	
3	7472 56	90 00	182 77	7200 00	-476 94	-23 08	12 00	182 77	477 50	
4	8901 88	90 00	182 76	7200 00	-1904 60	-92 00	0 00	-89 99	1906 82	Y Energy State Com #1H PBHL



Azimuths to Grid North
True North -0 18°
Magnetic North 8 04°

Magnetic Field
Strength 49249nT
Dip Angle 60 65°
Date 01/10/2008
Model igrf2005

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Y Energy State Com: #III	0 00	0 00	619531 80	602849 00	32°42'09 882N	103°59'56 336W	N/A

WELLPATH DETAILS

Original Hole

Rig Ref Datum	N/A SITE	0 00ft	
V Section Angle	Origin +N/-S	Origin +E/-W	Starting From TVD
182.77°	0 00	0 00	7200 00

ANNOTATIONS

No	TVD	MD	Annotation
1	6722 50	6722 50	KOP @ 6722 5' MD/TVD w/12° DLS
2	7200 00	7472 56	EOC @ 7473' MD / 7200' TVD

