

Pathfinder Energy

Planning Report

30-015-35333

Company: Marbob Energy Field: Amigo Fee Site: Amigo Fee #1 Well: Amigo Fee #1 Wellpath: Original		Date: 1/3/2007 Co-ordinate(NE) Reference: Site: Amigo Fee #1, Grid North Vertical (TVD) Reference: SITE 0.0 Section (VS) Reference: Well (0.00N,0.00E,223.54Azi) Plan: Plan #1 1/3/07		Time: 10:49:03 Page: 1
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Field: Amigo Fee 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	
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Site: Amigo Fee #1 Eddy County, NM		Site Position: From: Map Position Uncertainty: 0.00 ft Ground Level: 3112.00 ft	Northing: 513392.50 ft Easting: 547742.90 ft	Latitude: 32 24 40.806 N Longitude: 104 10 43.056 W North Reference: Grid Grid Convergence: 0.08 deg
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Well: Amigo Fee #1		Slot Name:	
Well Position: +N/-S 0.00 ft Position Uncertainty: 0.00 ft	Northing: 513392.50 ft Easting: 547742.90 ft	Latitude: 32 24 40.806 N Longitude: 104 10 43.056 W	

Wellpath: Original		Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 8.39 deg Mag Dip Angle: 60.37 deg	
Current Datum: SITE Magnetic Data: 1/3/2007 Field Strength: 49149 nT Vertical Section: Depth From (TVD) ft	Height: 0.00 ft +N/-S: ft +E/-W: ft	+N/-S: ft +E/-W: ft Direction: deg	0.00 0.00 0.00 223.54

Plan: Plan #1 1/3/07 Principal: No	Date Composed: 1/3/2007 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	223.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	223.54	600.00	0.00	0.00	0.00	0.00	0.00	223.54	
1075.15	14.25	223.54	1070.27	-42.63	-40.50	3.00	3.00	0.00	223.54	
3478.90	14.25	223.54	3400.00	-471.70	-448.20	0.00	0.00	0.00	0.00	Amigo Fee #1 Target @ 3.4
5609.82	3.60	223.54	5502.08	-711.08	-675.65	0.50	-0.50	0.00	180.00	
5627.78	3.60	223.54	5520.00	-711.89	-676.43	0.00	0.00	0.00	0.00	

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	223.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	223.54	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	223.54	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	223.54	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	223.54	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	223.54	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	223.54	600.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP @ 600' MD/TVD Build
700.00	3.00	223.54	699.95	-1.90	-1.80	2.62	3.00	3.00	0.00	
800.00	6.00	223.54	799.63	-7.58	-7.21	10.46	3.00	3.00	0.00	
900.00	9.00	223.54	898.77	-17.05	-16.20	23.51	3.00	3.00	0.00	
1000.00	12.00	223.54	997.08	-30.26	-28.75	41.74	3.00	3.00	0.00	
1075.15	14.25	223.54	1070.27	-42.63	-40.50	58.80	3.00	3.00	0.00	End of Build @ 14.25° INC
1100.00	14.25	223.54	1094.35	-47.06	-44.72	64.92	0.00	0.00	0.00	
1200.00	14.25	223.54	1191.27	-64.91	-61.68	89.54	0.00	0.00	0.00	
1300.00	14.25	223.54	1288.19	-82.76	-78.64	114.17	0.00	0.00	0.00	

Pathfinder Energy Planning Report

Company: Marbob Energy
Field: Amigo Fee
Site: Amigo Fee #1
Well: Amigo Fee #1
Wellpath: Original

Date: 1/3/2007 Time: 10:49:03
Co-ordinate(NE) Reference: Site: Amigo Foe #1, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,223.54Azi)
Plan: Plan #1 1/3/07

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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
1400.00	14.25	223.54	1385.11	-100.61	-95.60	138.79	0.00	0.00	0.00	
1500.00	14.25	223.54	1482.03	-118.46	-112.56	163.41	0.00	0.00	0.00	
1600.00	14.25	223.54	1578.95	-136.31	-129.52	188.04	0.00	0.00	0.00	
1700.00	14.25	223.54	1675.88	-154.16	-146.48	212.66	0.00	0.00	0.00	
1800.00	14.25	223.54	1772.80	-172.01	-163.44	237.28	0.00	0.00	0.00	
1900.00	14.25	223.54	1869.72	-189.86	-180.41	261.91	0.00	0.00	0.00	
2000.00	14.25	223.54	1966.64	-207.71	-197.37	286.53	0.00	0.00	0.00	
2100.00	14.25	223.54	2063.56	-225.56	-214.33	311.15	0.00	0.00	0.00	
2200.00	14.25	223.54	2160.48	-243.41	-231.29	335.78	0.00	0.00	0.00	
2300.00	14.25	223.54	2257.40	-261.27	-248.25	360.40	0.00	0.00	0.00	
2400.00	14.25	223.54	2354.32	-279.12	-265.21	385.02	0.00	0.00	0.00	
2500.00	14.25	223.54	2451.24	-296.97	-282.17	409.64	0.00	0.00	0.00	
2600.00	14.25	223.54	2548.16	-314.82	-299.13	434.27	0.00	0.00	0.00	
2700.00	14.25	223.54	2645.09	-332.67	-316.09	458.89	0.00	0.00	0.00	
2800.00	14.25	223.54	2742.01	-350.52	-333.05	483.51	0.00	0.00	0.00	
2900.00	14.25	223.54	2838.93	-368.37	-350.01	508.14	0.00	0.00	0.00	
3000.00	14.25	223.54	2935.85	-386.22	-366.98	532.76	0.00	0.00	0.00	
3100.00	14.25	223.54	3032.77	-404.07	-383.94	557.38	0.00	0.00	0.00	
3200.00	14.25	223.54	3129.69	-421.92	-400.90	582.01	0.00	0.00	0.00	
3300.00	14.25	223.54	3226.61	-439.77	-417.86	606.63	0.00	0.00	0.00	
3400.00	14.25	223.54	3323.53	-457.62	-434.82	631.25	0.00	0.00	0.00	
3478.90	14.25	223.54	3400.00	-471.70	-448.20	650.68	0.00	0.00	0.00	Amigo Fee #1 Target @ 3.4
3500.00	14.15	223.54	3420.46	-475.45	-451.77	655.86	0.50	-0.50	0.00	
3600.00	13.65	223.54	3517.53	-492.87	-468.31	679.88	0.50	-0.50	0.00	
3700.00	13.15	223.54	3614.81	-509.67	-484.27	703.05	0.50	-0.50	0.00	
3800.00	12.65	223.54	3712.29	-525.85	-499.65	725.38	0.50	-0.50	0.00	
3900.00	12.15	223.54	3809.95	-541.42	-514.44	746.85	0.50	-0.50	0.00	
4000.00	11.65	223.54	3907.80	-556.36	-528.64	767.47	0.50	-0.50	0.00	
4100.00	11.15	223.54	4005.83	-570.69	-542.26	787.23	0.50	-0.50	0.00	
4200.00	10.65	223.54	4104.03	-584.40	-555.28	806.14	0.50	-0.50	0.00	
4300.00	10.15	223.54	4202.38	-597.48	-567.72	824.19	0.50	-0.50	0.00	
4400.00	9.65	223.54	4300.89	-609.95	-579.56	841.38	0.50	-0.50	0.00	
4500.00	9.15	223.54	4399.55	-621.78	-590.81	857.71	0.50	-0.50	0.00	
4600.00	8.65	223.54	4498.35	-633.00	-601.46	873.18	0.50	-0.50	0.00	
4700.00	8.15	223.54	4597.27	-643.59	-611.52	887.79	0.50	-0.50	0.00	
4800.00	7.65	223.54	4696.33	-653.55	-620.99	901.53	0.50	-0.50	0.00	
4900.00	7.15	223.54	4795.49	-662.89	-629.86	914.41	0.50	-0.50	0.00	
5000.00	6.65	223.54	4894.77	-671.59	-638.13	926.42	0.50	-0.50	0.00	
5100.00	6.15	223.54	4994.14	-679.67	-645.81	937.57	0.50	-0.50	0.00	
5200.00	5.65	223.54	5093.61	-687.12	-652.89	947.84	0.50	-0.50	0.00	
5300.00	5.15	223.54	5193.17	-693.94	-659.37	957.25	0.50	-0.50	0.00	
5400.00	4.65	223.54	5292.81	-700.14	-665.26	965.79	0.50	-0.50	0.00	
5500.00	4.15	223.54	5392.51	-705.70	-670.54	973.46	0.50	-0.50	0.00	
5600.00	3.65	223.54	5492.28	-710.63	-675.22	980.26	0.50	-0.50	0.00	
5627.78	3.60	223.54	5520.00	-711.89	-676.43	982.01	0.18	-0.18	0.00	TD @ 5628' MD / 5520' TVD

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec	← Longitude → Deg Min Sec
Amigo Fee #1 Target @ 3,400' -Plan hit target			3400.00	-471.70	-448.20	512920.80	547294.70	32 24 36.144 N	104 10 48.293 W

Pathfinder Energy

Planning Report

Company: Marbob Energy
Field: Amigo Fee
Site: Amigo Fee #1
Well: Amigo Fee #1
Wellpath: Original

Date: 1/3/2007 **Time:** 10:49:03 **Page:** 3
Co-ordinate(NE) Reference: Site: Amigo Fee #1, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,223.54Azi)
Plan: Plan #1 1/3/07

Annotation

MD ft	TVD ft	
600.00	600.00	KOP @ 600' MD/TVD Build to 14.25° Inc
1075.15	1070.26	End of Build @ 14.25° INC.
3478.90	3400.00	Begin Natural Drop to TD
5627.77	5519.99	TD @ 5628' MD / 5520' TVD

Marbob Energy

Field: Amigo Fee
Site: Amigo Fee #1
Well: Amigo Fee #1
Wellpath: Original
Plan: Plan #1 1/3/07

PATHFINDER

SECTION DETAILS

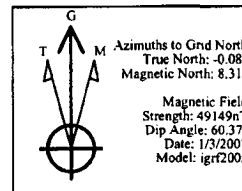
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	223.54	0.00	0.00	0.00	0.00	0.00	0.00	
2	600.00	0.00	223.54	600.00	0.00	0.00	0.00	223.54	0.00	
3	1075.15	14.25	223.54	1070.27	-42.63	-40.50	3.00	223.54	58.80	
4	3478.90	14.25	223.54	3400.00	-471.70	-448.20	0.00	0.00	650.68	Amigo Fee #1 Target @ 3,400'
5	5609.82	3.60	223.54	5502.08	-711.08	-675.65	0.50	180.00	980.88	
6	5627.78	3.60	223.54	5520.00	-711.89	-676.43	0.00	0.00	982.01	

SITE DETAILS

Amigo Fee #1
Eddy County, NM
Site Centre Northing: 513392.50
Easting: 547742.90
Ground Level: 3112.00
Positional Uncertainty: 0.00
Convergence: 0.08

FIELD DETAILS

Amigo Fee
Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Eastern Zone
Magnetic Model: igr2005
System Datum: Mean Sea Level
Local North: Grid North



ANNOTATIONS

No.	TVD	MD	Annotation
1	600.00	600.00	KOP @ 600' MD/TVD Build to 14.25° Inc
2	1070.26	1075.15	End of Build @ 14.25° INC.
3	3400.00	3478.90	Begin Natural Drop to TD
4	5519.99	5627.77	TD @ 5628' MD / 5520' TVD

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Amigo Fee #1	0.00	0.00	513392.50	547742.90	32°24'40.806N	104°10'41.056W	N/A

