

Pathfinder Energy Services

Survey Report

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Job No: 101005477
Date: 5/13/2006
Time: 9:40 pm
Wellpath ID: 105477
Date Created: 4/24/2006
Last Revision: 5/13/2006

Calculated using the Minimum Curvature Method
Computed using PDS VER2.2.6
Vertical Section Plane: 33.31 deg.

Survey Reference: WELLHEAD
Vertical Section Reference: WELLHEAD
Closure Reference: WELLHEAD
TVD Reference: WELLHEAD

Marbob Energy
Whiskey Girl Fee #1
Patterson #507
Eddy Co. N.M.
1005447

KB:16
MDC:8.47°

PATHFINDER OFFICE SUPERVISOR:
SHAWN COOK
PATHFINDER DIRECTIONAL DRILLERS:
GENO AGUILAR
BRAD LONG

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	T O T A L Rectangular Offsets (ft) (ft)		Closure Dist. (ft)	Dir. (deg.)	DLS (dg/100ft)
TIED INTO SCIENTIFIC GYRO										
6715.00	1.33	2.37	6713.55	0.00	85.63	56.43 N	70.06 E	89.96@	51.15	0.00
6723.00	1.32	356.47	6721.55	8.00	85.79	56.61 N	70.06 E	90.07@	51.06	1.71
6754.00	1.23	350.58	6752.54	31.00	86.32	57.30 N	69.98 E	90.45@	50.69	0.51
6786.00	2.11	15.01	6784.53	32.00	87.13	58.21 N	70.08 E	91.10@	50.29	3.48
6818.00	3.08	21.43	6816.49	32.00	88.53	59.58 N	70.54 E	92.34@	49.82	3.16
6850.00	3.61	26.79	6848.44	32.00	90.37	61.28 N	71.31 E	94.02@	49.33	1.92
6882.00	3.87	27.41	6880.37	32.00	92.45	63.13 N	72.26 E	95.96@	48.86	0.82
6913.00	4.13	29.16	6911.29	31.00	94.60	65.04 N	73.29 E	97.99@	48.41	0.93
6945.00	4.31	25.30	6943.21	32.00	96.94	67.13 N	74.37 E	100.18@	47.93	1.05
6977.00	4.92	22.13	6975.10	32.00	99.48	69.49 N	75.40 E	102.53@	47.33	2.07
7009.00	5.19	20.64	7006.98	32.00	102.24	72.11 N	76.42 E	105.08@	46.66	0.94
7041.00	5.89	20.90	7038.83	32.00	105.25	75.00 N	77.52 E	107.86@	45.94	2.19
7072.00	6.16	20.73	7069.66	31.00	108.43	78.04 N	78.68 E	110.82@	45.23	0.87
7136.00	5.72	20.90	7133.31	64.00	114.89	84.24 N	81.03 E	116.88@	43.89	0.69
7200.00	5.54	22.22	7197.01	64.00	121.04	90.08 N	83.33 E	122.71@	42.77	0.35
7263.00	6.19	19.41	7259.68	63.00	127.32	96.09 N	85.61 E	128.70@	41.70	1.13
7327.00	6.51	18.18	7323.28	64.00	134.17	102.80 N	87.89 E	135.25@	40.53	0.54
7391.00	6.51	19.41	7386.87	64.00	141.20	109.66 N	90.23 E	142.01@	39.45	0.22
7454.00	6.42	19.85	7449.47	63.00	148.09	116.35 N	92.61 E	148.71@	38.52	0.16
7518.00	5.98	20.90	7513.09	64.00	154.83	122.83 N	95.02 E	155.29@	37.73	0.71
7582.00	6.33	20.99	7576.73	64.00	161.53	129.23 N	97.47 E	161.87@	37.02	0.55
7645.00	6.33	21.52	7639.34	63.00	168.32	135.71 N	99.99 E	168.56@	36.38	0.09
7709.00	6.16	22.48	7702.96	64.00	175.15	142.16 N	102.59 E	175.32@	35.82	0.31
7773.00	5.89	23.36	7766.61	64.00	181.76	148.35 N	105.21 E	181.87@	35.34	0.45
7837.00	6.16	29.96	7830.25	64.00	188.42	154.34 N	108.23 E	188.50@	35.04	1.16
7900.00	6.16	34.70	7892.89	63.00	195.17	160.05 N	111.84 E	195.25@	34.95	0.81
7964.00	5.89	36.81	7956.54	64.00	201.88	165.50 N	115.76 E	201.97@	34.97	0.55

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8027.00	5.89	33.30	8019.21	63.00	208.34	170.79 N	119.47 E	208.43@	34.97	0.57
8091.00	5.80	30.75	8082.87	64.00	214.86	176.31 N	122.93 E	214.94@	34.89	0.43
8155.00	5.45	32.94	8146.56	64.00	221.13	181.64 N	126.24 E	221.20@	34.80	0.64
8219.00	5.63	32.42	8210.27	64.00	227.30	186.84 N	129.57 E	227.37@	34.74	0.29
8282.00	6.24	28.55	8272.93	63.00	233.81	192.46 N	132.86 E	233.87@	34.62	1.16
8346.00	6.33	26.09	8336.54	64.00	240.77	198.68 N	136.08 E	240.82@	34.41	0.44
8409.00	5.98	27.05	8399.18	63.00	247.48	204.73 N	139.10 E	247.51@	34.19	0.58
8472.00	5.80	28.37	8461.85	63.00	253.91	210.45 N	142.10 E	253.93@	34.03	0.36
8536.00	5.80	28.64	8525.52	64.00	260.36	216.13 N	145.19 E	260.37@	33.89	0.04
8599.00	5.63	28.72	8588.21	63.00	266.61	221.64 N	148.20 E	266.62@	33.77	0.27
8645.00	5.54	29.16	8633.99	46.00	271.07	225.55 N	150.37 E	271.08@	33.69	0.22
8689.00	5.28	27.76	8677.79	44.00	275.21	229.20 N	152.34 E	275.21@	33.61	0.66
8780.00	4.84	31.36	8768.44	91.00	283.21	236.18 N	156.29 E	283.21@	33.49	0.60
8812.00	4.66	29.25	8800.33	32.00	285.86	238.47 N	157.63 E	285.86@	33.46	0.78
8844.00	4.48	29.25	8832.22	32.00	288.40	240.70 N	158.88 E	288.40@	33.43	0.56
8876.00	4.22	28.20	8864.13	32.00	290.82	242.82 N	160.04 E	290.82@	33.39	0.85
8939.00	3.34	27.93	8927.00	63.00	294.96	246.49 N	162.00 E	294.96@	33.31	1.40
9002.00	2.46	26.18	8989.91	63.00	298.13	249.32 N	163.45 E	298.13@	33.25	1.40
9066.00	1.85	25.74	9053.87	64.00	300.51	251.49 N	164.51 E	300.51@	33.19	0.95
9130.00	1.23	39.01	9117.84	64.00	302.22	252.95 N	165.39 E	302.22@	33.18	1.11
9193.00	1.06	19.32	9180.83	63.00	303.46	254.03 N	166.01 E	303.46@	33.16	0.68
9256.00	0.97	345.75	9243.82	63.00	304.38	255.09 N	166.07 E	304.38@	33.06	0.94
9320.00	1.41	333.79	9307.81	64.00	305.15	256.32 N	165.59 E	305.16@	32.86	0.79
9352.00	1.58	320.96	9339.80	32.00	305.48	257.02 N	165.14 E	305.50@	32.72	1.17
9415.00	0.88	318.24	9402.78	63.00	305.87	258.05 N	164.27 E	305.90@	32.48	1.11
9479.00	0.88	292.84	9466.78	64.00	305.91	258.61 N	163.49 E	305.95@	32.30	0.60
9543.00	1.93	349.26	9530.76	64.00	306.59	259.86 N	162.83 E	306.66@	32.07	2.53
9606.00	3.78	11.41	9593.68	63.00	309.28	262.94 N	163.05 E	309.35@	31.80	3.37
9670.00	4.40	63.44	9657.54	64.00	313.36	266.11 N	165.66 E	313.46@	31.90	5.67
9733.00	2.72	77.42	9720.41	63.00	316.53	267.51 N	169.28 E	316.57@	32.33	2.98
9795.00	2.29	85.50	9782.35	62.00	318.34	267.93 N	171.95 E	318.36@	32.69	0.90
9859.00	2.29	88.58	9846.30	64.00	319.86	268.06 N	174.50 E	319.86@	33.06	0.19
9923.00	2.02	94.03	9910.26	64.00	321.14	268.02 N	176.91 E	321.14@	33.43	0.53
9986.00	1.67	100.27	9973.23	63.00	322.04	267.77 N	178.92 E	322.05@	33.75	0.64
10050.00	1.58	106.24	10037.20	64.00	322.66	267.36 N	180.68 E	322.65@	34.05	0.30
10114.00	1.14	112.57	10101.18	64.00	323.04	266.87 N	182.12 E	323.05@	34.31	0.73
10178.00	1.06	118.11	10165.17	64.00	323.21	266.35 N	183.23 E	323.28@	34.53	0.21
10241.00	1.41	121.36	10228.16	63.00	323.29	265.67 N	184.40 E	323.40@	34.77	0.57
10304.00	1.41	141.14	10291.14	63.00	323.08	264.66 N	185.55 E	323.23@	35.03	0.77
10367.00	0.97	102.29	10354.12	63.00	323.03	263.94 N	186.56 E	323.22@	35.25	1.42
10430.00	0.70	118.72	10417.12	63.00	323.26	263.65 N	187.42 E	323.47@	35.41	0.57
10494.00	0.88	99.48	10481.11	64.00	323.49	263.38 N	188.25 E	323.73@	35.56	0.50
10557.00	0.70	86.12	10544.11	63.00	323.91	263.32 N	189.11 E	324.15@	35.68	0.41
10621.00	1.14	87.61	10608.10	64.00	324.52	263.38 N	190.13 E	324.84@	35.83	0.69
10685.00	1.14	75.04	10672.08	64.00	325.37	263.57 N	191.39 E	325.72@	35.98	0.39
10748.00	0.88	68.72	10735.08	63.00	326.23	263.90 N	192.44 E	326.62@	36.10	0.45
10812.00	0.97	67.48	10799.07	64.00	327.08	264.29 N	193.40 E	327.45@	36.20	0.14
10875.00	0.70	88.40	10862.06	63.00	327.74	264.51 N	194.28 E	328.15@	36.30	0.64

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10939.00	1.06	16.33	10926.05	64.00	328.53	265.08 N	194.83 E	328.98@	36.32	1.68
11002.00	1.41	17.30	10989.04	63.00	329.83	266.38 N	195.23 E	330.26@	36.24	0.56
11065.00	1.32	14.40	11052.02	63.00	331.26	267.83 N	195.64 E	331.67@	36.15	0.18
11128.00	0.79	2.18	11115.01	63.00	332.32	268.96 N	195.84 E	332.71@	36.06	0.91
11192.00	0.62	21.61	11179.01	64.00	333.04	269.73 N	195.98 E	333.41@	36.00	0.45
11255.00	0.70	23.80	11242.00	63.00	333.75	270.40 N	196.26 E	334.11@	35.97	0.13
11318.00	0.44	52.98	11305.00	63.00	334.36	270.89 N	196.61 E	334.72@	35.97	0.61
11382.00	0.44	65.55	11369.00	64.00	334.80	271.14 N	197.03 E	335.17@	36.00	0.15
11477.00	0.70	76.19	11463.99	95.00	335.53	271.43 N	197.93 E	335.93@	36.10	0.29
11572.00	0.97	92.62	11558.98	95.00	336.37	271.53 N	199.29 E	336.82@	36.28	0.38
11666.00	0.53	93.41	11652.97	94.00	336.99	271.47 N	200.52 E	337.50@	36.45	0.47
11762.00	0.35	98.25	11748.97	96.00	337.34	271.40 N	201.25 E	337.88@	36.56	0.19
11798.00	0.26	122.07	11784.97	36.00	337.39	271.34 N	201.43 E	337.94@	36.59	0.43
PROJECTION TO BIT										
11850.00	0.26	122.07	11836.97	52.00	337.39	271.22 N	201.63 E	337.96@	36.63	0.00