

PathFinder Energy Services

Survey Report

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Job No: JWT-0602-0032-WTWT
Date: 2/25/2006
Time: 1:40 pm
Wellpath ID: 06020032
Date Created: 2/4/2006
Last Revision: 2/25/2006

Calculated using the Minimum Curvature Method
Computed using PDS VER2.2.6
Vertical Section Plane: 179.87 deg.

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

EOG RESOURCES
Sand Tank #7 Fed. #2H
McVay #4
Eddy Co. N.M.
06020032

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Build Rate (dg/100ft)	Walk Rate (dg/100ft)	DLS (dg/100ft)
TIE-IN IS A SCIENTIFIC GYRO SURVEY									
7300.00	1.90	303.38	7294.67	17.80	18.28 S	211.28W	0.00	0.00	0.00
THE FOLLOWING ARE PATHFINDER SURVEYS									
7340.00	3.78	211.03	7334.83	18.66	19.05 S	212.51W	4.70	-230.88	10.76
7372.00	8.18	199.43	7366.46	21.61	22.10 S	213.82W	13.75	-36.25	14.19
7404.00	12.40	196.27	7397.93	27.06	27.55 S	215.54W	13.19	-9.87	13.30
7436.00	16.88	193.54	7427.92	34.63	36.12 S	217.52W	14.45	-8.81	14.62
7468.00	21.28	190.29	7457.21	44.54	45.04 S	219.58W	14.19	-10.48	14.60
7498.00	25.59	184.23	7486.57	57.15	57.85 S	221.13W	13.47	-18.94	15.42
7530.00	28.84	175.53	7515.03	71.74	72.24 S	221.04W	10.16	-27.19	16.03
7561.00	31.92	176.76	7541.77	87.39	87.89 S	219.98W	9.94	3.97	10.14
7593.00	35.00	178.51	7568.47	105.01	105.51 S	219.28W	9.63	5.47	10.09
7622.00	38.60	177.99	7591.88	122.37	122.87 S	218.74W	12.41	-1.79	12.46
7654.00	42.91	176.93	7615.92	143.24	143.73 S	217.81W	13.47	-3.31	13.64
7686.00	45.46	176.06	7638.86	165.50	165.99 S	216.44W	7.97	-2.75	8.20
7718.00	47.84	176.23	7660.83	188.72	189.21 S	214.87W	7.44	0.66	7.45
7750.00	51.00	177.11	7681.84	212.98	213.47 S	213.47W	9.88	2.75	10.09
7781.00	53.38	178.25	7700.65	237.45	237.94 S	212.48W	7.68	3.68	8.21
7813.00	55.93	178.60	7719.16	263.55	264.03 S	211.76W	7.97	1.09	8.02
7844.00	58.88	178.07	7735.82	289.79	290.27 S	211.00W	12.74	-1.71	12.82
7876.00	62.98	178.16	7750.83	317.88	318.36 S	210.07W	9.62	0.28	9.83
7908.00	64.89	177.64	7764.99	348.60	347.08 S	209.02W	6.03	-1.83	8.21
7939.00	66.74	177.28	7777.69	374.85	375.33 S	207.77W	5.97	-1.16	6.06
7971.00	69.20	177.46	7789.70	404.49	404.98 S	206.40W	7.69	0.56	7.71
8002.00	72.28	178.43	7799.92	433.73	434.20 S	205.36W	9.94	3.13	10.37
8033.00	75.97	179.22	7808.40	463.54	464.01 S	204.75W	11.90	2.55	12.15
8065.00	80.28	180.01	7814.98	494.85	495.31 S	204.64W	13.47	2.47	13.68
8098.00	83.98	179.74	7819.23	525.55	526.02 S	204.47W	11.94	-0.87	11.97
8128.00	88.17	178.51	7821.97	557.43	557.89 S	203.99W	6.84	-3.84	7.84
8171.00	88.02	177.99	7824.15	600.35	600.81 S	202.67W	4.30	-1.21	4.47
8203.00	89.08	178.26	7824.98	632.33	632.79 S	201.62W	3.31	0.81	3.41
8233.00	89.25	178.43	7825.40	662.31	662.77 S	200.76W	0.57	0.60	0.83
8285.00	89.52	178.48	7825.74	694.30	694.76 S	199.89W	0.84	0.16	0.86
8328.00	88.37	178.69	7826.90	757.27	757.72 S	198.34W	-1.83	0.33	1.86

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Date: 2/25/2006

Wellpath ID: 06020032

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Build Rate (dg/100ft)	Walk Rate (dg/100ft)	DLS (dg/100ft)
8392.00	87.49	178.69	7829.21	821.22	821.67 S	196.87W	-1.38	0.00	1.38
8455.00	87.67	178.61	7831.88	884.15	884.59 S	195.34W	0.29	-0.29	0.40
8517.00	87.76	177.99	7834.35	948.07	948.51 S	193.48W	0.15	-0.84	0.85
8581.00	87.85	177.81	7836.80	1009.99	1010.42 S	191.10W	0.14	-0.28	0.31
8644.00	88.11	177.64	7839.02	1072.90	1073.33 S	188.80W	0.41	-0.27	0.49
8708.00	88.46	177.37	7840.93	1136.82	1137.24 S	186.82W	0.55	-0.42	0.69
8803.00	88.20	177.55	7843.70	1231.70	1232.11 S	181.61W	-0.27	0.19	0.33
8868.00	88.20	177.99	7845.68	1294.62	1295.03 S	179.16W	0.00	0.70	0.70
8930.00	88.81	178.34	7847.35	1358.57	1358.98 S	177.11W	0.95	0.56	1.10
8993.00	88.02	177.81	7849.09	1421.52	1421.92 S	175.00W	-1.25	-0.84	1.51
9057.00	87.05	177.46	7851.85	1485.41	1485.80 S	172.36W	-1.52	-0.55	1.81
9121.00	86.97	176.67	7855.19	1549.24	1549.63 S	169.08W	-0.13	-1.23	1.24
9184.00	87.58	176.67	7858.18	1612.07	1612.45 S	165.43W	0.97	0.00	0.97
9247.00	87.93	176.40	7860.65	1674.92	1675.29 S	161.62W	0.56	-0.43	0.70
9310.00	88.46	176.23	7862.63	1737.78	1738.13 S	157.58W	0.84	-0.27	0.88
9372.00	88.11	175.53	7864.49	1799.59	1799.94 S	153.12W	-0.56	-1.13	1.26
9436.00	88.81	175.28	7868.21	1863.37	1863.71 S	147.99W	1.09	-0.42	1.17
9499.00	89.80	175.09	7867.08	1926.15	1926.48 S	142.69W	1.25	-0.27	1.28
9563.00	88.20	174.38	7868.31	1989.88	1990.19 S	136.82W	-2.19	-1.11	2.45
9627.00	87.85	174.47	7870.52	2053.55	2053.85 S	130.80W	-0.55	0.14	0.56
9690.00	88.29	174.21	7872.64	2116.22	2116.51 S	124.39W	0.70	-0.41	0.81
9754.00	88.72	173.94	7874.31	2179.87	2180.15 S	117.78W	0.67	-0.42	0.79
9818.00	87.93	174.47	7876.18	2243.53	2243.79 S	111.33W	-1.23	0.83	1.49
9879.00	87.58	175.00	7878.57	2304.24	2304.49 S	106.74W	-0.57	0.87	1.04
9941.00	87.58	174.47	7881.19	2365.94	2366.17 S	100.06W	0.00	-0.85	0.85
10002.00	88.11	175.35	7883.48	2426.67	2426.89 S	94.65W	0.87	1.44	1.68
10064.00	88.20	175.35	7885.48	2488.44	2488.65 S	89.62W	0.15	0.00	0.15
10128.00	88.46	175.35	7887.28	2550.22	2550.42 S	84.60W	0.42	0.00	0.42
10187.00	88.99	175.09	7888.64	2611.01	2611.19 S	79.52W	0.87	-0.43	0.97
10249.00	89.25	174.74	7889.59	2672.77	2672.94 S	74.02W	0.42	-0.58	0.70
10310.00	89.69	174.47	7890.16	2733.51	2733.67 S	68.28W	0.72	-0.44	0.85
10372.00	89.87	174.82	7890.40	2795.25	2795.40 S	62.50W	0.29	0.56	0.83
10434.00	90.04	175.70	7890.47	2856.95	2857.08 S	54.90W	0.18	0.96	0.97
10526.00	89.98	175.97	7890.47	2948.80	2948.92 S	50.39W	-0.13	0.44	0.45
10649.00	88.99	178.05	7891.59	3071.51	3071.81 S	41.84W	-0.79	0.07	0.79
10710.00	89.25	175.44	7892.53	3132.34	3132.44 S	37.31W	0.43	-1.00	1.09
10803.00	87.85	175.88	7894.89	3225.06	3225.14 S	30.28W	-1.51	0.47	1.58
10895.00	88.29	176.44	7897.98	3318.78	3318.82 S	23.32W	0.48	-0.48	0.88
10957.00	88.64	174.74	7899.64	3378.52	3378.57 S	18.01W	0.58	-1.13	1.26
11049.00	88.44	175.35	7903.59	3470.11	3470.14 S	10.07W	-2.39	0.88	2.48
11142.00	85.74	174.65	7909.94	3562.55	3562.57 S	1.99W	-0.75	-0.75	1.06
11234.00	85.74	174.65	7916.77	3653.92	3653.91 S	6.57 E	0.00	0.00	0.00
11326.00	86.08	174.47	7923.32	3745.29	3745.27 S	15.27 E	0.38	-0.20	0.43
11450.00	86.44	173.86	7931.40	3838.41	3838.36 S	27.85 E	0.28	-0.49	0.57
11500.00	86.79	173.94	7934.35	3918.08	3917.99 S	33.15 E	0.70	0.16	0.72

Straight Line Projection To Bit

PathFinder Energy Services

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Date: 2/25/2008

Wellpath ID: 09020032

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Build Rate (dg/100ft)	Walk Rate (dg/100ft)	DLS (dg/100ft)
11560.00	88.79	173.94	7937.71	3977.64	3977.58 S	39.47 E	0.00	0.00	0.00