

PathFinder Energy Services

Survey Report

Page 1
 Job No: JWTD5120248
 Date: 1/16/2006
 Time: 2:44 am
 Wellpath ID: 05120248
 Date Created: 1/2/2006
 Last Revision: 1/16/2006

Calculated using the Minimum Curvature Method
 Computed using PDS VER2.2.6
 Vertical Section Plane: 270.12 deg.

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

EOG Resources
 Tigris "A" 7 Fee #1-H
 Eddy Co., N.M.
 JW #3
 05120248

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	TOTAL Rectangular Offsets (ft)		Vertical Section (ft)	Build Rate (dg/100ft)	Walk Rate (dg/100ft)	DLS (dg/100ft)
TIE INTO MULTI-SHOT GYRO										
4400.00	3.50	83.36	4399.07	0.00	40.00 N	15.27 E	-15.19	0.00	0.00	0.00
THE FOLLOWING ARE PATHFINDER SURVEYS										
4503.00	2.28	95.85	4501.84	103.00	40.15 N	20.43 E	-20.35	-1.18	12.13	1.33
4535.00	0.79	224.92	4533.93	32.00	39.93 N	20.91 E	-20.83	-4.66	403.34	8.89
4587.00	3.96	263.15	4585.90	32.00	39.65 N	19.68 E	-19.57	9.91	119.47	10.56
4598.00	7.39	269.57	4596.74	31.00	39.50 N	16.80 E	-16.52	11.08	20.71	11.24
4630.00	10.90	271.77	4628.33	32.00	39.58 N	11.51 E	-11.43	10.97	6.87	11.02
4662.00	14.25	272.91	4659.56	32.00	39.87 N	4.56 E	-4.47	10.47	3.56	10.50
4694.00	17.67	273.26	4690.32	32.00	40.35 N	4.23W	4.31	10.69	1.09	10.69
4725.00	20.93	271.24	4719.58	31.00	40.74 N	14.47W	14.55	10.52	-6.52	10.73
4757.00	23.92	267.55	4749.16	32.00	40.58 N	26.66W	26.75	9.34	-11.53	10.32
4789.00	27.08	268.14	4778.03	32.00	39.82 N	40.42W	40.60	9.88	-4.41	10.06
4821.00	30.89	270.10	4806.05	32.00	39.34 N	55.86W	55.94	11.28	12.37	12.76
4852.00	34.56	275.90	4832.16	31.00	40.26 N	72.52W	72.61	12.48	18.71	16.04
4884.00	39.31	280.29	4857.74	32.00	43.00 N	91.54W	91.63	14.84	13.72	16.97
4916.00	44.05	280.03	4881.63	32.00	46.75 N	112.48W	112.58	14.81	-0.81	14.82
4947.00	48.68	279.68	4902.82	31.00	50.62 N	134.76W	134.87	18.16	-1.13	18.18
4979.00	53.02	278.78	4922.80	32.00	54.18 N	159.49W	159.60	10.44	-9.06	12.61
5010.00	55.49	272.74	4940.82	31.00	56.26 N	184.55W	184.87	7.97	-13.03	13.24
5042.00	58.74	269.22	4958.29	32.00	56.70 N	211.41W	211.53	10.16	-11.00	13.73
5074.00	62.52	267.81	4973.98	32.00	55.97 N	239.28W	239.40	11.81	-4.41	12.42
5106.00	66.92	265.97	4987.65	32.00	54.39 N	268.16W	268.28	13.75	-5.75	14.70
5138.00	71.05	263.24	4999.12	32.00	51.58 N	297.89W	298.00	12.91	-8.53	15.16
5169.00	75.36	261.40	5008.08	31.00	47.61 N	327.30W	327.39	13.90	-5.94	15.02
5201.00	80.55	261.22	5014.75	32.00	42.88 N	358.22W	358.31	16.22	-0.56	16.23
5241.00	86.88	261.57	5019.13	40.00	36.93 N	397.51W	397.59	15.82	0.88	15.85
5273.00	88.20	261.13	5020.50	32.00	32.13 N	429.12W	429.19	4.12	-1.38	4.35
5305.00	88.11	260.87	5021.53	32.00	27.12 N	460.71W	460.78	-0.28	-0.81	0.86
5337.00	89.08	260.96	5022.32	32.00	22.07 N	492.30W	492.34	3.03	0.28	3.04
5368.00	90.04	260.78	5022.56	31.00	17.15 N	522.90W	522.94	3.10	-0.58	3.15
5400.00	90.40	260.61	5022.43	32.00	11.98 N	554.48W	554.51	1.13	-0.53	1.24
5432.00	91.36	260.96	5021.94	32.00	6.85 N	586.06W	586.08	3.00	1.09	3.19
5463.00	91.54	260.78	5021.16	31.00	1.94 N	616.66W	616.66	0.58	-0.58	0.62

PathFinder Energy Services

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Page 2

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Wellpath ID: 05120248

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5495.00	91.71	260.78	5020.25	32.00	3.19 S	648.24W	648.23	0.53	0.00	0.53
5527.00	92.59	260.78	5019.05	32.00	8.31 S	879.80W	879.78	2.75	0.00	2.75
5559.00	92.86	260.70	5017.53	32.00	13.45 S	711.35W	711.32	0.84	-0.25	0.88
5591.00	92.88	260.87	5015.98	32.00	18.57 S	742.90W	742.86	-0.58	0.53	0.77
5622.00	91.89	260.26	5014.75	31.00	23.65 S	773.45W	773.40	-2.55	-1.97	3.22
5654.00	91.80	260.17	5013.72	32.00	29.09 S	804.97W	804.91	-0.28	-0.28	0.40
5686.00	92.15	260.43	5012.61	32.00	34.48 S	836.50W	836.42	1.09	0.81	1.36
5717.00	92.15	260.43	5011.45	31.00	39.63 S	867.04W	866.98	0.00	0.00	0.00
5781.00	92.51	260.70	5008.85	64.00	50.11 S	930.12W	930.02	0.56	0.42	0.70
5844.00	92.42	262.10	5006.14	63.00	59.52 S	992.36W	992.23	-0.14	2.22	2.22
5908.00	91.80	263.42	5003.78	64.00	67.58 S	1055.80W	1055.66	-0.97	2.06	2.28
5971.00	91.45	264.74	5002.00	63.00	74.07 S	1118.44W	1118.28	-0.56	2.10	2.17
6035.00	91.19	268.06	5000.52	64.00	79.21 S	1182.21W	1182.05	-0.41	2.06	2.10
6099.00	91.28	268.17	4999.14	64.00	82.43 S	1248.11W	1245.94	0.14	3.30	3.30
6163.00	90.84	268.08	4997.96	64.00	84.52 S	1310.07W	1309.89	-0.69	-0.14	0.70
6226.00	90.75	269.13	4997.08	63.00	86.05 S	1373.04W	1372.86	-0.14	1.67	1.67
6290.00	90.84	270.36	4996.19	64.00	86.34 S	1437.04W	1436.85	0.14	1.92	1.93
6354.00	90.48	270.89	4995.46	64.00	85.64 S	1501.03W	1500.84	-0.56	0.83	1.00
6417.00	91.89	271.07	4994.15	63.00	84.56 S	1564.00W	1563.82	2.24	0.29	2.26
6480.00	91.63	270.63	4992.22	63.00	83.63 S	1626.97W	1626.79	-0.41	-0.70	0.81
6544.00	91.10	270.19	4990.70	64.00	83.17 S	1690.95W	1690.77	-0.83	-0.89	1.08
6612.00	91.54	270.54	4989.13	68.00	82.74 S	1758.93W	1758.75	0.66	0.51	0.83
6674.00	91.38	270.27	4987.56	62.00	82.30 S	1820.90W	1820.73	-0.29	-0.44	0.52
6737.00	91.01	270.63	4986.26	63.00	81.81 S	1883.89W	1883.71	-0.56	0.57	0.80
6800.00	91.38	271.42	4984.95	63.00	80.88 S	1946.86W	1946.69	0.56	1.25	1.37
6862.00	92.15	271.86	4983.06	62.00	78.90 S	2008.81W	2008.64	1.27	0.71	1.46
6925.00	93.21	271.95	4980.11	63.00	76.81 S	2071.71W	2071.54	1.68	0.14	1.69
6987.00	93.74	271.77	4978.35	62.00	74.80 S	2133.56W	2133.40	0.85	-0.29	0.90
7050.00	93.91	272.21	4972.15	63.00	72.62 S	2196.35W	2196.22	0.27	0.70	0.75
7112.00	93.30	271.42	4968.25	62.00	70.66 S	2258.23W	2258.07	-0.98	-1.27	1.61
7175.00	91.54	270.80	4965.59	63.00	69.44 S	2321.15W	2321.00	-2.79	-0.98	2.96
7238.00	91.19	271.07	4964.09	63.00	68.41 S	2384.13W	2383.98	-0.56	0.43	0.70
7300.00	91.28	271.59	4962.75	62.00	66.98 S	2446.10W	2445.95	0.15	0.64	0.86
7363.00	91.01	271.86	4961.49	63.00	65.08 S	2509.06W	2508.91	-0.43	0.43	0.61
7425.00	90.75	272.03	4960.54	62.00	62.98 S	2571.01W	2570.88	-0.42	0.27	0.50
7488.00	90.84	272.38	4959.67	63.00	60.55 S	2633.96W	2633.83	0.14	0.56	0.57
7550.00	91.01	272.82	4958.67	62.00	57.74 S	2695.89W	2695.76	0.27	0.71	0.78
7613.00	90.92	272.91	4957.61	63.00	54.59 S	2758.80W	2758.68	-0.14	0.14	0.20
7676.00	91.63	272.74	4956.20	63.00	51.49 S	2821.71W	2821.59	1.13	-0.27	1.16
7738.00	91.38	272.30	4954.59	62.00	48.76 S	2883.63W	2883.52	-0.44	-0.71	0.83
7800.00	91.01	271.86	4953.30	62.00	46.51 S	2945.57W	2945.47	-0.56	-0.71	0.91
7863.00	91.46	272.03	4951.95	63.00	44.38 S	3008.52W	3008.42	0.70	0.27	0.75
7926.00	91.89	272.12	4950.12	63.00	42.08 S	3071.45W	3071.36	0.70	0.14	0.71
7988.00	93.12	272.12	4947.41	62.00	39.80 S	3133.35W	3133.26	1.98	0.00	1.98
8051.00	93.03	272.03	4944.03	63.00	37.53 S	3196.22W	3196.13	-0.14	-0.14	0.20
8114.00	93.03	272.56	4940.70	63.00	35.01 S	3259.08W	3259.00	0.00	0.84	0.84

PathFinder Energy Services

Page 3

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8176.00	92.95	272.82	4937.46	62.00	32.10 S	3320.83W	3320.85	-0.13	0.42	0.44
8238.00	92.77	273.35	4934.37	62.00	28.77 S	3382.76W	3382.69	-0.29	0.85	0.90
8300.00	93.12	273.35	4931.18	62.00	25.15 S	3444.57W	3444.51	0.56	0.00	0.56
8383.00	93.21	273.53	4927.71	83.00	21.38 S	3507.36W	3507.31	0.14	0.29	0.32
8428.00	92.95	273.17	4924.32	83.00	17.70 S	3570.16W	3570.12	-0.41	-0.57	0.70
8488.00	91.80	273.17	4921.75	82.00	14.27 S	3632.01W	3631.98	-1.85	0.00	1.85
8551.00	91.89	273.26	4919.72	63.00	10.74 S	3694.88W	3694.85	0.14	0.14	0.20
8613.00	91.71	273.17	4917.77	62.00	7.27 S	3756.75W	3756.73	-0.29	-0.15	0.32
8676.00	91.80	273.17	4915.85	83.00	3.78 S	3819.63W	3819.61	0.14	0.00	0.14
8692.00	91.89	273.17	4915.33	16.00	2.90 S	3835.60W	3835.58	0.56	0.00	0.56