

Pathfinder

Survey Report

Page 1
Job No: 101005351WTWT
Date: 4/6/2006
Time: 10:16 am
Wellpath ID: 10100535
Date Created: 3/18/2006
Last Revision: 4/6/2006

Calculated using the Minimum Curvature Method
Computed using PDS VER2.2.6
Vertical Section Plane: 0.16 deg.

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

EOG RESOURCES
RIO GRANDE 23 FED #2-H
JW #3
RIO GRANDE 23 FED #2-H
0603

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Vertical Section (ft)	TVD (ft)	T O T A L Rectangular Offsets (ft)		Build Rate (dg/100ft)	DLS (dg/100ft)
4205.00	4.92	116.77	-23.80	4204.10	23.80 S	0.30W	0.00	0.00
4223.00	5.19	116.56	-24.51	4222.03	24.51 S	1.12 E	1.50	1.50
4255.00	5.63	107.77	-25.63	4253.89	25.64 S	3.91 E	1.38	2.93
4287.00	7.21	81.14	-25.79	4285.69	25.81 S	7.39 E	4.94	10.40
4318.00	9.67	61.72	-24.24	4316.36	24.27 S	11.60 E	7.94	12.04
4350.00	13.45	51.52	-20.64	4347.71	20.68 S	16.89 E	11.81	13.39
4382.00	17.76	45.55	-14.88	4378.52	14.95 S	23.29 E	13.47	14.36
4414.00	22.07	41.86	-6.96	4408.61	7.05 S	30.79 E	13.47	14.02
4446.00	26.64	38.34	3.17	4437.75	3.06 N	39.25 E	14.28	14.98
4477.00	30.78	35.09	15.14	4464.94	15.01 N	48.13 E	13.35	14.27
4509.00	34.91	31.49	29.69	4491.82	29.53 N	57.62 E	12.91	14.27
4541.00	39.13	27.88	46.46	4517.36	46.27 N	67.13 E	13.19	14.83
4573.00	43.09	24.28	65.38	4541.47	65.17 N	76.35 E	12.37	14.41
4604.00	47.13	21.38	85.65	4563.35	85.41 N	84.85 E	13.03	14.62
4636.00	51.00	18.21	108.41	4584.31	108.15 N	93.02 E	12.09	14.22
4668.00	55.13	15.49	132.91	4603.54	132.63 N	100.42 E	12.91	14.58
4700.00	59.09	12.59	158.99	4620.92	158.69 N	106.92 E	12.37	14.53
4732.00	62.34	8.81	186.42	4636.57	186.11 N	112.08 E	10.16	14.46
4763.00	65.69	5.56	214.07	4650.16	213.75 N	115.56 E	10.81	14.34
4795.00	69.56	2.83	243.58	4662.34	243.25 N	117.71 E	12.09	14.44
4827.00	74.04	0.37	273.96	4672.33	273.63 N	118.55 E	14.00	15.79

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Page 2
Date: 4/6/2006
Wellpath ID: 10100535

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Vertical Section (ft)	TVD (ft)	T O T A L Rectangular Offsets (ft)		Build Rate (dg/100ft)	DLS (dg/100ft)
4859.00	76.94	358.35	304.93	4680.35	304.60 N	118.20 E	9.06	10.93
4890.00	79.84	357.74	335.27	4686.59	334.94 N	117.16 E	9.35	9.55
4922.00	82.48	357.74	366.86	4691.50	366.54 N	115.92 E	8.25	8.25
4954.00	84.94	358.09	398.64	4695.01	398.32 N	114.76 E	7.69	7.76
4986.00	86.61	358.00	430.53	4697.37	430.21 N	113.67 E	5.22	5.23
5018.00	88.46	357.38	462.47	4698.74	462.16 N	112.38 E	5.78	6.10
5049.00	90.66	357.03	493.42	4698.98	493.12 N	110.87 E	7.10	7.19
5081.00	91.10	357.12	525.37	4698.49	525.07 N	109.24 E	1.37	1.40
5118.00	91.45	356.95	562.31	4697.67	562.01 N	107.32 E	0.95	1.05
5150.00	91.71	357.12	594.25	4696.78	593.96 N	105.67 E	0.81	0.97
5182.00	92.24	357.47	626.19	4695.68	625.90 N	104.16 E	1.66	1.98
5214.00	90.66	356.59	658.13	4694.87	657.85 N	102.50 E	-4.94	5.65
5245.00	89.34	355.54	689.05	4694.87	688.77 N	100.38 E	-4.26	5.44
5277.00	88.90	355.19	720.93	4695.36	720.66 N	97.79 E	-1.37	1.76
5309.00	89.60	355.89	752.83	4695.78	752.56 N	95.30 E	2.19	3.09
5341.00	90.48	356.33	784.75	4695.76	784.49 N	93.13 E	2.75	3.07
5372.00	90.40	355.98	815.67	4695.52	815.42 N	91.05 E	-0.26	1.16
5404.00	90.66	356.15	847.59	4695.23	847.34 N	88.86 E	0.81	0.97
5436.00	91.01	356.59	879.51	4694.76	879.27 N	86.83 E	1.09	1.76
5468.00	90.92	356.51	911.45	4694.22	911.21 N	84.91 E	-0.28	0.38
5500.00	90.92	356.15	943.37	4693.71	943.14 N	82.86 E	0.00	1.12
5531.00	91.01	355.71	974.28	4693.18	974.06 N	80.66 E	0.29	1.45
5563.00	91.36	355.19	1006.17	4692.52	1005.95 N	78.12 E	1.09	1.96
5595.00	91.19	355.45	1038.04	4691.81	1037.84 N	75.51 E	-0.53	0.97
5627.00	91.36	355.89	1069.94	4691.10	1069.74 N	73.09 E	0.53	1.47
5659.00	90.66	356.33	1101.85	4690.54	1101.66 N	70.92 E	-2.19	2.58
5690.00	90.48	356.33	1132.78	4690.23	1132.59 N	68.94 E	-0.58	0.58
5722.00	90.92	356.68	1164.71	4689.84	1164.53 N	66.99 E	1.37	1.76
5754.00	91.45	356.95	1196.65	4689.17	1196.48 N	65.21 E	1.66	1.86
5786.00	91.45	356.86	1228.59	4688.36	1228.42 N	63.48 E	0.00	0.28
5817.00	91.45	356.07	1259.52	4687.58	1259.35 N	61.57 E	0.00	2.55
5849.00	90.48	355.45	1291.42	4687.04	1291.26 N	59.21 E	-3.03	3.60
5881.00	90.13	355.19	1323.30	4686.87	1323.15 N	56.60 E	-1.09	1.36
5913.00	90.31	354.66	1355.17	4686.75	1355.02 N	53.77 E	0.56	1.75

Pathfinder

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Page 3
Date: 4/6/2006
Wellpath ID: 10100535

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5945.00	90.66	354.31	1387.01	4686.48	1386.87 N	50.69 E	1.09	1.55
5976.00	90.22	353.78	1417.83	4686.24	1417.71 N	47.47 E	-1.42	2.22
6008.00	90.57	353.87	1449.64	4686.02	1449.52 N	44.03 E	1.09	1.13
6040.00	90.48	354.83	1481.47	4685.72	1481.36 N	40.88 E	-0.28	3.01
6072.00	90.66	354.66	1513.33	4685.41	1513.23 N	37.95 E	0.56	0.77
6104.00	89.87	354.66	1545.18	4685.26	1545.09 N	34.97 E	-2.47	2.47
6135.00	89.86	354.57	1576.03	4685.33	1575.95 N	32.06 E	-0.03	0.29
6172.00	89.43	354.83	1612.86	4685.56	1612.79 N	28.65 E	-1.16	1.36
6204.00	89.25	356.24	1644.76	4685.93	1644.69 N	26.16 E	-0.56	4.44
6235.00	89.25	356.51	1675.69	4686.33	1675.63 N	24.20 E	0.00	0.87
6267.00	89.60	357.38	1707.63	4686.66	1707.58 N	22.49 E	1.09	2.93
6298.00	89.96	358.09	1738.61	4686.77	1738.55 N	21.27 E	1.16	2.57
6329.00	90.84	359.58	1769.60	4686.56	1769.55 N	20.64 E	2.84	5.58
6360.00	91.28	0.20	1800.59	4685.98	1800.54 N	20.58 E	1.42	2.45
6391.00	91.71	0.64	1831.58	4685.18	1831.53 N	20.80 E	1.39	1.98
6422.00	91.80	0.11	1862.56	4684.23	1862.51 N	21.01 E	0.29	1.73
6453.00	90.75	0.20	1893.56	4683.54	1893.50 N	21.09 E	-3.39	3.40
6485.00	90.66	359.58	1925.55	4683.14	1925.50 N	21.03 E	-0.28	1.96
6516.00	88.90	0.28	1956.55	4683.26	1956.50 N	20.99 E	-5.68	6.11
6547.00	88.64	0.46	1987.54	4683.93	1987.49 N	21.19 E	-0.84	1.02
6579.00	88.90	0.90	2019.53	4684.62	2019.48 N	21.57 E	0.81	1.60
6610.00	89.43	1.08	2050.53	4685.07	2050.47 N	22.11 E	1.71	1.81
6641.00	89.87	1.08	2081.52	4685.26	2081.47 N	22.69 E	1.42	1.42
6672.00	90.13	1.25	2112.52	4685.26	2112.46 N	23.32 E	0.84	1.00
6704.00	90.57	0.90	2144.51	4685.06	2144.46 N	23.92 E	1.38	1.76
6735.00	90.75	0.81	2175.51	4684.70	2175.45 N	24.38 E	0.58	0.65
6766.00	91.01	0.64	2206.50	4684.23	2206.44 N	24.78 E	0.84	1.00
6798.00	91.10	0.81	2238.50	4683.64	2238.44 N	25.18 E	0.28	0.60
6829.00	91.80	0.99	2269.48	4682.85	2269.42 N	25.67 E	2.26	2.33
6860.00	92.24	1.16	2300.46	4681.76	2300.40 N	26.25 E	1.42	1.52
6892.00	91.19	0.72	2332.44	4680.80	2332.38 N	26.77 E	-3.28	3.56
6923.00	90.57	0.46	2363.44	4680.33	2363.37 N	27.09 E	-2.00	2.17
6954.00	90.48	0.02	2394.44	4680.04	2394.37 N	27.22 E	-0.29	1.45
6986.00	90.75	359.85	2426.44	4679.70	2426.37 N	27.19 E	0.84	1.00

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Page 4
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Wellpath ID: 10100535

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7017.00	91.28	0.11	2457.43	4679.15	2457.36 N	27.17 E	1.71	1.90
7048.00	91.54	0.11	2488.42	4678.39	2488.35 N	27.23 E	0.84	0.84
7079.00	92.15	0.02	2519.40	4677.39	2519.34 N	27.27 E	1.97	1.99
7111.00	91.80	359.14	2551.38	4676.29	2551.32 N	27.03 E	-1.09	2.96
7142.00	91.80	359.32	2582.36	4675.31	2582.30 N	26.62 E	0.00	0.58
7173.00	92.33	359.14	2613.34	4674.20	2613.28 N	26.20 E	1.71	1.81
7205.00	92.68	358.97	2645.30	4672.80	2645.24 N	25.68 E	1.09	1.22
7236.00	90.48	359.23	2676.28	4671.94	2676.22 N	25.19 E	-7.10	7.15
7268.00	89.87	359.05	2708.28	4671.85	2708.22 N	24.71 E	-1.91	1.99
7298.00	90.31	358.97	2738.27	4671.80	2738.22 N	24.19 E	1.47	1.49
7330.00	91.28	359.49	2770.27	4671.35	2770.21 N	23.76 E	3.03	3.44
7361.00	91.89	359.85	2801.25	4670.50	2801.20 N	23.58 E	1.97	2.28
7392.00	91.71	359.67	2832.24	4669.52	2832.18 N	23.45 E	-0.58	0.82
7423.00	91.80	359.67	2863.22	4668.57	2863.17 N	23.27 E	0.29	0.29
7454.00	92.07	359.67	2894.20	4667.53	2894.15 N	23.09 E	0.87	0.87
7486.00	91.89	359.49	2926.18	4666.42	2926.13 N	22.86 E	-0.56	0.80
7517.00	91.36	358.61	2957.16	4665.54	2957.11 N	22.35 E	-1.71	3.31
7548.00	91.45	358.70	2988.14	4664.78	2988.09 N	21.62 E	0.29	0.41
7580.00	92.59	358.97	3020.11	4663.65	3020.07 N	20.97 E	3.56	3.66
7611.00	92.86	359.23	3051.07	4662.18	3051.03 N	20.48 E	0.87	1.21
7642.00	93.12	359.05	3082.03	4660.56	3081.98 N	20.02 E	0.84	1.02
7674.00	93.30	359.05	3113.97	4658.77	3113.93 N	19.49 E	0.56	0.56
7705.00	93.47	358.97	3144.91	4656.94	3144.87 N	18.95 E	0.55	0.61
PROJECTION TO TARGET DEPTH								
7767.00	93.47	358.97	3206.78	4653.19	3206.74 N	17.84 E	0.00	0.00