

Pathfinder

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Survey Report

Date: 7/24/2006
Time: 3:57 pm
Wellpath ID: yarrow#1
Date Created: 2/28/2006
Last Revision: 3/3/2006

Calculated using the Minimum Curvature Method
Computed using PDS VER2.2.6
Vertical Section Plane: 0.00 deg.

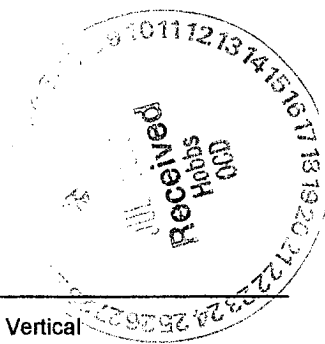
Survey Reference: WELLHEAD
Vertical Section Reference: WELLHEAD
Closure Reference: WELLHEAD
TVD Reference: WELLHEAD

30-025-37561

Yates Petroleum
Yarrow BHY State # 1
Patterson # 76
Eddy Co. N.M.
JWT-0602-0055-WTWT

KBH: 20'
MAG. DEC.: 7.71° TO GRID

PATHFINDER OFFICE SUPERVISOR:
CODY MEBANE
PATHFINDER FIELD ENGINEER:
LEE ADAMS



Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	DLS (dg/100ft)	Closure Dist. Dir. (ft) (deg.)	TOTAL Rectangular Offsets (ft) (ft)	Vertical Section (ft)
TIE IN								
800.00	0.09	214.89	800.00	0.00	0.00	108.35@ 72.67	32.28N 103.47 E	32.28
THE FOLLOWING ARE PATHFINDER MWD SURVEYS								
894.00	0.18	184.13	894.00	94.00	0.12	108.25@ 72.77	32.07N 103.42 E	32.07
988.00	0.18	114.41	988.00	94.00	0.22	108.33@ 72.89	31.86N 103.54 E	31.86
1082.00	0.26	151.24	1082.00	94.00	0.17	108.45@ 73.06	31.62N 103.78 E	31.62
1177.00	0.18	213.20	1177.00	95.00	0.25	108.42@ 73.22	31.30N 103.80 E	31.30
1271.00	0.18	16.67	1271.00	94.00	0.38	108.35@ 73.20	31.32N 103.76 E	31.32
1366.00	0.26	322.80	1366.00	95.00	0.22	108.35@ 73.03	31.63N 103.67 E	31.63
1459.00	0.35	286.94	1459.00	93.00	0.22	108.08@ 72.84	31.89N 103.27 E	31.89
1554.00	0.79	305.13	1553.99	95.00	0.50	107.45@ 72.48	32.35N 102.46 E	32.35
1648.00	0.88	309.44	1647.98	94.00	0.12	106.67@ 71.88	33.18N 101.37 E	33.18
1743.00	0.79	308.65	1742.97	95.00	0.10	105.92@ 71.25	34.05N 100.30 E	34.05
1835.00	0.97	300.03	1834.96	92.00	0.24	105.07@ 70.64	34.84N 99.13 E	34.84
1929.00	1.14	309.26	1928.94	94.00	0.26	104.08@ 69.87	35.83N 97.72 E	35.83
2021.00	1.14	312.25	2020.93	92.00	0.06	103.20@ 68.98	37.02N 96.33 E	37.02
2119.00	1.41	312.43	2118.90	98.00	0.28	102.24@ 67.89	38.49N 94.72 E	38.49
2181.00	1.23	309.09	2180.88	62.00	0.32	101.60@ 67.17	39.42N 93.64 E	39.42
2210.00	1.23	310.32	2209.88	29.00	0.09	101.31@ 66.86	39.82N 93.16 E	39.82
2307.00	1.32	310.49	2306.85	97.00	0.09	100.37@ 65.75	41.22N 91.52 E	41.22
2376.00	0.44	275.34	2375.85	69.00	1.44	99.81@ 65.26	41.76N 90.65 E	41.76
2464.00	0.29	269.71	2463.84	88.00	0.18	99.31@ 65.11	41.79N 90.09 E	41.79

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Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	DLS (dg/100ft)	Closure Dist. Dir. (ft) (deg.)	TOTAL Rectangular Offsets (ft) (ft)	Vertical Section (ft)
2559.00	0.53	271.29	2558.84	95.00	0.25	98.70@ 64.94	41.80N 89.41 E	41.80
2653.00	0.62	231.39	2652.84	94.00	0.43	97.82@ 64.90	41.49N 88.58 E	41.49
2747.00	0.62	247.39	2746.83	94.00	0.18	96.81@ 64.96	40.98N 87.71 E	40.98
2848.00	0.53	260.83	2847.83	101.00	0.16	95.82@ 64.87	40.70N 86.75 E	40.70
2940.00	0.53	275.51	2939.82	92.00	0.15	95.04@ 64.67	40.67N 85.90 E	40.67
3036.00	0.62	284.30	3035.82	96.00	0.13	94.26@ 64.33	40.84N 84.96 E	40.84
3130.00	0.62	292.21	3129.81	94.00	0.09	93.53@ 63.89	41.16N 83.99 E	41.16
3226.00	0.62	309.26	3225.81	96.00	0.19	92.98@ 63.36	41.68N 83.11 E	41.68
3317.00	0.88	330.97	3316.80	91.00	0.42	92.75@ 62.66	42.61N 82.39 E	42.61
3412.00	1.06	325.17	3411.78	95.00	0.22	92.63@ 61.67	43.96N 81.53 E	43.96
3474.00	0.79	318.84	3473.78	62.00	0.46	92.48@ 61.05	44.76N 80.93 E	44.76
3568.00	0.53	18.26	3567.77	94.00	0.74	92.66@ 60.48	45.66N 80.63 E	45.66
3660.00	1.23	85.41	3659.76	92.00	1.23	93.87@ 60.56	46.14N 81.75 E	46.14
3692.00	1.49	98.15	3691.75	32.00	1.24	94.52@ 60.80	46.11N 82.51 E	46.11
3753.00	1.14	67.65	3752.74	61.00	1.26	95.75@ 61.13	46.23N 83.85 E	46.23
3844.00	1.06	38.21	3843.72	91.00	0.62	97.43@ 61.00	47.23N 85.21 E	47.23
3941.00	0.31	351.27	3940.71	97.00	0.91	98.35@ 60.65	48.20N 85.73 E	48.20
4037.00	0.26	14.21	4036.71	96.00	0.13	98.59@ 60.42	48.67N 85.74 E	48.67
4131.00	0.53	339.85	4130.71	94.00	0.37	98.81@ 60.08	49.28N 85.64 E	49.28
4226.00	0.53	45.18	4225.71	95.00	0.60	99.31@ 59.77	50.00N 85.80 E	50.00
4318.00	1.32	88.13	4317.69	92.00	1.09	100.65@ 59.99	50.34N 87.16 E	50.34
4357.00	1.67	94.55	4356.68	39.00	0.99	101.52@ 60.30	50.31N 88.18 E	50.31
4413.00	1.58	100.35	4412.66	56.00	0.33	102.75@ 60.83	50.10N 89.75 E	50.10
4476.00	1.14	85.32	4475.64	63.00	0.89	104.03@ 61.28	50.00N 91.23 E	50.00
4537.00	0.88	85.14	4536.63	61.00	0.43	105.02@ 61.51	50.09N 92.30 E	50.09
4632.00	1.32	90.85	4631.61	95.00	0.48	106.64@ 61.96	50.13N 94.12 E	50.13
4692.00	1.41	89.36	4691.60	60.00	0.16	107.91@ 62.32	50.13N 95.55 E	50.13
4788.00	1.14	75.91	4787.57	96.00	0.42	109.89@ 62.71	50.38N 97.66 E	50.38
4851.00	1.14	86.72	4850.56	63.00	0.34	111.07@ 62.92	50.57N 98.89 E	50.57
4914.00	1.41	88.36	4913.55	63.00	0.43	112.35@ 63.22	50.62N 100.29 E	50.62
4977.00	0.62	73.63	4976.54	63.00	1.31	113.38@ 63.42	50.74N 101.40 E	50.74
5068.00	0.70	71.34	5067.53	91.00	0.09	114.42@ 63.50	51.06N 102.40 E	51.06
5109.00	0.44	53.59	5108.53	41.00	0.76	114.82@ 63.50	51.23N 102.76 E	51.23
PROJECTION TO BIT								
5150.00	0.44	53.59	5149.53	41.00	0.00	115.13@ 63.47	51.42N 103.01 E	51.42