

Number: WTX-1200-D-308

State/County: New Mex.

Company: Yates Petroleum

Declination: 9.7

Lease/Well: Patriot AIZ #10-H

Grid:

Location: Eddy, Co.

File name: C:\WINSERVE\YATES\PAT10H.SVY

Rig Name: UTI #165

Date/Time: 06-Jan-01 / 09:45

RKB:

Curve Name: WORK

G.L. or M.S.L.:

DAILEY INTERNATIONAL Inc.
MIDLAND, TEXAS

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane 356.93

Vertical Section Referenced to offset from Wellhead: EW =.00 Ft, NS=.00 Ft

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100	BUILD RATE Deg/100
TIE-IN F/GYRO SURVEY										
7630.00	1.91	56.59	7624.70	55.14	200.63	44.32	208.07	74.63	.00	.00
GYRO SURVEY										
7690.00	3.51	24.01	7684.63	57.37	202.21	46.46	210.19	74.16	3.60	2.67
GYRO SURVEY										
7695.00	4.76	17.71	7689.62	57.71	202.34	46.79	210.41	74.08	26.56	25.00
7700.00	8.60	13.10	7694.59	58.27	202.49	47.34	210.70	73.95	77.48	76.80
7705.00	11.50	6.50	7699.51	59.13	202.63	48.19	211.08	73.73	62.31	58.00
7710.00	14.50	5.90	7704.38	60.25	202.75	49.30	211.51	73.45	60.06	60.00
7715.00	17.30	2.80	7709.19	61.61	202.85	50.66	212.00	73.10	58.50	56.00
7720.00	20.50	359.60	7713.92	63.23	202.88	52.27	212.50	72.69	67.25	64.00
7725.00	23.80	358.20	7718.55	65.11	202.84	54.16	213.04	72.20	66.83	66.00
7730.00	26.90	357.10	7723.07	67.25	202.75	56.30	213.61	71.65	62.71	62.00
7735.00	30.50	356.70	7727.45	69.65	202.62	58.70	214.26	71.03	72.10	72.00
7740.00	33.80	356.50	7731.68	72.31	202.46	61.36	214.99	70.35	66.03	66.00
7745.00	37.30	356.10	7735.75	75.21	202.28	64.26	215.80	69.60	70.15	70.00
7750.00	40.60	355.60	7739.64	78.34	202.05	67.41	216.70	68.81	66.30	66.00
7755.00	44.80	354.80	7743.31	81.72	201.76	70.80	217.68	67.95	84.70	84.00
7760.00	48.10	353.70	7746.76	85.32	201.40	74.41	218.73	67.04	67.90	66.00
7765.00	51.00	352.80	7750.00	89.10	200.95	78.21	219.82	66.09	59.59	58.00
7770.00	54.50	352.10	7753.03	93.05	200.43	82.18	220.97	65.10	70.88	70.00
7775.00	57.70	351.30	7755.82	97.15	199.83	86.31	222.19	64.07	65.36	64.00
7780.00	60.70	348.70	7758.38	101.38	199.08	90.57	223.41	63.01	74.79	60.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	Vertical Depth	N-S FT	E-W FT	Vertical Section FT	O S U R E		Dogleg Severity Deg/100	BUILD RATE Deg/100
							Distance FT	Direction Deg		
7785.00	64.10	348.10	7760.69	105.72	198.19	94.95	224.62	61.92	68.83	68.00
7790.00	67.20	347.20	7762.75	110.17	197.22	99.45	225.90	60.81	64.13	62.00
7795.00	70.20	345.60	7764.57	114.70	196.12	104.03	227.20	59.68	67.00	60.00
7800.00	72.60	343.90	7766.17	119.27	194.87	108.66	228.47	58.53	57.81	48.00
end of 4° motor										
7829.00	83.10	335.30	7772.27	145.76	184.97	135.65	235.50	51.76	46.35	36.21
7833.00	83.30	335.10	7772.74	149.37	183.31	139.33	236.46	50.83	7.05	5.00
7865.00	87.80	333.60	7775.23	178.12	169.50	168.78	245.88	43.58	14.82	14.06
7897.00	92.70	332.30	7775.09	206.61	154.95	198.01	258.26	36.87	15.84	15.31
7928.00	97.40	332.50	7772.36	233.97	140.65	226.10	272.99	31.01	15.17	15.16
7959.00	97.40	331.80	7768.37	261.15	126.29	254.01	290.08	25.81	2.24	.00
7991.00	97.40	333.50	7764.25	289.33	111.71	282.93	310.15	21.11	5.27	.00
8023.00	97.30	331.40	7760.15	317.47	97.03	311.82	331.97	17.00	6.52	-.31
8055.00	97.80	331.90	7755.95	345.39	81.97	340.50	354.98	13.35	2.20	1.56
8087.00	99.00	333.10	7751.27	373.46	67.35	369.32	379.49	10.22	5.27	3.75
8118.00	99.40	334.40	7746.32	400.91	53.82	397.45	404.50	7.65	4.34	1.29
8150.00	97.20	336.00	7741.70	429.65	40.54	426.86	431.56	5.39	8.47	-6.88
8181.00	94.80	337.30	7738.46	457.95	28.32	455.78	458.83	3.54	8.79	-7.74
8213.00	93.20	336.00	7736.22	487.26	15.67	485.72	487.51	1.84	6.44	-5.00
8245.00	94.10	339.10	7734.19	516.77	3.47	515.84	516.78	.39	10.07	2.81
8277.00	93.20	339.60	7732.15	546.65	-7.79	546.29	546.71	359.18	3.22	-2.81
8308.00	90.30	338.40	7731.20	575.58	-18.89	575.76	575.89	358.12	10.12	-9.35
8340.00	89.80	338.70	7731.17	605.36	-30.59	606.13	606.13	357.11	1.82	-1.56
8372.00	91.80	337.80	7730.73	635.08	-42.45	636.44	636.49	356.18	6.85	6.25
8404.00	93.00	338.60	7729.39	664.76	-54.32	666.72	666.98	355.33	4.51	3.75
8435.00	93.50	337.50	7727.63	693.47	-65.89	696.00	696.59	354.57	3.89	1.61
8467.00	93.60	336.90	7725.65	722.91	-78.27	726.07	727.14	353.82	1.90	.31
8499.00	91.40	334.80	7724.25	752.08	-91.35	755.89	757.61	353.07	9.50	-6.87
8530.00	90.40	336.20	7723.77	780.28	-104.20	784.74	787.21	352.39	5.55	-3.23
8562.00	90.70	336.50	7723.46	809.59	-117.03	814.70	818.01	351.77	1.33	.94
8594.00	91.60	336.50	7722.82	838.93	-129.79	844.68	848.92	351.21	2.81	2.81
8625.00	91.00	337.10	7722.11	867.42	-142.00	873.78	878.97	350.70	2.74	-1.94
8656.00	91.00	336.70	7721.57	895.93	-154.16	902.90	909.10	350.24	1.29	.00
8689.00	90.70	335.20	7721.08	926.06	-167.61	933.71	941.11	349.74	4.63	-.91
8721.00	90.60	337.40	7720.72	955.36	-180.47	963.65	972.25	349.30	6.88	-.31
8818.00	91.00	337.30	7719.36	1044.87	-217.82	1055.03	1067.33	348.22	.43	.41
PROJECTION TO TD										
8848.00	91.00	337.30	7718.84	1072.54	-229.40	1083.29	1096.80	347.93	.00	.00