

Job Number:	State/Country: New Mexico
Company: Yates Petroleum Corp.	Declination: 9.15° East
Lease/Well: Lowe Staple AMR Fed. Com. #2	Grid: True North
Location: Eddy County	File name: C:\WINSERVE\YATES\I.SAMR2.SVY
Rig Name:	Date/Time: 20-Mar-02 / 16:33
RKB:	Curve Name: WORK
G.L. or M.S.L.:	

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 183.24
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Anglo 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
SCIENTIFIC GYRO									
5385.00	1.14	307.61	5384.53	-6.91	-4.92	7.18	8.48	215.45	00
5419.00	.90	294.10	5418.52	-6.59	-5.43	6.89	8.54	219.48	99
5450.00	1.20	260.00	5449.52	-6.55	-5.97	6.88	8.87	222.36	2.19
5482.00	1.50	242.30	5481.51	-6.80	-6.67	7.17	9.53	224.45	1.59
5514.00	2.30	223.40	5513.49	-7.47	-7.49	7.88	10.57	225.08	3.14
5545.00	3.20	215.60	5544.46	-8.62	-8.42	9.08	12.05	224.32	3.14
5577.00	3.80	211.10	5576.40	-10.26	-9.49	10.78	13.97	222.77	2.06
5609.00	4.60	211.10	5608.31	-12.26	-10.70	12.85	16.27	221.10	2.50
5641.00	5.20	208.40	5640.19	-14.64	-12.05	15.29	18.96	219.46	2.01
5672.00	5.90	205.30	5671.05	-17.31	-13.40	18.04	21.89	217.73	2.46
5704.00	6.60	204.40	5702.86	-20.47	-14.86	21.28	25.30	215.97	2.21
5736.00	7.30	204.30	5734.62	-24.00	-16.46	24.89	29.10	214.44	2.19
5768.00	7.80	204.70	5766.35	-27.83	-18.20	28.81	33.25	213.19	1.57
5799.00	8.30	204.00	5797.04	-31.78	-19.99	32.86	37.55	212.17	1.64
5831.00	8.80	202.40	5828.68	-36.16	-21.86	37.33	42.25	211.16	1.73
5863.00	9.50	201.10	5860.28	-40.88	-23.75	42.16	47.28	210.15	2.28
5895.00	9.90	201.70	5891.82	-45.90	-25.71	47.28	52.61	209.26	1.29
5926.00	10.50	201.80	5922.33	-51.00	-27.75	52.49	58.06	208.55	1.91
5958.00	11.10	201.80	5953.76	-56.57	-29.97	58.17	64.02	207.92	1.87
5990.00	11.90	201.50	5985.12	-62.50	-32.33	64.23	70.36	207.35	2.51
6022.00	12.80	201.20	6016.38	-68.87	-34.82	70.73	77.17	206.82	2.82
6053.00	13.80	201.40	6046.55	-75.52	-37.41	77.51	84.28	206.35	3.23