

Job Number: 1

State/Country: NM/USA

Company: Yates Petroleum Corporation

Declination:

Lease/Well: Lowe Staple AMR Federal Com #1

Grid:

Location: Sec. 22 T21S-R24E, 1,650' FSL & 2,310' FWL, BHL: 660' FSL & FWL

Date/Time: 23-May-01 / 10:46

Rig Name: UTI #166

Curve Name:

RKB:

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

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane 239.04

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

Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
Kick off of cement plug, begin building at a rate of 2.5 deg/100'.									
3350.00	.00	239.04	3350.00	.00	.00	.00	.00	.00	.00
3380.00	.75	239.04	3380.00	-.10	-.17	.20	.20	239.04	2.50
3410.00	1.50	239.04	3409.99	-.40	-.67	.79	.79	239.04	2.50
3440.00	2.25	239.04	3439.98	-.91	-1.52	1.77	1.77	239.04	2.50
3470.00	3.00	239.04	3469.95	-1.62	-2.69	3.14	3.14	239.04	2.50
3500.00	3.75	239.04	3499.89	-2.52	-4.21	4.91	4.91	239.04	2.50
3530.00	4.50	239.04	3529.82	-3.63	-6.06	7.06	7.06	239.04	2.50
3560.00	5.25	239.04	3559.71	-4.95	-8.24	9.61	9.61	239.04	2.50
3590.00	6.00	239.04	3589.56	-6.46	-10.77	12.55	12.55	239.04	2.50
3620.00	6.75	239.04	3619.38	-8.17	-13.62	15.89	15.89	239.04	2.50
3650.00	7.50	239.04	3649.14	-10.09	-16.81	19.61	19.61	239.04	2.50
3680.00	8.25	239.04	3678.86	-12.20	-20.34	23.72	23.72	239.04	2.50
3710.00	9.00	239.04	3708.52	-14.52	-24.20	28.22	28.22	239.04	2.50
3740.00	9.75	239.04	3738.12	-17.03	-28.39	33.10	33.10	239.04	2.50
3770.00	10.50	239.04	3767.65	-19.74	-32.91	38.38	38.38	239.04	2.50
3800.00	11.25	239.04	3797.11	-22.66	-37.76	44.04	44.04	239.04	2.50
3830.00	12.00	239.04	3826.50	-25.77	-42.94	50.08	50.08	239.04	2.50
3860.00	12.75	239.04	3855.80	-29.07	-48.46	56.51	56.51	239.04	2.50
3890.00	13.50	239.04	3885.02	-32.58	-54.30	63.32	63.32	239.04	2.50
3920.00	14.25	239.04	3914.14	-36.28	-60.47	70.52	70.52	239.04	2.50
3950.00	15.00	239.04	3943.17	-40.18	-66.96	78.09	78.09	239.04	2.50
3980.00	15.75	239.04	3972.10	-44.27	-73.78	86.05	86.05	239.04	2.50
4010.00	16.50	239.04	4000.92	-48.56	-80.93	94.38	94.38	239.04	2.50
4040.00	17.25	239.04	4029.62	-53.04	-88.40	103.09	103.09	239.04	2.50
4070.00	18.00	239.04	4058.21	-57.71	-96.19	112.17	112.17	239.04	2.50
4100.00	18.75	239.04	4086.68	-62.58	-104.29	121.63	121.63	239.04	2.50

RECEIVED
2001 MAY 25 AM 9:06
BUREAU OF LAND MGMT.
ROSWELL OFFICE