



Job Number:
 Company: Yates Petroleum Corp.
 Lease/Well: Sands Springs "ASU" #4
 Location: Lea County
 Rig Name: Key #38
 RKB:
 G.L. or M.S.L.:

State/Country: New Mexico
 Declination: 9.4 East
 Grid: True North
 File name: C:\WINSURV2\YATES\SANDSPR.SVY
 Date/Time: 31-Mar-00 / 13:04
 Curve Name: Plan #4

Weatherford - Dailey Int'l. Inc.
 Midland, Texas
 916 - 561- 8892
 1- 888 - 366 - 0083

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 270.00
 Vertical Section Referenced to Wellhead
 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	Direction Deg	Dogleg Severity Deg/100
Kick off Point									
12857.03	.00	.00	12857.03	.00	.00	.00	.00	.00	.00
12882.03	5.00	270.00	12882.00	.00	-1.09	1.09	1.09	270.00	20.00
12907.03	10.00	270.00	12906.78	.00	-4.35	4.35	4.35	270.00	20.00
12932.03	15.00	270.00	12931.18	.00	-9.76	9.76	9.76	270.00	20.00
12957.03	20.00	270.00	12955.01	.00	-17.28	17.28	17.28	270.00	20.00
12982.03	25.00	270.00	12978.10	.00	-26.84	26.84	26.84	270.00	20.00
13007.03	30.00	270.00	13000.27	.00	-38.38	38.38	38.38	270.00	20.00
Top of Woodford									
13014.80	30.00	270.00	13007.00	.00	-42.27	42.27	42.27	270.00	.00
13040.00	34.00	270.00	13028.36	.00	-55.62	55.62	55.62	270.00	15.87
13065.00	38.00	270.00	13048.59	.00	-70.31	70.31	70.31	270.00	16.00
13090.00	42.00	270.00	13067.73	.00	-86.38	86.38	86.38	270.00	16.00
13115.00	45.00	270.00	13085.87	.00	-103.58	103.58	103.58	270.00	12.00
Top of Devonian									
13144.89	45.00	270.00	13107.00	.00	-124.72	124.72	124.72	270.00	.00
13169.89	57.34	270.00	13122.65	.00	-144.16	144.16	144.16	270.00	49.36