

DIRECTIONAL/LATERAL

State/Country: NM/USA

Company: Yates Petroleum Corporation
 Lease/Well: Walt Canyon AMA Federl #2-H
 Location: Section 3 T22S-R24E
 Rig Name:
 RKB:
 G.L. or M.S.L.:

Declination:
 Grid:
 File name: C:\WINSERVE\WALT2R.SVY
 Date/Time: 08-Sep-00 / 16:17
 Curve Name:

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane 4.74

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
TOP--BEGIN BUILDING @ 5 DEGREES/100'.									
7348.80	.00	4.75	7348.80	.00	.00	.00	.00	.00	.00
7378.80	1.50	4.75	7378.80	.39	.03	.39	.39	4.75	5.00
7408.80	3.00	4.75	7408.77	1.57	.13	1.57	1.57	4.75	5.00
7438.80	4.50	4.75	7438.71	3.52	.29	3.53	3.53	4.75	5.00
7468.80	6.00	4.75	7468.58	6.26	.52	6.28	6.28	4.75	5.00
7498.80	7.50	4.75	7498.37	9.77	.81	9.80	9.80	4.75	5.00
7528.80	9.00	4.75	7528.06	14.06	1.17	14.11	14.11	4.75	5.00
7558.80	10.50	4.75	7557.63	19.12	1.59	19.19	19.19	4.75	5.00
7588.80	12.00	4.75	7587.05	24.96	2.07	25.04	25.04	4.75	5.00
7618.80	13.50	4.75	7616.31	31.55	2.62	31.66	31.66	4.75	5.00
7648.80	15.00	4.75	7645.39	38.91	3.23	39.05	39.05	4.75	5.00
7678.80	16.50	4.75	7674.26	47.03	3.90	47.19	47.19	4.75	5.00
7708.80	18.00	4.75	7702.91	55.89	4.64	56.09	56.09	4.75	5.00
7738.80	19.50	4.75	7731.32	65.50	5.44	65.73	65.73	4.75	5.00
7768.80	21.00	4.75	7759.46	75.85	6.30	76.11	76.11	4.75	5.00
7798.80	22.50	4.75	7787.32	86.93	7.22	87.23	87.23	4.75	5.00
7828.80	24.00	4.75	7814.89	98.73	8.20	99.07	99.07	4.75	5.00
7858.80	25.50	4.75	7842.13	111.25	9.24	111.63	111.63	4.75	5.00
7888.80	27.00	4.75	7869.04	124.47	10.33	124.90	124.90	4.75	5.00
7918.80	28.50	4.75	7895.58	138.39	11.49	138.87	138.87	4.75	5.00
END OF BUILD--HOLD @ 30 DEGREES INCLINATION									
7948.80	30.00	4.75	7921.76	153.00	12.70	153.52	153.52	4.75	5.00
7992.96	30.00	4.75	7960.00	175.00	14.53	175.60	175.60	4.75	5.00
END OF DIRECITONAL HOLE--RUN AND CEMENT 7" CASING									
WELL OUT OF 7" W/ 6 1/8" BIT--BEGIN BUILDING @ 35.81 DEGREES/100'									
7992.96	30.00	4.75	7960.00	175.00	14.53	175.60	175.60	4.75	.00
8022.96	40.74	4.75	7984.43	192.28	15.97	192.94	192.94	4.75	35.81
8052.96	51.49	4.75	8005.19	213.80	17.75	214.53	214.53	4.75	35.81
8082.96	62.23	4.75	8021.57	238.79	19.83	239.62	239.62	4.75	35.81
8112.96	72.97	4.75	8032.99	266.39	22.12	267.31	267.31	4.75	35.81
8142.96	83.71	4.75	8039.04	295.63	24.55	296.65	296.65	4.75	35.81
END OF BUILD--HOLD 90 DEGREE ANGLE TO END OF LATERAL									
8160.51	90.00	4.74	8040.00	313.09	26.00	314.17	314.17	4.75	35.81
8260.51	90.00	4.74	8040.00	412.75	34.27	414.17	414.17	4.75	.00
8360.51	90.00	4.74	8040.00	512.40	42.54	514.17	514.17	4.75	.00
8460.51	90.00	4.74	8040.00	612.06	50.81	614.17	614.17	4.75	.00