

Job Number: 03187

State/Country: New Mexico / USA

Company: Devon Energy Prod. Co.

Declination:

Lease/Well: NEBU #327

Grid:

Location: San Juan County, Sec 20-31N-4W

File name: C:\CUST03\SURVEYS\DEVON\03187.SVY

Rig Name: DJ #1

Date/Time: 24-Oct-03 / 13:05

RKB:

Curve Name: As Drilled

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

20-045-31291

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 176.02
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOSURE Distance FT Direction Deg		Dogleg Severity Deg/100
282.00	.30	97.00	282.00	.15	-.09	.76	.76	97.00	.00
322.00	1.00	162.80	322.00	.42	-.35	.91	.98	111.10	3.06
384.00	2.90	177.80	383.96	2.51	-2.44	1.13	2.69	155.04	3.15
444.00	5.40	176.80	443.80	6.85	-6.77	1.35	6.91	168.73	4.17
505.00	7.50	174.80	504.41	13.70	-13.60	1.87	13.73	172.17	3.46
569.00	9.10	175.80	567.73	22.94	-22.81	2.62	22.96	173.45	2.51
630.00	10.20	178.50	627.87	33.16	-33.02	3.12	33.17	174.61	1.95
694.00	12.00	177.60	690.67	45.47	-45.34	3.54	45.47	175.53	2.83
755.00	14.20	173.60	750.08	59.29	-59.11	4.84	59.29	175.51	3.90
817.00	16.10	172.30	809.92	75.47	-75.19	6.64	75.48	174.95	3.11
911.00	19.10	172.30	899.51	103.83	-103.35	10.45	103.86	174.23	3.19
1005.00	21.70	170.80	987.61	136.48	-135.75	15.29	136.61	173.57	2.82
1100.00	21.80	174.50	1075.85	171.61	-170.65	19.79	171.79	173.39	1.45
1194.00	21.70	175.50	1163.16	206.44	-205.35	22.82	206.61	173.66	.41
1288.00	21.50	178.10	1250.56	241.03	-239.89	24.76	241.16	174.11	1.04
1383.00	21.50	176.80	1338.95	275.83	-274.67	26.31	275.93	174.53	.50
1478.00	21.50	176.30	1427.34	310.65	-309.42	28.40	310.72	174.76	.19
1573.00	22.00	175.80	1515.58	345.85	-344.54	30.83	345.92	174.89	.56
1667.00	22.60	176.00	1602.55	381.52	-380.12	33.38	381.58	174.98	.64
1761.00	21.80	176.00	1689.58	417.04	-415.55	35.86	417.09	175.07	.85
1855.00	21.80	177.30	1776.86	451.94	-450.40	37.90	451.99	175.19	.51
1950.00	22.40	176.40	1864.88	487.68	-486.08	39.86	487.71	175.31	.73
2044.00	21.20	178.10	1952.15	522.57	-520.95	41.55	522.60	175.44	1.44

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Vertical Section FT	N-S FT	E-W FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
2139.00	21.90	174.80	2040.52	557.45	-555.76	43.73	557.48	175.50	1.47
2234.00	20.70	175.30	2129.02	591.96	-590.14	46.71	591.98	175.47	1.28
2328.00	20.80	175.30	2216.93	625.26	-623.33	49.44	625.29	175.47	.11
2423.00	21.30	175.50	2305.59	659.38	-657.34	52.17	659.41	175.46	.53
2517.00	20.80	175.30	2393.31	693.14	-691.00	54.88	693.17	175.46	.54
2610.00	21.50	176.60	2480.05	726.69	-724.47	57.25	726.72	175.48	.91
2706.00	21.40	175.50	2569.40	761.80	-759.49	59.66	761.83	175.51	.43
2799.00	19.00	175.80	2656.67	793.91	-791.51	62.10	793.94	175.51	2.58
2894.00	17.30	176.90	2746.94	823.50	-821.04	64.00	823.53	175.54	1.83
2989.00	13.90	180.80	2838.43	849.00	-846.56	64.60	849.02	175.64	3.74
3083.00	11.10	181.30	2930.20	869.27	-866.90	64.24	869.27	175.76	2.98
3179.00	9.80	171.10	3024.61	886.61	-884.21	65.30	886.62	175.78	2.35
3273.00	9.20	171.10	3117.32	902.07	-899.54	67.70	902.08	175.70	.64
3368.00	7.30	185.00	3211.34	915.60	-913.06	68.35	915.61	175.72	2.89
3462.00	6.00	186.80	3304.71	926.32	-923.88	67.24	926.33	175.84	1.40
3557.00	3.50	195.60	3399.38	933.93	-931.61	65.87	933.93	175.96	2.73
3651.00	1.60	175.30	3493.28	937.95	-935.68	65.21	937.95	176.01	2.21
3716.00	.40	111.10	3558.27	938.95	-936.67	65.50	938.95	176.00	2.26
3779.00	.40	74.80	3621.27	939.00	-936.69	65.91	939.00	175.97	.40
Projected									
3830.00	.40	74.80	3672.27	938.94	-936.59	66.26	938.94	175.95	.00