

Survey

Client: Burlington Resources Field: Eddy County Structure: Merphan 16 State #1 Well: Merphan 16 State #1 Borehole: Merphan 16 State #1 API #: Date: March 22, 1999 Grid Convergence: 0.28894650° Scale Factor: 0.99994170 Location: N 32 2 42.040, W 103 47 19.553 : N 380526.000 ftUS, E 668732.000 ftUS Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet	Survey Computation Method: Minimum Curvature DLS Computation Method: Lubinski Vertical Section Azimuth: 0.000° Vertical Section Origin: N 0.000 ft, E 0.000 ft TVD Reference: 3212.0 ft above Magnetic Declination: 9.051° Total Field Strength: 49730.585 nT Dip: 60.314° Declination Date: March 10, 1999 Magnetic Declination Model: BGS 1998 North Reference: Grid North Coordinate Reference To: Structure Reference Point
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Station ID	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	VSec (ft)	N/S (ft)	E/W (ft)	Closure (ft)	at Azim (°)	DLS (°/100ft)	TF (°)
Tie-In	3980.00	2.93	159.14	3978.89	-5.00	-5.00	-14.74	15.56	251.26	0.00	161.1MTF
	4352.00	2.00	161.07	4350.54	-20.02	-20.02	-9.25	22.06	204.79	0.25	177.1MTF
	4862.00	1.50	177.07	4860.31	-35.11	-35.11	-6.02	35.62	189.73	0.14	147.9MTF
	5343.00	1.25	212.07	5341.17	-45.84	-45.84	-8.48	46.62	190.49	0.18	149.9MTF
	5823.00	0.25	210.07	5821.13	-51.19	-51.19	-11.79	52.53	192.97	0.21	-86.9MTF
	6336.00	0.75	273.07	6334.11	-51.97	-51.97	-15.70	54.29	196.81	0.13	100.9MTF
	6750.00	1.25	259.07	6748.05	-52.69	-52.69	-22.84	57.42	203.44	0.13	155.9MTF
	7230.00	1.50	204.07	7227.93	-59.42	-59.42	-30.54	66.81	207.21	0.27	168.9MTF
	7677.00	2.00	191.07	7674.72	-72.41	-72.41	-34.43	80.18	205.43	0.14	117.9MTF
	8029.00	1.00	242.07	8026.61	-79.88	-79.88	-38.32	88.60	205.63	0.45	-90.9MTF
	8381.00	1.50	269.07	8378.52	-81.39	-81.39	-45.64	93.32	209.28	0.22	-68.9MTF