

Company: Foundation Energy Management  
WellName: Banta Ridge Federal #12B-18  
Location:

Vertical Section calculated on an Azimuth of: 210.0073

Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\Foundation Energy\Banta Ridge Federa 12B-18\Directional Plan Survey.sr5

#	Depth Feet	Inc Degrees	Azimuth Degrees	TVD Feet	SubSea Feet	North Feet	East Feet	Section Feet	Dogleg /100 ft	BldRate /100 ft	Trnrate /100 ft	Comment
0	0.00	0.00	210.01	0.00	5859.00	0.00	0.00	0.00	0.00	0.00	0.00	
1	100.00	0.00	210.01	100.00	5759.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	210.01	200.00	5659.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	300.00	0.00	210.01	300.00	5559.00	0.00	0.00	0.00	0.00	0.00	0.00	
4	400.00	0.00	210.01	400.00	5459.00	0.00	0.00	0.00	0.00	0.00	0.00	
5	500.00	0.00	210.01	500.00	5359.00	0.00	0.00	0.00	0.00	0.00	0.00	
6	508.00	0.00	210.01	508.00	5351.00	KOP, B.G.=2°/100'		0.00	0.00	0.00	0.00	
7	600.00	1.84	210.01	599.98	5259.02	-1.28	-0.74	1.48	2.00	2.00	0.00	
8	700.00	3.84	210.01	699.86	5159.14	-5.57	-3.22	6.43	2.00	2.00	0.00	
9	800.00	5.84	210.01	799.49	5059.51	-12.88	-7.44	14.87	2.00	2.00	0.00	
10	900.00	7.84	210.01	898.78	4960.22	-23.19	-13.39	26.78	2.00	2.00	0.00	
11	1000.00	9.84	210.01	997.59	4861.42	-36.50	-21.08	42.14	2.00	2.00	0.00	
12	1100.00	11.84	210.01	1095.80	4763.20	-52.78	-30.48	60.95	2.00	2.00	0.00	
13	1108.00	12.00	210.01	1103.62	4755.38	TOS, Hold 12°		-54.21	-31.31	62.60	2.00	0.00
14	1200.00	12.00	210.01	1193.61	4665.39	-70.78	-40.87	81.73	0.00	0.00	0.00	
15	1300.00	12.00	210.01	1291.43	4567.57	-88.78	-51.27	102.52	0.00	0.00	0.00	
16	1400.00	12.00	210.01	1389.24	4469.76	-106.78	-61.67	123.31	0.00	0.00	0.00	
17	1500.00	12.00	210.01	1487.06	4371.94	-124.79	-72.07	144.10	0.00	0.00	0.00	
18	1600.00	12.00	210.01	1584.87	4274.13	-142.79	-82.47	164.90	0.00	0.00	0.00	
19	1700.00	12.00	210.01	1682.69	4176.31	-160.80	-92.86	185.69	0.00	0.00	0.00	
20	1800.00	12.00	210.01	1780.50	4078.50	-178.80	-103.26	206.48	0.00	0.00	0.00	
21	1900.00	12.00	210.01	1878.32	3980.68	-196.81	-113.66	227.27	0.00	0.00	0.00	
22	2000.00	12.00	210.01	1976.13	3882.87	-214.81	-124.06	248.06	0.00	0.00	0.00	
23	2100.00	12.00	210.01	2073.95	3785.05	-232.81	-134.45	268.85	0.00	0.00	0.00	
24	2200.00	12.00	210.01	2171.76	3687.24	-250.82	-144.85	289.64	0.00	0.00	0.00	
25	2300.00	12.00	210.01	2269.57	3589.43	-268.82	-155.25	310.43	0.00	0.00	0.00	
26	2400.00	12.00	210.01	2367.39	3491.61	-286.83	-165.65	331.22	0.00	0.00	0.00	
27	2500.00	12.00	210.01	2465.20	3393.80	-304.83	-176.05	352.02	0.00	0.00	0.00	
28	2600.00	12.00	210.01	2563.02	3295.98	-322.84	-186.44	372.81	0.00	0.00	0.00	
29	2700.00	12.00	210.01	2660.83	3198.17	-340.84	-196.84	393.60	0.00	0.00	0.00	
30	2800.00	12.00	210.01	2758.65	3100.35	-358.85	-207.24	414.39	0.00	0.00	0.00	
31	2900.00	12.00	210.01	2856.46	3002.54	-376.85	-217.64	435.18	0.00	0.00	0.00	
32	3000.00	12.00	210.01	2954.28	2904.72	-394.85	-228.04	455.97	0.00	0.00	0.00	
33	3100.00	12.00	210.01	3052.09	2806.91	-412.86	-238.43	476.76	0.00	0.00	0.00	
34	3200.00	12.00	210.01	3149.91	2709.09	-430.86	-248.83	497.55	0.00	0.00	0.00	
35	3300.00	12.00	210.01	3247.72	2611.28	-448.87	-259.23	518.34	0.00	0.00	0.00	
36	3378.10	12.00	210.01	3324.11	2534.89	TOD, D.G.=2°/100'		-462.93	-267.35	534.58	0.00	0.00
37	3400.00	11.56	210.01	3345.55	2513.45	-466.80	-269.59	539.05	2.00	2.00	0.00	
38	3500.00	9.56	210.01	3443.85	2415.15	-482.67	-278.75	557.38	2.00	2.00	0.00	
39	3600.00	7.56	210.01	3542.73	2316.27	-495.56	-286.20	572.27	2.00	2.00	0.00	
40	3700.00	5.56	210.01	3642.07	2216.93	-505.46	-291.91	583.70	2.00	2.00	0.00	

May 18,2011  
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PathTracker 5.0.361  
Survey Calculation Program

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Company: Foundation Energy Management  
WellName: Banta Ridge Federal #12B-18  
Location:

Vertical Section calculated on an Azimuth of: 210.0073

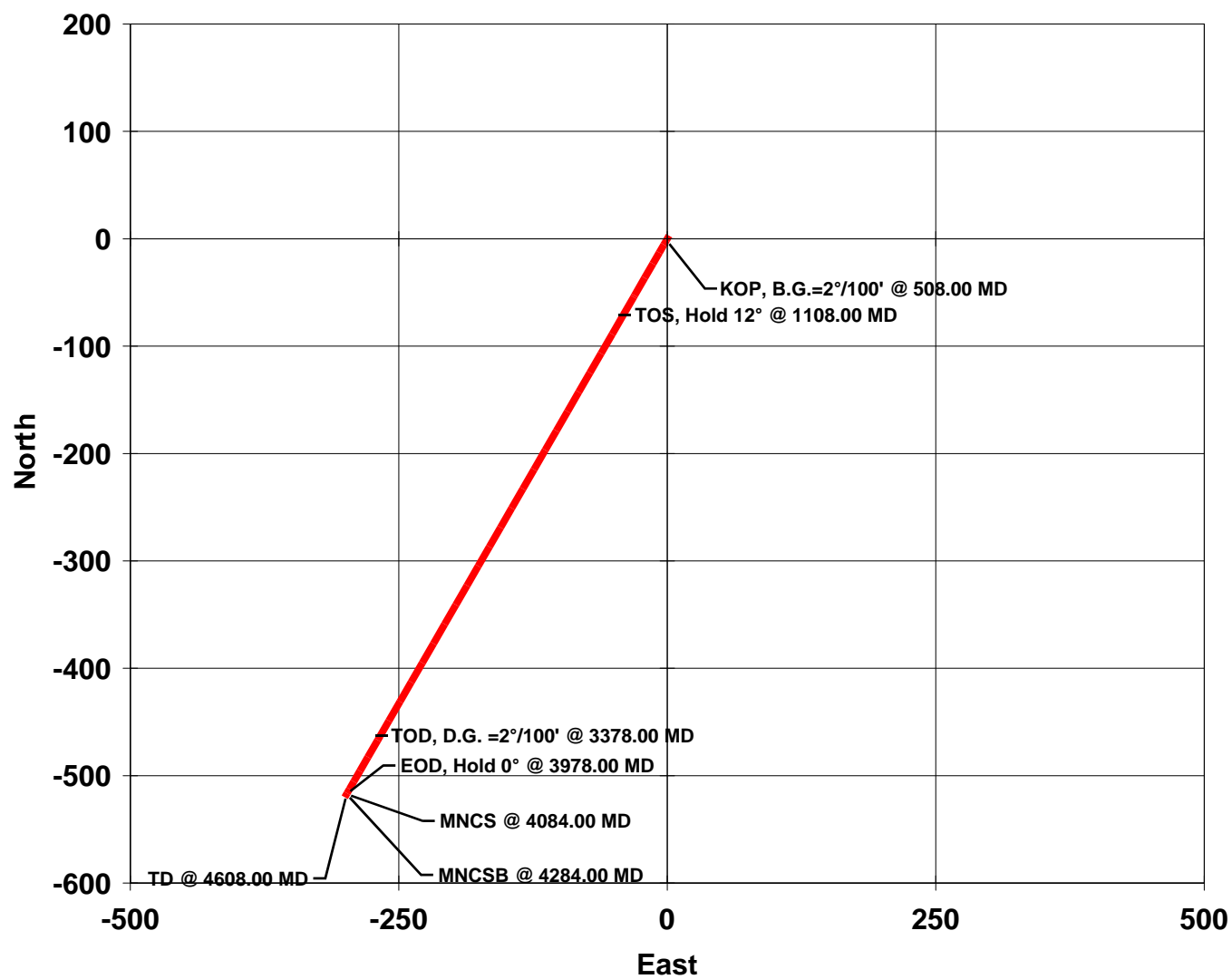
Survey Calculation Method: Minimum Curvature

FileName: F:\WELL REPORTS\Foundation Energy\Banta Ridge Federa 12B-18\Directional Plan Survey.sr5

#	Depth Feet	Inc Degrees	Azimuth Degrees	TVD Feet	SubSea Feet	North Feet	East Feet	Section Feet	Dogleg /100 ft	BldRate /100 ft	Trnrate /100 ft	Comment
41	3800.00	3.56	210.01	3741.75	2117.25	-512.35	-295.89	591.65	2.00	2.00	0.00	
42	3900.00	1.56	210.01	3841.65	2017.35	-516.22	-298.13	596.12	2.00	2.00	0.00	
43	3978.10	0.00	210.01	3919.74	1939.26	-517.14	-298.66	597.19	2.00	2.00	0.00	EOD, Hold 0°
44	4000.00	0.00	210.01	3941.64	1917.36	-517.14	-298.66	597.19	0.00	0.00	0.00	
Int	4084.36	0.00	0.00	4026.00	1833.00	-517.14	-298.66	597.19	---	---	---	MNCS
46	4100.00	0.00	210.01	4041.64	1817.36	-517.14	-298.66	597.19	0.00	0.00	0.00	
47	4200.00	0.00	210.01	4141.64	1717.36	-517.14	-298.66	597.19	0.00	0.00	0.00	
Int	4284.36	0.00	0.00	4226.00	1633.00	-517.14	-298.66	597.19	---	---	---	MNCSB
49	4300.00	0.00	210.01	4241.64	1617.36	-517.14	-298.66	597.19	0.00	0.00	0.00	
50	4400.00	0.00	210.01	4341.64	1517.36	-517.14	-298.66	597.19	0.00	0.00	0.00	
51	4500.00	0.00	210.01	4441.64	1417.36	-517.14	-298.66	597.19	0.00	0.00	0.00	
52	4600.00	0.00	210.01	4541.64	1317.36	-517.14	-298.66	597.19	0.00	0.00	0.00	TD
53	4608.36	0.00	210.01	4550.00	1309.00	-517.14	-298.66	597.19	0.00	0.00	0.00	

Closure is 597.1854 meters on an Azimuth of 210.0073

Plan View  
Banta Ridge Federal #12B-18



Section View  
Banta Ridge Federal #12B-18

