



Company: Concho
Lease/Well: Magnum Pronto 32 State SWD/1

Rig Name: Pulling Unit
State/County: New Mexico/Lea
Latitude: 32.62, Longitude: -103.79
GRID North is 0.29 Degrees East of True North
VS-Azi: 0.00 Degrees



HOBBS OGD

APR 27 2015

RECEIVED

FIELD COPY ONLY (NOT DEFINITIVE)

Depth Reference : Ground Level

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: magnum pronto 32 state swd 1.ut

Minimum Curvature Method

Report Date/Time: 2/20/2015 / 12:34

VES Survey International

Midland, TX

(432)-563-5444

Surveyor: Tim Dillon

30-025-41354

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
25.00	0.10	331.62	25.00	0.02	-0.01	0.02	0.02	331.62	0.40
50.00	0.21	300.82	50.00	0.06	-0.06	0.06	0.09	315.84	0.54
75.00	0.27	288.67	75.00	0.10	-0.16	0.10	0.19	303.87	0.31
100.00	0.28	309.35	100.00	0.16	-0.26	0.16	0.30	302.06	0.40
125.00	0.29	312.71	125.00	0.24	-0.35	0.24	0.43	304.67	0.08
150.00	0.38	308.65	150.00	0.34	-0.46	0.34	0.57	306.13	0.37
175.00	0.29	282.26	175.00	0.40	-0.59	0.40	0.71	304.37	0.71
200.00	0.32	288.85	200.00	0.44	-0.72	0.44	0.84	301.47	0.18
225.00	0.21	274.59	225.00	0.47	-0.83	0.47	0.95	299.30	0.51
250.00	0.16	281.01	250.00	0.48	-0.91	0.48	1.03	297.62	0.22
275.00	0.11	281.25	275.00	0.49	-0.97	0.49	1.08	296.74	0.20
300.00	0.11	268.68	300.00	0.49	-1.01	0.49	1.13	295.84	0.10
325.00	0.14	279.64	325.00	0.50	-1.07	0.50	1.18	294.89	0.15
350.00	0.14	271.90	350.00	0.50	-1.13	0.50	1.24	293.97	0.08
375.00	0.13	288.95	375.00	0.51	-1.19	0.51	1.29	293.35	0.16
400.00	0.11	253.78	400.00	0.51	-1.24	0.51	1.34	292.60	0.30
425.00	0.13	271.79	425.00	0.51	-1.29	0.51	1.38	291.56	0.17
450.00	0.18	264.64	450.00	0.51	-1.36	0.51	1.45	290.48	0.21
475.00	0.19	245.63	475.00	0.49	-1.43	0.49	1.51	288.72	0.25
500.00	0.15	239.25	500.00	0.45	-1.50	0.45	1.56	286.77	0.18
525.00	0.15	221.02	525.00	0.41	-1.55	0.41	1.60	284.84	0.19
550.00	0.10	233.51	550.00	0.37	-1.59	0.37	1.63	283.21	0.23
575.00	0.05	247.78	575.00	0.36	-1.61	0.36	1.65	282.41	0.21
600.00	0.12	263.88	600.00	0.35	-1.65	0.35	1.69	281.92	0.29
625.00	0.18	278.73	625.00	0.35	-1.72	0.35	1.75	281.58	0.28
650.00	0.26	272.37	650.00	0.36	-1.81	0.36	1.85	281.24	0.33
675.00	0.19	227.88	675.00	0.33	-1.90	0.33	1.93	279.99	0.73
700.00	0.21	229.98	700.00	0.28	-1.96	0.28	1.98	278.03	0.09
725.00	0.19	238.77	725.00	0.23	-2.03	0.23	2.05	276.35	0.15
750.00	0.13	240.73	750.00	0.19	-2.09	0.19	2.10	275.21	0.24
775.00	0.12	229.07	775.00	0.16	-2.14	0.16	2.15	274.27	0.11
800.00	0.06	232.54	800.00	0.13	-2.17	0.13	2.17	273.55	0.24
825.00	0.06	235.87	825.00	0.12	-2.19	0.12	2.19	273.12	0.01
850.00	0.07	313.17	850.00	0.12	-2.21	0.12	2.22	273.17	0.33

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
875.00	0.11	325.52	875.00	0.15	-2.24	0.15	2.24	273.91	0.18
900.00	0.14	282.54	900.00	0.18	-2.28	0.18	2.29	274.49	0.38
925.00	0.17	282.72	925.00	0.19	-2.35	0.19	2.35	274.73	0.12
950.00	0.11	265.14	950.00	0.20	-2.41	0.20	2.42	274.75	0.29
975.00	0.15	246.75	975.00	0.19	-2.46	0.19	2.47	274.30	0.23
1000.00	0.07	214.40	1000.00	0.16	-2.50	0.16	2.50	273.66	0.39
1025.00	0.08	193.35	1025.00	0.13	-2.51	0.13	2.52	272.96	0.12
1050.00	0.08	107.75	1050.00	0.11	-2.50	0.11	2.50	272.47	0.43
1075.00	0.07	73.50	1075.00	0.11	-2.47	0.11	2.47	272.48	0.18
1100.00	0.05	345.92	1100.00	0.12	-2.46	0.12	2.46	272.84	0.34
1125.00	0.08	52.42	1125.00	0.14	-2.45	0.14	2.45	273.35	0.30
1150.00	0.05	330.72	1150.00	0.16	-2.44	0.16	2.44	273.83	0.35
1175.00	0.10	354.23	1175.00	0.19	-2.44	0.19	2.45	274.55	0.23
1200.00	0.10	295.34	1200.00	0.23	-2.47	0.23	2.48	275.22	0.39
1225.00	0.13	277.81	1225.00	0.24	-2.51	0.24	2.53	275.42	0.18
1250.00	0.07	235.68	1249.99	0.23	-2.55	0.23	2.57	275.23	0.36
1275.00	0.10	177.87	1274.99	0.20	-2.57	0.20	2.57	274.53	0.35
1300.00	0.11	165.55	1299.99	0.16	-2.56	0.16	2.56	273.54	0.10
1325.00	0.03	20.09	1324.99	0.14	-2.55	0.14	2.56	273.17	0.54
1350.00	0.06	311.47	1349.99	0.16	-2.56	0.16	2.56	273.49	0.23
1375.00	0.07	48.67	1374.99	0.17	-2.56	0.17	2.56	273.91	0.39
1400.00	0.07	330.56	1399.99	0.20	-2.55	0.20	2.56	274.44	0.35
1425.00	0.09	315.67	1424.99	0.23	-2.57	0.23	2.58	275.01	0.11
1450.00	0.05	325.55	1449.99	0.25	-2.59	0.25	2.61	275.47	0.17
1475.00	0.11	279.56	1474.99	0.26	-2.62	0.26	2.64	275.69	0.33
1500.00	0.07	312.61	1499.99	0.28	-2.66	0.28	2.67	275.92	0.26
1525.00	0.13	308.21	1524.99	0.30	-2.69	0.30	2.71	276.44	0.24
1550.00	0.10	283.82	1549.99	0.33	-2.74	0.33	2.76	276.81	0.23
1575.00	0.08	253.86	1574.99	0.33	-2.77	0.33	2.79	276.72	0.20
1600.00	0.09	242.42	1599.99	0.31	-2.81	0.31	2.83	276.36	0.08
1625.00	0.07	199.74	1624.99	0.29	-2.83	0.29	2.85	275.84	0.24
1650.00	0.05	183.50	1649.99	0.26	-2.84	0.26	2.85	275.32	0.10
1675.00	0.08	115.53	1674.99	0.25	-2.82	0.25	2.83	274.98	0.31
1700.00	0.10	77.44	1699.99	0.24	-2.78	0.24	2.80	274.99	0.25
1725.00	0.10	112.98	1724.99	0.24	-2.74	0.24	2.75	274.98	0.24
1750.00	0.07	145.67	1749.99	0.22	-2.71	0.22	2.72	274.59	0.22
1775.00	0.16	75.12	1774.99	0.21	-2.67	0.21	2.68	274.59	0.61
1800.00	0.07	349.86	1799.99	0.24	-2.64	0.24	2.65	275.16	0.68
1825.00	0.07	111.18	1824.99	0.25	-2.63	0.25	2.64	275.39	0.49
1850.00	0.05	311.58	1849.99	0.25	-2.62	0.25	2.64	275.44	0.47
1875.00	0.08	328.75	1874.99	0.27	-2.64	0.27	2.65	275.88	0.14
1900.00	0.10	305.14	1899.99	0.30	-2.67	0.30	2.68	276.40	0.17
1925.00	0.09	329.50	1924.99	0.33	-2.70	0.33	2.72	276.96	0.17
1950.00	0.10	302.88	1949.99	0.36	-2.72	0.36	2.75	277.48	0.18
1975.00	0.08	320.79	1974.99	0.38	-2.75	0.38	2.78	277.92	0.14
2000.00	0.09	277.87	1999.99	0.40	-2.78	0.40	2.81	278.16	0.25
2025.00	0.07	202.89	2024.99	0.39	-2.81	0.39	2.84	277.86	0.39
2050.00	0.08	201.25	2049.99	0.36	-2.82	0.36	2.84	277.22	0.04
2075.00	0.07	12.68	2074.99	0.36	-2.82	0.36	2.85	277.19	0.60
2100.00	0.06	132.03	2099.99	0.36	-2.81	0.36	2.83	277.34	0.45
2125.00	0.10	62.58	2124.99	0.36	-2.78	0.36	2.81	277.44	0.39
2150.00	0.07	180.04	2149.99	0.36	-2.76	0.36	2.79	277.39	0.58
2175.00	0.10	356.33	2174.99	0.36	-2.76	0.36	2.79	277.52	0.68
2200.00	0.07	2.47	2199.99	0.40	-2.76	0.40	2.79	278.27	0.13
2225.00	0.21	53.32	2224.99	0.44	-2.73	0.44	2.76	279.26	0.70

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
2250.00	0.06	327.57	2249.99	0.48	-2.70	0.48	2.74	280.15	0.86
2275.00	0.09	41.36	2274.99	0.51	-2.69	0.51	2.74	280.70	0.37
2300.00	0.08	265.02	2299.99	0.52	-2.70	0.52	2.75	280.95	0.63
2325.00	0.07	238.01	2324.99	0.51	-2.73	0.51	2.77	280.64	0.15
2350.00	0.12	228.52	2349.99	0.49	-2.76	0.49	2.80	280.01	0.21
2375.00	0.14	134.22	2374.99	0.45	-2.76	0.45	2.79	279.23	0.76
2400.00	0.08	30.94	2399.99	0.44	-2.73	0.44	2.76	279.21	0.71
2425.00	0.08	48.97	2424.99	0.47	-2.70	0.47	2.74	279.83	0.10
2450.00	0.07	345.50	2449.99	0.49	-2.69	0.49	2.74	280.40	0.32
2475.00	0.08	306.62	2474.99	0.52	-2.71	0.52	2.76	280.85	0.20
2500.00	0.05	331.66	2499.99	0.54	-2.73	0.54	2.78	281.18	0.16
2525.00	0.11	314.99	2524.99	0.57	-2.75	0.57	2.81	281.62	0.25
2550.00	0.08	168.55	2549.99	0.57	-2.77	0.57	2.82	281.56	0.73
2575.00	0.05	115.43	2574.99	0.54	-2.75	0.54	2.81	281.18	0.26
2600.00	0.10	203.66	2599.99	0.52	-2.75	0.52	2.80	280.69	0.44
2625.00	0.10	30.68	2624.99	0.52	-2.75	0.52	2.80	280.68	0.80
2650.00	0.06	47.10	2649.99	0.55	-2.73	0.55	2.78	281.31	0.18
2675.00	0.09	93.82	2674.99	0.55	-2.70	0.55	2.76	281.59	0.26
2700.00	0.07	298.39	2699.99	0.56	-2.69	0.56	2.75	281.74	0.63
2725.00	0.12	12.55	2724.99	0.59	-2.70	0.59	2.77	282.37	0.49
2750.00	0.09	18.75	2749.99	0.64	-2.69	0.64	2.76	283.32	0.13
2775.00	0.10	245.09	2774.99	0.65	-2.70	0.65	2.78	283.44	0.70
2800.00	0.06	309.56	2799.99	0.65	-2.73	0.65	2.81	283.28	0.37
2825.00	0.06	293.52	2824.99	0.66	-2.76	0.66	2.83	283.45	0.07
2850.00	0.13	144.22	2849.99	0.64	-2.75	0.64	2.82	283.12	0.74
2875.00	0.09	95.01	2874.99	0.62	-2.71	0.62	2.78	282.79	0.39
2900.00	0.09	191.08	2899.99	0.60	-2.70	0.60	2.76	282.44	0.54
2925.00	0.12	21.81	2924.99	0.60	-2.69	0.60	2.76	282.57	0.84
2950.00	0.01	71.20	2949.99	0.63	-2.68	0.63	2.75	283.13	0.45
2975.00	0.09	99.74	2974.99	0.62	-2.66	0.62	2.73	283.18	0.33
3000.00	0.12	293.42	2999.99	0.63	-2.66	0.63	2.74	283.30	0.83
3025.00	0.08	296.23	3024.99	0.65	-2.70	0.65	2.78	283.47	0.16
3050.00	0.06	5.82	3049.99	0.67	-2.72	0.67	2.80	283.82	0.33
3075.00	0.08	208.48	3074.99	0.67	-2.73	0.67	2.81	283.74	0.55
3100.00	0.07	285.53	3099.99	0.66	-2.75	0.66	2.83	283.41	0.38
3125.00	0.11	260.80	3124.99	0.66	-2.79	0.66	2.86	283.23	0.22
3150.00	0.10	77.41	3149.99	0.66	-2.79	0.66	2.87	283.24	0.84
3175.00	0.05	129.09	3174.99	0.65	-2.76	0.65	2.84	283.34	0.32
3200.00	0.09	242.98	3199.99	0.64	-2.77	0.64	2.84	282.98	0.48
3225.00	0.08	33.70	3224.99	0.64	-2.78	0.64	2.85	283.06	0.66
3250.00	0.07	108.53	3249.99	0.65	-2.75	0.65	2.83	283.36	0.37
3275.00	0.11	101.13	3274.99	0.64	-2.71	0.64	2.79	283.35	0.17
3300.00	0.14	299.74	3299.99	0.65	-2.72	0.65	2.80	283.55	0.99
3325.00	0.05	280.95	3324.99	0.67	-2.75	0.67	2.84	283.71	0.38
3350.00	0.06	308.54	3349.99	0.68	-2.78	0.68	2.86	283.81	0.11
3375.00	0.24	300.55	3374.99	0.72	-2.83	0.72	2.92	284.21	0.72
3400.00	0.27	321.23	3399.99	0.79	-2.91	0.79	3.02	285.16	0.38
3425.00	0.39	349.86	3424.99	0.92	-2.96	0.92	3.10	287.22	0.80
3450.00	0.54	354.82	3449.99	1.12	-2.99	1.12	3.19	290.54	0.62
3475.00	0.76	5.30	3474.99	1.40	-2.99	1.40	3.30	295.16	1.00
3500.00	0.93	6.26	3499.99	1.77	-2.95	1.77	3.44	300.97	0.68
3525.00	1.30	1.35	3524.98	2.25	-2.92	2.25	3.69	307.68	1.53
3550.00	1.45	359.00	3549.98	2.85	-2.92	2.85	4.08	314.37	0.64
3575.00	1.52	351.61	3574.97	3.50	-2.97	3.50	4.59	319.65	0.81
3600.00	1.58	347.74	3599.96	4.16	-3.09	4.16	5.19	323.39	0.48

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
3625.00	1.43	340.60	3624.95	4.79	-3.27	4.79	5.80	325.70	0.96
3650.00	1.55	337.45	3649.94	5.40	-3.50	5.40	6.44	327.03	0.58
3675.00	1.58	333.09	3674.93	6.02	-3.79	6.02	7.11	327.81	0.49
3700.00	1.63	333.17	3699.92	6.65	-4.11	6.65	7.81	328.29	0.20
3725.00	1.61	333.00	3724.91	7.28	-4.43	7.28	8.52	328.69	0.08
3750.00	1.67	332.93	3749.90	7.91	-4.75	7.91	9.23	329.02	0.24
3775.00	1.69	331.34	3774.89	8.56	-5.09	8.56	9.96	329.25	0.20
3800.00	1.90	332.48	3799.88	9.25	-5.46	9.25	10.74	329.44	0.85
3825.00	1.87	332.60	3824.86	9.98	-5.84	9.98	11.56	329.66	0.12
3850.00	1.92	332.52	3849.85	10.71	-6.22	10.71	12.39	329.86	0.20
3875.00	1.92	332.15	3874.84	11.46	-6.61	11.46	13.23	330.01	0.05
3900.00	1.97	330.70	3899.82	12.20	-7.02	12.20	14.08	330.10	0.28
3925.00	1.97	329.49	3924.81	12.95	-7.45	12.95	14.93	330.10	0.17
3950.00	1.98	328.20	3949.79	13.68	-7.89	13.68	15.80	330.03	0.18
3975.00	1.99	325.59	3974.78	14.41	-8.36	14.41	16.66	329.87	0.36
4000.00	2.05	321.51	3999.76	15.12	-8.89	15.12	17.54	329.55	0.62
4025.00	2.00	319.64	4024.75	15.80	-9.45	15.80	18.41	329.12	0.33
4050.00	2.01	317.79	4049.73	16.46	-10.03	16.46	19.27	328.65	0.26
4075.00	1.92	313.53	4074.72	17.07	-10.62	17.07	20.11	328.10	0.69
4100.00	1.92	312.35	4099.70	17.64	-11.24	17.64	20.92	327.50	0.16
4125.00	1.90	311.49	4124.69	18.20	-11.86	18.20	21.72	326.91	0.14
4150.00	1.85	312.06	4149.68	18.74	-12.47	18.74	22.51	326.37	0.21
4175.00	1.71	310.62	4174.66	19.26	-13.05	19.26	23.26	325.87	0.59
4200.00	1.71	310.15	4199.65	19.74	-13.62	19.74	23.98	325.40	0.06
4225.00	1.77	306.87	4224.64	20.21	-14.21	20.21	24.71	324.89	0.46
4250.00	1.69	306.29	4249.63	20.66	-14.82	20.66	25.42	324.35	0.33
4275.00	1.76	310.24	4274.62	21.13	-15.41	21.13	26.15	323.90	0.55
4300.00	1.77	312.88	4299.61	21.64	-15.98	21.64	26.90	323.55	0.33
4325.00	1.68	316.98	4324.59	22.17	-16.52	22.17	27.64	323.31	0.61
4350.00	1.67	319.10	4349.58	22.71	-17.01	22.71	28.37	323.18	0.25
4375.00	1.81	321.13	4374.57	23.29	-17.49	23.29	29.13	323.10	0.61
4400.00	1.79	316.62	4399.56	23.89	-18.01	23.89	29.91	322.99	0.57
4425.00	1.77	316.45	4424.55	24.45	-18.54	24.45	30.68	322.82	0.08
4450.00	1.61	319.01	4449.54	24.99	-19.04	24.99	31.42	322.70	0.71
4475.00	1.59	320.74	4474.53	25.53	-19.49	25.53	32.12	322.64	0.21
4500.00	1.34	326.18	4499.52	26.04	-19.87	26.04	32.75	322.65	1.14
4525.00	1.21	329.01	4524.51	26.51	-20.17	26.51	33.31	322.73	0.58
4550.00	1.12	329.37	4549.51	26.94	-20.43	26.94	33.81	322.83	0.36
4575.00	0.97	329.25	4574.50	27.34	-20.66	27.34	34.27	322.92	0.60
4600.00	0.91	327.83	4599.50	27.69	-20.88	27.69	34.67	322.98	0.26
4625.00	1.09	332.75	4624.50	28.07	-21.09	28.07	35.11	323.08	0.80
4650.00	0.98	334.33	4649.49	28.47	-21.29	28.47	35.55	323.21	0.45
4675.00	0.42	336.48	4674.49	28.75	-21.42	28.75	35.85	323.31	2.24
4700.00	0.16	320.88	4699.49	28.86	-21.48	28.86	35.97	323.34	1.08
4725.00	0.16	275.61	4724.49	28.89	-21.54	28.89	36.03	323.30	0.49
4750.00	0.16	293.17	4749.49	28.91	-21.60	28.91	36.09	323.23	0.20
4775.00	0.14	359.54	4774.49	28.95	-21.64	28.95	36.14	323.23	0.66
4800.00	0.12	278.69	4799.49	28.98	-21.66	28.98	36.18	323.23	0.68
4825.00	0.07	91.37	4824.49	28.99	-21.67	28.99	36.19	323.22	0.76
4850.00	0.11	6.11	4849.49	29.01	-21.65	29.01	36.20	323.26	0.50
4875.00	0.07	0.45	4874.49	29.05	-21.65	29.05	36.23	323.30	0.16
4900.00	0.12	49.48	4899.49	29.08	-21.63	29.08	36.25	323.36	0.36
4925.00	0.09	312.35	4924.49	29.11	-21.63	29.11	36.27	323.39	0.63
4950.00	0.12	11.77	4949.49	29.15	-21.64	29.15	36.30	323.42	0.43
4975.00	0.11	312.75	4974.49	29.19	-21.65	29.19	36.34	323.44	0.45

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5000.00	0.09	316.78	4999.49	29.22	-21.68	29.22	36.39	323.43	0.08
5025.00	0.09	192.74	5024.49	29.22	-21.70	29.22	36.39	323.40	0.64
5050.00	0.09	346.25	5049.49	29.22	-21.71	29.22	36.40	323.39	0.70
5075.00	0.04	218.50	5074.49	29.23	-21.72	29.23	36.42	323.39	0.48
5100.00	0.07	60.70	5099.49	29.23	-21.71	29.23	36.41	323.40	0.43
5125.00	0.05	333.36	5124.49	29.25	-21.70	29.25	36.42	323.43	0.34
5150.00	0.07	319.73	5149.49	29.27	-21.71	29.27	36.45	323.43	0.10
5175.00	0.06	338.48	5174.49	29.30	-21.73	29.30	36.47	323.43	0.09
5200.00	0.09	243.75	5199.49	29.30	-21.75	29.30	36.49	323.41	0.45
5225.00	0.05	116.35	5224.49	29.29	-21.76	29.29	36.48	323.39	0.51
5250.00	0.08	48.14	5249.49	29.29	-21.74	29.29	36.48	323.42	0.31
5275.00	0.12	6.18	5274.49	29.33	-21.72	29.33	36.50	323.48	0.32
5300.00	0.08	30.53	5299.49	29.37	-21.71	29.37	36.52	323.53	0.23
5325.00	0.04	278.47	5324.49	29.39	-21.71	29.39	36.54	323.55	0.41
5350.00	0.05	249.09	5349.49	29.38	-21.73	29.38	36.54	323.52	0.10
5375.00	0.04	358.75	5374.49	29.39	-21.74	29.39	36.55	323.51	0.30
5400.00	0.06	282.61	5399.49	29.40	-21.75	29.40	36.57	323.51	0.25
5425.00	0.12	247.74	5424.49	29.39	-21.79	29.39	36.59	323.45	0.31
5450.00	0.05	348.04	5449.49	29.39	-21.81	29.39	36.60	323.42	0.55
5475.00	0.09	335.78	5474.49	29.42	-21.82	29.42	36.63	323.43	0.17
5500.00	0.07	10.82	5499.49	29.46	-21.83	29.46	36.66	323.46	0.21
5525.00	0.06	313.73	5524.49	29.48	-21.84	29.48	36.69	323.47	0.25
5550.00	0.11	40.00	5549.49	29.51	-21.83	29.51	36.70	323.50	0.49
5575.00	0.13	328.39	5574.49	29.55	-21.83	29.55	36.74	323.54	0.57
5600.00	0.13	286.15	5599.49	29.58	-21.87	29.58	36.79	323.52	0.37
5625.00	0.04	307.94	5624.49	29.60	-21.91	29.60	36.82	323.49	0.38
5650.00	0.04	334.00	5649.49	29.61	-21.92	29.61	36.84	323.49	0.07
5675.00	0.08	229.63	5674.49	29.60	-21.93	29.60	36.84	323.47	0.39
5700.00	0.07	17.39	5699.49	29.61	-21.94	29.61	36.85	323.46	0.58
5725.00	0.09	271.73	5724.49	29.62	-21.96	29.62	36.87	323.45	0.51
5750.00	0.07	12.67	5749.49	29.64	-21.97	29.64	36.90	323.45	0.50
5775.00	0.04	353.56	5774.49	29.66	-21.97	29.66	36.91	323.47	0.14
5800.00	0.10	0.03	5799.49	29.69	-21.97	29.69	36.94	323.50	0.24
5825.00	0.10	284.78	5824.49	29.72	-21.99	29.72	36.97	323.50	0.49
5850.00	0.13	246.45	5849.49	29.71	-22.04	29.71	37.00	323.43	0.32
5875.00	0.05	283.87	5874.49	29.71	-22.08	29.71	37.01	323.38	0.38
5900.00	0.10	247.23	5899.49	29.70	-22.11	29.70	37.03	323.34	0.27
5925.00	0.09	7.20	5924.49	29.71	-22.13	29.71	37.04	323.33	0.66
5950.00	0.10	354.41	5949.49	29.75	-22.13	29.75	37.08	323.36	0.09
5975.00	0.06	347.02	5974.49	29.79	-22.13	29.79	37.11	323.39	0.16
6000.00	0.10	10.55	5999.49	29.82	-22.13	29.82	37.13	323.42	0.20
6025.00	0.14	266.23	6024.49	29.84	-22.16	29.84	37.17	323.41	0.76
6050.00	0.08	353.74	6049.49	29.86	-22.19	29.86	37.20	323.38	0.63
6075.00	0.08	340.83	6074.49	29.89	-22.20	29.89	37.23	323.40	0.07
6100.00	0.07	10.94	6099.49	29.92	-22.20	29.92	37.26	323.43	0.16
6125.00	0.07	301.99	6124.49	29.94	-22.21	29.94	37.28	323.44	0.32
6150.00	0.11	239.40	6149.49	29.94	-22.24	29.94	37.30	323.39	0.40
6175.00	0.11	43.27	6174.49	29.95	-22.25	29.95	37.30	323.39	0.87
6200.00	0.10	327.80	6199.49	29.98	-22.24	29.98	37.33	323.43	0.52
6225.00	0.08	340.33	6224.49	30.02	-22.26	30.02	37.37	323.44	0.11
6250.00	0.13	348.48	6249.49	30.06	-22.27	30.06	37.41	323.47	0.21
6275.00	0.04	288.65	6274.49	30.09	-22.28	30.09	37.44	323.48	0.46
6300.00	0.11	26.21	6299.49	30.12	-22.28	30.12	37.46	323.50	0.49
6325.00	0.11	354.64	6324.49	30.16	-22.27	30.16	37.49	323.55	0.24
6350.00	0.06	2.37	6349.49	30.20	-22.28	30.20	37.52	323.58	0.20

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
6375.00	0.06	10.80	6374.49	30.22	-22.27	30.22	37.54	323.61	0.04
6400.00	0.10	316.13	6399.49	30.25	-22.29	30.25	37.57	323.62	0.33
6425.00	0.08	251.40	6424.49	30.26	-22.32	30.26	37.60	323.59	0.39
6450.00	0.08	28.63	6449.49	30.27	-22.33	30.27	37.61	323.59	0.60
6475.00	0.09	330.88	6474.49	30.30	-22.33	30.30	37.64	323.62	0.33
6500.00	0.03	302.06	6499.49	30.33	-22.34	30.33	37.67	323.62	0.26
6525.00	0.05	333.77	6524.49	30.34	-22.35	30.34	37.68	323.62	0.12
6550.00	0.08	0.08	6549.49	30.37	-22.36	30.37	37.71	323.64	0.17
6575.00	0.14	289.81	6574.49	30.39	-22.39	30.39	37.75	323.63	0.54
6600.00	0.06	323.84	6599.49	30.41	-22.42	30.41	37.79	323.60	0.39
6625.00	0.08	62.48	6624.49	30.43	-22.41	30.43	37.80	323.63	0.43
6650.00	0.08	276.17	6649.49	30.44	-22.42	30.44	37.81	323.63	0.61
6675.00	0.08	27.09	6674.49	30.46	-22.43	30.46	37.82	323.64	0.53
6700.00	0.08	5.59	6699.49	30.49	-22.42	30.49	37.85	323.68	0.12
6725.00	0.07	308.25	6724.49	30.52	-22.43	30.52	37.87	323.69	0.29
6750.00	0.08	322.19	6749.49	30.54	-22.45	30.54	37.91	323.68	0.08
6775.00	0.13	350.41	6774.49	30.59	-22.46	30.59	37.95	323.70	0.28
6800.00	0.10	256.25	6799.49	30.61	-22.49	30.61	37.98	323.69	0.68
6825.00	0.10	266.68	6824.49	30.60	-22.53	30.60	38.00	323.63	0.07
6850.00	0.12	346.73	6849.49	30.63	-22.56	30.63	38.04	323.62	0.57
6875.00	0.07	298.29	6874.49	30.66	-22.58	30.66	38.08	323.63	0.36
6900.00	0.11	348.60	6899.49	30.69	-22.60	30.69	38.11	323.63	0.34
6925.00	0.06	302.54	6924.49	30.72	-22.61	30.72	38.15	323.64	0.32
6950.00	0.07	322.36	6949.49	30.74	-22.63	30.74	38.17	323.63	0.10
6975.00	0.09	41.70	6974.49	30.77	-22.63	30.77	38.19	323.66	0.41
7000.00	0.11	32.35	6999.49	30.80	-22.61	30.80	38.21	323.72	0.10
7025.00	0.08	351.97	7024.49	30.84	-22.59	30.84	38.23	323.77	0.29
7050.00	0.08	287.01	7049.49	30.86	-22.61	30.86	38.26	323.77	0.34
7075.00	0.10	303.38	7074.49	30.88	-22.65	30.88	38.29	323.74	0.13
7100.00	0.09	35.52	7099.49	30.91	-22.66	30.91	38.32	323.76	0.55
7125.00	0.10	0.17	7124.49	30.94	-22.64	30.94	38.34	323.80	0.23
7150.00	0.04	307.76	7149.49	30.97	-22.65	30.97	38.37	323.82	0.33
7175.00	0.08	30.89	7174.49	30.99	-22.65	30.99	38.38	323.84	0.34
7200.00	0.08	4.47	7199.49	31.02	-22.64	31.02	38.40	323.88	0.15
7225.00	0.08	359.68	7224.49	31.06	-22.64	31.06	38.43	323.91	0.03
7250.00	0.09	355.33	7249.49	31.10	-22.64	31.10	38.46	323.94	0.05
7275.00	0.09	288.52	7274.49	31.12	-22.66	31.12	38.50	323.94	0.40
7300.00	0.08	31.16	7299.49	31.14	-22.67	31.14	38.52	323.95	0.53
7325.00	0.08	36.17	7324.49	31.17	-22.65	31.17	38.53	324.00	0.03
7350.00	0.07	25.59	7349.49	31.20	-22.63	31.20	38.54	324.04	0.07
7375.00	0.10	308.96	7374.49	31.23	-22.64	31.23	38.57	324.05	0.43
7400.00	0.08	325.07	7399.49	31.25	-22.67	31.25	38.61	324.05	0.13
7425.00	0.12	313.13	7424.49	31.29	-22.70	31.29	38.65	324.04	0.18
7450.00	0.09	287.77	7449.49	31.31	-22.74	31.31	38.70	324.01	0.22
7475.00	0.06	304.59	7474.49	31.32	-22.77	31.32	38.72	323.99	0.15
7500.00	0.05	19.46	7499.49	31.34	-22.77	31.34	38.74	324.00	0.27
7525.00	0.08	316.12	7524.49	31.36	-22.78	31.36	38.77	324.01	0.29
7550.00	0.07	25.74	7549.49	31.39	-22.79	31.39	38.79	324.02	0.34
7575.00	0.13	350.52	7574.49	31.43	-22.79	31.43	38.82	324.06	0.33
7600.00	0.07	35.60	7599.49	31.47	-22.78	31.47	38.85	324.10	0.38
7625.00	0.11	336.64	7624.49	31.51	-22.78	31.51	38.88	324.13	0.38
7650.00	0.03	355.55	7649.49	31.54	-22.79	31.54	38.91	324.14	0.33
7675.00	0.10	35.43	7674.49	31.56	-22.78	31.56	38.92	324.18	0.32
7700.00	0.10	5.87	7699.49	31.60	-22.76	31.60	38.95	324.23	0.20
7725.00	0.13	19.28	7724.49	31.65	-22.75	31.65	38.98	324.29	0.16

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
7750.00	0.09	335.04	7749.49	31.69	-22.75	31.69	39.01	324.33	0.36
7775.00	0.07	317.02	7774.49	31.72	-22.77	31.72	39.05	324.33	0.13
7800.00	0.05	331.82	7799.49	31.74	-22.79	31.74	39.07	324.33	0.10
7825.00	0.05	311.52	7824.49	31.76	-22.80	31.76	39.10	324.33	0.07
7850.00	0.13	3.52	7849.49	31.79	-22.81	31.79	39.13	324.35	0.43
7875.00	0.06	317.03	7874.49	31.83	-22.81	31.83	39.16	324.37	0.40
7900.00	0.08	349.75	7899.49	31.86	-22.83	31.86	39.19	324.38	0.18
7925.00	0.09	15.16	7924.49	31.90	-22.82	31.90	39.22	324.41	0.15
7950.00	0.10	341.36	7949.49	31.94	-22.83	31.94	39.25	324.45	0.22
7975.00	0.06	4.22	7974.49	31.97	-22.83	31.97	39.28	324.47	0.20
8000.00	0.10	14.80	7999.49	32.00	-22.82	32.00	39.31	324.50	0.17
8025.00	0.09	316.85	8024.49	32.04	-22.83	32.04	39.34	324.52	0.37
8050.00	0.06	335.90	8049.49	32.06	-22.85	32.06	39.37	324.52	0.15
8075.00	0.03	349.16	8074.49	32.08	-22.86	32.08	39.39	324.53	0.13
8100.00	0.15	325.30	8099.49	32.12	-22.88	32.12	39.43	324.54	0.49
8125.00	0.04	335.32	8124.49	32.15	-22.90	32.15	39.47	324.54	0.44
8150.00	0.06	356.96	8149.49	32.17	-22.90	32.17	39.49	324.55	0.11
8175.00	0.13	314.90	8174.49	32.21	-22.92	32.21	39.53	324.56	0.38
8200.00	0.09	7.15	8199.49	32.25	-22.94	32.25	39.57	324.57	0.41
8225.00	0.15	338.92	8224.49	32.30	-22.95	32.30	39.62	324.60	0.33
8250.00	0.12	314.17	8249.49	32.34	-22.98	32.34	39.68	324.60	0.26
8275.00	0.09	2.61	8274.49	32.38	-23.00	32.38	39.72	324.61	0.36
8300.00	0.08	354.50	8299.49	32.42	-23.00	32.42	39.75	324.64	0.06
8325.00	0.11	334.77	8324.49	32.46	-23.01	32.46	39.79	324.66	0.18
8350.00	0.13	318.16	8349.49	32.50	-23.04	32.50	39.84	324.66	0.16
8375.00	0.10	4.60	8374.49	32.54	-23.06	32.54	39.88	324.68	0.38
8400.00	0.11	355.43	8399.49	32.59	-23.06	32.59	39.92	324.72	0.08
8425.00	0.15	318.78	8424.49	32.64	-23.08	32.64	39.98	324.73	0.36
8450.00	0.09	317.74	8449.49	32.68	-23.12	32.68	40.03	324.72	0.24
8475.00	0.11	14.65	8474.49	32.71	-23.12	32.71	40.06	324.74	0.39
8500.00	0.13	349.74	8499.49	32.77	-23.12	32.77	40.10	324.79	0.22
8525.00	0.07	327.12	8524.49	32.81	-23.14	32.81	40.14	324.81	0.28
8550.00	0.08	345.72	8549.49	32.84	-23.15	32.84	40.18	324.82	0.10
8575.00	0.07	335.75	8574.49	32.87	-23.16	32.87	40.21	324.83	0.07
8600.00	0.10	350.87	8599.49	32.90	-23.17	32.90	40.24	324.85	0.15
8625.00	0.12	18.09	8624.49	32.95	-23.17	32.95	40.28	324.89	0.22
8650.00	0.12	338.12	8649.49	33.00	-23.17	33.00	40.32	324.93	0.33
8675.00	0.12	341.48	8674.49	33.05	-23.19	33.05	40.37	324.95	0.03
8700.00	0.11	12.13	8699.49	33.10	-23.19	33.10	40.41	324.98	0.25
8725.00	0.08	334.06	8724.49	33.13	-23.19	33.13	40.44	325.01	0.27
8750.00	0.07	353.45	8749.49	33.17	-23.20	33.17	40.47	325.03	0.11
8775.00	0.10	7.58	8774.49	33.20	-23.20	33.20	40.50	325.06	0.15
8800.00	0.15	339.54	8799.49	33.25	-23.21	33.25	40.55	325.09	0.31
8825.00	0.11	322.47	8824.49	33.30	-23.23	33.30	40.61	325.10	0.22
8850.00	0.11	0.33	8849.49	33.35	-23.25	33.35	40.65	325.12	0.29
8875.00	0.09	4.12	8874.49	33.39	-23.25	33.39	40.69	325.15	0.08
8900.00	0.10	327.28	8899.49	33.43	-23.26	33.43	40.72	325.17	0.24
8925.00	0.09	21.14	8924.49	33.47	-23.26	33.47	40.76	325.20	0.35
8950.00	0.14	353.23	8949.49	33.51	-23.26	33.51	40.79	325.24	0.29
8975.00	0.13	329.56	8974.49	33.57	-23.28	33.57	40.85	325.26	0.22
9000.00	0.07	342.33	8999.49	33.61	-23.30	33.61	40.89	325.27	0.25
9025.00	0.12	26.46	9024.49	33.65	-23.29	33.65	40.92	325.31	0.34
9050.00	0.12	345.73	9049.49	33.69	-23.28	33.69	40.96	325.36	0.33
9075.00	0.06	343.45	9074.49	33.73	-23.29	33.73	40.99	325.37	0.24
9100.00	0.10	343.84	9099.49	33.77	-23.30	33.77	41.03	325.39	0.16

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
9125.00	0.15	327.81	9124.49	33.81	-23.33	33.81	41.08	325.40	0.24
9150.00	0.09	342.37	9149.49	33.86	-23.35	33.86	41.13	325.41	0.27
9175.00	0.05	2.91	9174.49	33.89	-23.36	33.89	41.16	325.43	0.19
9200.00	0.10	333.99	9199.49	33.92	-23.36	33.92	41.19	325.44	0.24
9225.00	0.08	19.80	9224.49	33.96	-23.37	33.96	41.22	325.47	0.29
9250.00	0.08	358.22	9249.49	33.99	-23.36	33.99	41.25	325.50	0.12
9275.00	0.11	348.08	9274.49	34.03	-23.37	34.03	41.28	325.52	0.14
9300.00	0.11	11.45	9299.49	34.08	-23.37	34.08	41.32	325.56	0.18
9325.00	0.06	333.43	9324.48	34.11	-23.37	34.11	41.35	325.59	0.29
9350.00	0.12	20.24	9349.48	34.15	-23.37	34.15	41.38	325.62	0.36
9375.00	0.05	355.27	9374.48	34.19	-23.36	34.19	41.40	325.66	0.31
9400.00	0.10	24.98	9399.48	34.22	-23.35	34.22	41.42	325.69	0.25
9425.00	0.03	348.01	9424.48	34.24	-23.34	34.24	41.44	325.72	0.31
9450.00	0.07	359.04	9449.48	34.26	-23.34	34.26	41.46	325.73	0.16
9475.00	0.10	338.84	9474.48	34.30	-23.35	34.30	41.49	325.75	0.17
9500.00	0.09	338.07	9499.48	34.34	-23.37	34.34	41.54	325.77	0.04
9525.00	0.08	357.71	9524.48	34.37	-23.37	34.37	41.57	325.78	0.12
9550.00	0.06	24.82	9549.48	34.40	-23.37	34.40	41.59	325.81	0.15
9575.00	0.09	357.96	9574.48	34.44	-23.37	34.44	41.61	325.84	0.18
9600.00	0.08	340.45	9599.48	34.47	-23.37	34.47	41.65	325.86	0.11
9625.00	0.10	13.18	9624.48	34.51	-23.37	34.51	41.68	325.89	0.22
9650.00	0.12	339.22	9649.48	34.55	-23.38	34.55	41.72	325.92	0.27
9675.00	0.09	26.20	9674.48	34.60	-23.38	34.60	41.75	325.95	0.35
9700.00	0.13	16.00	9699.48	34.64	-23.36	34.64	41.78	326.01	0.18
9725.00	0.11	343.12	9724.48	34.69	-23.36	34.69	41.82	326.04	0.28
9750.00	0.08	3.77	9749.48	34.73	-23.37	34.73	41.86	326.07	0.18
9775.00	0.12	7.27	9774.48	34.78	-23.36	34.78	41.89	326.11	0.16
9800.00	0.10	342.38	9799.48	34.82	-23.37	34.82	41.93	326.14	0.21
9825.00	0.07	26.52	9824.48	34.86	-23.36	34.86	41.96	326.17	0.28
9850.00	0.09	16.30	9849.48	34.89	-23.35	34.89	41.98	326.20	0.10
9875.00	0.10	354.94	9874.48	34.93	-23.35	34.93	42.02	326.24	0.15
9900.00	0.09	346.94	9899.48	34.97	-23.36	34.97	42.05	326.26	0.07
9925.00	0.11	30.91	9924.48	35.01	-23.35	35.01	42.08	326.30	0.31
9950.00	0.05	1.80	9949.48	35.04	-23.33	35.04	42.10	326.34	0.28
9975.00	0.10	0.39	9974.48	35.07	-23.33	35.07	42.13	326.37	0.20
10000.00	0.13	22.28	9999.48	35.12	-23.32	35.12	42.16	326.41	0.21
10025.00	0.12	345.24	10024.48	35.17	-23.32	35.17	42.20	326.46	0.32
10050.00	0.07	344.82	10049.48	35.21	-23.33	35.21	42.24	326.48	0.20
10075.00	0.11	337.54	10074.48	35.25	-23.34	35.25	42.28	326.49	0.17
10100.00	0.12	16.63	10099.48	35.30	-23.34	35.30	42.32	326.52	0.31
10125.00	0.04	359.33	10124.48	35.33	-23.34	35.33	42.34	326.55	0.33
10150.00	0.09	340.76	10149.48	35.36	-23.34	35.36	42.37	326.57	0.21
10175.00	0.08	12.21	10174.48	35.40	-23.35	35.40	42.40	326.59	0.19
10200.00	0.14	334.48	10199.48	35.44	-23.36	35.44	42.44	326.61	0.36
10225.00	0.13	26.74	10224.48	35.49	-23.36	35.49	42.49	326.65	0.48
10250.00	0.08	345.99	10249.48	35.54	-23.35	35.54	42.52	326.69	0.35
10275.00	0.11	30.60	10274.48	35.57	-23.34	35.57	42.55	326.73	0.31
10300.00	0.08	353.77	10299.48	35.61	-23.33	35.61	42.57	326.77	0.27
10325.00	0.11	334.13	10324.48	35.65	-23.34	35.65	42.61	326.78	0.18
10350.00	0.12	334.42	10349.48	35.69	-23.36	35.69	42.66	326.79	0.04
10375.00	0.10	10.21	10374.48	35.74	-23.37	35.74	42.70	326.82	0.28
10400.00	0.08	7.02	10399.48	35.78	-23.37	35.78	42.73	326.85	0.08
10425.00	0.12	330.63	10424.48	35.82	-23.38	35.82	42.77	326.87	0.29
10450.00	0.10	21.40	10449.48	35.86	-23.38	35.86	42.81	326.90	0.38
10475.00	0.04	355.91	10474.48	35.89	-23.37	35.89	42.83	326.93	0.26

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
10500.00	0.17	37.53	10499.48	35.93	-23.35	35.93	42.85	326.98	0.57
10525.00	0.06	358.69	10524.48	35.97	-23.33	35.97	42.87	327.03	0.52
10550.00	0.14	337.84	10549.48	36.01	-23.34	36.01	42.92	327.05	0.35
10575.00	0.09	25.21	10574.48	36.06	-23.34	36.06	42.96	327.08	0.41
10600.00	0.10	12.36	10599.48	36.10	-23.33	36.10	42.98	327.12	0.09
10625.00	0.11	19.84	10624.48	36.14	-23.32	36.14	43.01	327.17	0.07
10650.00	0.09	6.21	10649.48	36.18	-23.31	36.18	43.04	327.21	0.12
10675.00	0.07	341.23	10674.48	36.22	-23.31	36.22	43.07	327.23	0.16
10700.00	0.10	21.66	10699.48	36.25	-23.31	36.25	43.10	327.26	0.26
10725.00	0.08	339.94	10724.48	36.29	-23.31	36.29	43.13	327.29	0.27
10750.00	0.07	23.65	10749.48	36.32	-23.31	36.32	43.15	327.31	0.23
10775.00	0.09	351.50	10774.48	36.35	-23.30	36.35	43.18	327.34	0.19
10800.00	0.09	22.15	10799.48	36.39	-23.30	36.39	43.21	327.37	0.19
10825.00	0.08	15.78	10824.48	36.43	-23.29	36.43	43.23	327.41	0.05
10850.00	0.02	351.76	10849.48	36.45	-23.28	36.45	43.25	327.43	0.25
10875.00	0.07	344.92	10874.48	36.47	-23.29	36.47	43.27	327.44	0.20
10900.00	0.10	346.10	10899.48	36.50	-23.30	36.50	43.30	327.45	0.12
10925.00	0.06	352.47	10924.48	36.54	-23.30	36.54	43.33	327.47	0.16
10950.00	0.13	0.62	10949.48	36.58	-23.30	36.58	43.37	327.50	0.28
10975.00	0.07	0.44	10974.48	36.62	-23.30	36.62	43.41	327.53	0.24
11000.00	0.08	19.84	10999.48	36.65	-23.30	36.65	43.43	327.56	0.11
11025.00	0.11	340.52	11024.48	36.69	-23.30	36.69	43.46	327.58	0.28
11050.00	0.11	27.90	11049.48	36.74	-23.30	36.74	43.50	327.62	0.35
11075.00	0.04	347.13	11074.48	36.77	-23.29	36.77	43.52	327.65	0.34
11100.00	0.12	26.86	11099.48	36.80	-23.28	36.80	43.54	327.68	0.37
11125.00	0.10	340.14	11124.48	36.84	-23.27	36.84	43.58	327.72	0.36
11150.00	0.11	29.97	11149.48	36.88	-23.27	36.88	43.61	327.75	0.36
11175.00	0.09	344.97	11174.48	36.92	-23.26	36.92	43.64	327.79	0.31
11200.00	0.10	225.76	11199.48	36.93	-23.28	36.93	43.65	327.77	0.66
11225.00	0.07	184.59	11224.48	36.90	-23.30	36.90	43.64	327.73	0.26
11250.00	0.05	145.83	11249.48	36.87	-23.29	36.87	43.61	327.72	0.18
11275.00	0.07	275.36	11274.48	36.86	-23.30	36.86	43.61	327.70	0.44
11300.00	0.09	54.17	11299.48	36.88	-23.30	36.88	43.62	327.71	0.60
11325.00	0.07	276.32	11324.48	36.89	-23.30	36.89	43.63	327.72	0.60
11350.00	0.08	184.62	11349.48	36.87	-23.32	36.87	43.63	327.69	0.43
11375.00	0.09	212.32	11374.48	36.84	-23.33	36.84	43.61	327.65	0.17
11400.00	0.12	235.67	11399.48	36.81	-23.36	36.81	43.60	327.60	0.21
11425.00	0.10	120.57	11424.48	36.78	-23.36	36.78	43.58	327.58	0.74
11450.00	0.08	337.32	11449.48	36.79	-23.35	36.79	43.57	327.59	0.68
11475.00	0.06	230.95	11474.48	36.80	-23.37	36.80	43.59	327.58	0.45
11500.00	0.13	3.09	11499.48	36.82	-23.38	36.82	43.61	327.58	0.70
11525.00	0.08	213.45	11524.48	36.83	-23.39	36.83	43.63	327.58	0.81
11550.00	0.08	161.41	11549.48	36.80	-23.39	36.80	43.60	327.56	0.28
11575.00	0.08	183.53	11574.48	36.76	-23.39	36.76	43.57	327.54	0.12
11600.00	0.12	26.01	11599.48	36.77	-23.38	36.77	43.57	327.56	0.79
11625.00	0.06	246.91	11624.48	36.79	-23.38	36.79	43.59	327.57	0.68
11650.00	0.13	30.70	11649.48	36.81	-23.37	36.81	43.60	327.58	0.73
11675.00	0.23	239.11	11674.48	36.81	-23.40	36.81	43.62	327.55	1.40
11700.00	0.04	303.42	11699.48	36.79	-23.45	36.79	43.63	327.48	0.86
11725.00	0.36	44.21	11724.48	36.85	-23.41	36.85	43.65	327.58	1.48
11750.00	0.31	60.54	11749.48	36.94	-23.29	36.94	43.67	327.77	0.43
11775.00	0.39	50.14	11774.48	37.02	-23.17	37.02	43.68	327.96	0.41
11800.00	0.97	41.31	11799.48	37.24	-22.96	37.24	43.75	328.34	2.35
11825.00	1.14	45.33	11824.47	37.57	-22.65	37.57	43.87	328.92	0.74
11850.00	1.20	45.30	11849.47	37.93	-22.28	37.93	43.99	329.57	0.24

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
11875.00	1.23	43.00	11874.46	38.31	-21.91	38.31	44.14	330.23	0.23
11900.00	1.45	42.49	11899.46	38.74	-21.52	38.74	44.31	330.95	0.88
11925.00	1.59	44.74	11924.45	39.22	-21.06	39.22	44.52	331.77	0.61
11950.00	1.71	43.63	11949.44	39.74	-20.56	39.74	44.74	332.65	0.50
11975.00	1.75	42.64	11974.43	40.29	-20.04	40.29	45.00	333.55	0.20
12000.00	1.82	41.82	11999.41	40.86	-19.52	40.86	45.29	334.47	0.30
12025.00	1.95	40.67	12024.40	41.48	-18.98	41.48	45.62	335.42	0.54
12050.00	1.95	40.48	12049.39	42.13	-18.42	42.13	45.98	336.38	0.03
12075.00	2.00	38.17	12074.37	42.79	-17.88	42.79	46.38	337.33	0.38
12100.00	2.03	38.97	12099.36	43.48	-17.33	43.48	46.81	338.27	0.16
12125.00	2.15	37.72	12124.34	44.20	-16.76	44.20	47.27	339.23	0.51
12150.00	2.20	37.61	12149.32	44.95	-16.18	44.95	47.77	340.20	0.20
12175.00	2.25	35.55	12174.30	45.73	-15.61	45.73	48.32	341.16	0.38
12200.00	2.37	34.71	12199.28	46.55	-15.03	46.55	48.92	342.11	0.50
12225.00	2.40	35.41	12224.26	47.40	-14.43	47.40	49.55	343.07	0.17
12250.00	2.44	36.65	12249.24	48.26	-13.81	48.26	50.19	344.03	0.26
12275.00	2.55	36.35	12274.21	49.13	-13.16	49.13	50.86	345.00	0.44
12300.00	2.55	35.88	12299.19	50.03	-12.51	50.03	51.57	345.97	0.08
12325.00	2.57	35.36	12324.17	50.94	-11.85	50.94	52.30	346.90	0.12
12350.00	2.65	34.58	12349.14	51.87	-11.20	51.87	53.07	347.81	0.35
12375.00	2.74	33.29	12374.11	52.85	-10.55	52.85	53.89	348.71	0.43
12400.00	2.68	33.54	12399.08	53.83	-9.90	53.83	54.74	349.58	0.24
12425.00	2.76	33.69	12424.06	54.82	-9.24	54.82	55.59	350.43	0.32
12450.00	2.79	33.92	12449.03	55.83	-8.57	55.83	56.48	351.28	0.13
12475.00	2.75	34.20	12474.00	56.83	-7.89	56.83	57.37	352.10	0.17
12500.00	2.79	36.70	12498.97	57.81	-7.19	57.81	58.26	352.91	0.51
12525.00	2.94	29.46	12523.94	58.86	-6.51	58.86	59.22	353.69	1.57
12550.00	2.98	33.98	12548.90	59.95	-5.83	59.95	60.24	354.45	0.95
12575.00	3.01	33.84	12573.87	61.04	-5.10	61.04	61.25	355.22	0.12
12600.00	3.12	33.89	12598.83	62.15	-4.36	62.15	62.30	355.99	0.44
12625.00	3.21	36.23	12623.80	63.28	-3.56	63.28	63.38	356.78	0.63
12650.00	3.26	36.92	12648.76	64.41	-2.72	64.41	64.47	357.58	0.25
12675.00	3.24	37.85	12673.72	65.54	-1.86	65.54	65.56	358.37	0.23
12700.00	3.50	39.41	12698.67	66.68	-0.94	66.68	66.69	359.19	1.10
12725.00	3.59	39.83	12723.62	67.88	0.04	67.88	67.88	0.03	0.37
12750.00	3.68	40.97	12748.57	69.08	1.07	69.08	69.09	0.89	0.46
12775.00	3.88	41.14	12773.52	70.32	2.15	70.32	70.36	1.75	0.80
12800.00	3.87	41.80	12798.46	71.59	3.27	71.59	71.67	2.62	0.18
12825.00	3.84	41.44	12823.41	72.85	4.39	72.85	72.98	3.45	0.15
12850.00	3.98	41.74	12848.35	74.12	5.52	74.12	74.33	4.26	0.57
12875.00	3.99	42.29	12873.29	75.41	6.68	75.41	75.71	5.06	0.16
12900.00	3.94	42.65	12898.23	76.69	7.85	76.69	77.09	5.84	0.22
12925.00	3.69	42.70	12923.17	77.91	8.98	77.91	78.43	6.57	1.00
12950.00	3.54	44.79	12948.12	79.05	10.06	79.05	79.69	7.26	0.80
12975.00	3.30	45.68	12973.08	80.10	11.12	80.10	80.87	7.91	0.98
13000.00	3.00	47.47	12998.04	81.05	12.12	81.05	81.95	8.51	1.26
13025.00	2.71	48.02	13023.01	81.88	13.04	81.88	82.92	9.05	1.17
13050.00	2.54	51.04	13047.98	82.63	13.91	82.63	83.79	9.56	0.88
13075.00	2.64	51.73	13072.96	83.33	14.79	83.33	84.63	10.07	0.42
13100.00	2.75	51.36	13097.93	84.06	15.71	84.06	85.52	10.59	0.45
13125.00	2.74	50.59	13122.90	84.82	16.65	84.82	86.43	11.10	0.15
13150.00	2.58	45.63	13147.87	85.59	17.51	85.59	87.36	11.56	1.12
13175.00	2.85	50.04	13172.85	86.38	18.39	86.38	88.32	12.02	1.36
13200.00	2.87	48.78	13197.81	87.19	19.33	87.19	89.31	12.50	0.26
13225.00	2.82	47.63	13222.78	88.02	20.26	88.02	90.32	12.96	0.30

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
13250.00	2.90	50.36	13247.75	88.84	21.20	88.84	91.33	13.42	0.63
13275.00	3.08	49.50	13272.72	89.68	22.20	89.68	92.38	13.90	0.74
13300.00	3.19	49.23	13297.68	90.57	23.24	90.57	93.50	14.39	0.44
13325.00	3.38	48.38	13322.64	91.51	24.31	91.51	94.69	14.88	0.78
13350.00	3.44	48.02	13347.60	92.50	25.42	92.50	95.93	15.37	0.25
13375.00	3.64	47.72	13372.55	93.54	26.57	93.54	97.24	15.86	0.80
13400.00	3.84	47.19	13397.49	94.64	27.77	94.64	98.63	16.35	0.81
13425.00	3.98	47.49	13422.44	95.80	29.02	95.80	100.10	16.85	0.57
13450.00	4.10	47.40	13447.37	96.99	30.32	96.99	101.62	17.36	0.48
13475.00	4.24	47.05	13472.31	98.22	31.65	98.22	103.20	17.86	0.57
13500.00	4.37	45.53	13497.24	99.52	33.01	99.52	104.85	18.35	0.69
13525.00	4.63	43.29	13522.16	100.92	34.38	100.92	106.62	18.81	1.26
13550.00	4.94	40.78	13547.07	102.47	35.78	102.47	108.54	19.25	1.50
13575.00	5.13	37.14	13571.98	104.18	37.15	104.18	110.60	19.63	1.49
13600.00	5.34	34.12	13596.87	106.03	38.48	106.03	112.80	19.95	1.39
13625.00	5.51	27.28	13621.76	108.06	39.68	108.06	115.12	20.17	2.67
13646.00	5.40	22.73	13642.67	109.87	40.53	109.87	117.11	20.25	2.12

HORIZONTAL DISPLACEMENT IS
117.11 FEET AT 20.25 DEGREES