

Tie Point Parameters for Directional Survey

Measured Depth	True Vertical Depth	+East -West Well Departure	+North -South Well Departure	Deviation	Azimuth
0.0	0.0	0.0	0.0	0.000	0.0

Coordinates

Measured Depth	True Vertical Depth	+North -South	+East -West	Course Length	Wellbore Deviation	Wellbore Azimuth
(ft)	(ft)	(ft)	(ft)	(ft)	(deg)	(deg)
0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.0	50.0	0.0	0.0	0.0	0.1	18.6
100.0	100.0	0.1	0.0	0.1	0.1	37.2
150.0	150.0	0.2	0.1	0.2	0.2	55.9
200.0	200.0	0.3	0.3	0.4	0.2	74.5
250.0	250.0	0.3	0.5	0.6	0.2	77.0
300.0	300.0	0.4	0.7	0.8	0.2	79.5
350.0	350.0	0.4	1.0	1.0	0.2	82.0
400.0	400.0	0.4	1.2	1.3	0.2	84.5
450.0	450.0	0.5	1.4	1.4	0.2	63.4
500.0	500.0	0.6	1.5	1.6	0.1	42.2
550.0	550.0	0.6	1.5	1.6	0.1	21.1
600.0	600.0	0.7	1.5	1.7	0.0	0.0
650.0	650.0	0.7	1.5	1.7	0.0	0.0
700.0	700.0	0.7	1.5	1.7	0.0	0.0
750.0	750.0	0.7	1.5	1.7	0.0	0.0
800.0	800.0	0.7	1.5	1.7	0.0	0.0
850.0	850.0	0.7	1.5	1.7	0.0	0.0
900.0	900.0	0.7	1.5	1.7	0.0	0.0
950.0	950.0	0.7	1.5	1.7	0.0	0.0
1000.0	1000.0	0.7	1.5	1.7	0.0	0.0
1050.0	1050.0	0.7	1.5	1.7	0.0	0.0
1100.0	1100.0	0.7	1.5	1.7	0.0	0.0
1150.0	1150.0	0.7	1.5	1.7	0.0	0.0
1200.0	1200.0	0.7	1.5	1.7	0.0	0.0

