



RELATÓRIOS

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COORDENADAS DE ESTAQUEAMENTO



COORDENADAS (TOPOGRAPH)

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	400.980,075	7.818.173,249	462,674	34°29'21"
1		20,000	400.996,559	7.818.161,924	465,599	34°29'21"
2		40,000	401.013,044	7.818.150,599	467,939	34°29'21"
3		60,000	401.029,529	7.818.139,274	470,485	34°29'21"
4		80,000	401.046,013	7.818.127,949	473,157	34°29'21"
5		100,000	401.062,498	7.818.116,624	475,021	34°29'21"
5+3,921	PI1	103,921	401.065,730	7.818.114,404	475,224	34°29'21"
6		120,000	401.078,983	7.818.105,299	476,114	34°29'21"
7		140,000	401.095,467	7.818.093,974	476,880	34°29'21"
8		160,000	401.111,952	7.818.082,649	478,542	34°29'21"
9		180,000	401.128,437	7.818.071,324	479,413	34°29'21"
10		200,000	401.144,921	7.818.059,999	480,332	34°29'21"
11		220,000	401.161,406	7.818.048,674	481,133	34°29'21"
11+9,229	PI2	229,229	401.169,013	7.818.043,448	481,499	34°29'21"
12		240,000	401.177,891	7.818.037,349	481,879	34°29'21"
12+8,427	PI3	248,427	401.184,837	7.818.032,577	482,064	34°29'21"
13		260,000	401.194,375	7.818.026,024	482,367	34°29'21"
14		280,000	401.210,860	7.818.014,699	482,942	34°29'21"
15		300,000	401.227,345	7.818.003,374	483,661	34°29'21"
16		320,000	401.243,830	7.817.992,049	484,183	34°29'21"
17		340,000	401.260,314	7.817.980,724	484,584	34°29'21"
18		360,000	401.276,799	7.817.969,399	485,349	34°29'21"
19		380,000	401.293,284	7.817.958,074	485,989	34°29'21"
19+13,059	PI4	393,059	401.304,047	7.817.950,680	486,280	34°29'21"
20		400,000	401.309,768	7.817.946,749	486,264	34°29'21"
21		420,000	401.326,253	7.817.935,424	486,788	34°29'21"
22		440,000	401.342,738	7.817.924,099	486,944	34°29'21"
23		460,000	401.359,222	7.817.912,774	487,381	34°29'21"
24		480,000	401.375,707	7.817.901,449	487,612	34°29'21"
25		500,000	401.392,192	7.817.890,124	487,717	34°29'21"
26		520,000	401.408,676	7.817.878,799	488,116	34°29'21"
27		540,000	401.425,161	7.817.867,474	488,364	34°29'21"
27+0,108	PI5	540,108	401.425,250	7.817.867,413	488,369	34°29'21"
28		560,000	401.441,646	7.817.856,149	488,441	34°29'21"
29		580,000	401.458,130	7.817.844,824	488,911	34°29'21"
29+11,397	PI6	591,397	401.467,524	7.817.838,371	489,412	34°29'21"
30		600,000	401.474,615	7.817.833,499	489,258	34°29'21"
31		620,000	401.491,100	7.817.822,174	490,089	34°29'21"
32		640,000	401.507,584	7.817.810,850	491,147	34°29'21"
33		660,000	401.524,069	7.817.799,525	492,120	34°29'21"
34		680,000	401.540,554	7.817.788,200	493,456	34°29'21"
34+7,151	PI7	687,151	401.546,448	7.817.784,150	493,457	34°29'21"
35		700,000	401.557,038	7.817.776,874	494,136	34°29'21"
36		720,000	401.573,523	7.817.765,549	496,072	34°29'21"
37		740,000	401.590,008	7.817.754,224	497,225	34°29'21"
37+4,156	PI-8	744,156	401.593,433	7.817.751,871	497,385	34°29'21"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	400.951,521	7.818.084,205	464,976	10°36'49"
1		20,000	400.971,179	7.818.080,521	467,781	10°36'49"
2		40,000	400.990,836	7.818.076,837	470,475	10°36'49"
3		60,000	401.010,494	7.818.073,153	472,907	10°36'49"
4		80,000	401.030,152	7.818.069,470	474,951	10°36'49"
5		100,000	401.049,810	7.818.065,786	476,428	10°36'49"
5+6,788	PI1	106,788	401.056,482	7.818.064,536	476,839	10°36'49"
6		120,000	401.069,468	7.818.062,102	477,558	10°36'49"
7		140,000	401.089,126	7.818.058,419	478,740	10°36'49"
8		160,000	401.108,783	7.818.054,735	479,523	10°36'49"
9		180,000	401.128,441	7.818.051,051	480,382	10°36'49"
10		200,000	401.148,099	7.818.047,367	480,802	10°36'49"
11		220,000	401.167,757	7.818.043,684	481,459	10°36'49"
11+1,278	PI-2	221,278	401.169,013	7.818.043,448	481,499	10°36'49"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.020,656	7.817.996,894	475,503	10°45'01"
1		20,000	401.040,304	7.817.993,163	477,005	10°45'01"
1+2,892	PI1	22,892	401.043,146	7.817.992,624	477,227	10°45'01"
2		40,000	401.059,954	7.817.989,433	478,486	10°45'01"
3		60,000	401.079,602	7.817.985,702	479,664	10°45'01"
4		80,000	401.099,251	7.817.981,971	480,997	10°45'01"
5		100,000	401.118,900	7.817.978,241	481,965	10°45'01"
6		120,000	401.138,549	7.817.974,510	482,825	10°45'01"
7		140,000	401.158,198	7.817.970,780	483,607	10°45'01"
7+14,774	PI2	154,774	401.172,713	7.817.968,024	483,696	10°45'01"
8		160,000	401.177,847	7.817.967,049	483,982	10°45'01"
9		180,000	401.197,496	7.817.963,318	484,672	10°45'01"
10		200,000	401.217,145	7.817.959,588	484,773	10°45'01"
11		220,000	401.236,794	7.817.955,857	485,396	10°45'01"
12		240,000	401.256,443	7.817.952,127	485,663	10°45'01"
13		260,000	401.276,092	7.817.948,396	486,072	10°45'01"
14		280,000	401.295,741	7.817.944,665	486,233	10°45'01"
14+3,347	PI-3	283,347	401.299,029	7.817.944,041	486,296	10°45'01"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	400.980,075	7.818.173,249	462,674	34°29'21"
1		20,000	400.996,559	7.818.161,924	465,599	34°29'21"
2		40,000	401.013,044	7.818.150,599	467,939	34°29'21"
3		60,000	401.029,529	7.818.139,274	470,485	34°29'21"
4		80,000	401.046,013	7.818.127,949	473,157	34°29'21"
5		100,000	401.062,498	7.818.116,624	475,021	34°29'21"
5+3,921	PIV01	103,921	401.065,730	7.818.114,404	475,224	34°29'21"
6		120,000	401.078,983	7.818.105,299	476,114	34°29'21"
7		140,000	401.095,467	7.818.093,974	476,880	34°29'21"
8		160,000	401.111,952	7.818.082,649	478,542	34°29'21"
9		180,000	401.128,437	7.818.071,324	479,413	34°29'21"
10		200,000	401.144,921	7.818.059,999	480,332	34°29'21"
11		220,000	401.161,406	7.818.048,674	481,133	34°29'21"
11+9,229	PIV02	229,229	401.169,013	7.818.043,448	481,499	34°29'21"
12		240,000	401.177,891	7.818.037,349	481,879	34°29'21"
12+8,427	PIV03	248,427	401.184,837	7.818.032,577	482,064	34°29'21"
13		260,000	401.194,375	7.818.026,024	482,367	34°29'21"
14		280,000	401.210,860	7.818.014,699	482,942	34°29'21"
15		300,000	401.227,345	7.818.003,374	483,661	34°29'21"
16		320,000	401.243,830	7.817.992,049	484,183	34°29'21"
17		340,000	401.260,314	7.817.980,724	484,584	34°29'21"
18		360,000	401.276,799	7.817.969,399	485,349	34°29'21"
19		380,000	401.293,284	7.817.958,074	485,989	34°29'21"
19+13,059	PIV04	393,059	401.304,047	7.817.950,680	486,280	34°29'21"
20		400,000	401.309,768	7.817.946,749	486,264	34°29'21"
21		420,000	401.326,253	7.817.935,424	486,788	34°29'21"
22		440,000	401.342,738	7.817.924,099	486,944	34°29'21"
23		460,000	401.359,222	7.817.912,774	487,381	34°29'21"
24		480,000	401.375,707	7.817.901,449	487,612	34°29'21"
25		500,000	401.392,192	7.817.890,124	487,717	34°29'21"
26		520,000	401.408,676	7.817.878,799	488,116	34°29'21"
27		540,000	401.425,161	7.817.867,474	488,364	34°29'21"
27+0,108	PIV05	540,108	401.425,250	7.817.867,413	488,369	34°29'21"
28		560,000	401.441,646	7.817.856,149	488,441	34°29'21"
29		580,000	401.458,130	7.817.844,824	488,911	34°29'21"
29+11,397	PIV06	591,397	401.467,524	7.817.838,371	489,412	34°29'21"
30		600,000	401.474,615	7.817.833,499	489,258	34°29'21"
30+10,000	PCV07	610,000	401.482,857	7.817.827,837	489,737	34°29'21"
31		620,000	401.491,100	7.817.822,174	490,089	34°29'21"
31+10,000	PTV07	630,000	401.499,342	7.817.816,512	490,528	34°29'21"
32		640,000	401.507,584	7.817.810,850	491,147	34°29'21"
33		660,000	401.524,069	7.817.799,525	492,120	34°29'21"
34		680,000	401.540,554	7.817.788,200	493,456	34°29'21"
34+7,151	PIV08	687,151	401.546,448	7.817.784,150	493,457	34°29'21"
35		700,000	401.557,038	7.817.776,874	494,136	34°29'21"
36		720,000	401.573,523	7.817.765,549	496,072	34°29'21"
37		740,000	401.590,008	7.817.754,224	497,225	34°29'21"
37+4,156	V	744,156	401.593,433	7.817.751,871	497,385	34°29'21"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.429,949	7.817.845,464	489,179	10°41'23"
1		20,000	401.449,602	7.817.841,754	489,053	10°41'23"
1+18,238	PI-1	38,238	401.467,523	7.817.838,371	489,412	10°41'23"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	400.982,730	7.817.855,310	479,208	10°29'15"
1		20,000	401.002,396	7.817.851,669	480,016	10°29'15"
1+15,044	PI1	35,044	401.017,188	7.817.848,931	480,099	10°29'15"
2		40,000	401.022,062	7.817.848,029	480,144	10°29'15"
3		60,000	401.041,727	7.817.844,389	480,627	10°29'15"
4		80,000	401.061,393	7.817.840,748	481,456	10°29'15"
5		100,000	401.081,059	7.817.837,108	482,482	10°29'15"
5+5,909	PI2	105,909	401.086,869	7.817.836,032	482,941	10°29'15"
6		120,000	401.100,725	7.817.833,467	483,861	10°29'15"
7		140,000	401.120,391	7.817.829,827	485,695	10°29'15"
8		160,000	401.140,057	7.817.826,187	486,573	10°29'15"
8+5,915	PI3	165,915	401.145,873	7.817.825,110	486,786	10°29'15"
9		180,000	401.159,723	7.817.822,546	487,665	10°29'15"
10		200,000	401.179,389	7.817.818,906	488,664	10°29'15"
11		220,000	401.199,055	7.817.815,265	489,581	10°29'15"
12		240,000	401.218,720	7.817.811,625	489,803	10°29'15"
13		260,000	401.238,386	7.817.807,984	490,633	10°29'15"
14		280,000	401.258,052	7.817.804,344	491,188	10°29'15"
14+18,065	PI4	298,065	401.275,815	7.817.801,056	491,512	10°29'15"
15		300,000	401.277,718	7.817.800,704	491,551	10°29'15"
16		320,000	401.297,384	7.817.797,063	492,319	10°29'15"
17		340,000	401.317,050	7.817.793,423	492,904	10°29'15"
18		360,000	401.336,716	7.817.789,782	493,296	10°29'15"
19		380,000	401.356,382	7.817.786,142	493,518	10°29'15"
20		400,000	401.376,048	7.817.782,501	493,625	10°29'15"
21		420,000	401.395,713	7.817.778,861	493,782	10°29'15"
21+3,867	PI-5	423,867	401.399,516	7.817.778,157	493,667	10°29'15"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	400.918,495	7.817.794,810	480,282	10°42'52"
1		20,000	400.938,146	7.817.791,092	481,406	10°42'52"
2		40,000	400.957,797	7.817.787,373	482,565	10°42'52"
3		60,000	400.977,449	7.817.783,655	483,447	10°42'52"
4		80,000	400.997,100	7.817.779,937	484,557	10°42'52"
4+6,925	PI1	86,925	401.003,904	7.817.778,649	484,665	10°42'52"
5		100,000	401.016,751	7.817.776,218	485,197	10°42'52"
6		120,000	401.036,403	7.817.772,500	485,998	10°42'52"
7		140,000	401.056,054	7.817.768,782	486,803	10°42'52"
8		160,000	401.075,705	7.817.765,064	487,632	10°42'52"
9		180,000	401.095,357	7.817.761,345	488,446	10°42'52"
10		200,000	401.115,008	7.817.757,627	489,358	10°42'52"
10+17,878	PI2	217,878	401.132,575	7.817.754,303	489,955	10°42'52"
11		220,000	401.134,659	7.817.753,909	490,004	10°42'52"
12		240,000	401.154,311	7.817.750,190	490,827	10°42'52"
13		260,000	401.173,962	7.817.746,472	491,698	10°42'52"
14		280,000	401.193,613	7.817.742,754	492,315	10°42'52"
15		300,000	401.213,265	7.817.739,036	492,799	10°42'52"
16		320,000	401.232,916	7.817.735,317	493,522	10°42'52"
17		340,000	401.252,567	7.817.731,599	494,094	10°42'52"
17+9,967	PI3	349,967	401.262,360	7.817.729,746	494,165	10°42'34"
18		360,000	401.272,219	7.817.727,883	494,640	10°42'16"
19		380,000	401.291,871	7.817.724,168	495,389	10°42'16"
20		400,000	401.311,523	7.817.720,453	496,149	10°42'16"
21		420,000	401.331,175	7.817.716,738	496,467	10°42'16"
22		440,000	401.350,827	7.817.713,023	497,050	10°42'16"
23		460,000	401.370,479	7.817.709,308	497,342	10°42'16"
23+15,735	PI-4	475,735	401.385,940	7.817.706,386	497,283	10°42'16"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	400.935,178	7.817.716,272	485,179	10°42'32"
1		20,000	400.954,829	7.817.712,555	486,606	10°42'32"
2		40,000	400.974,481	7.817.708,839	487,667	10°42'32"
2+15,947	PI1	55,947	400.990,150	7.817.705,876	488,571	10°42'32"
3		60,000	400.994,133	7.817.705,122	488,761	10°42'32"
4		80,000	401.013,784	7.817.701,406	489,591	10°42'32"
5		100,000	401.033,436	7.817.697,690	490,626	10°42'32"
6		120,000	401.053,088	7.817.693,973	491,455	10°42'32"
7		140,000	401.072,739	7.817.690,257	492,065	10°42'32"
8		160,000	401.092,391	7.817.686,541	492,715	10°42'32"
9		180,000	401.112,043	7.817.682,824	493,415	10°42'32"
9+6,985	PI2	186,985	401.118,906	7.817.681,526	493,441	10°42'32"
10		200,000	401.131,694	7.817.679,108	493,937	10°42'32"
11		220,000	401.151,346	7.817.675,391	494,527	10°42'32"
12		240,000	401.170,998	7.817.671,675	495,209	10°42'32"
13		260,000	401.190,649	7.817.667,959	495,257	10°42'32"
14		280,000	401.210,301	7.817.664,242	496,171	10°42'32"
15		300,000	401.229,953	7.817.660,526	496,816	10°42'32"
15+19,011	PI3	319,011	401.248,633	7.817.656,993	497,570	10°42'32"
16		320,000	401.249,604	7.817.656,809	497,599	10°42'32"
17		340,000	401.269,256	7.817.653,093	498,366	10°42'32"
18		360,000	401.288,908	7.817.649,377	498,755	10°42'32"
19		380,000	401.308,559	7.817.645,660	498,772	10°42'32"
20		400,000	401.328,211	7.817.641,944	499,135	10°42'32"
21		420,000	401.347,863	7.817.638,227	499,424	10°42'32"
21+14,747	PI-4	434,747	401.362,353	7.817.635,487	499,830	10°42'32"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PC1	0,000	400.935,178	7.817.716,272	485,179	190°42'32"
1		20,000	400.920,350	7.817.728,433	483,778	248°00'17"
1+4,700	PI2	24,700	400.919,115	7.817.732,956	483,434	261°28'10"
2		40,000	400.916,846	7.817.748,087	482,347	261°28'10"
2+17,981	PC4	57,981	400.914,178	7.817.765,870	481,368	261°28'10"
3		60,000	400.913,919	7.817.767,871	481,221	263°46'58"
4		80,000	400.915,734	7.817.787,655	480,387	286°42'04"
4+15,378	PI5	95,378	400.922,331	7.817.801,479	480,071	304°19'22"
5		100,000	400.924,938	7.817.805,296	479,993	304°19'22"
6		120,000	400.936,215	7.817.821,814	479,631	304°19'22"
6+13,066	PC7	133,066	400.943,582	7.817.832,605	479,433	304°19'21"
6+14,556	PI8	134,556	400.944,592	7.817.833,693	479,438	321°23'43"
7		140,000	400.948,846	7.817.837,090	479,451	321°23'43"
8		160,000	400.964,475	7.817.849,569	479,126	321°23'43"
8+2,732	PC10	162,732	400.966,610	7.817.851,273	479,089	321°23'43"
8+19,869	PI-11	179,869	400.982,730	7.817.855,310	479,208	10°29'15"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	400.987,354	7.817.691,081	489,129	280°42'10"
0+15,056	PI1	15,056	400.990,150	7.817.705,876	488,571	280°42'10"
1		20,000	400.991,068	7.817.710,733	488,266	280°42'10"
2		40,000	400.994,782	7.817.730,385	487,260	280°42'10"
3		60,000	400.998,497	7.817.750,037	486,028	280°42'10"
4		80,000	401.002,211	7.817.769,689	485,160	280°42'10"
4+9,118	PI2	89,118	401.003,904	7.817.778,649	484,665	280°42'10"
5		100,000	401.005,925	7.817.789,342	483,983	280°42'10"
6		120,000	401.009,640	7.817.808,994	482,753	280°42'10"
7		140,000	401.013,354	7.817.828,646	481,433	280°42'10"
8		160,000	401.017,068	7.817.848,298	480,138	280°42'10"
8+0,645	PI-3	160,645	401.017,188	7.817.848,931	480,099	280°42'10"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.086,869	7.817.836,032	482,941	280°37'49"
1		20,000	401.090,559	7.817.855,689	482,091	280°37'49"
2		40,000	401.094,248	7.817.875,346	481,704	280°37'49"
2+18,551	PC2	58,551	401.097,670	7.817.893,578	481,496	280°37'49"
3		60,000	401.097,912	7.817.895,007	481,485	278°33'16"
3+13,237	PI-3	73,237	401.097,699	7.817.908,182	481,323	259°35'40"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PC1	0,000	400.951,521	7.818.084,205	464,976	73°00'04"
0+11,810	PI2	11,810	400.957,079	7.818.073,871	466,022	50°26'47"
1		20,000	400.962,295	7.818.067,556	467,548	50°26'47"
2		40,000	400.975,031	7.818.052,136	470,227	50°26'47"
3		60,000	400.987,767	7.818.036,715	471,854	50°26'47"
4		80,000	401.000,503	7.818.021,294	473,537	50°26'47"
5		100,000	401.013,239	7.818.005,874	474,521	50°26'47"
5+11,647	PI3	111,647	401.020,656	7.817.996,894	475,503	48°04'47"
6		120,000	401.026,488	7.817.990,914	475,882	45°42'46"
7		140,000	401.040,453	7.817.976,597	477,113	45°42'46"
8		160,000	401.054,418	7.817.962,280	477,452	45°42'46"
9		180,000	401.068,383	7.817.947,963	479,107	45°42'46"
10		200,000	401.082,349	7.817.933,646	479,654	45°42'46"
10+6,648	PC5	206,648	401.086,991	7.817.928,887	480,219	45°42'46"
11		220,000	401.094,561	7.817.917,964	480,858	64°50'18"
11+10,302	PI-6	230,302	401.097,699	7.817.908,182	481,323	79°35'40"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PC1	0,000	400.951,521	7.818.084,205	464,976	253°00'03"
0+15,567	PI2	15,567	400.950,948	7.818.099,587	463,792	282°43'53"
1		20,000	400.951,925	7.818.103,911	463,553	282°43'53"
2		40,000	400.956,332	7.818.123,419	462,963	282°43'53"
3		60,000	400.960,740	7.818.142,927	462,518	282°43'53"
3+7,206	PC4	67,206	400.962,328	7.818.149,956	462,190	282°43'53"
4		80,000	400.966,705	7.818.161,941	461,743	297°23'31"
4+6,194	PI5	86,194	400.969,887	7.818.167,250	461,832	304°29'21"
4+11,907	PC7	91,907	400.973,122	7.818.171,959	462,085	304°29'21"
4+19,761	PI-8	99,761	400.980,075	7.818.173,249	462,674	34°29'21"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.043,146	7.817.992,624	477,227	280°30'22"
1		20,000	401.046,792	7.818.012,288	477,510	280°30'22"
2		40,000	401.050,439	7.818.031,953	477,445	280°30'22"
3		60,000	401.054,086	7.818.051,618	477,229	280°30'22"
3+13,138	PI1	73,138	401.056,482	7.818.064,536	476,839	280°30'22"
4		80,000	401.057,733	7.818.071,283	476,773	280°30'22"
5		100,000	401.061,380	7.818.090,947	476,036	280°30'22"
6		120,000	401.065,026	7.818.110,612	475,338	280°30'22"
6+3,857	PI-2	123,857	401.065,730	7.818.114,404	475,224	280°30'22"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.116,498	7.817.668,703	493,647	280°38'12"
0+13,047	PI1	13,047	401.118,906	7.817.681,526	493,441	280°38'12"
1		20,000	401.120,190	7.817.688,360	493,180	280°38'12"
2		40,000	401.123,881	7.817.708,016	492,413	280°38'12"
3		60,000	401.127,573	7.817.727,672	491,395	280°38'12"
4		80,000	401.131,265	7.817.747,329	490,301	280°38'12"
4+7,097	PI2	87,097	401.132,575	7.817.754,303	489,955	280°38'12"
5		100,000	401.134,956	7.817.766,985	489,536	280°38'12"
6		120,000	401.138,648	7.817.786,641	488,630	280°38'12"
7		140,000	401.142,340	7.817.806,298	487,714	280°38'12"
7+19,141	PI3	159,141	401.145,873	7.817.825,110	486,786	280°38'12"
8		160,000	401.146,031	7.817.825,954	486,762	280°38'12"
9		180,000	401.149,723	7.817.845,610	486,387	280°38'12"
10		200,000	401.153,414	7.817.865,267	485,881	280°38'12"
11		220,000	401.157,106	7.817.884,923	485,395	280°38'12"
11+11,836	PI4	231,836	401.159,291	7.817.896,555	485,162	280°38'12"
12		240,000	401.160,798	7.817.904,579	485,132	280°38'12"
13		260,000	401.164,489	7.817.924,236	484,680	280°38'12"
14		280,000	401.168,181	7.817.943,892	484,443	280°38'12"
15		300,000	401.171,873	7.817.963,548	483,790	280°38'12"
15+4,554	PI5	304,554	401.172,713	7.817.968,024	483,696	280°38'12"
16		320,000	401.175,564	7.817.983,205	483,446	280°38'12"
17		340,000	401.179,256	7.818.002,861	483,008	280°38'12"
18		360,000	401.182,948	7.818.022,517	482,344	280°38'12"
18+10,236	PI-6	370,236	401.184,837	7.818.032,577	482,064	280°38'12"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.246,567	7.817.646,046	498,219	280°41'07"
0+11,141	PI1	11,141	401.248,633	7.817.656,993	497,570	280°41'07"
1		20,000	401.250,275	7.817.665,699	497,221	280°41'07"
2		40,000	401.253,984	7.817.685,352	496,389	280°41'07"
3		60,000	401.257,692	7.817.705,005	495,513	280°41'07"
4		80,000	401.261,400	7.817.724,658	494,407	280°41'07"
4+5,177	PI2	85,177	401.262,360	7.817.729,746	494,165	280°41'07"
5		100,000	401.265,108	7.817.744,312	493,829	280°41'07"
6		120,000	401.268,817	7.817.763,965	493,191	280°41'07"
7		140,000	401.272,525	7.817.783,618	492,179	280°41'07"
7+17,745	PI3	157,745	401.275,815	7.817.801,056	491,512	280°41'07"
8		160,000	401.276,233	7.817.803,271	491,516	280°41'07"
9		180,000	401.279,942	7.817.822,924	491,205	280°41'07"
10		200,000	401.283,650	7.817.842,578	490,437	280°41'07"
11		220,000	401.287,358	7.817.862,231	489,706	280°41'07"
11+1,273	PI-4	221,273	401.287,594	7.817.863,482	489,625	280°41'07"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.422,927	7.817.855,134	489,210	280°42'36"
0+12,497	PI-1	12,497	401.425,250	7.817.867,413	488,369	280°42'36"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.541,050	7.817.755,720	494,919	280°45'03"
1		20,000	401.544,780	7.817.775,369	494,071	280°45'03"
1+8,938	PI-1	28,938	401.546,448	7.817.784,150	493,457	280°45'03"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.948,678	7.817.670,512	510,061	357°59'57"
1		20,000	401.968,666	7.817.671,210	509,725	357°59'57"
2		40,000	401.988,653	7.817.671,908	509,057	357°59'57"
3		60,000	402.008,641	7.817.672,606	508,409	357°59'57"
3+13,404	PI1	73,404	402.022,037	7.817.673,074	507,785	357°59'57"
4		80,000	402.028,629	7.817.673,305	507,414	357°59'57"
5		100,000	402.048,617	7.817.674,003	506,845	357°59'57"
6		120,000	402.068,605	7.817.674,701	505,984	357°59'57"
6+0,522	PI-2	120,522	402.069,126	7.817.674,720	505,991	357°59'57"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.734,734	7.817.672,217	506,109	34°12'05"
1		20,000	401.751,275	7.817.660,975	507,218	34°12'05"
2		40,000	401.767,816	7.817.649,733	508,126	34°12'05"
3		60,000	401.784,358	7.817.638,491	508,903	34°12'05"
4		80,000	401.800,899	7.817.627,249	509,565	34°12'05"
4+2,316	PI1	82,316	401.802,815	7.817.625,947	509,528	34°12'05"
5		100,000	401.817,441	7.817.616,007	510,324	34°12'05"
6		120,000	401.833,982	7.817.604,765	510,780	34°12'05"
7		140,000	401.850,523	7.817.593,523	511,438	34°12'05"
8		160,000	401.867,065	7.817.582,280	511,806	34°12'05"
8+13,019	PI2	173,019	401.877,832	7.817.574,962	512,333	34°12'05"
9		180,000	401.883,606	7.817.571,038	512,399	34°12'05"
10		200,000	401.900,147	7.817.559,796	512,522	34°12'05"
11		220,000	401.916,689	7.817.548,554	512,322	34°12'05"
12		240,000	401.933,230	7.817.537,312	511,987	34°12'05"
13		260,000	401.949,771	7.817.526,070	511,366	34°12'05"
13+5,059	PI3	265,059	401.953,955	7.817.523,227	511,141	34°12'05"
14		280,000	401.966,313	7.817.514,828	510,616	34°12'05"
15		300,000	401.982,854	7.817.503,586	510,109	34°12'05"
16		320,000	401.999,395	7.817.492,344	508,997	34°12'05"
17		340,000	402.015,937	7.817.481,102	508,551	34°12'05"
17+17,019	PI-4	357,019	402.030,013	7.817.471,535	506,890	34°12'05"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.802,815	7.817.625,947	509,528	267°33'42"
1		20,000	401.801,964	7.817.645,929	508,891	267°33'42"
2		40,000	401.801,113	7.817.665,911	508,519	267°33'42"
3		60,000	401.800,262	7.817.685,892	508,192	267°33'42"
4		80,000	401.799,411	7.817.705,874	507,356	267°33'42"
4+16,996	PI-1	96,996	401.798,688	7.817.722,855	506,813	267°33'42"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.877,832	7.817.574,962	512,333	268°05'10"
1		20,000	401.877,164	7.817.594,951	511,853	268°05'10"
2		40,000	401.876,497	7.817.614,940	511,417	268°05'10"
3		60,000	401.875,829	7.817.634,929	510,984	268°05'10"
4		80,000	401.875,161	7.817.654,918	510,155	268°05'10"
5		100,000	401.874,493	7.817.674,907	509,608	268°05'10"
6		120,000	401.873,825	7.817.694,895	509,146	268°05'10"
7		140,000	401.873,157	7.817.714,884	508,366	268°05'10"
7+12,318	PI-1	152,318	401.872,746	7.817.727,195	507,945	268°05'10"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	401.953,955	7.817.523,227	511,141	267°56'52"
1		20,000	401.953,239	7.817.543,214	511,363	267°56'52"
2		40,000	401.952,523	7.817.563,201	511,438	267°56'52"
3		60,000	401.951,807	7.817.583,188	511,709	267°56'52"
4		80,000	401.951,091	7.817.603,175	511,335	267°56'52"
5		100,000	401.950,374	7.817.623,163	511,154	267°56'52"
6		120,000	401.949,658	7.817.643,150	510,865	267°56'52"
7		140,000	401.948,942	7.817.663,137	510,282	267°56'52"
7+7,379	PI1	147,379	401.948,678	7.817.670,512	510,061	267°56'52"
8		160,000	401.948,226	7.817.683,124	509,642	267°56'52"
9		180,000	401.947,510	7.817.703,111	508,919	267°56'52"
10		200,000	401.946,793	7.817.723,099	508,317	267°56'52"
10+6,291	PI-2	206,291	401.946,568	7.817.729,385	508,085	267°56'52"

Estaca	Descrição	Progressiva	X	Y	Z	Azimute
0	PI-0	0,000	402.030,264	7.817.465,200	506,299	267°44'01"
0+6,340	PI1	6,340	402.030,013	7.817.471,535	506,890	267°44'01"
1		20,000	402.029,473	7.817.485,184	507,751	267°44'01"
2		40,000	402.028,682	7.817.505,169	508,069	267°44'01"
3		60,000	402.027,891	7.817.525,153	508,101	267°44'01"
4		80,000	402.027,100	7.817.545,137	508,410	267°44'01"
5		100,000	402.026,309	7.817.565,122	508,439	267°44'01"
6		120,000	402.025,518	7.817.585,106	508,609	267°44'01"
7		140,000	402.024,727	7.817.605,090	508,582	267°44'01"
8		160,000	402.023,936	7.817.625,075	508,414	267°44'01"
9		180,000	402.023,146	7.817.645,059	508,320	267°44'01"
10		200,000	402.022,355	7.817.665,043	507,939	267°44'01"
10+8,037	PI2	208,037	402.022,037	7.817.673,074	507,785	267°44'01"
11		220,000	402.021,564	7.817.685,028	507,781	267°44'01"
12		240,000	402.020,773	7.817.705,012	507,673	267°44'01"
13		260,000	402.019,982	7.817.724,997	506,978	267°44'01"
13+5,233	PI-3	265,233	402.019,775	7.817.730,225	506,883	267°44'01"