

EBX

EBX – ENGENHARIA BÁSICA PARA ROTA DO MINERODUTO

RELAÇÃO DE PI'S DO MINERODUTO EBX

PSI DOCUMENT NO.:B118.01-G-C-001

0	30-Mai-06	Para Aprovação do Cliente	SRF	JAS	
Rev	Date	Revision	By	PSI Approval	Client Approval

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1.0 FUSO 23-SAD 69-KM 0 AO KM160

MINERODUTO EBX - TRECHO: ITAPANHOACANGA / VARGEM LINDA			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
2	PI2	7919242.100	667988.451
3	PI3	7918339.240	667690.931
4	PI4	7917519.789	667798.902
5	PI5	7916524.529	667806.436
6	PI6	7915777.311	668436.929
7	PI7	7914892.552	668653.130
8	PI8	7913947.898	668839.859
9	PI9	7913063.953	668507.630
10	PI10	7912197.609	668604.452
11	PI11	7911329.548	668821.891
12	PI12	7910363.107	668667.396
13	PI13	7909385.798	668544.109
14	PI14	7908419.284	668308.278
15	PI15	7907503.614	668443.598
16	PI16	7906599.170	668800.761
17	PI17	7905601.853	668863.433
18	PI18	7904616.205	669026.242
19	PI19	7903701.958	669403.082
20	PI20	7902749.426	669575.991
21	PI21	7901757.902	669446.174
22	PI22	7900823.843	669694.611
23	PI23	7899922.472	670118.612
24	PI24	7898926.011	670176.841
25	PI25	7898016.304	670209.959
26	PI26	7897141.575	670694.571
27	PI27	7896192.456	670982.173
28	PI28	7895229.271	671247.914
29	PI29	7894363.473	671747.510
30	PI30	7893523.008	672278.964
31	PI31	7892875.601	673041.108
32	PI32	7891996.255	673344.227
33	PI33	7891173.721	673768.754
34	PI34	7890235.064	674113.606
35	PI35	7889524.728	674679.309
36	PI36	7888530.925	674695.889
37	PI37	7887554.558	674492.049
38	PI38	7886795.373	674984.131
39	PI39	7885797.116	675043.143
40	PI40	7884798.859	675102.156
41	PI41	7883800.602	675161.168
42	PI42	7882802.344	675220.181
43	PI43	7881804.087	675279.193
44	PI44	7880949.451	674993.278
45	PI45	7880209.206	674383.723
46	PI46	7879282.997	674076.211
47	PI47	7878341.388	674128.602
48	PI48	7877473.709	674543.707

MINERODUTO EBX - TRECHO: ITAPANHOACANGA / VARGEM LINDA			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
52	PI52	7875701.791	677856.307
53	PI53	7874793.024	678197.456
54	PI54	7873917.758	678552.151
55	PI55	7873089.327	678071.331
56	PI56	7872352.363	678482.269
57	PI57	7871392.906	678522.528
58	PI58	7870503.612	678796.522
59	PI59	7869587.907	678988.270
60	PI60	7868594.391	678933.813
61	PI61	7867901.891	679202.913
62	PI62	7867136.103	679805.837
63	PI63	7866236.066	680048.372
64	PI64	7865244.884	679920.843
65	PI65	7865062.016	680769.724
66	PI66	7864989.573	681755.330
67	PI67	7864672.023	682690.786
68	PI68	7863980.911	683144.993
69	PI69	7863469.695	683911.980
70	PI70	7862635.670	683890.909
71	PI71	7862241.560	684531.287
72	PI72	7861553.997	685078.598
73	PI73	7860554.503	685046.801
74	PI74	7859907.039	684497.765
75	PI75	7859054.377	684429.488
76	PI76	7858178.681	684792.648
77	PI77	7857608.082	685438.343
78	PI78	7856753.184	685950.757
79	PI79	7855877.951	686433.604
80	PI80	7855625.899	687315.432
81	PI81	7854900.941	687980.852
82	PI82	7854097.233	688408.550
83	PI83	7853119.996	688546.372
84	PI84	7852641.612	689384.852
85	PI85	7851900.570	689992.541
86	PI86	7851616.865	690827.098
87	PI87	7850942.764	691418.529
88	PI88	7850376.468	692097.341
89	PI89	7849869.140	692790.784
90	PI90	7850650.141	693392.360
91	PI91	7850644.454	694363.641
92	PI92	7850532.985	695211.061
93	PI93	7849807.290	695824.900
94	PI94	7849302.321	696669.965
95	PI95	7848744.496	697428.592
96	PI96	7848432.414	698128.767
97	PI97	7847526.611	698242.544
98	PI98	7846693.035	698576.513
99	PI99	7845839.837	699028.923

MINERODUTO EBX - TRECHO: ITAPANHOACANGA / VARGEM LINDA			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
100	PI100	7844964.216	699446.717
101	PI101	7844078.432	699873.588
102	PI102	7843166.573	700200.846
103	PI103	7842354.541	700722.868
107	PI107	7839166.732	702782.428
108	PI108	7838246.268	703171.365
109	PI109	7837374.944	703661.255
110	PI110	7836516.631	704120.466
111	PI111	7835612.451	704544.381
112	PI112	7834741.861	705035.480
113	PI113	7833971.142	705668.332
114	PI114	7833182.654	706253.682
115	PI115	7832217.222	706491.533
116	PI116	7831220.593	706432.909
117	PI117	7830298.224	706526.260
118	PI118	7829406.465	706966.802
119	PI119	7828483.512	706875.363
120	PI120	7827494.234	706790.306
121	PI121	7826562.516	707137.789
122	PI122	7825569.920	707258.117
123	PI123	7824576.805	707358.229
124	PI124	7823691.666	707760.822
125	PI125	7822748.774	708018.692
126	PI126	7821916.144	708142.320
127	PI127	7820922.777	708181.673
128	PI128	7819930.241	708297.295
129	PI129	7818931.988	708299.659
130	PI130	7818182.171	708830.709
131	PI131	7817595.737	709611.096
132	PI132	7817317.015	710471.681
133	PI133	7816925.673	711108.934
134	PI134	7815964.414	710962.262
135	PI135	7814997.573	710721.844
136	PI136	7814061.805	710453.568
137	PI137	7813208.733	710773.501
138	PI138	7812821.238	711635.126
139	PI139	7812326.433	712213.094
140	PI140	7811496.666	712594.336
141	PI141	7810763.741	712106.824
142	PI142	7809896.135	711760.380
143	PI143	7809725.627	710813.205
144	PI144	7808949.803	710268.731
145	PI145	7808047.302	710246.274
146	PI146	7807208.797	710750.876
147	PI147	7806260.606	710754.224
148	PI148	7805595.512	711166.132
149	PI149	7804961.784	711883.987

MINERODUTO EBX - TRECHO: ITAPANHOACANGA / VARGEM LINDA			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
150	PI150	7804138.112	711756.689
151	PI151	7803191.511	711996.744
152	PI152	7802236.994	712294.899
153	PI153	7801282.477	712593.054
154	PI154	7800358.159	712972.958
155	PI155	7799437.490	713351.248
156	PI156	7798462.624	713271.691
157	PI157	7797584.547	713750.211
158	PI158	7796706.471	714228.731
159	PI159	7796042.657	714911.284
160	PI160	7796355.756	715678.145

2.0 FUSO 23-SAD 69-KM160 AO KM373

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
160+29,72	PI1	7796334.674	715699.093
160+117,36	PI2	7796255.631	715736.957
160+296,97	PI3	7796081.044	715694.807
160+446,05	PI4	7795941.184	715643.194
160+802,97	PI5	7795609.232	715774.347
161+12,1	PI6	7795479.953	715938.736
161+77,43	PI7	7795421.641	715968.199
161+170,48	PI8	7795329.274	715956.952
161+537,95	PI9	7795073.405	716220.704
161+560,29	PI10	7795053.065	716229.941
161+609,99	PI11	7795003.436	716232.524
161+659,48	PI12	7794972.682	716193.744
161+713,71	PI13	7794925.904	716166.311
161+944,34	PI14	7794702.436	716223.348
162+364	PI15	7794290.699	716142.217
162+551,83	PI16	7794169.789	715998.471
162+736,35	PI17	7793985.706	715985.809
163+68,92	PI18	7793719.815	716185.570
163+660,13	PI19	7793138.167	716079.654
164+147,59	PI20	7792805.235	715723.607
164+563,92	PI21	7792399.066	715632.198
164+926,17	PI22	7792051.220	715733.357
165+311,66	PI23	7791712.805	715548.763
166+826,53	PI24	7790214.467	715771.962
167+120,67	PI25	7789979.215	715595.409
167+367,41	PI26	7789747.499	715680.218
167+708,91	PI27	7789478.719	715890.881
168+346,5	PI28	7788851.319	716004.422
168+638,2	PI29	7788592.008	716138.000
168+904,29	PI30	7788471.716	716375.346
169+685,3	PI31	7788311.195	717139.682
169+830,53	PI32	7788182.879	717207.701
169+876,62	PI33	7788158.876	717247.055
170+405,04	PI34	7788184.942	717774.831
170+469,78	PI35	7788217.269	717830.921
170+517,44	PI36	7788220.547	717878.469
170+612,77	PI37	7788181.071	717965.239
170+719,02	PI38	7788188.208	718071.254
170+922,34	PI39	7788059.420	718228.582
171+201,58	PI40	7787791.981	718308.905
171+313,29	PI41	7787681.022	718321.806
171+405,07	PI42	7787598.665	718362.304
171+538,84	PI43	7787491.854	718442.842

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
173+39,57	PI47	7787004.504	719383.509
173+284,02	PI48	7787226.263	719486.364
173+539,38	PI49	7787481.496	719494.347
173+691,29	PI50	7787620.776	719554.991
173+834,37	PI51	7787683.988	719683.356
173+975,29	PI52	7787729.180	719816.835
174+161,85	PI53	7787735.351	720003.290
174+291,12	PI54	7787771.671	720127.354
174+382,09	PI55	7787776.788	720218.178
174+561,43	PI56	7787933.743	720304.937
174+714,7	PI57	7788048.769	720406.229
174+934,02	PI58	7788127.108	720611.085
175+18,17	PI59	7788117.948	720694.735
175+135,39	PI60	7788066.804	720800.213
175+361,89	PI61	7787912.888	720966.376
175+599,64	PI62	7787699.842	721071.906
175+979,58	PI63	7787347.899	721215.048
176+135,55	PI64	7787288.970	721359.462
176+389,77	PI65	7787098.553	721527.898
176+562,15	PI66	7786939.602	721594.582
176+703,95	PI67	7786847.137	721702.086
176+844,85	PI68	7786787.159	721829.590
177+31,43	PI69	7786729.680	722007.096
177+321,7	PI70	7786674.701	722292.106
177+532,71	PI71	7786624.720	722497.113
177+611,75	PI72	7786559.744	722542.115
177+702,72	PI73	7786472.277	722517.113
177+924,31	PI74	7786382.310	722314.606
178+4,03	PI75	7786304.651	722332.626
178+229,93	PI76	7786324.643	722557.634
178+340,19	PI77	7786317.146	722667.638
178+382,89	PI78	7786277.161	722682.638
178+585,21	PI79	7786097.228	722590.135
178+704,47	PI80	7786032.252	722690.138
178+848,02	PI81	7786114.721	722807.643
178+954,85	PI82	7786069.927	722904.626
179+71,84	PI83	7786039.749	723017.650
179+413,36	PI84	7786074.665	723357.385
179+479,87	PI85	7786024.573	723401.135
179+839,4	PI86	7785667.388	723360.161
180+54,03	PI87	7785454.012	723383.353
180+286,66	PI88	7785229.070	723324.026
180+437,73	PI89	7785078.220	723315.883
180+591,43	PI90	7784929.351	723277.663

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
180+697,32	PI91	7784838.233	723331.607
180+863,87	PI92	7784676.242	723370.313
181+62,04	PI93	7784497.739	723456.389
181+306,89	PI94	7784388.887	723675.709
182+247,68	PI98	7784368.962	724522.809
182+758,12	PI99	7784375.204	725033.208
182+879,58	PI100	7784357.311	725153.342
183+319,41	PI101	7784008.202	725420.870
183+842,66	PI102	7783539.981	725654.464
184+62,57	PI103	7783416.095	725836.152
184+291,27	PI104	7783335.795	726050.287
184+560,59	PI105	7783399.539	726311.962
184+739,01	PI106	7783349.963	726483.350
184+897,05	PI107	7783242.238	726598.994
185+168,26	PI108	7782973.137	726632.752
185+341,64	PI109	7782821.082	726549.453
185+523,7	PI110	7782642.069	726516.244
185+764,91	PI111	7782455.806	726669.489
185+942,45	PI112	7782284.639	726716.646
186+212,34	PI113	7782068.838	726878.730
186+304,07	PI114	7782046.268	726967.643
186+365,07	PI115	7782000.493	727007.949
186+587,46	PI116	7781801.227	726909.196
186+665,93	PI117	7781760.540	726976.297
186+861,73	PI118	7781688.284	727158.280
186+991,7	PI119	7781558.330	727156.732
187+138,71	PI120	7781416.380	727194.983
187+497,37	PI121	7781059.279	727228.431
187+620,33	PI122	7780974.318	727139.552
187+768,63	PI123	7780831.717	727098.821
187+927,94	PI124	7780745.309	726964.978
187+999,68	PI125	7780718.713	726898.356
188+54,85	PI126	7780667.051	726917.721
188+179,9	PI127	7780685.783	727041.361
188+319,18	PI128	7780741.526	727169.002
188+389,82	PI129	7780757.894	727237.720
188+459,15	PI130	7780773.825	727305.188
188+666,16	PI131	7780676.930	727488.128
188+878,39	PI132	7780713.697	727697.143
189+8,09	PI133	7780645.005	727807.160
189+155,29	PI134	7780500.718	727836.314
189+409,77	PI135	7780317.012	728012.410
189+589,2	PI136	7780339.431	728190.432
189+677,06	PI137	7780400.014	728254.078

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
189+771,59	PI138	7780362.465	728340.825
190+337,21	PI139	7780630.765	728838.767
190+413,73	PI140	7780605.550	728911.006
190+542,92	PI141	7780496.077	728979.618
190+748,63	PI142	7780345.071	729119.308
190+883,78	PI143	7780213.036	729148.157
191+520,82	PI144	7779634.133	728882.293
192+16,32	PI145	7779138.744	728892.935
195+23,7	PI149	7776545.577	729791.562
195+215,67	PI150	7776358.287	729749.420
195+657,18	PI151	7775995.371	729497.979
195+962,39	PI152	7775717.914	729370.811
196+937,68	PI153	7774743.115	729340.043
197+127,23	PI154	7774556.575	729373.727
197+411,79	PI155	7774285.578	729286.924
197+535,6	PI156	7774206.893	729382.511
197+831,69	PI157	7774186.531	729677.898
198+36,64	PI158	7774060.224	729839.309
198+252,02	PI159	7773907.046	729990.717
198+491,23	PI160	7773890.613	730229.356
198+856,51	PI161	7773742.995	730563.486
199+171,89	PI162	7773502.867	730767.936
199+528,97	PI163	7773306.900	731066.439
199+753,21	PI164	7773259.131	731285.528
199+968,78	PI165	7773259.132	731501.105
201+94,59	PI166	7772625.576	732431.719
201+410,73	PI167	7772318.332	732506.217
201+813,06	PI168	7771917.927	732545.515
202+185,42	PI169	7771560.418	732441.399
202+761,82	PI170	7771032.579	732672.950
202+961,39	PI171	7770847.952	732597.185
203+650,91	PI172	7770282.746	732992.128
203+923,2	PI173	7770047.220	733128.762
203+999,93	PI174	7769979.377	733092.898
204+48,74	PI175	7769932.430	733106.247
204+126,98	PI176	7769921.223	733183.680
204+190,02	PI177	7769965.243	733228.796
204+256,64	PI178	7769950.804	733293.838
204+360,37	PI179	7769853.639	733330.145
204+701,02	PI180	7769534.484	733449.238
205+41,7	PI181	7769300.135	733696.508
205+132,84	PI182	7769223.739	733746.217
205+395,07	PI183	7768965.594	733792.335
205+596,84	PI184	7768906.776	733985.336

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
205+849,95	PI185	7768906.776	734238.446
205+934,98	PI186	7768858.162	734308.213
206+28,89	PI187	7768766.885	734330.295
206+99,19	PI188	7768696.642	734327.686
206+140,67	PI189	7768678.094	734364.794
206+422,18	PI190	7768875.777	734565.222
206+473,26	PI191	7768897.376	734611.509
206+515,26	PI192	7768869.309	734642.754
206+626,68	PI193	7768764.392	734680.241
206+846,15	PI194	7768550.294	734728.534
206+947,75	PI195	7768474.617	734796.320
207+132,37	PI196	7768376.055	734952.430
207+732,28	PI200	7767839.248	735189.380
207+989,41	PI201	7767699.267	735405.068
208+316,42	PI202	7767526.491	735682.703
208+484,99	PI203	7767461.897	735838.410
208+640,04	PI204	7767462.415	735993.461
208+781,59	PI205	7767417.201	736127.594
208+921,75	PI206	7767310.922	736218.971
209+206,72	PI207	7767065.921	736364.516
209+430,16	PI208	7766956.692	736559.437
209+958,94	PI209	7766966.944	737088.111
210+137,46	PI210	7767033.294	737253.848
210+284,85	PI211	7767054.645	737399.680
210+476,37	PI212	7767124.132	737578.150
210+595,3	PI213	7767113.394	737696.594
210+726,38	PI214	7767007.632	737774.029
211+208,49	PI215	7766663.959	738112.147
211+503,52	PI216	7766369.079	738121.495
211+686,06	PI217	7766194.453	738174.668
211+805,72	PI218	7766095.674	738242.207
211+975,12	PI219	7766024.881	738396.103
212+116,26	PI220	7766022.659	738537.221
212+238,98	PI221	7766061.942	738653.491
212+538,09	PI222	7766044.503	738952.090
212+874,77	PI223	7766109.706	739282.395
212+993,67	PI224	7766042.679	739380.601
213+103,78	PI225	7765951.832	739442.826
213+267,77	PI226	7765893.480	739596.074
213+545,01	PI227	7765708.659	739802.730
213+641,97	PI228	7765618.429	739838.215
213+786,58	PI229	7765474.496	739824.187
213+971,18	PI230	7765295.966	739871.118

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
214+309,33	PI231	7765029.923	740079.842
214+463,47	PI232	7764877.284	740101.284
215+40,37	PI233	7764343.194	739883.188
215+402,28	PI234	7764007.597	740018.674
215+785,75	PI235	7763640.069	739909.266
215+901,31	PI236	7763526.950	739932.896
216+103,07	PI237	7763379.855	740070.991
216+213,21	PI238	7763272.177	740094.156
216+315,66	PI239	7763170.297	740083.407
216+818,94	PI240	7762704.049	739893.927
217+74,85	PI241	7762539.834	739697.654
217+210,47	PI242	7762421.737	739630.969
217+340,36	PI243	7762297.786	739592.159
217+428,35	PI244	7762210.115	739599.744
217+518,13	PI245	7762129.081	739638.377
217+682,25	PI246	7762042.039	739777.519
217+953,64	PI247	7761872.332	739989.308
218+693,47	PI251	7761180.035	740223.962
218+921,82	PI252	7760956.691	740271.508
219+223,52	PI253	7760696.088	740423.525
219+472,08	PI254	7760478.737	740544.106
219+680,11	PI255	7760307.676	740662.495
219+888,89	PI256	7760189.187	740834.393
220+214,05	PI257	7760170.102	741158.993
220+974,11	PI258	7759605.532	741667.868
221+117,74	PI259	7759481.376	741740.086
221+353,52	PI260	7759271.235	741633.174
221+458,46	PI261	7759168.575	741611.393
221+641,27	PI262	7758994.585	741555.284
221+733,38	PI263	7758909.943	741591.611
221+828,23	PI264	7758887.658	741683.808
221+893,77	PI265	7758859.616	741743.036
221+969,71	PI266	7758803.532	741794.248
222+179,07	PI267	7758595.034	741813.162
222+245,84	PI268	7758537.520	741847.093
222+309,19	PI269	7758516.282	741906.768
222+407,98	PI270	7758552.094	741998.847
222+644,79	PI271	7758462.525	742218.062
223+138,22	PI272	7758053.958	742494.738
223+248,01	PI273	7757944.182	742492.988
223+407,73	PI274	7757870.809	742634.855
223+477,87	PI275	7757878.630	742704.555
223+577,53	PI276	7757866.661	742803.490
223+665,28	PI277	7757838.748	742886.684

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
223+738,01	PI278	7757807.476	742952.352
223+802,95	PI279	7757767.243	743003.330
223+858,37	PI280	7757722.225	743035.648
223+925,43	PI281	7757657.526	743053.268
223+956,95	PI282	7757629.690	743068.052
223+996,4	PI283	7757638.281	743106.559
224+151,18	PI284	7757772.500	743183.647
224+229,46	PI285	7757740.434	743255.059
224+298,33	PI286	7757801.698	743286.525
224+369,63	PI287	7757825.183	743353.840
224+421,73	PI288	7757809.843	743403.635
224+564,85	PI289	7757683.854	743471.523
224+694,07	PI290	7757602.112	743571.614
224+776,63	PI291	7757521.608	743589.906
225+794,76	PI292	7756945.603	744429.437
226+488,98	PI293	7757012.648	745120.407
226+708,9	PI294	7757004.758	745340.183
226+910,35	PI295	7756928.451	745526.621
227+4,27	PI296	7756893.560	745613.819
227+123,23	PI297	7756814.206	745702.457
227+207,66	PI298	7756731.807	745720.846
227+930,96	PI302	7756087.869	745428.811
227+999,06	PI303	7756031.293	745466.708
228+266,04	PI304	7755764.652	745453.265
228+332,03	PI305	7755714.369	745410.534
228+387,45	PI306	7755661.502	745427.172
228+454,14	PI307	7755642.009	745490.951
228+583,95	PI308	7755677.308	745615.874
228+776,21	PI309	7755625.849	745801.112
229+33,86	PI310	7755576.885	746054.067
229+127,79	PI311	7755495.553	746101.058
229+172,85	PI312	7755494.038	746146.095
229+241,73	PI313	7755530.807	746204.332
229+315,86	PI314	7755530.615	746278.465
229+431,57	PI315	7755483.910	746384.327
229+485,27	PI316	7755493.344	746437.192
229+758,51	PI317	7755699.631	746616.375
229+909,09	PI318	7755753.214	746757.104
230+101,93	PI319	7755754.788	746949.935
230+167,73	PI320	7755772.257	747013.372
230+373,82	PI321	7755925.883	747150.759
230+717,84	PI322	7756115.913	747437.527
230+932,21	PI323	7756298.166	747550.388
231+206,02	PI324	7756370.350	747814.510

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
231+286,03	PI325	7756352.954	747892.605
231+374,16	PI326	7756291.129	747955.421
231+524,22	PI327	7756153.640	748015.530
231+650,71	PI328	7756028.398	748033.268
231+719,96	PI329	7755964.605	748060.203
231+811,77	PI330	7755897.916	748123.311
232+46,96	PI331	7755755.025	748310.119
232+447,05	PI332	7755441.846	748559.097
232+585,87	PI333	7755373.554	748679.957
232+781,23	PI334	7755368.180	748875.242
232+936,96	PI335	7755263.326	748990.381
233+95,23	PI336	7755132.675	749079.718
233+419,94	PI337	7754837.117	749214.173
233+895,99	PI338	7754371.617	749313.865
234+135,84	PI339	7754131.845	749320.009
234+389,23	PI340	7753941.378	749152.904
234+839,53	PI341	7753493.110	749110.137
235+203,3	PI342	7753153.564	749240.671
235+714,16	PI343	7752682.830	749439.121
235+845,23	PI344	7752613.060	749550.083
236+499,96	PI345	7752089.236	749942.863
236+612,11	PI346	7751979.066	749963.858
236+678,81	PI347	7751935.686	750014.524
236+806,88	PI348	7751880.924	750130.300
236+900,35	PI349	7751799.282	750175.798
237+474,75	PI353	7751379.654	750537.758
237+868,87	PI354	7751157.779	750863.490
238+62,44	PI355	7751014.936	750994.129
238+169,74	PI356	7750916.662	751037.210
238+336,15	PI357	7750750.966	751052.608
238+749,15	PI358	7750417.434	751296.172
239+73,29	PI359	7750124.472	751434.881
239+237,82	PI360	7750112.680	751598.987
239+484,68	PI361	7749993.224	751815.018
239+549,24	PI362	7749934.365	751841.544
239+746,67	PI363	7749741.607	751798.860
239+934,95	PI364	7749590.906	751911.736
240+71,48	PI365	7749454.521	751918.034
240+158,07	PI366	7749406.498	751990.085
240+296,34	PI367	7749482.078	752105.865
240+429,84	PI368	7749504.922	752237.397
240+561,64	PI369	7749441.978	752353.202
240+781,73	PI370	7749370.542	752561.375
241+115,24	PI371	7749355.612	752894.554

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
241+258,55	PI372	7749389.109	753033.891
241+373,68	PI373	7749491.670	753086.206
241+475,26	PI374	7749556.485	753164.410
242+223,43	PI375	7749244.196	753844.292
242+421,75	PI376	7749117.767	753997.089
242+574,03	PI377	7748978.395	754058.442
242+657,33	PI378	7748933.491	754128.604
242+930,76	PI379	7748854.534	754390.388
243+130,56	PI380	7748751.915	754561.823
243+331,05	PI381	7748588.540	754678.027
243+559,3	PI382	7748495.749	754886.567
243+702,12	PI383	7748498.627	755029.351
243+773,07	PI384	7748530.058	755092.958
243+954,38	PI385	7748459.658	755260.052
243+984,93	PI386	7748441.069	755284.295
244+9,7	PI387	7748416.595	755288.059
244+94,31	PI388	7748337.290	755258.559
244+193,94	PI389	7748239.019	755242.173
244+250,2	PI390	7748184.433	755255.786
244+552,97	PI391	7747968.954	755468.491
244+716,86	PI392	7747892.474	755613.441
244+779,82	PI393	7747856.203	755664.896
244+843,9	PI394	7747829.301	755723.057
244+912,84	PI395	7747789.401	755779.284
245+126,32	PI396	7747700.090	755973.183
245+232,77	PI397	7747659.338	756071.520
245+323,35	PI398	7747663.421	756162.007
245+457,38	PI399	7747725.923	756280.576
245+591,71	PI400	7747828.116	756367.760
245+618,37	PI401	7747835.803	756393.290
245+692,43	PI402	7747815.364	756464.472
245+806,7	PI403	7747771.192	756569.858
245+901,14	PI404	7747700.695	756632.699
245+976,28	PI405	7747676.211	756703.741
246+343,6	PI406	7747461.556	757001.808
246+532,77	PI407	7747272.504	756995.241
246+796,24	PI408	7747077.823	757172.778
246+963,78	PI409	7747043.278	757336.719
247+220,88	PI410	7746880.768	757535.940
247+407,1	PI411	7746713.601	757617.993
247+574,36	PI412	7746561.288	757687.106
247+950,92	PI413	7746332.424	757986.133
248+163,72	PI414	7746146.912	758090.389
248+286,21	PI415	7746029.619	758125.699

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
248+460,3	PI416	7745923.488	758263.698
248+852,5	PI417	7745625.489	758518.688
249+195,14	PI418	7745445.653	758810.337
249+332,45	PI419	7745445.653	758947.646
249+394,42	PI420	7745423.661	759005.583
249+467,04	PI421	7745373.006	759057.614
249+523,71	PI422	7745327.311	759091.139
249+577,35	PI423	7745318.359	759144.028
249+608,2	PI424	7745305.591	759172.112
249+647,58	PI425	7745277.018	759199.211
249+713,59	PI426	7745223.789	759238.247
249+789,01	PI427	7745211.697	759312.686
250+136,55	PI428	7745106.821	759644.033
250+222,11	PI429	7745048.867	759706.971
250+484,99	PI430	7744961.483	759954.906
250+589,28	PI431	7745010.221	760047.104
250+661,36	PI432	7745054.816	760103.726
250+777,88	PI433	7745121.386	760199.363
250+947,31	PI434	7745111.729	760368.520
251+217,82	PI435	7745156.142	760635.357
251+334,41	PI436	7745149.313	760751.749
251+962,78	PI437	7745188.094	761378.922
252+258,24	PI438	7745093.208	761658.733
253+79,38	PI439	7744653.203	762352.031
253+241,77	PI440	7744624.540	762511.868
253+329,87	PI441	7744569.810	762580.901
253+596,21	PI442	7744319.972	762673.205
253+680,74	PI443	7744258.059	762730.758
253+917,45	PI444	7744125.765	762927.047
254+441,38	PI445	7744075.355	763448.549
254+508,62	PI446	7744041.001	763506.346
254+681,32	PI447	7743896.979	763601.659
254+948,81	PI448	7743881.740	763868.710
254+997,54	PI449	7743897.418	763914.855
255+89,95	PI450	7743966.594	763976.120
255+165	PI451	7743981.145	764049.749
255+264,85	PI452	7743937.511	764139.560
255+405,73	PI453	7743982.904	764272.928
255+495,42	PI454	7743941.902	764352.696
255+678,08	PI455	7743831.232	764498.013
255+861,46	PI456	7743718.076	764642.318
255+933,37	PI457	7743697.544	764711.235
256+4,37	PI458	7743643.230	764756.963
256+159,4	PI459	7743517.842	764848.123

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
256+219,74	PI460	7743499.527	764905.615
256+405,02	PI461	7743556.198	765082.017
256+507,47	PI462	7743558.276	765184.452
256+655,94	PI463	7743531.803	765330.536
256+903	PI464	7743289.736	765379.965
256+983,97	PI465	7743208.930	765385.167
257+105,55	PI466	7743098.310	765334.712
257+310,57	PI467	7742950.731	765192.410
257+699,46	PI468	7742611.105	765002.956
257+807,51	PI469	7742503.106	765006.350
257+943,75	PI470	7742410.937	765106.681
258+78,55	PI471	7742287.833	765161.593
258+107,76	PI472	7742258.671	765159.920
258+205,27	PI473	7742167.477	765125.407
258+324,75	PI474	7742064.141	765065.415
258+490,49	PI475	7742010.718	764908.525
258+670,85	PI476	7741849.587	764827.491
258+755,11	PI477	7741777.196	764784.366
258+846,63	PI478	7741686.364	764773.193
259+137,97	PI479	7741407.397	764857.189
259+258,22	PI480	7741319.849	764939.624
259+515,07	PI481	7741296.180	765195.386
259+690,02	PI482	7741215.809	765350.787
259+726,56	PI483	7741180.023	765358.126
259+750,38	PI484	7741157.436	765365.702
259+781,95	PI485	7741128.937	765379.288
259+877,71	PI486	7741083.429	765463.541
259+901,67	PI487	7741073.301	765485.253
260+31,87	PI488	7741025.291	765606.278
260+329,7	PI489	7741106.428	765892.844
260+576,02	PI490	7741111.541	766139.116
260+672,71	PI491	7741108.141	766235.742
260+827,66	PI492	7741069.808	766385.880
261+7,16	PI493	7741060.723	766565.148
261+160,98	PI494	7740988.654	766701.043
261+321,28	PI495	7740868.906	766807.604
261+430,79	PI496	7740768.755	766851.909
261+554,17	PI497	7740680.817	766938.444
261+854,49	PI498	7740522.472	767193.627
262+72,03	PI499	7740537.834	767410.624
262+376,51	PI500	7740441.692	767699.533
262+466,54	PI501	7740453.295	767788.805
262+807,55	PI502	7740640.103	768074.099
263+141,69	PI503	7740892.748	768292.776

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
263+233,01	PI504	7740931.461	768375.490
263+419,1	PI505	7740934.841	768561.543
263+572,19	PI506	7740899.787	768710.564
263+670,91	PI507	7740829.418	768779.806
263+724,32	PI508	7740827.828	768833.193
263+762,94	PI509	7740853.287	768862.228
263+816,74	PI510	7740906.856	768867.293
263+899,51	PI511	7740972.119	768816.391
263+923,23	PI512	7740992.829	768804.829
263+996,75	PI513	7741061.743	768779.206
264+35,06	PI514	7741100.051	768779.279
264+73,98	PI515	7741118.547	768813.521
264+112,34	PI516	7741097.702	768845.724
264+233,36	PI517	7741000.617	768917.969
264+463,64	PI518	7740863.334	769102.861
264+694,65	PI519	7740767.742	769313.166
264+803,93	PI520	7740796.734	769418.526
264+904,28	PI521	7740744.821	769504.408
264+961,01	PI522	7740726.554	769558.111
265+152,85	PI523	7740800.536	769735.114
265+307,96	PI524	7740766.371	769886.412
265+591,3	PI525	7740871.790	770149.412
265+750,9	PI526	7740870.604	770309.006
265+858,91	PI527	7740793.343	770384.494
266+52,93	PI528	7740621.269	770474.128
266+173,87	PI529	7740500.337	770473.385
266+407,51	PI530	7740276.195	770407.426
266+638,67	PI531	7740047.509	770441.096
267+152,12	PI532	7739580.494	770654.490
267+255,94	PI533	7739476.822	770659.949
267+415,61	PI534	7739322.231	770620.007
268+352,77	PI535	7738385.989	770661.634
268+525,58	PI536	7738216.012	770692.786
268+667,51	PI537	7738096.626	770769.532
268+951,84	PI538	7737976.391	771027.190
269+111,36	PI539	7737964.755	771186.286
269+202,14	PI540	7737935.020	771272.059
269+282,46	PI541	7737872.400	771322.355
270+279,46	PI542	7736877.880	771392.588
271+155,62	PI543	7736009.070	771279.341
271+803,26	PI544	7735390.153	771088.600
272+428,9	PI545	7734798.569	771292.221
272+604,86	PI546	7734669.739	771412.077
273+116,8	PI547	7734187.014	771582.521

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
273+266,68	PI548	7734131.330	771721.676
273+387,26	PI549	7734127.572	771842.197
273+617,19	PI550	7734147.118	772071.293
273+828,14	PI551	7734180.388	772279.604
273+942,19	PI552	7734219.349	772386.794
274+41,86	PI553	7734299.484	772446.056
274+91,55	PI554	7734296.529	772495.664
274+134,28	PI555	7734272.498	772530.990
274+158,75	PI556	7734256.809	772549.775
274+199,19	PI557	7734243.942	772588.112
274+293,5	PI558	7734187.307	772663.515
274+319,13	PI559	7734186.232	772689.131
274+378,6	PI560	7734206.052	772745.196
274+414,91	PI561	7734219.074	772779.087
274+446,07	PI562	7734211.137	772809.225
274+474,07	PI563	7734191.455	772829.146
274+549,66	PI564	7734130.715	772874.128
274+653,56	PI565	7734133.851	772977.987
274+744,21	PI566	7734087.330	773055.780
274+819,12	PI567	7734078.887	773130.212
274+965,9	PI568	7733949.695	773199.891
275+158,26	PI569	7733757.405	773205.242
275+231,16	PI570	7733690.479	773176.349
275+288,23	PI571	7733633.786	773169.762
275+390,69	PI572	7733562.554	773243.399
275+513,15	PI573	7733441.821	773222.914
275+608,22	PI574	7733365.480	773279.588
276+127,47	PI575	7732918.691	773544.149
276+347,35	PI576	7732748.173	773682.970
276+456,79	PI577	7732638.905	773676.855
276+611,05	PI578	7732545.892	773799.927
276+748,48	PI579	7732416.234	773845.471
276+855,48	PI580	7732382.627	773947.056
277+245,48	PI581	7732545.673	774301.348
277+315,4	PI582	7732534.698	774370.400
277+430,03	PI583	7732464.236	774460.805
277+712,21	PI584	7732205.808	774574.136
277+989,53	PI585	7731929.278	774594.978
278+102,19	PI586	7731816.711	774590.262
278+155,3	PI587	7731766.273	774606.883
278+233,49	PI588	7731731.271	774676.801
278+430,1	PI589	7731645.473	774853.709
278+543,56	PI590	7731540.963	774897.871
278+657,29	PI591	7731427.381	774903.553

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
278+874,7	PI592	7731210.388	774889.997
278+947,15	PI593	7731142.197	774865.533
279+39,91	PI594	7731057.259	774902.816
279+114,99	PI595	7730983.470	774916.717
279+523,21	PI596	7730575.743	774936.650
279+627,53	PI597	7730474.176	774912.836
279+699,43	PI598	7730402.338	774915.931
279+788,93	PI599	7730322.476	774956.311
279+929,68	PI600	7730221.368	775054.238
280+55,81	PI601	7730184.799	775174.944
280+179	PI602	7730180.658	775298.072
280+309,45	PI603	7730136.268	775420.733
280+571,9	PI604	7730070.221	775674.738
280+927,6	PI605	7730049.342	776029.823
282+204,88	PI606	7729636.030	777238.387
282+545,68	PI607	7729601.434	777577.426
282+731,9	PI608	7729638.284	777759.962
282+885,24	PI609	7729598.920	777908.166
282+991,87	PI610	7729544.980	778000.145
283+269,59	PI611	7729338.263	778185.605
283+592,68	PI612	7729148.042	778446.764
283+829,59	PI613	7728961.643	778592.994
283+973,52	PI614	7728892.199	778719.059
284+144,6	PI615	7728782.238	778850.118
284+231,66	PI616	7728714.414	778904.697
284+354,44	PI617	7728721.448	779027.277
285+53,45	PI618	7728665.110	779724.010
285+313,34	PI619	7728597.878	779975.061
285+475,32	PI620	7728559.117	780132.331
285+572,7	PI621	7728557.763	780229.704
285+638,76	PI622	7728542.917	780294.070
285+680,54	PI623	7728512.043	780322.229
285+720,07	PI624	7728478.500	780343.134
285+793,31	PI625	7728409.767	780368.440
285+848,7	PI626	7728378.424	780414.101
285+903,26	PI627	7728368.370	780467.728
285+940,03	PI628	7728389.265	780497.985
285+978,93	PI629	7728417.308	780524.942
286+20,04	PI630	7728434.354	780562.351
286+85,14	PI631	7728429.405	780627.266
286+151,66	PI632	7728396.413	780685.030
286+370,35	PI633	7728259.932	780855.899
286+797,58	PI634	7728042.212	781223.496
286+989,83	PI635	7728063.145	781414.598

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
287+268,06	PI636	7727834.836	781573.627
288+173,23	PI637	7727373.560	782352.442
288+524,03	PI638	7727073.023	782533.379
288+925,63	PI639	7726671.421	782533.379
289+451,98	PI640	7726153.627	782627.908
290+13,98	PI641	7725592.386	782657.043
290+321,84	PI642	7725289.395	782711.569
290+671,31	PI643	7724946.616	782643.521
290+730,54	PI644	7724907.275	782599.240
290+888,1	PI645	7724896.729	782442.028
290+929,31	PI646	7724861.928	782419.973
290+995,75	PI647	7724805.580	782455.185
291+56,57	PI648	7724748.550	782476.326
291+130,43	PI649	7724674.774	782479.833
291+268,97	PI650	7724636.249	782346.764
291+515,95	PI651	7724449.825	782184.758
291+762,86	PI652	7724206.969	782229.301
292+17,72	PI653	7724059.273	782437.014
292+326,66	PI654	7723967.424	782731.985
292+520,49	PI655	7723855.218	782890.026
292+940,12	PI656	7723553.110	783181.264
293+119,65	PI657	7723376.714	783147.847
293+909,05	PI658	7722595.225	783259.336
294+760,93	PI659	7721850.930	783673.721
295+294,94	PI660	7721323.585	783589.563
296+19,64	PI661	7720759.548	784044.587
296+570,44	PI662	7720462.974	784508.722
297+155,22	PI663	7719880.997	784565.940
297+591,24	PI664	7719488.466	784755.764
299+211,19	PI665	7718675.667	786157.045
299+836,15	PI666	7718536.596	786766.336
300+98,65	PI667	7718329.695	786927.877
301+777,99	PI668	7716733.904	786404.751
302+293,99	PI669	7716217.905	786404.751
303+232,97	PI670	7715288.443	786271.422
303+314,57	PI671	7715219.335	786228.026
303+466,36	PI672	7715141.133	786097.936
303+623,22	PI673	7715084.577	785951.630
303+704,58	PI674	7715019.523	785902.767
303+777,47	PI675	7714947.067	785910.754
304+197,95	PI676	7714673.950	786230.454
305+548,89	PI677	7713605.726	787057.465
306+590,87	PI678	7713062.707	787946.756
306+719,45	PI679	7713034.984	788072.313

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
306+929,76	PI680	7712908.548	788240.376
307+93,23	PI681	7712780.289	788341.728
307+546,17	PI682	7712477.517	788678.598
307+800,87	PI683	7712235.062	788756.634
307+865,88	PI684	7712179.939	788791.103
308+12,28	PI685	7712087.535	788904.651
308+104,93	PI686	7712037.060	788982.351
308+296,27	PI687	7712024.016	789173.238
308+578,4	PI688	7711895.959	789424.636
308+628,83	PI689	7711905.252	789474.197
308+712,35	PI690	7711937.410	789551.286
308+766,62	PI691	7711926.724	789604.490
308+952	PI692	7711761.511	789688.581
310+154,52	PI693	7710614.745	790050.491
310+417,03	PI694	7710354.524	790085.115
310+472,05	PI695	7710318.193	790126.424
310+674,27	PI696	7710123.083	790179.585
310+797,07	PI697	7710015.423	790238.661
310+966,97	PI698	7709885.746	790348.432
311+112,91	PI699	7709795.285	790462.951
311+434,1	PI700	7709545.117	790664.401
311+680,01	PI701	7709304.366	790714.476
311+767,7	PI702	7709220.490	790688.876
312+38,27	PI703	7709031.507	790495.244
312+364,33	PI704	7708748.924	790332.582
312+678,16	PI705	7708457.983	790214.917
312+806,97	PI706	7708329.365	790207.889
312+931,15	PI707	7708205.221	790204.970
313+140	PI708	7708007.200	790271.359
313+222,6	PI709	7707954.139	790334.660
313+334,24	PI710	7707938.400	790445.179
313+631,95	PI711	7707766.977	790688.581
314+103,67	PI712	7707373.732	790949.122
314+354,14	PI713	7707299.166	791188.234
314+554	PI714	7707399.265	791361.217
314+724,11	PI715	7707547.190	791445.230
314+856,48	PI716	7707616.106	791558.241
314+900,25	PI717	7707634.675	791597.873
314+942,05	PI718	7707628.141	791639.158
315+4,31	PI719	7707571.732	791665.527
315+147,71	PI720	7707477.594	791773.701
315+262,98	PI721	7707438.205	791882.034
315+368,93	PI722	7707445.065	791987.755
315+481,52	PI723	7707392.683	792087.414

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
315+601,99	PI724	7707372.890	792206.248
315+732,69	PI725	7707298.940	792314.021
315+831,38	PI726	7707279.176	792410.712
316+0,69	PI727	7707222.464	792570.237
316+100,86	PI728	7707171.271	792656.339
316+156,07	PI729	7707148.892	792706.807
316+463,59	PI730	7706920.808	792913.082
316+619,92	PI731	7706766.019	792934.965
316+823,78	PI732	7706579.186	792853.396
317+86,35	PI733	7706427.663	792638.958
317+273,88	PI734	7706272.734	792533.296
317+460,43	PI735	7706086.876	792517.273
317+647,75	PI736	7705969.538	792663.292
317+881,02	PI737	7705969.538	792896.565
318+82,65	PI738	7705896.048	793084.322
318+996,85	PI739	7705256.040	793737.126
319+161,51	PI740	7705103.201	793798.380
319+261,67	PI741	7705015.747	793847.207
319+522,33	PI742	7704967.926	794103.441
320+513,22	PI743	7705033.020	795092.189
321+921,83	PI744	7705319.423	796471.381
322+126,72	PI745	7705238.388	796659.559
322+320,87	PI746	7705104.595	796800.250
322+620,83	PI747	7704845.393	796951.218
322+721,65	PI748	7704749.849	796983.396
322+861,4	PI749	7704727.017	797121.268
323+20,19	PI750	7704587.487	797197.084
323+152,02	PI751	7704535.690	797318.306
323+236,28	PI752	7704568.705	797395.827
323+374,06	PI753	7704675.093	797483.390
323+470,53	PI754	7704743.021	797551.879
323+540,85	PI755	7704740.928	797622.168
323+661,86	PI756	7704664.238	797715.777
323+688,06	PI757	7704664.016	797741.976
323+758,35	PI758	7704729.909	797766.437
323+806,65	PI759	7704761.893	797802.631
323+869,5	PI760	7704744.235	797862.954
324+0,64	PI761	7704635.071	797935.618
324+51,8	PI762	7704603.615	797975.972
324+153,69	PI763	7704509.176	798014.204
324+246,92	PI764	7704439.493	798076.145
324+342,34	PI765	7704442.368	798171.523
324+385,65	PI766	7704413.019	798203.363
324+495,3	PI767	7704304.970	798222.051

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
324+813,01	PI768	7704061.207	798425.813
324+917,35	PI769	7703961.072	798455.140
324+977,89	PI770	7703900.567	798453.187
325+152,54	PI771	7703739.094	798519.744
325+281,94	PI772	7703611.097	798538.794
325+359,66	PI773	7703557.607	798595.165
325+439,54	PI774	7703535.269	798671.859
325+612,2	PI775	7703365.403	798702.802
325+666,39	PI776	7703311.213	798702.802
325+723,88	PI777	7703259.194	798727.295
325+778,57	PI778	7703238.706	798777.999
325+826,55	PI779	7703243.127	798825.771
325+857,72	PI780	7703235.620	798856.023
325+902,45	PI781	7703192.222	798866.877
326+18,28	PI782	7703079.989	798838.228
326+99,5	PI783	7702998.851	798834.589
326+223,36	PI784	7702876.237	798817.085
326+533,48	PI785	7702592.238	798941.674
326+713,79	PI786	7702431.899	799024.141
326+879,02	PI787	7702268.502	799048.699
327+245,97	PI788	7701907.205	799112.861
327+541,4	PI789	7701620.652	799041.001
327+757,01	PI790	7701417.313	799112.698
327+933,7	PI791	7701241.155	799126.395
328+170,93	PI792	7701062.548	799282.527
328+360,89	PI793	7700910.860	799396.877
328+558,92	PI794	7700715.218	799427.547
328+855,7	PI795	7700418.527	799420.077
329+27,45	PI796	7700260.382	799353.092
329+374,41	PI797	7699914.587	799381.563
329+689,28	PI798	7699627.754	799511.437
330+36,26	PI799	7699301.868	799630.563
330+126,43	PI800	7699230.691	799685.920
330+230,59	PI801	7699130.126	799713.050
330+333,74	PI802	7699027.994	799727.521
330+452,11	PI803	7698928.517	799663.362
330+586,54	PI804	7698966.743	799534.481
330+651,65	PI805	7698910.705	799501.333
330+804,25	PI806	7698775.009	799571.140
330+920,95	PI807	7698685.358	799645.861
331+34,35	PI808	7698595.695	799715.283
331+132,15	PI809	7698498.863	799728.987
331+284,38	PI810	7698349.356	799700.320

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
331+488,61	PI811	7698193.944	799567.818
332+271,04	PI812	7697420.185	799683.972
332+681,82	PI813	7697010.300	799711.156
332+929,44	PI814	7696855.649	799904.547
333+394,11	PI815	7696448.828	800129.080
333+486,77	PI816	7696356.253	800125.260
333+627,72	PI817	7696226.019	800071.344
333+739,06	PI818	7696138.826	800002.102
333+802,87	PI819	7696087.652	799963.995
333+914,11	PI820	7695976.517	799968.748
334+17,04	PI821	7695881.580	800008.537
334+163,3	PI822	7695841.924	800149.318
334+262,79	PI823	7695742.784	800157.637
334+409,49	PI824	7695653.576	800041.173
334+550,91	PI825	7695517.924	800001.204
334+641,61	PI826	7695433.506	800034.373
334+747,75	PI827	7695394.335	800133.021
334+792,69	PI828	7695372.049	800172.042
334+920,06	PI829	7695315.528	800286.182
335+149,53	PI830	7695109.789	800387.814
335+203,16	PI831	7695088.827	800437.178
335+425,49	PI832	7695156.409	800648.992
335+507,28	PI833	7695115.693	800719.924
335+577,65	PI834	7695103.810	800789.280
335+869,9	PI835	7694960.188	801043.808
336+90,73	PI836	7694798.859	801194.605
336+327	PI837	7694603.618	801327.659
336+472,65	PI838	7694458.270	801337.024
336+658,93	PI839	7694303.783	801232.932
336+747,59	PI840	7694215.379	801226.256
336+802,38	PI841	7694164.895	801247.548
336+836,94	PI842	7694130.569	801243.506
336+954,81	PI843	7694074.451	801139.853
337+9,85	PI844	7694027.904	801110.481
337+85,73	PI845	7693952.024	801110.986
337+229,3	PI846	7693821.455	801170.686
337+487,5	PI847	7693601.644	801306.138
337+711,51	PI848	7693404.313	801412.166
337+815,59	PI849	7693324.731	801479.247
338+34,92	PI850	7693257.498	801688.012
338+563,78	PI851	7693035.768	802168.155
338+802,47	PI852	7693036.570	802406.835
339+125,88	PI853	7692853.811	802673.660
339+444,33	PI854	7692566.613	802811.232

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
339+607,86	PI855	7692468.247	802941.880
339+710,78	PI856	7692376.949	802989.371
339+935,84	PI857	7692154.933	803026.309
340+229,83	PI858	7691869.616	803097.159
340+285,41	PI859	7691831.829	803137.920
340+621,44	PI860	7691752.255	803464.394
340+730,84	PI861	7691686.712	803551.991
340+987,09	PI862	7691467.078	803683.979
341+136,78	PI863	7691434.086	803829.998
341+298,23	PI864	7691336.298	803958.464
341+465,07	PI865	7691278.988	804115.147
341+720,19	PI866	7691070.876	804262.719
341+918,21	PI867	7690944.459	804415.126
342+57,8	PI868	7690819.770	804477.889
342+202,37	PI869	7690751.255	804605.191
342+369,25	PI870	7690722.268	804769.532
342+524,21	PI871	7690727.261	804924.412
342+718,58	PI872	7690720.301	805118.656
342+874,61	PI873	7690728.858	805274.458
343+14,36	PI874	7690703.553	805411.894
343+206,56	PI875	7690601.412	805574.705
343+381,15	PI876	7690517.061	805727.564
343+474,63	PI877	7690522.546	805820.892
343+548,01	PI878	7690513.464	805893.700
343+872,96	PI879	7690433.336	806208.618
344+38,64	PI880	7690344.664	806348.578
344+202,4	PI881	7690204.565	806433.370
344+288,96	PI882	7690126.525	806470.804
344+760,01	PI883	7689850.295	806852.361
344+814,12	PI884	7689810.084	806888.568
344+910,66	PI885	7689716.893	806913.774
345+50,03	PI886	7689580.435	806885.439
345+478,86	PI887	7689217.201	806657.499
345+556,41	PI888	7689156.295	806609.489
345+653,3	PI889	7689089.372	806539.420
345+734,77	PI890	7689013.878	806508.798
345+784,9	PI891	7688964.276	806516.018
345+897,16	PI892	7688866.395	806570.996
346+63,73	PI893	7688701.091	806550.481
346+263,92	PI894	7688535.930	806663.604
346+389,93	PI895	7688421.079	806715.452
346+465,11	PI896	7688349.047	806736.964
346+514,65	PI897	7688312.709	806770.637
346+570,95	PI898	7688290.748	806822.482

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
346+676,78	PI899	7688308.566	806926.800
346+774,18	PI900	7688379.241	806993.826
346+842,1	PI901	7688421.769	807046.775
346+906,91	PI902	7688429.194	807111.160
347+8,12	PI903	7688353.707	807178.573
347+160,46	PI904	7688204.659	807210.064
347+229,97	PI905	7688135.236	807206.421
347+321,39	PI906	7688050.474	807240.669
347+488,19	PI907	7687888.498	807280.496
347+534,19	PI908	7687844.721	807266.384
347+567,49	PI909	7687811.644	807262.536
347+624,96	PI910	7687778.059	807309.176
347+684,04	PI911	7687730.744	807344.554
347+736,45	PI912	7687682.338	807364.634
347+783,33	PI913	7687637.438	807351.158
347+918,19	PI914	7687539.670	807258.263
348+95,17	PI915	7687384.520	807173.116
348+228,97	PI916	7687251.783	807156.272
348+401,81	PI917	7687080.149	807176.633
348+575,03	PI918	7686913.360	807223.393
348+853,14	PI919	7686641.619	807282.578
349+185,12	PI920	7686441.859	807547.733
349+286,15	PI921	7686412.965	807644.546
349+504,08	PI922	7686392.049	807861.462
349+736,31	PI923	7686197.157	807987.751
349+891,84	PI924	7686119.423	808122.465
350+159,93	PI925	7686103.265	808390.066
350+301,47	PI926	7686082.162	808530.024
350+454,49	PI927	7685982.247	808645.927
350+571,98	PI928	7685876.362	808696.838
350+732,68	PI929	7685804.502	808840.572
350+793,44	PI930	7685749.912	808867.262
350+953,1	PI931	7685590.287	808870.157
351+0,2	PI932	7685549.367	808846.821
351+74,8	PI933	7685530.313	808774.699
351+178,34	PI934	7685553.872	808673.873
351+302,49	PI935	7685534.232	808551.284
351+370,1	PI936	7685493.242	808497.520
351+490,04	PI937	7685386.789	808442.273
351+567,67	PI938	7685367.606	808367.049
351+638,71	PI939	7685367.055	808296.011
351+655,66	PI940	7685370.028	808279.322
351+712,72	PI941	7685409.525	808238.142
351+731,02	PI942	7685408.929	808219.854

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
351+827,39	PI943	7685314.156	808202.343
351+853,5	PI944	7685306.898	808177.267
351+914,61	PI945	7685320.926	808117.783
351+999,05	PI946	7685236.601	808113.369
352+126,29	PI947	7685158.826	808012.675
352+184,01	PI948	7685147.818	807956.013
352+254,42	PI949	7685096.430	807907.877
352+319,1	PI950	7685032.869	807895.877
352+440,17	PI951	7684929.306	807958.573
352+550,94	PI952	7684819.874	807975.783
352+723,48	PI953	7684680.552	808077.553
352+806,88	PI954	7684610.999	808123.571
352+851,09	PI955	7684567.358	808116.446
352+887,73	PI956	7684552.381	808083.016
353+72,53	PI957	7684621.615	807911.665
353+191,81	PI958	7684685.641	807811.035
353+255,88	PI959	7684661.832	807751.554
353+330,9	PI960	7684680.364	807678.858
353+391,99	PI961	7684728.425	807641.143
353+647,98	PI962	7684852.090	807417.004
353+985,69	PI963	7684966.867	807099.392
354+185,79	PI964	7684921.849	806904.430
354+326,02	PI965	7684828.315	806799.952
354+450,36	PI966	7684707.091	806772.284
354+540,51	PI967	7684630.522	806724.699
354+694,01	PI968	7684551.210	806593.269
354+908,16	PI969	7684478.084	806392.000
355+43,87	PI970	7684475.611	806256.311
355+149,57	PI971	7684452.303	806153.212
355+215,94	PI972	7684463.951	806087.875
355+297,49	PI973	7684406.674	806029.814
355+779,28	PI974	7683976.615	805812.643
355+939,12	PI975	7683820.024	805844.751
356+110,36	PI976	7683666.473	805920.544
356+259,21	PI977	7683517.688	805916.352
356+393,95	PI978	7683390.612	805871.557
356+506,26	PI979	7683279.588	805888.497
356+785,74	PI980	7683136.605	806128.641
356+947,96	PI981	7682992.297	806202.740
357+762,1	PI982	7682200.591	806392.528
357+956,77	PI983	7682006.119	806401.305
358+1,82	PI984	7681962.149	806391.507
358+51,31	PI985	7681912.658	806390.962
358+93,82	PI986	7681894.454	806429.375

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
358+138,2	PI987	7681903.018	806472.920
358+177,68	PI988	7681898.559	806512.149
358+269,55	PI989	7681846.885	806588.111
358+350,67	PI990	7681842.416	806669.104
358+512,79	PI991	7681705.302	806755.609
358+587,97	PI992	7681636.420	806785.716
358+645,28	PI993	7681580.973	806771.190
358+747,18	PI994	7681513.767	806694.600
358+846,23	PI995	7681425.324	806649.992
358+909,68	PI996	7681361.900	806648.341
358+957,36	PI997	7681318.070	806667.104
359+25,09	PI998	7681296.960	806731.461
359+76,08	PI999	7681267.912	806773.366
359+232,91	PI1000	7681144.336	806869.941
359+379,65	PI1001	7681022.081	806951.091
359+649,65	PI1002	7680756.143	806997.774
359+836,51	PI1003	7680569.351	806993.000
359+885,32	PI1004	7680526.127	806970.309
359+944,13	PI1005	7680484.338	806928.928
360+76,87	PI1006	7680440.755	806803.557
360+151,16	PI1007	7680414.343	806734.116
360+212,62	PI1008	7680368.584	806693.091
360+356,89	PI1009	7680234.461	806639.924
360+446,13	PI1010	7680146.561	806655.300
360+746,4	PI1011	7679887.835	806807.694
360+834,19	PI1012	7679815.713	806757.632
360+914,91	PI1013	7679735.477	806748.817
361+2,63	PI1014	7679649.184	806764.581
361+119,89	PI1015	7679552.952	806697.578
361+376,77	PI1016	7679423.793	806475.535
361+620,29	PI1017	7679375.554	806236.835
361+840,53	PI1018	7679200.778	806102.835
362+157,8	PI1019	7678907.615	805981.532
362+305,77	PI1020	7678769.119	805929.427
362+525,21	PI1021	7678585.244	806049.192
362+650,15	PI1022	7678512.291	806150.622
362+815,17	PI1023	7678359.185	806212.198
363+58,23	PI1024	7678117.588	806185.559
363+397,18	PI1025	7677813.836	806335.949
363+505	PI1026	7677711.405	806302.281
363+622,79	PI1027	7677625.001	806222.222
363+765,36	PI1028	7677508.358	806140.242
363+897,56	PI1029	7677376.324	806146.874
364+705,49	PI1030	7676705.361	806596.934

MINERODUTO EBX - TRECHO: VARGEM LINDA / NATIVIDADE			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-23			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	NORTE
365+542,92	PI1031	7676664.551	807433.370
366+67,02	PI1032	7676323.111	807830.980
366+656,97	PI1033	7675749.795	807970.129
367+141,44	PI1034	7675369.929	808270.799
367+620,39	PI1035	7675340.105	808748.821
367+882,65	PI1036	7675225.280	808984.611
369+541,34	PI1037	7673972.889	810072.167
370+246,42	PI1038	7673541.214	810629.654
370+401,29	PI1039	7673498.927	810778.642
370+917,42	PI1040	7673173.667	811179.388
371+95,68	PI1041	7673017.662	811265.634
371+399,13	PI1042	7672716.408	811302.044
371+684,29	PI1043	7672431.880	811283.042
371+724,04	PI1044	7672396.335	811300.829
371+784,68	PI1045	7672351.206	811341.336
371+822,27	PI1046	7672313.658	811343.147
371+982,96	PI1047	7672183.853	811248.424
372+172,84	PI1048	7671994.949	811229.252
372+818,25	PI1049	7671349.584	811221.456
373+231,77	PI1050	7670978.072	811403.050

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MINERODUTÓ EBX - TRECHO: NATIVIDADE / CABO DE SANTO ANDRÉ			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-24			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
372+748,77	V0	7670705.891	188214.715
373+117,4	PI1	7670525.821	188536.377
373+654,89	PI2	7670472.685	189071.228
373+828,44	PI3	7670324.689	189161.886
374+25,68	PI4	7670128.880	189185.622
374+270,07	PI5	7669914.358	189302.691
374+417,31	PI6	7669848.845	189434.552
374+796,13	PI7	7669788.746	189808.578
374+868,3	PI8	7669761.884	189875.558
375+517,71	PI9	7669390.578	190408.345
375+840,88	PI10	7669082.685	190506.549
375+999,24	PI11	7668938.490	190572.010
376+115,34	PI12	7668860.264	190657.794
376+198,82	PI13	7668801.318	190716.906
376+255,65	PI14	7668747.109	190733.971
376+372,32	PI15	7668645.047	190677.431
376+452,54	PI16	7668616.480	190602.474
376+494,67	PI17	7668580.009	190581.382
376+541,84	PI18	7668535.075	190595.734
376+687,79	PI19	7668457.664	190719.470
376+778,11	PI20	7668384.021	190771.755
376+835,46	PI21	7668345.452	190814.197
376+912,78	PI22	7668371.205	190887.106
376+958,42	PI23	7668364.268	190932.212
377+168,21	PI24	7668195.120	191056.306
377+333,03	PI25	7668046.743	191128.079
377+528,75	PI26	7667861.067	191189.955
377+698,35	PI27	7667764.411	191329.318
378+12,83	PI28	7667553.254	191562.362
378+120,46	PI29	7667528.427	191667.091
378+363,28	PI30	7667535.863	191909.802
378+477,48	PI31	7667516.123	192022.285
378+601,95	PI32	7667449.464	192127.394
378+748,12	PI33	7667336.313	192219.925
379+11,85	PI34	7667087.072	192306.148
379+211,21	PI35	7666893.809	192355.064
379+746,4	PI36	7666388.526	192531.472
379+896,83	PI37	7666243.380	192570.984
379+986,43	PI38	7666163.252	192611.092
380+208,98	PI39	7666010.999	192773.406
380+332,84	PI40	7665924.139	192861.699
380+443,32	PI41	7665832.027	192922.701
380+561,97	PI42	7665716.826	192951.101

MINERODUTÓ EBX - TRECHO: NATIVIDADE / CABO DE SANTO ANDRÉ			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-24			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
380+661	PI43	7665622.745	192982.027
380+738,13	PI44	7665547.114	192966.885
380+851,62	PI45	7665458.849	192895.552
380+903,76	PI46	7665414.454	192868.202
380+949,11	PI47	7665370.854	192855.732
381+22,17	PI48	7665298.008	192861.341
381+130,1	PI49	7665196.814	192898.861
381+222,47	PI50	7665108.221	192925.032
381+335,09	PI51	7664998.220	192900.922
382+73,34	PI52	7664282.958	192718.091
382+143,44	PI53	7664214.069	192705.161
382+207,39	PI54	7664150.163	192702.772
382+409,13	PI55	7663956.198	192758.263
382+485	PI56	7663893.847	192801.476
382+556,94	PI57	7663875.269	192870.975
383+150,15	PI58	7663823.805	193461.955
383+282,47	PI59	7663813.621	193593.883
383+534,71	PI60	7663682.728	193809.502
383+732,69	PI61	7663505.828	193898.389
384+19,67	PI62	7663261.192	194048.421
384+285,22	PI63	7663031.220	194181.198
384+483,82	PI64	7662906.766	194335.976
384+537,94	PI65	7662858.963	194361.352
384+687,37	PI66	7662709.634	194366.578
384+777,35	PI67	7662628.431	194405.349
384+923,56	PI68	7662532.336	194515.550
384+992,88	PI69	7662472.165	194549.970
385+112,9	PI70	7662358.863	194589.561
385+207,48	PI71	7662268.035	194615.930
385+343,84	PI72	7662138.953	194659.892
385+444,66	PI73	7662046.128	194699.239
385+508,48	PI74	7662002.103	194745.433
385+879,81	PI75	7661845.554	195082.154
385+978,42	PI76	7661800.842	195170.041
386+94,63	PI77	7661721.735	195255.173
386+197,73	PI78	7661634.042	195309.386
386+271,37	PI79	7661565.264	195335.712
386+362,74	PI80	7661474.563	195346.718
386+470,28	PI81	7661372.269	195379.891
387+261,39	PI82	7660627.692	195647.226
388+796,81	PI83	7659764.632	196917.125
389+664,93	PI84	7659479.258	197736.995
391+51,25	PI85	7659688.923	199107.370
391+264,45	PI86	7659621.216	199309.528

MINERODUTÓ EBX - TRECHO: NATIVIDADE / CABO DE SANTO ANDRÉ			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-24			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
391+742,93	PI87	7659292.459	199657.183
392+59,89	PI88	7658983.340	199727.260
392+793,65	PI89	7658424.075	200202.267
392+951,29	PI90	7658274.977	200253.447
393+415,7	PI91	7657946.328	200581.565
393+763,75	PI92	7657636.913	200740.958
394+735,69	PI93	7656896.056	201370.077
394+998,02	PI94	7656664.914	201494.132
395+229,31	PI95	7656442.380	201557.164
395+457,16	PI96	7656336.274	201758.807
395+946,87	PI97	7656312.506	202247.936
396+438,67	PI98	7655994.993	202623.509
396+800,49	PI99	7655895.425	202971.357
397+193,46	PI100	7655754.070	203338.026
399+347,96	PI101	7654173.443	204802.091
400+22,91	PI102	7653588.725	205139.229
400+562,85	PI103	7653289.899	205588.940
400+972,42	PI104	7653240.470	205995.514
401+58,38	PI105	7653195.202	206068.584
401+435,44	PI106	7652837.936	206189.173
402+15,76	PI107	7652496.400	206658.345
402+148,52	PI108	7652444.475	206780.525
402+392,04	PI109	7652458.405	207023.648
402+538,57	PI110	7652421.033	207165.335
402+891,35	PI111	7652291.708	207493.558
403+191,5	PI112	7652207.298	207781.591
403+515,32	PI113	7652043.411	208060.871
403+626,65	PI114	7651947.459	208117.336
405+730,78	PI115	7650374.305	209514.679
407+620,52	PI116	7649305.638	211073.226
408+485,3	PI117	7648661.570	211650.298
409+18,59	PI118	7648234.128	211969.186
409+155,45	PI119	7648098.091	211984.190
409+224,83	PI120	7648037.300	212017.631
409+283,61	PI121	7648011.239	212070.313
409+321,59	PI122	7648009.245	212108.246
409+417,17	PI123	7647952.497	212185.157
409+729,59	PI124	7647640.213	212194.158
409+885,36	PI125	7647487.096	212222.791
409+965,19	PI126	7647429.567	212278.135
410+88,15	PI127	7647347.799	212369.974
410+184,57	PI128	7647259.290	212408.213
410+259,41	PI129	7647226.929	212475.704
410+366,97	PI130	7647231.784	212583.149

MINERODUTÓ EBX - TRECHO: NATIVIDADE / CABO DE SANTO ANDRÉ			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-24			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
410+455,52	PI131	7647207.476	212668.301
410+813,99	PI132	7646999.632	212960.367
410+931,48	PI133	7646883.774	212979.878
411+26,44	PI134	7646805.459	213033.577
411+441,07	PI135	7646596.714	213391.826
411+579,05	PI136	7646519.670	213506.289
412+106,23	PI137	7646174.393	213904.669
412+649,66	PI138	7645816.640	214313.724
413+191,23	PI139	7645432.055	214695.038
413+951,32	PI140	7645088.757	215373.177
414+359,15	PI141	7644901.060	215735.257
415+304,47	PI142	7644407.277	216541.361
416+299,45	PI143	7644036.054	217464.495
416+698,26	PI144	7643808.469	217791.988
417+255,04	PI145	7643648.942	218325.429
417+694,69	PI146	7643619.478	218764.088
417+833,43	PI147	7643575.818	218895.782
418+112,12	PI148	7643385.958	219099.800
418+604,06	PI149	7642983.557	219382.764
418+893,74	PI150	7642716.850	219495.839
419+640,69	PI151	7642018.757	219761.527
419+975,06	PI152	7641778.429	219994.018
420+55,03	PI153	7641727.868	220055.971
420+234,68	PI154	7641740.549	220235.169
420+299,69	PI155	7641731.302	220299.526
420+337,64	PI156	7641714.276	220333.435
420+394,7	PI157	7641663.775	220359.995
420+447,09	PI158	7641637.892	220405.547
420+471,26	PI159	7641615.042	220413.419
420+511,79	PI160	7641578.304	220396.286
420+552,7	PI161	7641538.017	220403.347
420+619,71	PI162	7641475.802	220428.260
420+690,28	PI163	7641417.953	220468.680
420+735,45	PI164	7641410.528	220513.229
420+786,33	PI165	7641366.264	220538.322
420+842,49	PI166	7641359.606	220594.082
420+878,72	PI167	7641366.974	220629.559
420+902,98	PI168	7641376.097	220652.040
420+939,77	PI169	7641363.115	220686.463
421+15,71	PI170	7641375.395	220761.401
421+79,14	PI171	7641371.535	220824.719
421+138,1	PI172	7641342.533	220876.044
421+195,52	PI173	7641300.131	220914.763
421+255,09	PI174	7641269.630	220965.935

MINERODUTÓ EBX - TRECHO: NATIVIDADE / CABO DE SANTO ANDRÉ			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-24			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
421+343,17	PI175	7641252.302	221052.293
421+424,14	PI176	7641250.845	221133.252
421+592,09	PI177	7641259.769	221300.969
421+807,49	PI178	7641365.395	221488.691
422+90,93	PI179	7641414.177	221767.899
422+297,78	PI180	7641365.813	221969.014
422+727,71	PI181	7641080.732	222290.830
422+805,92	PI182	7641069.630	222368.249
423+470,16	PI183	7641334.885	222977.234
423+713,8	PI184	7641331.957	223220.855
424+220,79	PI185	7641114.971	223679.063
424+531,11	PI186	7641135.208	223988.720
426+966,1	PI187	7642082.734	226231.793
427+561	PI188	7641947.501	226811.124
427+930,25	PI189	7641757.973	227128.015
428+152,93	PI190	7641593.791	227278.457
429+19,67	PI191	7641179.266	228039.647
430+515,26	PI192	7640783.163	229481.829
432+826,84	PI193	7641364.001	231719.243
434+43,21	PI194	7641785.898	232860.101
434+371,91	PI195	7641700.324	233177.469
434+615,94	PI196	7641503.706	233322.003
434+798,87	PI197	7641383.586	233459.965
435+77,33	PI198	7641170.106	233638.761
435+168,28	PI199	7641116.911	233712.534
435+288,98	PI200	7641014.053	233775.700
435+634,7	PI201	7640890.945	234098.756
435+787,64	PI202	7640779.799	234203.813
436+151,66	PI203	7640424.906	234122.804
436+299,64	PI204	7640329.273	234235.725
436+836,66	PI205	7639922.067	234585.826
436+959,28	PI206	7639932.469	234708.004
437+709,88	PI207	7639623.191	235391.926
437+955,11	PI208	7639462.093	235576.828
438+419,32	PI209	7639141.604	235912.643
438+553,54	PI210	7639022.065	235973.674
438+778,21	PI211	7638823.345	236078.498
439+86,14	PI212	7638517.038	236110.088
439+291,37	PI213	7638346.562	236224.365
439+467,72	PI214	7638193.033	236311.126
439+750,85	PI215	7637913.092	236268.778
440+134,01	PI216	7637567.523	236434.290
440+566,1	PI217	7637338.886	236800.930
440+770,23	PI218	7637336.295	237005.046

MINERODUTÓ EBX - TRECHO: NATIVIDADE / CABO DE SANTO ANDRÉ			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-24			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
441+16,17	PI219	7637426.272	237233.933
441+430,3	PI220	7637421.333	237648.034
441+911,67	PI221	7637027.900	237925.400
442+24,48	PI222	7636915.238	237931.184
442+128,2	PI223	7636814.131	237908.049
442+331,22	PI224	7636630.300	237821.907
442+507,38	PI225	7636471.358	237897.875
442+801,15	PI226	7636346.562	238163.817
443+405,14	PI227	7636338.131	238767.748
443+579,89	PI228	7636411.471	238926.370
443+953,19	PI229	7636463.565	239296.012
444+130,46	PI230	7636550.724	239450.383
444+638,5	PI231	7636524.862	239957.756
444+855,76	PI232	7636542.054	240174.336
445+182,11	PI233	7636369.788	240451.523
445+406,97	PI234	7636290.060	240661.766
445+595,21	PI235	7636294.455	240849.957
446+244,98	PI236	7635971.459	241413.764
446+705,97	PI237	7635644.844	241739.080
447+163,15	PI238	7635187.659	241739.080
447+635,15	PI239	7634795.371	242001.553
447+887,75	PI240	7634571.240	242118.055
448+97,73	PI241	7634428.559	242272.113
448+470,31	PI242	7634349.297	242636.165
448+834,81	PI243	7634155.027	242944.575
448+907,34	PI244	7634090.852	242978.388
449+96,7	PI245	7633913.622	242911.726
449+384,74	PI246	7633626.104	242894.330
449+558,25	PI247	7633476.425	242982.079
449+674,33	PI248	7633416.492	243081.491
449+817,84	PI249	7633292.264	243153.348
450+64,62	PI250	7633231.912	243392.631
450+871,8	PI251	7632723.378	244019.482
451+328,45	PI252	7632342.834	244271.891
451+912,78	PI253	7631881.143	244630.056
452+313,08	PI254	7631613.116	244927.387
452+614,31	PI255	7631510.595	245210.639
453+524,99	PI256	7631052.319	245997.608
453+875,46	PI257	7630814.553	246255.079
454+810,39	PI258	7630699.612	247182.918
455+157,22	PI259	7630555.740	247498.495
457+2,03	PI260	7629161.633	248706.724
457+639,13	PI261	7628542.257	248855.963
457+790,68	PI262	7628421.758	248947.872

MINERODUTÓ EBX - TRECHO: NATIVIDADE / CABO DE SANTO ANDRÉ			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-24			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
459+173,51	PI263	7627537.142	250010.727
459+585,89	PI264	7627125.320	250032.202
460+147,43	PI265	7626567.824	250099.483
460+602,77	PI266	7626185.849	250347.331
461+212,6	PI267	7626020.336	250934.270
461+441,01	PI268	7626094.329	251150.363
461+571,48	PI269	7626171.582	251255.503
461+640,26	PI270	7626190.696	251321.571
461+774	PI271	7626189.481	251455.310
462+630,7	PI272	7626162.355	252311.575
462+716,66	PI273	7626132.553	252392.212
462+850,45	PI274	7626009.354	252444.361
463+21,36	PI275	7625860.376	252528.119
463+171,21	PI276	7625760.525	252639.852
463+482,39	PI277	7625498.473	252807.684
463+590,63	PI278	7625395.030	252839.541
464+2,91	PI279	7624983.144	252821.516
464+199,7	PI280	7624789.690	252857.593
464+371,3	PI281	7624633.122	252927.820
464+639,5	PI282	7624391.195	253043.596
464+839,08	PI283	7624231.139	253162.818
465+19,03	PI284	7624169.130	253331.745
465+254,49	PI285	7624194.099	253565.876
465+456,45	PI286	7624088.410	253737.983
465+656,06	PI287	7623941.955	253873.609
465+848,84	PI288	7623788.265	253989.983
466+441,91	PI289	7623594.843	254550.623
466+556,55	PI290	7623525.171	254641.665
466+674,34	PI291	7623424.647	254703.061
467+41,8	PI292	7623088.364	254851.187
467+144,5	PI293	7623005.448	254911.777
467+363,81	PI294	7622839.115	255054.721
467+546,67	PI295	7622761.704	255220.381
467+883,34	PI296	7622576.896	255501.800
468+88,49	PI297	7622519.085	255698.636
468+151,21	PI298	7622488.912	255753.619
468+223.78	PI299	7622430.932	255797.263
468+414,7	PI300	7622260.081	255882.467
469+0,01	PI301	7621845.864	256296.006
469+105,98	PI302	7621763.978	256363.263
469+808,96	PI303	7621172.887	256743.782
469+928,35	PI304	7621073.721	256810.265
470+357,24	PI305	7620769.383	257112.470
470+441	PI306	7620693.261	257147.414

MINERODUTÓ EBX - TRECHO: NATIVIDADE / CABO DE SANTO ANDRÉ			
SISTEMA DE COORDENADAS UTM SAD-69 / FUSO-24			
KILÔMETRO	VÉRTICE	COORDENADA	
		NORTE	ESTE
470+531,37	PI307	7620604.119	257162.278
472+184,24	PI308	7618951.251	257161.183
472+345,23	PI309	7618792.270	257135.840
473+300,95	PI310	7617849.510	256979.023
473+770,96	PI311	7617381.992	257027.365
474+805,59	PI312	7616770.775	257862.158
476+6,48	PI313	7615809.353	258581.755
477+114,53	PI314	7614986.103	259323.398
478+226,77	PI315	7614279.941	260182.701
479+471,72	PI316	7613394.085	261057.431
482+269,94	PI317	7611200.390	262794.596
483+527,14	PI318	7610535.411	263861.532
487+830,74	PI319	7607260.494	266653.647
488+981,79	PI320	7606520.291	267535.136
492+299,16	PI321	7603904.347	269575.183
493+7,51	PI322	7603802.485	270276.171
493+239,86	PI323	7603666.232	270464.372
495+293,56	PI324	7601694.013	271037.104
495+869,56	PI325	7601278.851	271436.374
497+20,42	PI326	7600129.816	271501.150
498+375,15	PI327	7599271.269	272549.098
499+562,24	PI328	7598324.620	273265.364
504+810,4	PI329	7596092.586	278015.227
510+685,13	PI330	7591231.259	281313.715
530+514,9	V331	7576882.662	295000.842