

ANNEX 7A

Allocation of Demand and Water Sources to Each Macro Sector

Table 7A-1 Allocation of Demand to Each Macro Sector in 2010

Unit: m³/day

Traffic Zone	Demand in 2010	Las Mercedes	San Cristobal	Asosoca G	Asosoca P-A	Asosoca P-AS	Villa Austria	Las Jaguitas	Sabana Grande	Schick	Siera Maestra	San Judas	Unan	Altamira G	Km8 CM G	Km8 CM P	Esquipulas	CVL	Total
Total	390,475	53,872	26,545	28,677	31,977	5,235	65,674	19,172	2,610	18,657	14,947	28,596	17,456	16,316	23,160	14,122	13,928	9,532	390,475
9	1,672	0	0	1,003	669	0	0	0	0	0	0	0	0	0	0	0	0	0	1,672
10	3,313	0	818	2,495	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,313
11	4,563	0	1,126	3,437	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,563
12	7,371	0	0	7,371	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,371
13	5,777	0	0	5,199	578	0	0	0	0	0	0	0	0	0	0	0	0	0	5,777
14	3,461	0	0	0	3,461	0	0	0	0	0	0	0	0	0	0	0	0	0	3,461
15	5,220	0	0	4,176	1,044	0	0	0	0	0	0	0	0	0	0	0	0	0	5,220
16	3,557	0	0	3,557	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,557
17	2,878	0	0	1,439	1,439	0	0	0	0	0	0	0	0	0	0	0	0	0	2,878
18	5,076	0	0	0	5,076	0	0	0	0	0	0	0	0	0	0	0	0	0	5,076
19	967	0	0	0	967	0	0	0	0	0	0	0	0	0	0	0	0	0	967
20	3,138	0	0	0	3,138	0	0	0	0	0	0	0	0	0	0	0	0	0	3,138
21	8,242	0	0	0	6,594	0	0	0	0	0	0	1,648	0	0	0	0	0	0	8,242
22	4,752	0	0	0	4,752	0	0	0	0	0	0	0	0	0	0	0	0	0	4,752
23	4,260	0	0	0	4,260	0	0	0	0	0	0	0	0	0	0	0	0	0	4,260
24	286	0	0	0	0	0	0	0	0	0	0	0	0	286	0	0	0	0	286
25	834	0	0	0	0	0	0	0	0	0	0	0	0	834	0	0	0	0	834
26	4,786	0	0	0	0	0	0	0	0	0	0	2,393	2,393	0	0	0	0	0	4,786
27	1,820	0	0	0	0	0	0	0	0	0	0	1,820	0	0	0	0	0	0	1,820
28	8,350	0	0	0	0	0	0	0	0	0	0	8,350	0	0	0	0	0	0	8,350
32	5,234	0	0	0	0	0	0	0	0	0	0	5,234	0	0	0	0	0	0	5,234
29	2,099	0	0	0	0	1,050	0	0	0	0	0	1,050	0	0	0	0	0	0	2,099
30	599	0	0	0	0	299	0	0	0	0	0	299	0	0	0	0	0	0	599
31	1,455	0	0	0	0	1,455	0	0	0	0	0	0	0	0	0	0	0	0	1,455
32	2,737	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,737
33	1,111	0	0	0	0	0	0	0	0	0	0	0	0	2,737	0	0	0	0	1,111
34	4,861	0	0	0	0	0	0	0	0	0	0	1,111	0	0	0	0	0	0	4,861
35	4,861	0	0	0	0	2,430	0	0	0	0	2,430	0	0	0	0	0	0	0	4,861
37	6,375	0	0	0	0	0	0	0	0	0	4,462	0	0	0	0	0	0	0	1,912
38	2,407	0	0	0	0	0	0	0	0	0	2,407	0	0	0	0	0	0	0	2,407
39	3,795	0	0	0	0	0	0	0	0	0	0	3,795	0	0	0	0	0	0	3,795
40	8,344	0	0	0	0	0	0	0	0	0	4,339	4,005	0	0	0	0	0	0	8,344
36	1,224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,224
41	521	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	521
42	1,517	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,517
43	414	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	414
44	2,049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,049	2,049
45	1,895	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,895
46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	1,308	0	0	0	0	0	0	0	0	0	1,308	0	0	0	0	0	0	0	1,308
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	1,869	0	1,869	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,869
50	1,550	0	1,550	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,550
51	4,668	0	4,668	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,668
52	1,960	0	1,960	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,960
53	3,788	0	0	0	0	0	0	0	0	0	0	0	0	3,788	0	0	0	0	3,788
54	5,681	0	4,545	0	0	0	0	0	0	0	0	0	0	1,136	0	0	0	0	5,681
55	2,318	0	2,318	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,318
56	3,005	0	3,005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,005
59	1,504	1,504	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,504
60	6,629	1,945	4,684	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,629
61	6,780	0	0	0	0	0	6,780	0	0	0	0	0	0	0	0	0	0	0	6,780
62	7,482	7,482	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,482
64	7,332	0	0	0	0	0	7,332	0	0	0	0	0	0	0	0	0	0	0	7,332
57	907	907	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	907
58	3,861	3,861	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,861
63	5,675	5,675	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,675
65	2,637	0	0	0	0	0	0	0	0	0	0	0	0	2,637	0	0	0	0	2,637
66	7,636	0	0	0	0	0	0	0	0	0	0	0	0	7,636	0	0	0	0	7,636
67	7,116	0	0	0	0	0	7,116	0	0	0	0	0	0	0	0	0	0	0	7,116
68	11,116	0	0	0	0	0	0	0	0	2,223	0	0	0	0	8,893	0	0	0	11,116
69	3,004	0	0	0	0	0	0	0	0	0	0	0	0	0	3,004	0	0	0	3,004
70	3,964	0	0	0	0	0	0	0	0	0	0	0	3,964	0	0	0	0	0	3,964
71	11,263	0	0	0	0	0	0	0	0	0	0	0	0	0	11,263	0	0	0	11,263
72	7,145	0	0	0	0	0	0	0	0	7,145	0	0	0	0	0	0	0	0	7,145
73	12,011	0	0	0	0	0	9,609	0	0	0	0	0	0	0	0	0	2,402	0	12,011
74	1,480	0	0	0	0	0	0	0	0	0	0	0	1,480	0	0	0	0	0	1,480
75	1,657	0	0	0	0	0	0	0	0	0	0	0	0	1,657	0	0	0	0	1,657
76	1,549	0	0	0	0	0	0	0	0	0	0	0	0	1,549	0	0	0	0	1,549
77	1,474	0	0	0	0	0	0	0	0	0	0	0	0	1,474	0	0	0	0	1,474
86	1,091	0	0	0	0	0	0	0	0	0	0	0	0	1,091	0	0	0	0	1,091
78	2,276	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,276	0	0	2,276
79	2,379	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,379	0	0	2,379
83	1,044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,044	0	1,044
84	2,586	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,586	0	0	2,586
85	4,163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,163	0	0	4,163
87	2,445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,445	0	0	2,445
88	2,729	0	0	0	0	0	0	0	0	0	0	0	0	0	0	273	2,456	0	2,729
80	9,289	0	0	0	0	0	0	0	0	9,289	0	0	0	0	0	0	0	0	9,289
81	10,251	0	0	0	0	0	2,563	2,563	0	0	0	0	0	0	0	0	5,126	0	10,251
82	637	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	637	0	637
89	5,918	0	0	0	0	0	5,918	0	0	0	0	0	0	0	0	0	0	0	5,918
90	7,542	0	0	0	0	0	5,279	0	0	0	0	0	0	0	0	0	2,263	0	7,542
91	6,296	1,889	0	0	0	0	4,407	0	0	0	0	0	0	0	0	0	0	0	6,296
93	6,608	5,286	0	0	0	0	1,322	0	0	0	0	0	0	0	0	0	0	0	6,608
94	11,314	0	0	0	0	0	6,788	4,525	0	0	0	0	0	0	0	0	0	0	11,314
95	8,560	0	0	0	0	0	8,560	0	0	0	0	0	0	0	0	0	0	0	8,560
92	5,554	5,554	0	0	0	0	0	0	0	0</									

Unit: m³/day

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Table 7A-3 Allocation of Water Source to Each Macro Sector in 2010

Well No.	Capacity (m3/day)	Las Mercedes	San Cristobal	Asoscosca G	Asoscosca P-A	Asoscosca P-AS	Villa Austria	Las Jaguitas	Sabana Grande	Schick	Siera Maestra	San Judas	Unan	Altamira G	Km8 CM G	Km8 CM P	Esquipulas	CVL	Total
Total	240,420	76,989	3,429	11,210	9,150	5,655	11,695	9,863	0	6,093	7,600	21,732	8,034	15,065	6,615	3,784	0	10,481	207,394
84	5,500	0	0	5,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,500
82	5,710	0	0	5,710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,710
11	3,792	3,792	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,792
12	3,724	3,724	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,724
13	5,987	5,987	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,987
77	2,128	2,128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,128
78	5,845	5,845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,845
41	1,946	0	1,946	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,946
104	1,483	0	1,483	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,483
14	2,014	2,014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,014
17	3,006	3,006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,006
18	3,434	3,434	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,434
19	9,943	9,943	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,943
20	5,792	5,792	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,792
22	3,198	3,198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,198
21	3,044	3,044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,044
24	2,477	2,477	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,477
25	3,119	3,119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,119
26	5,694	5,694	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,694
79	5,120	5,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,120
80	3,974	3,974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,974
81	4,697	4,697	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,697
Z-B	91,627	76,989	3,429	11,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91,627
96	2,510	0	0	0	2,510	0	0	0	0	0	0	0	0	0	0	0	0	0	2,510
106	1,802	0	0	0	0	0	1,802	0	0	0	0	0	0	0	0	0	0	0	1,802
27	2,772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	4,479	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	3,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	4,862	0	0	0	0	0	0	4,862	0	0	0	0	0	0	0	0	0	0	4,862
31	5,001	0	0	0	0	0	0	5,001	0	0	0	0	0	0	0	0	0	0	5,001
68	1,519	0	0	0	0	0	1,519	0	0	0	0	0	0	0	0	0	0	0	1,519
46	1,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	3,833	0	0	0	0	0	0	0	0	0	0	0	0	3,833	0	0	0	0	3,833
54	3,410	0	0	0	0	0	0	0	0	0	0	0	0	3,410	0	0	0	0	3,410
53	3,493	0	0	0	3,493	0	0	0	0	0	0	0	0	0	0	0	0	0	3,493
89	3,146	0	0	0	3,146	0	0	0	0	0	0	0	0	0	0	0	0	0	3,146
52	2,997	0	0	0	0	0	2,997	0	0	0	0	0	0	0	0	0	0	0	2,997
34	1,674	0	0	0	0	0	0	0	0	0	0	0	0	1,674	0	0	0	0	1,674
35	1,650	0	0	0	0	0	0	0	0	0	0	0	0	1,650	0	0	0	0	1,650
57	4,498	0	0	0	0	0	0	0	0	0	0	0	0	4,498	0	0	0	0	4,498
91	2,005	0	0	0	0	0	2,005	0	0	0	0	0	0	0	0	0	0	0	2,005
112	1,669	0	0	0	0	0	1,669	0	0	0	0	0	0	0	0	0	0	0	1,669
111	1,019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	1,704	0	0	0	0	0	1,704	0	0	0	0	0	0	0	0	0	0	0	1,704
Z-A	58,973	0	0	0	9,150	0	11,695	9,863	0	0	0	0	0	15,065	0	0	0	0	45,772
58	2,617	0	0	0	0	2,617	0	0	0	0	0	0	0	0	0	0	0	0	2,617
59	1,635	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,635	1,635
86	1,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,650	1,650
95	2,677	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	1,956	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	2,398	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,398	2,398
90	2,516	0	0	0	0	0	0	0	0	0	0	0	0	2,516	0	0	0	0	2,516
70	2,866	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71	2,001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	3,203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	2,679	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	2,784	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	1,723	0	0	0	0	0	0	0	0	0	0	0	0	1,723	0	0	0	0	1,723
50	3,107	0	0	0	0	0	0	0	0	3,107	0	0	0	0	0	0	0	0	3,107
88	1,904	0	0	0	0	0	0	0	0	1,904	0	0	0	0	0	0	0	0	1,904
109	1,083	0	0	0	0	0	0	0	0	1,083	0	0	0	0	0	0	0	0	1,083
43	2,771	0	0	0	0	0	0	0	0	0	2,771	0	0	0	0	0	0	0	2,771
44	3,039	0	0	0	0	0	0	0	0	0	3,039	0	0	0	0	0	0	0	3,039
45	2,850	0	0	0	0	0	0	0	0	0	2,850	0	0	0	0	0	0	0	2,850
85	1,973	0	0	0	0	0	0	0	0	1,973	0	0	0	0	0	0	0	0	1,973
64	2,374	0	0	0	0	0	0	0	0	2,374	0	0	0	0	0	0	0	0	2,374
110	2,010	0	0	0	0	0	0	0	0	2,010	0	0	0	0	0	0	0	0	2,010
66	3,107	0	0	0	0	0	0	0	0	0	3,107	0	0	0	0	0	0	0	3,107
51	2,376	0	0	0	0	0	0	0	0	0	0	0	0	2,376	0	0	0	0	2,376
63	3,124	0	0	0	0	0	0	0	0	0	3,124	0	0	0	0	0	0	0	3,124
62	3,038	0	0	0	0	3,038	0	0	0	0	0	0	0	0	0	0	0	0	3,038
87	3,589	0	0	0	0	0	0	0	0	0	3,589	0	0	0	0	0	0	0	3,589
93	205	0	0	0	0	0	0	0	0	0	205	0	0	0	0	0	0	0	205
161	2,595	0	0	0	0	0	0	0	0	0	2,595	0	0	0	0	0	0	0	2,595
162	3,764	0	0	0	0	0	0	0	0	0	3,764	0	0	0	0	0	0	0	3,764
163	1,038	0	0	0	0	0	0	0	0	1,038	0	0	0	0	0	0	0	0	1,038
97	1,611	0	0	0	0	0	0	0	0	0	1,611	0	0	0	0	0	0	0	1,611
113	344	0	0	0	0	0	0	0	0	0	344	0	0	0	0	0	0	0	344
114	363	0	0	0	0	0	0	0	0	0	363	0	0	0	0	0	0	0	363
115	400	0	0	0	0	0	0	0	0	0	400	0	0	0	0	0	0	0	400
116	3,784	0	0	0	0	0	0	0	0	0	0	0	0	3,784	0	0	0	0	3,784
117	1,659	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	2,210	0	0	0	0	0	0	0	0	0	0	0	2,210	0	0	0	0	0	2,210
149	1,654	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,654	1,654
150	1,257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,257	1,257
151	1,886	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,886	1,886
Z-AS	89,820	0	0	0	0	5,655	0	0	0	6,093	7,600	21,732							

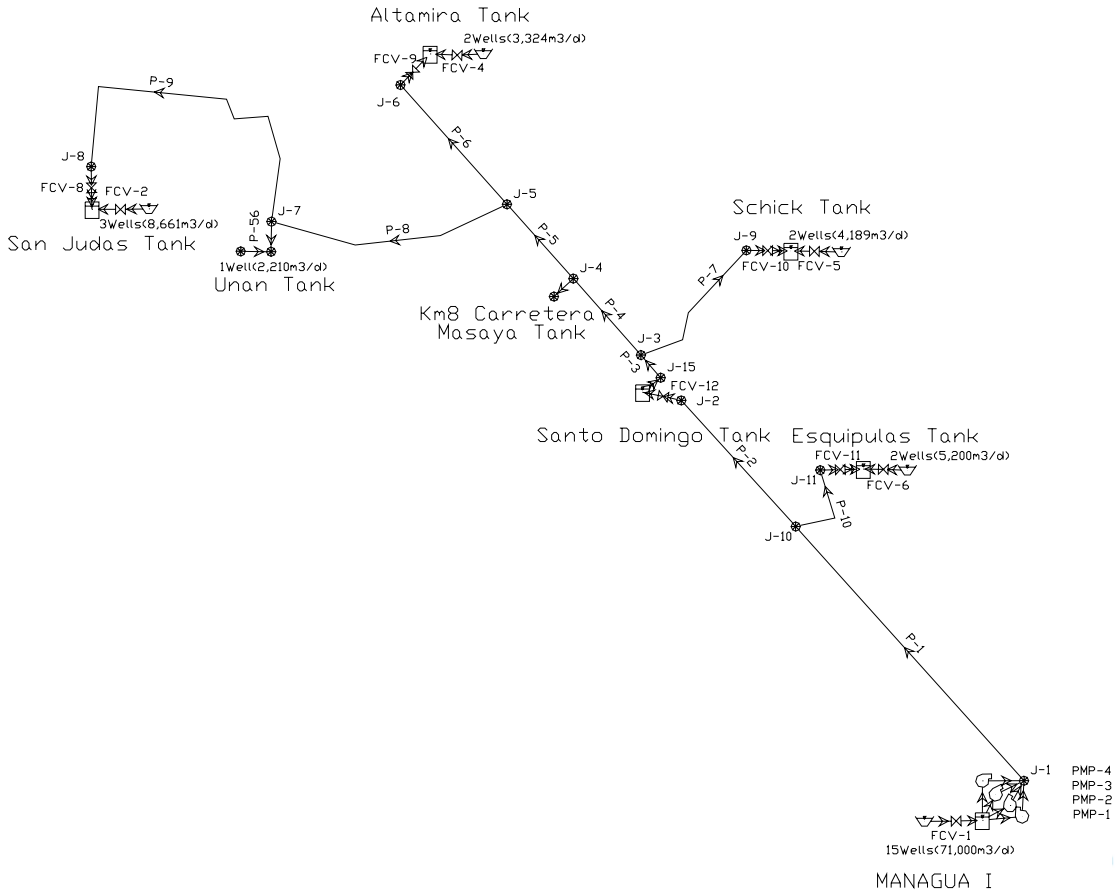
Table 7A-4 Allocation of Water Source to Each Macro Sector in 2015

Well No.	Capacity (m3/day)	Las Mercedes	San Cristobal	Asosoca G	Asosoca P-A	Asosoca P-AS	Villa Austria	Las Jaguitas	Sabana Grande	Schick	Sierra Maestra	San Judas	Unan	Altamira G	Km8 CM G	Km8 CM P	Esquipulas	CVL	Total
Total	240,420	71,182	3,429	11,210	12,983	5,655	6,693	9,863	0	6,093	7,600	21,732	8,034	11,231	6,615	3,784	0	10,481	196,586
84	5,500	0	0	5,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,500
82	5,710	0	0	5,710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,710
11	3,792	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	3,724	3,724	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,724
13	5,987	5,987	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,987
77	2,128	2,128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,128
78	5,845	5,845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,845
41	1,946	0	1,946	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,946
104	1,483	0	1,483	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,483
14	2,014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	3,006	3,006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,006
18	3,434	3,434	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,434
19	9,943	9,943	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,943
20	5,792	5,792	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,792
22	3,198	3,198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,198
21	3,044	3,044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,044
24	2,477	2,477	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,477
25	3,119	3,119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,119
26	5,694	5,694	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,694
79	5,120	5,120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,120
80	3,974	3,974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,974
81	4,697	4,697	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,697
Z-B	91,627	71,182	3,429	11,210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85,820
96	2,510	0	0	0	2,510	0	0	0	0	0	0	0	0	0	0	0	0	0	2,510
106	1,802	0	0	0	0	0	1,802	0	0	0	0	0	0	0	0	0	0	0	1,802
27	2,772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	4,479	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	3,030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	4,862	0	0	0	0	0	0	4,862	0	0	0	0	0	0	0	0	0	0	4,862
31	5,001	0	0	0	0	0	0	5,001	0	0	0	0	0	0	0	0	0	0	5,001
68	1,519	0	0	0	0	0	1,519	0	0	0	0	0	0	0	0	0	0	0	1,519
46	1,900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	3,833	0	0	0	3,833	0	0	0	0	0	0	0	0	0	0	0	0	0	3,833
54	3,410	0	0	0	0	0	0	0	0	0	0	0	0	3,410	0	0	0	0	3,410
53	3,493	0	0	0	3,493	0	0	0	0	0	0	0	0	0	0	0	0	0	3,493
89	3,146	0	0	0	3,146	0	0	0	0	0	0	0	0	0	0	0	0	0	3,146
52	2,997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	1,674	0	0	0	0	0	0	0	0	0	0	0	0	1,674	0	0	0	0	1,674
35	1,650	0	0	0	0	0	0	0	0	0	0	0	0	1,650	0	0	0	0	1,650
57	4,498	0	0	0	0	0	0	0	0	0	0	0	0	4,498	0	0	0	0	4,498
91	2,005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	1,669	0	0	0	0	0	1,669	0	0	0	0	0	0	0	0	0	0	0	1,669
111	1,019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	1,704	0	0	0	0	0	1,704	0	0	0	0	0	0	0	0	0	0	0	1,704
Z-A	58,973	0	0	0	12,983	0	6,693	9,863	0	0	0	0	0	11,231	0	0	0	0	40,770
58	2,617	0	0	0	0	2,617	0	0	0	0	0	0	0	0	0	0	0	0	2,617
59	1,635	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,635	1,635
86	1,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,650	1,650
95	2,677	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	1,956	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	2,398	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,398	2,398
90	2,516	0	0	0	0	0	0	0	0	0	0	0	0	2,516	0	0	0	0	2,516
70	2,866	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71	2,001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	3,203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	2,679	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	2,784	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	1,723	0	0	0	0	0	0	0	0	0	0	0	0	1,723	0	0	0	0	1,723
50	3,107	0	0	0	0	0	0	0	0	3,107	0	0	0	0	0	0	0	0	3,107
88	1,904	0	0	0	0	0	0	0	0	1,904	0	0	0	0	0	0	0	0	1,904
109	1,083	0	0	0	0	0	0	0	0	1,083	0	0	0	0	0	0	0	0	1,083
43	2,771	0	0	0	0	0	0	0	0	0	2,771	0	0	0	0	0	0	0	2,771
44	3,039	0	0	0	0	0	0	0	0	0	3,039	0	0	0	0	0	0	0	3,039
45	2,850	0	0	0	0	0	0	0	0	0	2,850	0	0	0	0	0	0	0	2,850
85	1,973	0	0	0	0	0	0	0	0	1,973	0	0	0	0	0	0	0	0	1,973
64	2,374	0	0	0	0	0	0	0	0	2,374	0	0	0	0	0	0	0	0	2,374
110	2,010	0	0	0	0	0	0	0	0	2,010	0	0	0	0	0	0	0	0	2,010
66	3,107	0	0	0	0	0	0	0	0	0	0	3,107	0	0	0	0	0	0	3,107
51	2,376	0	0	0	0	0	0	0	0	0	0	0	2,376	0	0	0	0	0	2,376
63	3,124	0	0	0	0	0	0	0	0	0	3,124	0	0	0	0	0	0	0	3,124
62	3,038	0	0	0	0	3,038	0	0	0	0	0	0	0	0	0	0	0	0	3,038
87	3,589	0	0	0	0	0	0	0	0	0	3,589	0	0	0	0	0	0	0	3,589
93	205	0	0	0	0	0	0	0	0	0	205	0	0	0	0	0	0	0	205
161	2,595	0	0	0	0	0	0	0	0	0	2,595	0	0	0	0	0	0	0	2,595
162	3,764	0	0	0	0	0	0	0	0	0	3,764	0	0	0	0	0	0	0	3,764
163	1,038	0	0	0	0	0	0	0	0	1,038	0	0	0	0	0	0	0	0	1,038
97	1,611	0	0	0	0	0	0	0	0	0	0	1,611	0	0	0	0	0	0	1,611
113	344	0	0	0	0	0	0	0	0	0	0	344	0	0	0	0	0	0	344
114	363	0	0	0	0	0	0	0	0	0	0	363	0	0	0	0	0	0	363
115	400	0	0	0	0	0	0	0	0	0	0	400	0	0	0	0	0	0	400
116	3,784	0	0	0	0	0	0	0	0	0	0	0	0	0	3,784	0	0	0	3,784
117	1,659	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	2,210	0	0	0	0	0	0	0	0	0	0	2,210	0	0	0	0	0	0	2,210
149	1,654	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,654	1,654
150	1,257	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,257	1,257
151	1,886	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,886	1,886
Z-AS	89,820	0	0	0	0	5,655	0	0	0	6,093	7,600	21,732	8,034	0	6,615	3,			

ANNEX 7B

Hydraulic Analyses

Scenario: Managua I Transmission System



Detailed Report for Pressure Pipe: P-1

Scenario Summary								
Scenario	Base							
Active Topology Alternative	Base-Active Topology							
Physical Alternative	Base-Physical							
Demand Alternative	Base-Demand							
Initial Settings Alternative	Base-Initial Settings							
Operational Alternative	Base-Operational							
Age Alternative	Base-Age Alternative							
Constituent Alternative	Base-Constituent							
Trace Alternative	Base-Trace Alternative							
Fire Flow Alternative	Base-Fire Flow							
Capital Cost Alternative	Base-Capital Cost							
Energy Cost Alternative	Base-Energy Cost							
User Data Alternative	Base-User Data							
Global Adjustments Summary								
	<None>	Roughness	<None>					
Pipe Characteristics								
Material	Ductile Iron	Hazen-Williams C	110.0					
Diameter	800.0 mm	Minor Loss Coefficient	0.00					
Check Valve?	false	Length	3,760.00 m					
From Node	J-1	To Node	J-10					
Elevations								
From Elevation	218.00 m	To Elevation	250.00 m					
Initial Status								
Initial Status	Open							
Calculated Results Summary								
Time Control	Discharge	Velocity	Upstream Structural	Downstream Structural	Calculated Friction	Calculated Minor	Pressure	Headloss
(hr)	Status	(m ³ /day)	(m/s)	Hydraulic Grade (m)	Hydraulic Grade (m)	Headloss (m)	Headloss (m)	Gradient (m/km)
0.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
1.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
2.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
3.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
4.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
5.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
6.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
7.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
8.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
9.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
10.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
11.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
12.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
13.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
14.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
15.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
16.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
17.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
18.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
19.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
20.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
21.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
22.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
23.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64
24.00	Open	71,000	1.63	284.42	270.72	13.70	0.00	13.70 3.64

Detailed Report for Pressure Pipe: P-2

Scenario Summary								
Scenario	Base							
Active Topology Alternative	Base-Active Topology							
Physical Alternative	Base-Physical							
Demand Alternative	Base-Demand							
Initial Settings Alternative	Base-Initial Settings							
Operational Alternative	Base-Operational							
Age Alternative	Base-Age Alternative							
Constituent Alternative	Base-Constituent							
Trace Alternative	Base-Trace Alternative							
Fire Flow Alternative	Base-Fire Flow							
Capital Cost Alternative	Base-Capital Cost							
Energy Cost Alternative	Base-Energy Cost							
User Data Alternative	Base-User Data							
Global Adjustments Summary								
<None>		Roughness	<None>					
Pipe Characteristics								
Material	Ductile Iron	Hazen-Williams C	110.0					
Diameter	800.0 mm	Minor Loss Coefficient	0.00					
Check Valve?	false	Length	2,137.00 m					
From Node	J-10	To Node	J-2					
Elevations								
From Elevation	250.00 m	To Elevation	252.00 m					
Initial Status								
Initial Status	Open							
Calculated Results Summary								
Time Control	Discharge	Velocity	Upstream Structural Grade	Downstream Structural Grade	Calculated Friction Headloss	Calculated Minor Headloss	Pressure Headloss	Pipe Gradient
(hr)	Status	(m ³ /day)	(m/s)	(m)	(m)	(m)	(m)	(m/km)
0.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
1.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
2.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
3.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
4.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
5.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
6.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
7.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
8.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
9.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
10.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
11.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
12.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
13.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
14.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
15.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
16.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
17.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
18.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
19.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
20.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
21.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
22.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
23.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85
24.00	Open	60,862	1.40	270.72	264.86	5.85	0.00	5.85

Title: The Study on Improvement of Water Supply System in Managua

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Project Engineer: JICA Study Team

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Detailed Report for Pressure Pipe: P-3

Scenario Summary									
Scenario	Base								
Active Topology Alternative	Base-Active Topology								
Physical Alternative	Base-Physical								
Demand Alternative	Base-Demand								
Initial Settings Alternative	Base-Initial Settings								
Operational Alternative	Base-Operational								
Age Alternative	Base-Age Alternative								
Constituent Alternative	Base-Constituent								
Trace Alternative	Base-Trace Alternative								
Fire Flow Alternative	Base-Fire Flow								
Capital Cost Alternative	Base-Capital Cost								
Energy Cost Alternative	Base-Energy Cost								
User Data Alternative	Base-User Data								
Global Adjustments Summary									
	<None>	Roughness	<None>						
Pipe Characteristics									
Material	Ductile Iron	Hazen-Williams C	110.0						
Diameter	800.0 mm	Minor Loss Coefficient	0.00						
Check Valve?	false	Length	360.00 m						
From Node	J-15	To Node	J-3						
Elevations									
From Elevation	252.00 m	To Elevation	238.00 m						
Initial Status									
Initial Status	Open								
Calculated Results Summary									
Time (hr)	Control Status	Discharge (m³/day)	Velocity (m/s)	Upstream Structural Hydraulic Grade (m)	Downstream Structural Hydraulic Grade (m)	Calculated Friction Headloss (m)	Calculated Minor Headloss (m)	Calculated Pipe Headloss (m)	Pressure Gradient (m/km)
0.00	Open	37,036	0.87	253.99	253.58	0.41	0.00	0.41	1.14
1.00	Open	37,473	0.86	254.24	253.83	0.40	0.00	0.40	1.12
2.00	Open	37,917	0.87	254.48	254.07	0.41	0.00	0.41	1.14
3.00	Open	39,249	0.90	254.72	254.28	0.44	0.00	0.44	1.22
4.00	Open	43,910	1.01	254.93	254.39	0.54	0.00	0.54	1.50
5.00	Open	68,026	1.57	254.98	253.76	1.21	0.00	1.21	3.37
6.00	Open	89,095	2.05	254.77	252.77	2.00	0.00	2.00	5.55
7.00	Open	88,651	2.04	254.47	252.49	1.98	0.00	1.98	5.50
8.00	Open	87,379	2.01	254.18	252.26	1.93	0.00	1.93	5.35
9.00	Open	84,917	1.96	253.92	252.09	1.83	0.00	1.83	5.08
10.00	Open	81,507	1.88	253.68	251.99	1.69	0.00	1.69	4.70
11.00	Open	74,686	1.72	253.50	252.06	1.44	0.00	1.44	4.00
12.00	Open	68,975	1.59	253.39	252.14	1.24	0.00	1.24	3.45
13.00	Open	69,822	1.61	253.30	252.03	1.27	0.00	1.27	3.53
14.00	Open	71,073	1.64	253.19	251.88	1.31	0.00	1.31	3.65
15.00	Open	65,645	1.51	253.12	251.98	1.13	0.00	1.13	3.15
16.00	Open	64,414	1.48	253.07	251.98	1.10	0.00	1.10	3.04
17.00	Open	62,456	1.44	253.04	252.01	1.03	0.00	1.03	2.87
18.00	Open	54,223	1.25	253.07	252.28	0.80	0.00	0.80	2.21
19.00	Open	50,731	1.17	253.16	252.46	0.70	0.00	0.70	1.96
20.00	Open	49,064	1.15	253.28	252.60	0.68	0.00	0.68	1.89
21.00	Open	47,825	1.10	253.41	252.77	0.63	0.00	0.63	1.75
22.00	Open	45,242	1.04	253.56	252.99	0.57	0.00	0.57	1.58
23.00	Open	39,773	0.92	253.75	253.31	0.45	0.00	0.45	1.25
24.00	Open	37,836	0.87	253.99	253.58	0.41	0.00	0.41	1.14

Detailed Report for Pressure Pipe: P-4

Scenario Summary										
Scenario	Base									
Active Topology Alternative	Base-Active Topology									
Physical Alternative	Base-Physical									
Demand Alternative	Base-Demand									
Initial Settings Alternative	Base-Initial Settings									
Operational Alternative	Base-Operational									
Age Alternative	Base-Age Alternative									
Constituent Alternative	Base-Constituent									
Trace Alternative	Base-Trace Alternative									
Fire Flow Alternative	Base-Fire Flow									
Capital Cost Alternative	Base-Capital Cost									
Energy Cost Alternative	Base-Energy Cost									
User Data Alternative	Base-User Data									
Global Adjustments Summary										
	<None>	Roughness	<None>							
Pipe Characteristics										
Material	Ductile Iron	Hazen-Williams C	110.0							
Diameter	800.0 mm	Minor Loss Coefficient	0.00							
Check Valve?	false	Length	1,090.00 m							
From Node	J-3	To Node	J-4							
Elevations										
From Elevation	238.00 m	To Elevation	207.00 m							
Initial Status										
Initial Status	Open									
Calculated Results Summary										
Time (hr)	Control Status	Discharge (m³/day)	Velocity (m/s)	Upstream Hydraulic Grade (m)	Downstream Hydraulic Grade (m)	Structural Headloss (m)	Friction Headloss (m)	Minor Headloss (m)	Calculated Pressure Headloss (m/km)	Pipe Gradient
0.00	Open	25,795	0.59	253.58	252.97	0.61	0.00	0.61	0.61	0.56
1.00	Open	25,432	0.59	253.83	253.24	0.59	0.00	0.59	0.59	0.54
2.00	Open	25,076	0.60	254.07	253.46	0.61	0.00	0.61	0.61	0.56
3.00	Open	27,208	0.63	254.28	253.61	0.67	0.00	0.67	0.67	0.62
4.00	Open	31,869	0.73	254.39	253.49	0.90	0.00	0.90	0.90	0.83
5.00	Open	55,985	1.29	253.76	251.21	2.56	0.00	2.56	2.56	2.35
6.00	Open	77,054	1.77	252.77	248.15	4.62	0.00	4.62	4.62	4.24
7.00	Open	76,610	1.76	252.49	247.92	4.57	0.00	4.57	4.57	4.19
8.00	Open	75,338	1.73	252.26	247.83	4.43	0.00	4.43	4.43	4.07
9.00	Open	72,876	1.68	252.09	247.92	4.17	0.00	4.17	4.17	3.82
10.00	Open	69,466	1.60	251.99	248.17	3.81	0.00	3.81	3.81	3.50
11.00	Open	62,645	1.44	252.06	248.91	3.15	0.00	3.15	3.15	2.89
12.00	Open	56,934	1.31	252.14	249.51	2.64	0.00	2.64	2.64	2.42
13.00	Open	57,781	1.33	252.03	249.31	2.71	0.00	2.71	2.71	2.49
14.00	Open	59,032	1.36	251.88	249.06	2.82	0.00	2.82	2.82	2.59
15.00	Open	53,604	1.23	251.98	249.62	2.36	0.00	2.36	2.36	2.17
16.00	Open	52,373	1.21	251.98	249.72	2.26	0.00	2.26	2.26	2.07
17.00	Open	50,415	1.16	252.01	249.90	2.11	0.00	2.11	2.11	1.93
18.00	Open	42,182	0.97	252.28	250.76	1.51	0.00	1.51	1.51	1.39
19.00	Open	38,690	0.89	252.46	251.17	1.29	0.00	1.29	1.29	1.18
20.00	Open	37,823	0.87	252.60	251.36	1.24	0.00	1.24	1.24	1.14
21.00	Open	35,784	0.82	252.77	251.66	1.12	0.00	1.12	1.12	1.02
22.00	Open	33,201	0.76	252.99	252.02	0.97	0.00	0.97	0.97	0.89
23.00	Open	27,732	0.64	253.31	252.61	0.70	0.00	0.70	0.70	0.64
24.00	Open	25,795	0.59	253.58	252.97	0.61	0.00	0.61	0.61	0.56

Detailed Report for Pressure Pipe: P-5

Scenario Summary								
Scenario	Base							
Active Topology Alternative	Base-Active Topology							
Physical Alternative	Base-Physical							
Demand Alternative	Base-Demand							
Initial Settings Alternative	Base-Initial Settings							
Operational Alternative	Base-Operational							
Age Alternative	Base-Age Alternative							
Constituent Alternative	Base-Constituent							
Trace Alternative	Base-Trace Alternative							
Fire Flow Alternative	Base-Fire Flow							
Capital Cost Alternative	Base-Capital Cost							
Energy Cost Alternative	Base-Energy Cost							
User Data Alternative	Base-User Data							
Global Adjustments Summary								
<None>		Roughness	<None>					
Pipe Characteristics								
Material	Ductile Iron	Hazen-Williams C	110.0					
Diameter	800.0 mm	Minor Loss Coefficient	0.00					
Check Valve?	false	Length	1,120.00 m					
From Node	J-4	To Node	J-5					
Elevations								
From Elevation	207.00 m	To Elevation	193.00 m					
Initial Status								
Initial Status	Open							
Calculated Results Summary								
Time Control	Discharge	Velocity	Upstream Structure	Downstream Structure	Calculated Friction	Calculated Minor	Pressure Headloss	Headloss
(hr)	Status	(m ³ /day)	(m/s)	Hydraulic Grade (m)	Hydraulic Grade (m)	Headloss (m)	Headloss (m)	Pipe Gradient Headloss (m/km)
0.00	Open	13,697	0.32	252.97	252.78	0.19	0.00	0.19
1.00	Open	13,588	0.31	253.24	253.05	0.19	0.00	0.19
2.00	Open	13,722	0.32	253.46	253.26	0.19	0.00	0.19
3.00	Open	14,124	0.33	253.61	253.40	0.21	0.00	0.21
4.00	Open	15,533	0.36	253.49	253.25	0.24	0.00	0.24
5.00	Open	22,818	0.53	251.21	250.71	0.50	0.00	0.50
6.00	Open	29,184	0.67	248.15	247.37	0.79	0.00	0.79
7.00	Open	29,050	0.67	247.92	247.14	0.78	0.00	0.78
8.00	Open	28,665	0.66	247.83	247.06	0.76	0.00	0.76
9.00	Open	27,922	0.64	247.92	247.20	0.72	0.00	0.72
10.00	Open	26,891	0.62	248.17	247.50	0.68	0.00	0.68
11.00	Open	24,830	0.57	248.91	248.33	0.58	0.00	0.58
12.00	Open	23,105	0.53	249.51	249.00	0.51	0.00	0.51
13.00	Open	23,361	0.54	249.31	248.79	0.52	0.00	0.52
14.00	Open	23,739	0.55	249.06	248.52	0.54	0.00	0.54
15.00	Open	22,099	0.51	249.62	249.15	0.47	0.00	0.47
16.00	Open	21,727	0.50	249.72	249.26	0.46	0.00	0.46
17.00	Open	21,136	0.49	249.90	249.47	0.43	0.00	0.43
18.00	Open	18,648	0.43	250.76	250.42	0.34	0.00	0.34
19.00	Open	17,593	0.41	251.17	250.86	0.31	0.00	0.31
20.00	Open	17,331	0.40	251.36	251.06	0.30	0.00	0.30
21.00	Open	16,715	0.38	251.66	251.38	0.28	0.00	0.28
22.00	Open	15,935	0.37	252.02	251.76	0.26	0.00	0.26
23.00	Open	14,283	0.33	252.61	252.40	0.21	0.00	0.21
24.00	Open	13,697	0.32	252.97	252.78	0.19	0.00	0.19

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Detailed Report for Pressure Pipe: P-6

Scenario Summary									
Scenario	Base								
Active Topology Alternative	Base-Active Topology								
Physical Alternative	Base-Physical								
Demand Alternative	Base-Demand								
Initial Settings Alternative	Base-Initial Settings								
Operational Alternative	Base-Operational								
Age Alternative	Base-Age Alternative								
Constituent Alternative	Base-Constituent								
Trace Alternative	Base-Trace Alternative								
Fire Flow Alternative	Base-Fire Flow								
Capital Cost Alternative	Base-Capital Cost								
Energy Cost Alternative	Base-Energy Cost								
User Data Alternative	Base-User Data								
Global Adjustments Summary									
	<None>	Roughness	<None>						
Pipe Characteristics									
Material	Ductile Iron	Hazen-Williams C	110.0						
Diameter	400.0 mm	Minor Loss Coefficient	0.00						
Check Valve?	false	Length	1,867.00 m						
From Node	J-5	To Node	J-6						
Elevations									
From Elevation	193.00 m	To Elevation	152.00 m						
Initial Status									
Initial Status	Open								
Calculated Results Summary									
Time (hr)	Control Status	Discharge (m³/day)	Velocity (m/s)	Upstream Structure Hydraulic Grade (m)	Downstream Structure Hydraulic Grade (m)	Calculated Friction Headloss (m)	Calculated Minor Headloss (m)	Pressure Headloss (m/km)	Headloss Gradient
0.00	Open	3,687	0.34	252.78	251.95	0.83	0.00	0.83	0.45
1.00	Open	3,687	0.34	253.05	252.22	0.83	0.00	0.83	0.45
2.00	Open	3,687	0.34	253.26	252.43	0.83	0.00	0.83	0.45
3.00	Open	3,687	0.34	253.40	252.57	0.83	0.00	0.83	0.45
4.00	Open	3,687	0.34	253.25	252.41	0.83	0.00	0.83	0.45
5.00	Open	3,687	0.34	250.71	249.88	0.83	0.00	0.83	0.45
6.00	Open	3,687	0.34	247.37	246.53	0.83	0.00	0.83	0.45
7.00	Open	3,687	0.34	247.14	246.31	0.83	0.00	0.83	0.45
8.00	Open	3,687	0.34	247.06	246.23	0.83	0.00	0.83	0.45
9.00	Open	3,687	0.34	247.20	246.37	0.83	0.00	0.83	0.45
10.00	Open	3,687	0.34	247.50	246.67	0.83	0.00	0.83	0.45
11.00	Open	3,687	0.34	248.33	247.50	0.83	0.00	0.83	0.45
12.00	Open	3,687	0.34	249.00	248.16	0.83	0.00	0.83	0.45
13.00	Open	3,687	0.34	248.79	247.96	0.83	0.00	0.83	0.45
14.00	Open	3,687	0.34	248.52	247.69	0.83	0.00	0.83	0.45
15.00	Open	3,687	0.34	249.15	248.32	0.83	0.00	0.83	0.45
16.00	Open	3,687	0.34	249.26	248.43	0.83	0.00	0.83	0.45
17.00	Open	3,687	0.34	249.47	248.64	0.83	0.00	0.83	0.45
18.00	Open	3,687	0.34	250.42	249.59	0.83	0.00	0.83	0.45
19.00	Open	3,687	0.34	250.86	250.03	0.83	0.00	0.83	0.45
20.00	Open	3,687	0.34	251.06	250.23	0.83	0.00	0.83	0.45
21.00	Open	3,687	0.34	251.38	250.55	0.83	0.00	0.83	0.45
22.00	Open	3,687	0.34	251.76	250.93	0.83	0.00	0.83	0.45
23.00	Open	3,687	0.34	252.40	251.57	0.83	0.00	0.83	0.45
24.00	Open	3,687	0.34	252.78	251.95	0.83	0.00	0.83	0.45

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Detailed Report for Pressure Pipe: P-7

Scenario Summary									
Scenario	Base								
Active Topology Alternative	Base-Active Topology								
Physical Alternative	Base-Physical								
Demand Alternative	Base-Demand								
Initial Settings Alternative	Base-Initial Settings								
Operational Alternative	Base-Operational								
Age Alternative	Base-Age Alternative								
Constituent Alternative	Base-Constituent								
Trace Alternative	Base-Trace Alternative								
Fire Flow Alternative	Base-Fire Flow								
Capital Cost Alternative	Base-Capital Cost								
Energy Cost Alternative	Base-Energy Cost								
User Data Alternative	Base-User Data								
Global Adjustments Summary									
	<None>	Roughness	<None>						
Pipe Characteristics									
Material	Ductile Iron	Hazen-Williams C	110.0						
Diameter	350.0 mm	Minor Loss Coefficient	0.00						
Check Valve?	false	Length	1,756.00 m						
From Node	J-3	To Node	J-9						
Elevations									
From Elevation	238.00 m	To Elevation	212.00 m						
Initial Status									
Initial Status	Open								
Calculated Results Summary									
Time (hr)	Control Status	Discharge (m³/day)	Velocity (m/s)	Upstream Hydraulic Grade (m)	Downstream Hydraulic Grade (m)	Calculated Friction Headloss (m)	Calculated Minor Headloss (m)	Pressure Headloss (m)	Headloss Gradient (m/km)
0.00	Open	12,041	1.45	253.58	240.16	13.42	0.00	13.42	7.64
1.00	Open	12,041	1.45	253.83	240.42	13.42	0.00	13.42	7.64
2.00	Open	12,041	1.45	254.07	240.65	13.42	0.00	13.42	7.64
3.00	Open	12,041	1.45	254.28	240.86	13.42	0.00	13.42	7.64
4.00	Open	12,041	1.45	254.39	240.97	13.42	0.00	13.42	7.64
5.00	Open	12,041	1.45	253.76	240.34	13.42	0.00	13.42	7.64
6.00	Open	12,041	1.45	252.77	239.36	13.42	0.00	13.42	7.64
7.00	Open	12,041	1.45	252.49	239.08	13.42	0.00	13.42	7.64
8.00	Open	12,041	1.45	252.26	238.84	13.42	0.00	13.42	7.64
9.00	Open	12,041	1.45	252.09	238.67	13.42	0.00	13.42	7.64
10.00	Open	12,041	1.45	251.99	238.57	13.42	0.00	13.42	7.64
11.00	Open	12,041	1.45	252.06	238.64	13.42	0.00	13.42	7.64
12.00	Open	12,041	1.45	252.14	238.73	13.42	0.00	13.42	7.64
13.00	Open	12,041	1.45	252.03	238.61	13.42	0.00	13.42	7.64
14.00	Open	12,041	1.45	251.88	238.46	13.42	0.00	13.42	7.64
15.00	Open	12,041	1.45	251.98	238.56	13.42	0.00	13.42	7.64
16.00	Open	12,041	1.45	251.98	238.56	13.42	0.00	13.42	7.64
17.00	Open	12,041	1.45	252.01	238.59	13.42	0.00	13.42	7.64
18.00	Open	12,041	1.45	252.28	238.86	13.42	0.00	13.42	7.64
19.00	Open	12,041	1.45	252.46	239.04	13.42	0.00	13.42	7.64
20.00	Open	12,041	1.45	252.60	239.18	13.42	0.00	13.42	7.64
21.00	Open	12,041	1.45	252.77	239.36	13.42	0.00	13.42	7.64
22.00	Open	12,041	1.45	252.99	239.57	13.42	0.00	13.42	7.64
23.00	Open	12,041	1.45	253.31	239.89	13.42	0.00	13.42	7.64
24.00	Open	12,041	1.45	253.58	240.16	13.42	0.00	13.42	7.64

Detailed Report for Pressure Pipe: P-8

Scenario Summary									
Scenario	Base								
Active Topology Alternative	Base-Active Topology								
Physical Alternative	Base-Physical								
Demand Alternative	Base-Demand								
Initial Settings Alternative	Base-Initial Settings								
Operational Alternative	Base-Operational								
Age Alternative	Base-Age Alternative								
Constituent Alternative	Base-Constituent								
Trace Alternative	Base-Trace Alternative								
Fire Flow Alternative	Base-Fire Flow								
Capital Cost Alternative	Base-Capital Cost								
Energy Cost Alternative	Base-Energy Cost								
User Data Alternative	Base-User Data								
Global Adjustments Summary									
<None>		Roughness	<None>						
Pipe Characteristics									
Material	Ductile Iron	Hazen-Williams C	110.0						
Diameter	500.0 mm	Minor Loss Coefficient	0.00						
Check Valve?	false	Length	2,720.00 m						
From Node	J-5	To Node	J-7						
Elevations									
From Elevation	193.00 m	To Elevation	199.00 m						
Initial Status									
Initial Status	Open								
Calculated Results Summary									
Time (hr)	Control Status	Discharge (m³/day)	Velocity (m/s)	Upstream Structure Hydraulic Grade (m)	Downstream Structure Hydraulic Grade (m)	Calculated Friction Headloss (m)	Calculated Minor Headloss (m)	Pressure Headloss (m)	Headloss Gradient (m/km)
0.00	Open	10,010	0.59	252.78	250.18	2.60	0.00	2.60	0.96
1.00	Open	9,901	0.58	253.05	250.50	2.55	0.00	2.55	0.94
2.00	Open	10,035	0.59	253.26	250.66	2.61	0.00	2.61	0.96
3.00	Open	10,437	0.62	253.40	250.60	2.81	0.00	2.81	1.03
4.00	Open	11,846	0.70	253.25	249.70	3.55	0.00	3.55	1.30
5.00	Open	19,131	1.13	250.71	242.08	8.62	0.00	8.62	3.17
6.00	Open	25,497	1.50	247.37	232.69	14.68	0.00	14.68	5.40
7.00	Open	25,363	1.50	247.14	232.61	14.53	0.00	14.53	5.34
8.00	Open	24,978	1.47	247.06	232.94	14.13	0.00	14.13	5.19
9.00	Open	24,235	1.43	247.20	233.84	13.36	0.00	13.36	4.91
10.00	Open	23,204	1.37	247.50	235.17	12.33	0.00	12.33	4.53
11.00	Open	21,143	1.25	248.33	237.95	10.38	0.00	10.38	3.82
12.00	Open	19,418	1.14	249.00	240.13	8.86	0.00	8.86	3.26
13.00	Open	19,674	1.16	248.79	239.71	9.08	0.00	9.08	3.34
14.00	Open	20,052	1.18	248.52	239.11	9.41	0.00	9.41	3.46
15.00	Open	18,412	1.09	249.15	241.12	8.03	0.00	8.03	2.95
16.00	Open	18,040	1.06	249.28	241.53	7.73	0.00	7.73	2.84
17.00	Open	17,449	1.03	249.47	242.20	7.27	0.00	7.27	2.67
18.00	Open	14,961	0.88	250.42	244.95	5.47	0.00	5.47	2.01
19.00	Open	13,906	0.82	250.86	246.09	4.78	0.00	4.78	1.76
20.00	Open	13,644	0.80	251.06	246.45	4.61	0.00	4.61	1.70
21.00	Open	13,028	0.77	251.38	247.14	4.23	0.00	4.23	1.56
22.00	Open	12,248	0.72	251.76	247.98	3.78	0.00	3.78	1.39
23.00	Open	10,596	0.62	252.40	249.51	2.89	0.00	2.89	1.06
24.00	Open	10,010	0.59	252.78	250.18	2.60	0.00	2.60	0.96

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Detailed Report for Pressure Pipe: P-9

Scenario Summary									
Scenario	Base								
Active Topology Alternative	Base-Active Topology								
Physical Alternative	Base-Physical								
Demand Alternative	Base-Demand								
Initial Settings Alternative	Base-Initial Settings								
Operational Alternative	Base-Operational								
Age Alternative	Base-Age Alternative								
Constituent Alternative	Base-Constituent								
Trace Alternative	Base-Trace Alternative								
Fire Flow Alternative	Base-Fire Flow								
Capital Cost Alternative	Base-Capital Cost								
Energy Cost Alternative	Base-Energy Cost								
User Data Alternative	Base-User Data								
Global Adjustments Summary									
<None>		Roughness	<None>						
Pipe Characteristics									
Material	Ductile Iron	Hazen-Williams C	110.0						
Diameter	350.0 mm	Minor Loss Coefficient	0.00						
Check Valve?	false	Length	4,333.00 m						
From Node	J-7	To Node	J-8						
Elevations									
From Elevation	199.00 m	To Elevation	212.00 m						
Initial Status									
Initial Status	Open								
Calculated Results Summary									
Time (hr)	Control Status	Discharge (m³/day)	Velocity (m/s)	Upstream Structural Grade (m)	Downstream Structural Grade (m)	Calculated Friction Headloss (m)	Calculated Minor Headloss (m)	Pressure Headloss (m)	Headloss Gradient (m/km)
0.00	Open	6,983	0.84	250.18	238.11	12.07	0.00	12.07	2.79
1.00	Open	6,983	0.84	250.50	238.43	12.07	0.00	12.07	2.79
2.00	Open	6,983	0.84	250.86	238.58	12.07	0.00	12.07	2.79
3.00	Open	6,983	0.84	250.60	238.53	12.07	0.00	12.07	2.79
4.00	Open	6,983	0.84	249.70	237.63	12.07	0.00	12.07	2.79
5.00	Open	6,983	0.84	242.08	230.01	12.07	0.00	12.07	2.79
6.00	Open	6,983	0.84	232.69	220.62	12.07	0.00	12.07	2.79
7.00	Open	6,983	0.84	232.61	220.54	12.07	0.00	12.07	2.79
8.00	Open	6,983	0.84	232.94	220.86	12.07	0.00	12.07	2.79
9.00	Open	6,983	0.84	233.84	221.77	12.07	0.00	12.07	2.79
10.00	Open	6,983	0.84	235.17	223.10	12.07	0.00	12.07	2.79
11.00	Open	6,983	0.84	237.95	225.88	12.07	0.00	12.07	2.79
12.00	Open	6,983	0.84	240.13	228.06	12.07	0.00	12.07	2.79
13.00	Open	6,983	0.84	239.71	227.64	12.07	0.00	12.07	2.79
14.00	Open	6,983	0.84	239.11	227.04	12.07	0.00	12.07	2.79
15.00	Open	6,983	0.84	241.12	229.05	12.07	0.00	12.07	2.79
16.00	Open	6,983	0.84	241.53	229.46	12.07	0.00	12.07	2.79
17.00	Open	6,983	0.84	242.20	230.13	12.07	0.00	12.07	2.79
18.00	Open	6,983	0.84	244.95	232.88	12.07	0.00	12.07	2.79
19.00	Open	6,983	0.84	246.09	234.02	12.07	0.00	12.07	2.79
20.00	Open	6,983	0.84	246.45	234.38	12.07	0.00	12.07	2.79
21.00	Open	6,983	0.84	247.14	235.07	12.07	0.00	12.07	2.79
22.00	Open	6,983	0.84	247.98	235.91	12.07	0.00	12.07	2.79
23.00	Open	6,983	0.84	249.51	237.44	12.07	0.00	12.07	2.79
24.00	Open	6,983	0.84	250.18	238.11	12.07	0.00	12.07	2.79

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Detailed Report for Pressure Pipe: P-10

Scenario Summary									
Scenario	Base								
Active Topology Alternative	Base-Active Topology								
Physical Alternative	Base-Physical								
Demand Alternative	Base-Demand								
Initial Settings Alternative	Base-Initial Settings								
Operational Alternative	Base-Operational								
Age Alternative	Base-Age Alternative								
Constituent Alternative	Base-Constituent								
Trace Alternative	Base-Trace Alternative								
Fire Flow Alternative	Base-Fire Flow								
Capital Cost Alternative	Base-Capital Cost								
Energy Cost Alternative	Base-Energy Cost								
User Data Alternative	Base-User Data								
Global Adjustments Summary									
	<None>	Roughness	<None>						
Pipe Characteristics									
Material	Ductile Iron	Hazen-Williams C	110.0						
Diameter	350.0 mm	Minor Loss Coefficient	0.00						
Check Valve?	false	Length	1,000.00 m						
From Node	J-10	To Node	J-11						
Elevations									
From Elevation	250.00 m	To Elevation	240.00 m						
Initial Status									
Initial Status	Open								
Calculated Results Summary									
Time (hr)	Control Status	Discharge (m³/day)	Velocity (m/s)	Upstream Structure Hydraulic Grade (m)	Downstream Structure Hydraulic Grade (m)	Calculated Friction Headloss (m)	Calculated Minor Headloss (m)	Pressure Headloss (m/km)	Headloss Gradient (m/km)
0.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
1.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
2.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
3.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
4.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
5.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
6.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
7.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
8.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
9.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
10.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
11.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
12.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
13.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
14.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
15.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
16.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
17.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
18.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
19.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
20.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
21.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
22.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
23.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56
24.00	Open	10,138	1.22	270.72	265.16	5.56	0.00	5.56	5.56

Detailed Report for Tank: Santo Domingo Tank

Scenario Summary	
Scenario	Base
Active Topology Alternative	Base-Active Topology
Physical Alternative	Base-Physical
Demand Alternative	Base-Demand
Initial Settings Alternative	Base-Initial Settings
Operational Alternative	Base-Operational
Age Alternative	Base-Age Alternative
Constituent Alternative	Base-Constituent
Trace Alternative	Base-Trace Alternative
Fire Flow Alternative	Base-Fire Flow
Capital Cost Alternative	Base-Capital Cost
Energy Cost Alternative	Base-Energy Cost
User Data Alternative	Base-User Data

Global Adjustments Summary		
	<None>	Roughness <None>

Geometric Summary			
X	15,601.00 m	Elevation	251.75 m
Y	8,320.74 m	Zone	Zone

Demand Summary		
Type	Base Flow (m³/day)	Pattern
Demand	0	Fixed

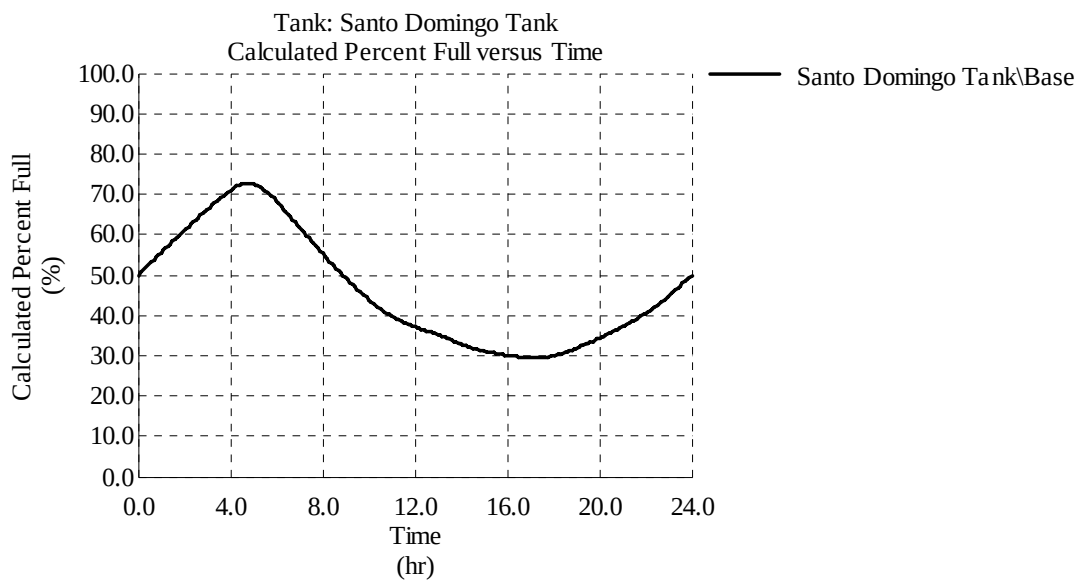
Operating Range Summary			
Maximum Elevation	256.25 m	Maximum Level	4.50 m
Initial HGL	254.00 m	Initial Level	2.25 m
Minimum Elevation	251.75 m	Minimum Level	0.00 m
Base Elevation	251.75 m		

Storage			
Section Type	Constant Area	Circular Tank Shape?	true
Diameter	70.62 m	Average Area	3,917.3 m²
Inactive Volume	0.00 m³	Total Active Volume	17,627.76 m³

Calculated Results Summary							
Time (hr)	Calculated Hydraulic Grade (m)	Calculated Level (m)	Pressure (kPa)	Calculated Percent Full (%)	Calculated Inflow Volume (m³/day)	Calculated Outflow Current (m³/day)	Status
0.00	254.00	2.25	22.02	50.0	8,813.86	23,026	Filling
1.00	254.25	2.50	24.44	55.5	9,780.84	23,389	Filling
2.00	254.49	2.74	26.85	61.0	0,747.82	22,945	Filling
3.00	254.73	2.98	29.18	66.3	1,681.13	21,613	Filling
4.00	254.94	3.19	31.26	71.0	2,513.58	16,952	Filling
5.00	255.01	3.26	31.89	72.4	2,765.88	-7,164	Draining
6.00	254.83	3.08	30.11	68.4	2,051.12	20,233	Draining
7.00	254.53	2.78	27.19	61.7	0,882.35	27,789	Draining
8.00	254.24	2.49	24.35	55.3	9,747.17	26,517	Draining
9.00	253.97	2.22	21.71	49.3	8,687.71	24,055	Draining
10.00	253.73	1.98	19.35	43.9	7,745.94	20,645	Draining
11.00	253.54	1.79	17.52	39.8	7,014.42	13,824	Draining
12.00	253.42	1.67	16.37	37.2	6,551.96	-8,113	Draining
13.00	253.33	1.58	15.49	35.2	6,198.80	-8,960	Draining
14.00	253.23	1.48	14.48	32.9	5,795.15	10,211	Draining

Detailed Report for Tank: Santo Domingo Tank

Calculated Results Summary								
Time (hr)	Calculated Hydraulic Grade (m)	Calculated Pressure Level (m)	Calculated Pressure (kPa)	Calculated Percent Full (%)	Calculated Inflow Volume (m³/day)	Calculated Outflow Volume (m³/day)	Current Status	
15.00	253.15	1.40	13.68	31.1	5,475.66	-4,783	Draining	
16.00	253.10	1.35	13.24	30.1	5,299.09	-3,552	Draining	
17.00	253.07	1.32	12.95	29.4	5,181.39	-1,594	Draining	
18.00	253.10	1.35	13.18	29.9	5,273.87	6,639	Filling	
19.00	253.18	1.43	14.04	31.9	5,618.57	10,131	Filling	
20.00	253.30	1.55	15.13	34.4	6,055.82	10,998	Filling	
21.00	253.42	1.67	16.37	37.2	6,551.96	13,037	Filling	
22.00	253.57	1.82	17.84	40.5	7,140.57	15,620	Filling	
23.00	253.77	2.02	19.73	44.8	7,897.31	21,089	Filling	
24.00	254.00	2.25	22.02	50.0	8,813.86	23,026	Filling	



Detailed Report for Tank: Altamira Tank

Scenario Summary							
Scenario	Base						
Active Topology Alternative	Base-Active Topology						
Physical Alternative	Base-Physical						
Demand Alternative	Base-Demand						
Initial Settings Alternative	Base-Initial Settings						
Operational Alternative	Base-Operational						
Age Alternative	Base-Age Alternative						
Constituent Alternative	Base-Constituent						
Trace Alternative	Base-Trace Alternative						
Fire Flow Alternative	Base-Fire Flow						
Capital Cost Alternative	Base-Capital Cost						
Energy Cost Alternative	Base-Energy Cost						
User Data Alternative	Base-User Data						
Global Adjustments Summary							
	<None>	Roughness	<None>				
Geometric Summary							
X	13,341.63 m	Elevation	151.15 m				
Y	12,040.82 m	Zone	Zone				
Demand Summary							
Type	Base Flow (m³/day)	Pattern					
Demand	7,011	Pattern - 1					
Operating Range Summary							
Maximum Elevation	157.15 m	Maximum Level	6.00 m				
Initial HGL	154.15 m	Initial Level	3.00 m				
Minimum Elevation	151.15 m	Minimum Level	0.00 m				
Base Elevation	151.15 m						
Storage							
Section Type	Constant Area	Circular Tank Shape?	true				
Diameter	63.37 m	Average Area	3,154.2 m²				
Inactive Volume	0.00 m³	Total Active Volume	18,925.06 m³				
Calculated Results Summary							
Time (hr)	Calculated Hydraulic Grade (m)	Calculated Level (m)	Calculated Pressure (kPa)	Calculated Percent Full (%)	Calculated Inflow Volume (m³/day)	Calculated Outflow Volume (m³/day)	Current Status
0.00	154.15	3.00	29.36	50.0	9,462.55	4,000	Filling
1.00	154.20	3.05	29.88	50.9	9,630.51	4,063	Filling
2.00	154.26	3.11	30.40	51.8	9,798.48	3,986	Filling
3.00	154.31	3.16	30.91	52.6	9,960.61	3,754	Filling
4.00	154.35	3.20	31.35	53.4	0,105.20	2,945	Filling
5.00	154.37	3.22	31.49	53.6	0,149.03	1,244	Draining
6.00	154.33	3.18	31.11	53.0	0,024.87	4,904	Draining
7.00	154.26	3.11	30.48	51.9	9,821.84	4,827	Draining
8.00	154.20	3.05	29.86	50.9	9,624.65	4,606	Draining
9.00	154.14	2.99	29.29	49.9	9,440.63	4,179	Draining
10.00	154.09	2.94	28.78	49.0	9,277.03	3,586	Draining
11.00	154.05	2.90	28.39	48.3	9,149.96	2,401	Draining
12.00	154.03	2.88	28.14	47.9	9,069.63	1,409	Draining
13.00	154.01	2.86	27.95	47.6	9,008.28	1,556	Draining
14.00	153.98	2.83	27.73	47.2	8,938.16	1,774	Draining

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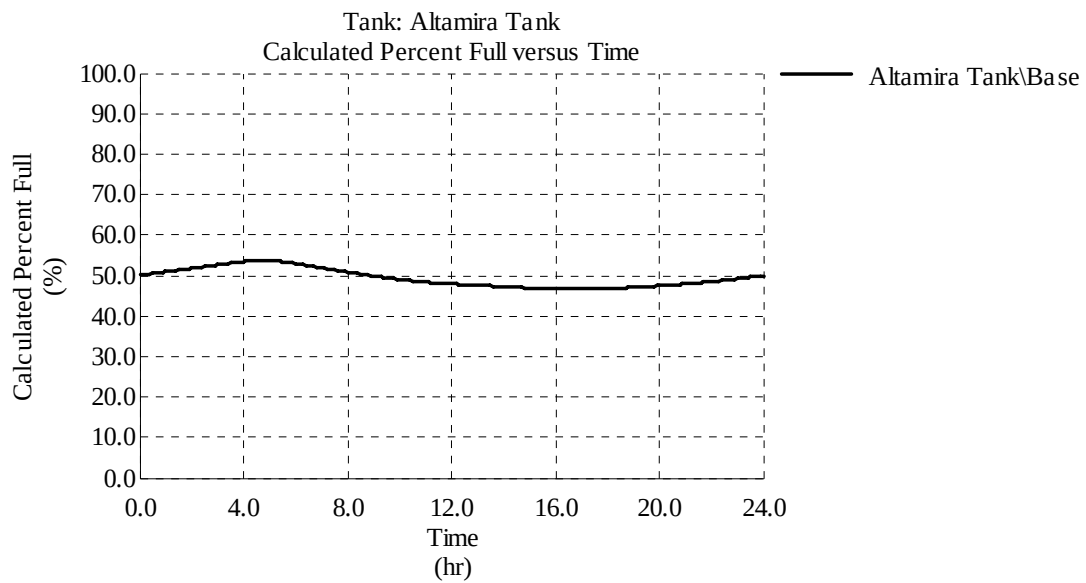
Project Engineer: JICA Study Team

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Detailed Report for Tank: Altamira Tank

Calculated Results Summary								
Time (hr)	Calculated Hydraulic Grade (m)	Calculated Level (m)	Pressure (kPa)	Calculated Percent Full (%)	Calculated Volume (m³)	Inflow (m³/day)	Outflow (m³/day)	Current Status
15.00	153.97	2.82	27.56	46.9	8,882.65	-831	831	Draining
16.00	153.96	2.81	27.47	46.8	8,851.99	-617	617	Draining
17.00	153.95	2.80	27.40	46.7	8,831.54	-277	277	Draining
18.00	153.96	2.81	27.45	46.8	8,847.59	1,153	-1,153	Filling
19.00	153.97	2.82	27.64	47.1	8,907.47	1,760	-1,760	Filling
20.00	154.00	2.85	27.87	47.5	8,983.43	1,910	-1,910	Filling
21.00	154.03	2.88	28.14	47.9	9,069.60	2,265	-2,265	Filling
22.00	154.06	2.91	28.46	48.5	9,171.85	2,713	-2,713	Filling
23.00	154.10	2.95	28.87	49.2	9,303.32	3,663	-3,663	Filling
24.00	154.15	3.00	29.36	50.0	9,462.52	4,000	-4,000	Filling



Detailed Report for Tank: San Judas Tank

Scenario Summary	
Scenario	Base
Active Topology Alternative	Base-Active Topology
Physical Alternative	Base-Physical
Demand Alternative	Base-Demand
Initial Settings Alternative	Base-Initial Settings
Operational Alternative	Base-Operational
Age Alternative	Base-Age Alternative
Constituent Alternative	Base-Constituent
Trace Alternative	Base-Trace Alternative
Fire Flow Alternative	Base-Fire Flow
Capital Cost Alternative	Base-Capital Cost
Energy Cost Alternative	Base-Energy Cost
User Data Alternative	Base-User Data

Global Adjustments Summary		
	<None>	Roughness <None>

Geometric Summary			
X	9,616.30 m	Elevation	211.79 m
Y	10,331.92 m	Zone	Zone

Demand Summary		
Type	Base Flow (m³/day)	Pattern
Demand	15,644	Pattern - 1

Operating Range Summary			
Maximum Elevation	217.79 m	Maximum Level	6.00 m
Initial HGL	214.79 m	Initial Level	3.00 m
Minimum Elevation	211.79 m	Minimum Level	0.00 m
Base Elevation	211.79 m		

Storage			
Section Type	Constant Area	Circular Tank Shape?	true
Diameter	36.06 m	Average Area	1,021.5 m²
Inactive Volume	0.00 m³	Total Active Volume	6,129.02 m³

Calculated Results Summary								
Time (hr)	Calculated Hydraulic Grade (m)	Calculated Level (m)	Pressure (kPa)	Calculated Percent Full (%)	Calculated Volume (m³)	Inflow (m³/day)	Outflow (m³/day)	Current Status
0.00	214.79	3.00	29.36	50.0	3,064.51	8,925	-8,925	Filling
1.00	215.16	3.37	32.95	56.1	3,439.32	9,066	-9,066	Filling
2.00	215.52	3.73	36.54	62.2	3,814.12	8,894	-8,894	Filling
3.00	215.88	4.09	40.01	68.1	4,175.87	8,377	-8,377	Filling
4.00	216.19	4.40	43.10	73.4	4,490.54	6,570	-6,570	Filling
5.00	216.29	4.50	44.04	75.0	4,596.31	-2,777	2,777	Draining
6.00	216.02	4.23	41.30	70.5	4,319.28	10,943	10,943	Draining
7.00	215.57	3.78	37.04	63.1	3,866.27	10,771	10,771	Draining
8.00	215.14	3.35	32.83	55.9	3,426.28	10,278	10,278	Draining
9.00	214.74	2.95	28.89	49.2	3,015.61	-9,324	9,324	Draining
10.00	214.38	2.59	25.39	43.2	2,650.59	-8,002	8,002	Draining
11.00	214.11	2.32	22.68	38.6	2,367.04	-5,358	5,358	Draining
12.00	213.93	2.14	20.96	35.7	2,187.80	-3,144	3,144	Draining
13.00	213.80	2.01	19.65	33.5	2,050.90	-3,473	3,473	Draining
14.00	213.64	1.85	18.15	30.9	1,894.46	-3,958	3,958	Draining