

Identificación de la tubería	Nodo de Inicio	Nodo Final	Velocidad (m/s)	Longitud (m)	Diametro (in)	Material	Caudal (L/s)
P-1	T-1	J-1	0.0326	22.0000	2.0000	PVC	0.6660
P-0	RESERVORIO	T-1	3.4560	7.0000	2.0000	PVC	7.0000
P-2	J-1	J-2	0.0317	6.0000	2.0000	PVC	0.0640
P-3	J-2	J-3	0.0316	6.0000	2.0000	PVC	0.0640
P-4	J-3	J-4	0.0314	6.0000	2.0000	PVC	0.0640
P-5	J-4	J-5	0.0312	6.0000	2.0000	PVC	0.0630
P-6	J-5	J-6	0.0311	6.0000	2.0000	PVC	0.0630
P-7	J-6	J-7	0.0310	6.0000	2.0000	PVC	0.0630
P-8	J-7	J-9	0.0292	6.0000	2.0000	PVC	0.0590
P-9	J-7	J-8	0.0017	7.0000	2.0000	PVC	0.0035
P-10	J-9	J-11	0.0160	64.0000	2.0000	PVC	0.0330
P-11	J-9	J-10	0.0129	13.0000	2.0000	PVC	0.0260
P-12	J-10	J-12	0.0123	13.0000	2.0000	PVC	0.0250
P-13	J-14	J-8	0.0008	89.0000	2.0000	PVC	-0.0017
P-14	J-13	J-15	0.0105	8.0000	2.0000	PVC	0.0210
P-15	J-11	J-13	0.0111	23.0000	2.0000	PVC	0.0230
P-16	J-12	J-20	0.0116	12.0000	2.0000	PVC	0.0240
P-17	J-15	J-16	0.0101	13.0000	2.0000	PVC	0.0200
P-18	J-20	J-23	0.0103	27.0000	2.0000	PVC	0.0210
P-19	J-16	J-17	0.0098	11.0000	2.0000	PVC	0.0200
P-20	J-26	J-27	0.0081	9.0000	2.0000	PVC	0.0160
P-21	J-23	J-24	0.0089	10.0000	2.0000	PVC	0.0180
P-22	J-27	J-28	0.0077	12.0000	2.0000	PVC	0.0160
P-23	J-24	J-26	0.0084	11.0000	2.0000	PVC	0.0170
P-24	J-28	J-29	0.0074	11.0000	2.0000	PVC	0.0150
P-25	J-29	J-30	0.0072	7.0000	2.0000	PVC	0.0150
P-26	J-17	J-18	0.0095	11.0000	2.0000	PVC	0.0190
P-64	J-70	J-71	0.0007	58.0000	2.0000	PVC	0.0015
P-27	J-30	J-31	0.0071	8.0000	2.0000	PVC	0.0140
P-28	J-31	J-32	0.0068	8.0000	2.0000	PVC	0.0140
P-29	J-18	J-19	0.0093	11.0000	2.0000	PVC	0.0190
P-30	J-32	J-11	0.0034	91.0000	2.0000	PVC	-0.0070
P-31	J-32	J-34	0.0100	8.0000	2.0000	PVC	0.0200
P-32	J-40	J-42	0.0070	38.0000	2.0000	PVC	0.0140
P-33	J-39	J-40	0.0080	7.0000	2.0000	PVC	0.0160
P-34	J-19	J-21	0.0091	5.0000	2.0000	PVC	0.0180
P-35	J-38	J-39	0.0085	6.0000	2.0000	PVC	0.0170
P-36	J-34	J-35	0.0098	8.0000	2.0000	PVC	0.0200
P-37	J-37	J-38	0.0088	6.0000	2.0000	PVC	0.0180
P-38	J-35	J-37	0.0094	15.0000	2.0000	PVC	0.0190
P-39	J-21	J-22	0.0049	12.0000	2.0000	PVC	0.0100
P-69	J-69	J-70	0.0018	49.0000	2.0000	PVC	0.0037
P-70	PBV-1	J-64	0.0035	6.0000	2.0000	PVC	0.0070
P-40	J-48	J-51	0.0034	6.0000	2.0000	PVC	0.0068
P-41	J-48	J-49	0.0008	16.0000	2.0000	PVC	0.0016
P-42	J-46	J-48	0.0045	18.0000	2.0000	PVC	0.0090
P-43	J-46	J-21	0.0039	63.0000	2.0000	PVC	-0.0080
P-71	J-64	J-65	0.0032	5.0000	2.0000	PVC	0.0065
P-44	J-51	J-52	0.0032	7.0000	2.0000	PVC	0.0064
P-45	J-44	J-46	0.0013	19.0000	2.0000	PVC	0.0026
P-46	J-44	J-47	0.0012	30.0000	2.0000	PVC	0.0025
P-47	J-42	J-43	0.0021	112.0000	2.0000	PVC	0.0042
P-48	J-42	J-44	0.0034	4.0000	2.0000	PVC	0.0069
P-49	J-52	J-53	0.0030	5.0000	2.0000	PVC	0.0060
P-72	J-65	J-66	0.0030	7.0000	2.0000	PVC	0.0061
P-50	J-53	J-55	0.0029	5.0000	2.0000	PVC	0.0058
P-51	J-22	J-25	0.0046	14.0000	2.0000	PVC	0.0093
P-73	J-68	J-69	0.0025	13.0000	2.0000	PVC	0.0050
P-52	J-55	J-56	0.0027	7.0000	2.0000	PVC	0.0054
P-74	J-67	J-68	0.0027	5.0000	2.0000	PVC	0.0055
P-75	J-66	J-67	0.0028	7.0000	2.0000	PVC	0.0058
P-53	J-50	J-54	0.0028	11.0000	2.0000	PVC	0.0057
P-54	J-56	J-57	0.0026	9.0000	2.0000	PVC	0.0052
P-55	J-25	J-33	0.0042	15.0000	2.0000	PVC	0.0085
P-56	J-54	J-57	0.0027	8.0000	2.0000	PVC	0.0055
P-57	J-45	J-50	0.0030	20.0000	2.0000	PVC	0.0061
P-58	J-33	J-36	0.0038	16.0000	2.0000	PVC	0.0078
P-59	J-57	J-58	0.0051	8.0000	2.0000	PVC	0.0100
P-60	J-58	J-59	0.0049	6.0000	2.0000	PVC	0.0100
P-61	J-41	J-45	0.0033	12.0000	2.0000	PVC	0.0067
P-62	J-36	J-41	0.0036	12.0000	2.0000	PVC	0.0072
P-63	J-59	J-60	0.0045	24.0000	2.0000	PVC	0.0092
P-65	J-60	J-61	0.0041	6.0000	2.0000	PVC	0.0082
P-66	J-61	J-62	0.0039	7.0000	2.0000	PVC	0.0078
P-67	J-62	J-63	0.0037	5.0000	2.0000	PVC	0.0075
P-68	J-63	PBV-1	0.0035	6.0000	2.0000	PVC	0.0070

TUBERÍAS PARTE ALTA
MÍNIMA DEMANDA

Identificación de la tubería	Nodo de Inicio	Nodo Final	Velocidad (m/s)	Longitud (m)	Diametro (in)	Caudal (L/s)
P-1	T-1	J-1	0.3010	22.0000	2.0000	0.6100
P-0	RESERVORIO	T-1	3.4560	7.0000	2.0000	7.0000
P-2	J-1	J-2	0.2927	6.0000	2.0000	0.5900
P-3	J-2	J-3	0.2913	6.0000	2.0000	0.5900
P-4	J-3	J-4	0.2896	6.0000	2.0000	0.5900
P-5	J-4	J-5	0.2881	6.0000	2.0000	0.5800
P-6	J-5	J-6	0.2873	6.0000	2.0000	0.5800
P-7	J-6	J-7	0.2861	6.0000	2.0000	0.5800
P-8	J-7	J-9	0.2692	6.0000	2.0000	0.5500
P-9	J-7	J-8	0.0161	7.0000	2.0000	0.0330
P-10	J-9	J-11	0.1418	64.0000	2.0000	0.2900
P-11	J-9	J-10	0.1256	13.0000	2.0000	0.2500
P-12	J-10	J-12	0.1197	13.0000	2.0000	0.2400
P-13	J-14	J-8	0.0078	89.0000	2.0000	-0.0160
P-14	J-13	J-15	0.0905	8.0000	2.0000	0.1800
P-15	J-11	J-13	0.0967	23.0000	2.0000	0.2000
P-17	J-15	J-16	0.0868	13.0000	2.0000	0.1800
P-16	J-12	J-20	0.1134	12.0000	2.0000	0.2300
P-18	J-20	J-23	0.1014	27.0000	2.0000	0.2100
P-19	J-16	J-17	0.0842	11.0000	2.0000	0.1700
P-20	J-26	J-27	0.0807	9.0000	2.0000	0.1600
P-21	J-23	J-24	0.0885	10.0000	2.0000	0.1800
P-22	J-27	J-28	0.0770	12.0000	2.0000	0.1600
P-23	J-24	J-26	0.0836	11.0000	2.0000	0.1700
P-24	J-28	J-29	0.0743	11.0000	2.0000	0.1500
P-25	J-29	J-30	0.0728	7.0000	2.0000	0.1500
P-26	J-17	J-18	0.0821	11.0000	2.0000	0.1700
P-64	J-70	J-71	0.0067	58.0000	2.0000	0.0130
P-27	J-30	J-31	0.0712	8.0000	2.0000	0.1400
P-28	J-31	J-32	0.0692	8.0000	2.0000	0.1400
P-29	J-18	J-19	0.0800	11.0000	2.0000	0.1600
P-30	J-32	J-11	0.0315	91.0000	2.0000	-0.0640
P-31	J-32	J-34	0.0983	8.0000	2.0000	0.2000
P-32	J-40	J-42	0.0700	38.0000	2.0000	0.1400
P-33	J-39	J-40	0.0795	7.0000	2.0000	0.1600
P-34	J-19	J-21	0.0781	5.0000	2.0000	0.1600
P-35	J-38	J-39	0.0839	6.0000	2.0000	0.1700
P-36	J-34	J-35	0.0963	8.0000	2.0000	0.2000
P-37	J-37	J-38	0.0874	6.0000	2.0000	0.1800
P-38	J-35	J-37	0.0926	15.0000	2.0000	0.1900
P-39	J-21	J-22	0.0440	12.0000	2.0000	0.0890
P-69	J-69	J-70	0.0168	49.0000	2.0000	0.0340
P-70	PBV-1	J-64	0.0318	6.0000	2.0000	0.0650
P-40	J-48	J-51	0.0326	6.0000	2.0000	0.0660
P-41	J-48	J-49	0.0073	16.0000	2.0000	0.0150
P-42	J-46	J-48	0.0426	18.0000	2.0000	0.0860
P-43	J-46	J-21	0.0320	63.0000	2.0000	-0.0650
P-71	J-64	J-65	0.0295	5.0000	2.0000	0.0600
P-44	J-51	J-52	0.0307	7.0000	2.0000	0.0620
P-45	J-44	J-46	0.0178	19.0000	2.0000	0.0360
P-46	J-44	J-47	0.0112	30.0000	2.0000	0.0230
P-47	J-42	J-43	0.0192	112.0000	2.0000	0.0390
P-48	J-42	J-44	0.0374	4.0000	2.0000	0.0760
P-49	J-52	J-53	0.0290	5.0000	2.0000	0.0590
P-72	J-65	J-66	0.0279	7.0000	2.0000	0.0560
P-50	J-53	J-55	0.0279	5.0000	2.0000	0.0570
P-51	J-22	J-25	0.0406	14.0000	2.0000	0.0820
P-73	J-68	J-69	0.0228	13.0000	2.0000	0.0460
P-52	J-55	J-56	0.0263	7.0000	2.0000	0.0530
P-74	J-67	J-68	0.0248	5.0000	2.0000	0.0500
P-75	J-66	J-67	0.0262	7.0000	2.0000	0.0530
P-53	J-50	J-54	0.0242	11.0000	2.0000	0.0490
P-54	J-56	J-57	0.0253	9.0000	2.0000	0.0510
P-55	J-25	J-33	0.0369	15.0000	2.0000	0.0750
P-56	J-54	J-57	0.0236	8.0000	2.0000	0.0480
P-57	J-45	J-50	0.0260	20.0000	2.0000	0.0530
P-58	J-33	J-36	0.0329	16.0000	2.0000	0.0690
P-59	J-57	J-58	0.0471	8.0000	2.0000	0.0950
P-60	J-58	J-59	0.0452	6.0000	2.0000	0.0920
P-61	J-41	J-45	0.0287	12.0000	2.0000	0.0580
P-62	J-36	J-41	0.0313	12.0000	2.0000	0.0640
P-63	J-59	J-60	0.0417	24.0000	2.0000	0.0840
P-65	J-60	J-61	0.0374	6.0000	2.0000	0.0760
P-66	J-61	J-62	0.0356	7.0000	2.0000	0.0720
P-67	J-62	J-63	0.0341	5.0000	2.0000	0.0690
P-68	J-63	PBV-1	0.0319	6.0000	2.0000	0.0650

TUBERÍAS PARTE ALTA
MÁXIMA DEMANDA

Label	Elevación (m)	Presión (m H2O)	Demanda (L/s)	Linea Piezometrica (m)	X (m)	Y (m)
J-1	1971.70	6.8500	0.0018	1978.56	1098.157.09	997.012.47
J-2	1970.30	8.2400	0.0003	1978.56	1098.154.94	997.018.25
J-3	1968.89	9.6500	0.0004	1978.56	1098.152.17	997.023.34
J-4	1967.45	11.1000	0.0003	1978.56	1098.148.76	997.028.23
J-5	1966.31	12.2000	0.0002	1978.56	1098.145.15	997.033.12
J-6	1964.73	13.8000	0.0003	1978.56	1098.140.04	997.036.47
J-7	1963.30	15.2000	0.0002	1978.56	1098.134.99	997.039.47
J-8	1961.30	17.2000	0.0018	1978.56	1098.128.07	997.037.71
J-9	1962.11	16.4000	0.0004	1978.56	1098.130.48	997.042.99
J-10	1958.80	19.7000	0.0013	1978.56	1098.117.79	997.047.32
J-11	1955.48	23.0000	0.0030	1978.56	1098.100.24	997.099.46
J-12	1955.32	23.2000	0.0014	1978.56	1098.104.88	997.048.08
J-13	1955.59	22.9000	0.0013	1978.56	1098.090.02	997.120.17
J-14	1957.77	20.7000	0.0017	1978.56	1098.048.44	996.997.89
J-15	1955.30	23.2000	0.0008	1978.56	1098.088.43	997.127.76
J-16	1952.34	26.2000	0.0006	1978.56	1098.090.08	997.140.24
J-17	1948.17	30.3000	0.0005	1978.56	1098.089.39	997.161.59
J-18	1944.51	34.0000	0.0005	1978.56	1098.086.70	997.152.14
J-19	1941.32	37.2000	0.0004	1978.56	1098.081.61	997.172.32
J-20	1952.64	25.9000	0.0026	1978.56	1098.093.28	997.044.80
J-21	1940.01	38.5000	0.0005	1978.56	1098.078.51	997.176.75
J-22	1935.95	42.5000	0.0007	1978.56	1098.070.29	997.185.55
J-23	1950.76	27.7000	0.0028	1978.56	1098.070.00	997.030.40
J-24	1950.49	28.0000	0.0011	1978.56	1098.060.69	997.025.64
J-25	1933.37	45.1000	0.0008	1978.55	1098.058.78	997.194.10
J-26	1950.89	27.6000	0.0007	1978.56	1098.050.00	997.022.87
J-27	1950.67	27.8000	0.0008	1978.56	1098.040.88	997.024.15
J-28	1950.04	28.5000	0.0006	1978.56	1098.029.93	997.028.68
J-29	1948.48	30.0000	0.0003	1978.56	1098.022.21	997.032.48
J-30	1946.93	31.6000	0.0003	1978.56	1098.019.48	997.046.26
J-31	1944.91	33.6000	0.0004	1978.56	1098.018.20	997.049.92
J-32	1942.87	35.6000	0.0005	1978.56	1098.019.54	997.057.39
J-33	1931.70	46.8000	0.0007	1978.55	1098.044.98	997.064.85
J-34	1941.04	37.4000	0.0004	1978.56	1098.023.42	997.195.48
J-35	1940.18	38.3000	0.0008	1978.56	1098.029.86	997.070.41
J-36	1940.44	48.0000	0.0006	1978.55	1098.029.59	997.201.44
J-37	1940.89	37.6000	0.0011	1978.56	1098.042.89	997.077.85
J-38	1941.08	37.4000	0.0008	1978.56	1098.046.88	997.082.43
J-39	1941.86	36.0000	0.0010	1978.56	1098.049.36	997.087.60
J-40	1942.00	36.0000	0.0021	1978.56	1098.048.62	997.094.42
J-41	1930.50	48.5000	0.0006	1978.55	1098.017.39	997.194.74
J-42	1937.35	41.1000	0.0029	1978.55	1098.032.37	997.128.98
J-43	1932.95	45.5000	0.0042	1978.55	1097.932.76	997.078.45
J-44	1937.50	41.0000	0.0018	1978.55	1098.030.46	997.132.20
J-45	1931.73	46.7000	0.0006	1978.55	1098.005.92	997.186.66
J-46	1938.26	40.2000	0.0016	1978.55	1098.022.26	997.148.95
J-47	1944.97	33.5000	0.0025	1978.55	1098.057.29	997.145.42
J-48	1938.37	40.1000	0.0006	1978.55	1098.014.25	997.164.87
J-49	1936.59	41.9000	0.0016	1978.55	1098.028.82	997.175.27
J-50	1933.71	44.8000	0.0004	1978.55	1097.989.30	997.182.47
J-51	1937.68	40.8000	0.0004	1978.55	1098.009.66	997.168.86
J-52	1936.72	41.8000	0.0004	1978.55	1098.003.86	997.172.47
J-53	1936.00	42.5000	0.0002	1978.55	1097.998.76	997.174.22
J-54	1933.02	45.4000	0.0002	1978.55	1097.982.45	997.176.77
J-55	1935.22	43.2000	0.0004	1978.55	1097.993.49	997.173.73
J-56	1933.66	44.8000	0.0002	1978.55	1097.986.20	997.173.81
J-57	1931.53	46.9000	0.0004	1978.55	1097.978.17	997.169.69
J-58	1930.54	47.9000	0.0004	1978.55	1097.971.40	997.165.28
J-59	1929.80	48.7000	0.0008	1978.55	1097.956.05	997.163.42
J-60	1925.21	53.2000	0.0009	1978.55	1097.943.04	997.157.34
J-61	1924.20	54.2000	0.0004	1978.55	1097.936.69	997.157.87
J-62	1922.22	56.2000	0.0003	1978.55	1097.930.42	997.159.64
J-63	1920.93	57.5000	0.0005	1978.55	1097.926.49	997.162.82
J-64	1917.86	40.6000	0.0005	1958.51	1097.921.07	1973.873
J-65	1916.22	42.2000	0.0004	1958.51	1097.921.29	1977.179.17
J-66	1914.67	43.7000	0.0004	1958.51	1097.922.91	1977.185.59
J-67	1914.67	43.7000	0.0003	1958.51	1097.926.25	1977.191.76
J-68	1915.26	43.2000	0.0005	1958.51	1097.929.42	1977.195.59
J-69	1919.83	38.6000	0.0013	1958.51	1097.940.73	2007.102.10
J-70	1926.90	31.5000	0.0022	1958.51	1097.985.52	2007.222.42
J-71	1918.74	39.7000	0.0015	1958.51	1098.038.75	2007.244.29