C

Network Table - Nodes

Node ID	Elevation m	Base Demand LPS	Demand LPS	Head m	Pressure m
Junc 2	67	0	0.00	142.80	75.80
Junc 3	67	0	0.00	142.80	75.80
Junc 4	66	0.16	0.16	142.74	76.74
Junc 5	66	0	0.00	142.70	76.70
Junc 6	64	0.15	0.15	142.62	78.62
Junc 7	64	0	0.00	142.11	78.11
Junc 8	63	0.16	0.16	141.96	78.96
Junc 9	63	0.14	0.14	142.05	79.05
Junc 10	62	0	0.00	141.94	79.94
Junc 11	61	0.15	0.15	141.01	80.01
Junc 12	69	0	0.00	142.13	73.13
Junc 13	69	0.12	0.12	142.11	73.11
Junc 14	69	0	0.00	142.07	73.07
Junc 15	70	0.12	0.12	142.06	72.06
Junc 16	68	0.08	0.08	141.95	73.95
Junc 17	68	0.1	0.10	141.94	73.94
Junc 18	69	0.07	0.07	141.94	72.94
Junc 19	66	0.12	0.12	141.93	75.93
Junc 20	65	0.08	0.08	141.93	76.93
Junc 21	70	0	0.00	141.75	71.75
Junc 22	70	0	0.00	141.74	71.74
Junc 23	70	0	0.00	141.73	71.73
Junc 24	70	0	0.00	141.69	71.69
Junc 25	70	0.1	0.10	141.69	71.69
Junc 26	71	0.088	0.09	141.60	70.60
Junc 27	69	0	0.00	141.44	72.44
Junc 28	70	0.083	0.08	141.37	71.37
Junc 29	69	0.085	0.09	141.42	72.42

C

Node ID	Elevation m	Base Demand LPS	Demand LPS	Head m	Pressure m
Junc 30	70	0.087	0.09	141.33	71.33
Junc 31	69	0.096	0.10	141.36	72.36
Junc 32	69	0.098	0.10	141.29	72.29
Junc 33	69	0.094	0.09	141.29	72.29
Junc 34	69	0.097	0.10	141.73	72.73
Junc 35	71	0	0.00	141.72	70.72
Junc 36	71	0	0.00	141.71	70.71
Junc 37	69	0.12	0.12	141.69	72.69
Junc 38	69	0	0.00	141.59	72.59
Junc 39	70	0.125	0.12	141.47	71.47
Junc 40	71	0.12	0.12	141.45	70.45
Junc 41	72	0.13	0.13	141.39	69.39
Junc 42	72	0.15	0.15	141.48	69.48
Junc 43	78	0	0.00	141.35	63.35
Junc 44	76	0.071	0.07	141.12	65.12
Junc 46	75	0.11	0.11	141.08	66.08
Junc 47	73	0.143	0.14	141.05	68.05
Junc 48	78	0.143	0.14	140.72	62.72
Junc 49	76	0.13	0.13	140.66	64.66
Junc 50	73	0.132	0.13	140.87	67.87
Junc 51	76	0.11	0.11	140.72	64.72
Junc 53	76	0	0.00	140.75	64.75
Junc 54	75	0.092	0.09	140.68	65.68
Junc 55	76	0.114	0.11	140.66	64.66
Junc 56	77	0	0.00	140.67	63.67
Junc 57	78	0.097	0.10	140.66	62.66
Junc 58	79	0.1	0.10	140.66	61.66
Junc 59	76	0.094	0.09	140.63	64.63
Junc 60	76	0	0.00	141.62	65.62

C

Node ID	Elevation m	Base Demand LPS	Demand LPS	Head m	Pressure m
Junc 61	76	0.12	0.12	141.61	65.61
Junc 62	76	0	0.00	141.54	65.54
Junc 63	76	0.076	0.08	141.53	65.53
Junc 64	77	0.098	0.10	141.52	64.52
Junc 65	77	0.12	0.12	141.52	64.52
Junc 66	74	0	0.00	141.42	67.42
Junc 67	73	0.098	0.10	141.42	68.42
Junc 68	75	0	0.00	141.31	66.31
Junc 69	77	0.13	0.13	141.26	64.26
Junc 70	76	0.13	0.13	141.26	65.26
Junc 71	79	0	0.00	141.58	62.58
Junc 72	78	0.097	0.10	141.56	63.56
Junc 73	77	0	0.00	141.58	64.58
Junc 74	76	0.0976	0.10	141.55	65.55
Junc 75	78	0	0.00	141.57	63.57
Junc 76	79	0.094	0.09	141.57	62.57
Junc 77	77	0.085	0.09	141.57	64.57
Resvr 1	81	#N/A	-5.40	81.00	0.00

Network Table - Links

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 2	6	50	110	0.16	0.08	0.36	Open
Pipe 3	156	50	110	0.16	0.08	0.36	Open
Pipe 4	23	50	110	0.60	0.31	4.15	Open
Pipe 5	260	50	110	0.15	0.08	0.32	Open
Pipe 6	245	50	110	0.45	0.23	2.43	Open
Pipe 7	150	50	110	0.27	0.14	0.96	Open
Pipe 8	125	50	110	0.18	0.09	0.44	Open
Pipe 9	150	25	110	0.04	0.08	0.74	Open
Pipe 10	125	50	110	0.11	0.06	0.18	Open
Pipe 11	100	25	110	0.15	0.31	9.31	Open
Pipe 12	3130	200	110	4.64	0.15	0.21	Open
Pipe 13	125	200	110	4.07	0.13	0.17	Open
Pipe 14	117	75	110	0.57	0.13	0.52	Open
Pipe 15	102	75	110	0.12	0.03	0.03	Open
Pipe 16	346	75	110	0.45	0.10	0.34	Open
Pipe 17	104	75	110	0.17	0.04	0.06	Open
Pipe 18	87	75	110	0.07	0.02	0.01	Open
Pipe 19	205	75	110	0.20	0.05	0.08	Open
Pipe 20	128	75	110	0.08	0.02	0.01	Open

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 21	545	150	110	3.95	0.22	0.65	Open
Pipe 22	9	100	110	2.16	0.28	1.53	Open
Pipe 23	4	75	110	1.22	0.28	2.13	Open
Pipe 24	15	50	110	0.48	0.24	2.71	Open
Pipe 25	30	50	110	0.10	0.05	0.15	Open
Pipe 26	50	50	110	0.38	0.19	1.75	Open
Pipe 27	155	50	110	0.29	0.15	1.07	Open
Pipe 28	137.5	50	110	0.09	0.04	0.11	Open
Pipe 29	122	50	110	0.20	0.10	0.56	Open
Pipe 30	175	50	110	0.12	0.06	0.21	Open
Pipe 31	112.5	50	110	0.12	0.06	0.23	Open
Pipe 32	112.4	50	110	0.16	0.08	0.35	Open
Pipe 33	127.4	50	110	0.06	0.03	0.06	Open
Pipe 34	96	50	110	0.10	0.05	0.14	Open
Pipe 35	252	150	110	1.79	0.10	0.15	Open
Pipe 36	4	75	110	0.64	0.15	0.66	Open
Pipe 37	126	50	110	0.12	0.06	0.21	Open
Pipe 38	286	75	110	0.52	0.12	0.45	Open
Pipe 39	65	50	110	0.37	0.19	1.74	Open
Pipe 40	113.4	50	110	0.12	0.06	0.21	Open
Pipe 41	346	50	110	0.13	0.07	0.24	Open

C

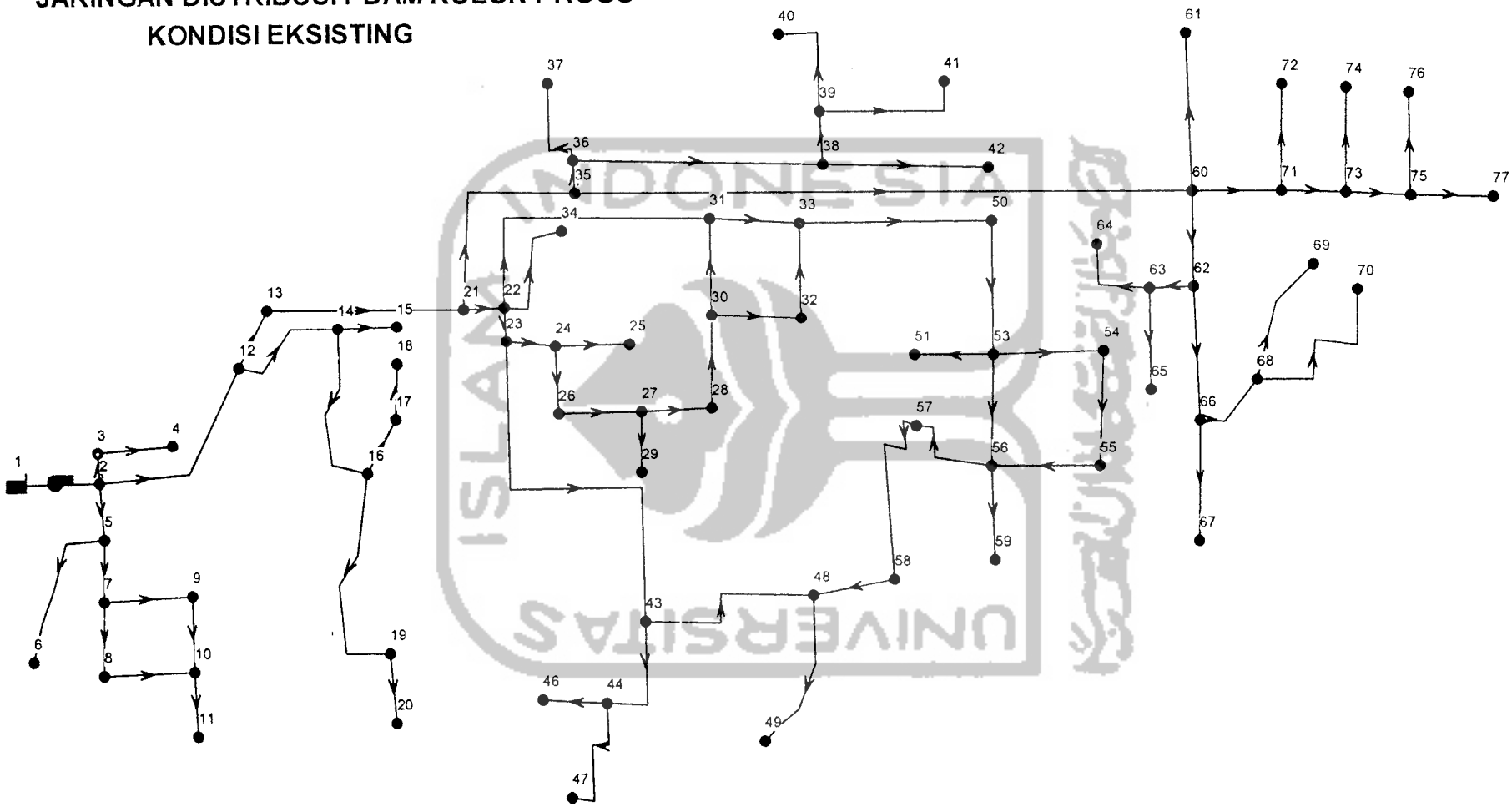
Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 42	334	50	110	0.15	0.08	0.32	Open
Pipe 43	449	75	110	0.74	0.17	0.85	Open
Pipe 44	176	50	110	0.32	0.17	1.33	Open
Pipe 45	187	50	110	0.11	0.06	0.18	Open
Pipe 46	243	50	110	0.14	0.07	0.29	Open
Pipe 47	300.5	50	110	0.42	0.21	2.11	Open
Pipe 48	225	50	110	0.13	0.07	0.24	Open
Pipe 50	331	75	110	0.46	0.10	0.36	Open
Pipe 51	183	50	110	0.11	0.06	0.18	Open
Pipe 52	202.3	50	110	0.16	0.08	0.37	Open
Pipe 53	203	50	110	0.07	0.04	0.08	Open
Pipe 54	202.5	50	110	0.04	0.02	0.03	Open
Pipe 55	172	50	110	0.19	0.10	0.49	Open
Pipe 56	276	50	110	0.05	0.03	0.05	Open
Pipe 57	245	50	110	0.04	0.02	0.03	Open
Pipe 58	278	50	110	0.09	0.05	0.13	Open
Pipe 59	177.5	50	110	0.14	0.07	0.29	Open
Pipe 60	1470	150	110	1.15	0.06	0.07	Open
Pipe 61	412	75	110	0.12	0.03	0.03	Open
Pipe 62	124	75	110	0.65	0.15	0.67	Open
Pipe 63	40	75	110	0.29	0.07	0.15	Open

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 64	84	50	110	0.10	0.05	0.14	Open
Pipe 65	278.5	75	110	0.12	0.03	0.03	Open
Pipe 66	510	75	110	0.36	0.08	0.22	Open
Pipe 67	78	75	110	0.10	0.02	0.02	Open
Pipe 68	128.5	50	110	0.26	0.13	0.88	Open
Pipe 69	226	50	110	0.13	0.07	0.24	Open
Pipe 70	214	50	110	0.13	0.07	0.24	Open
Pipe 71	625.3	100	110	0.37	0.05	0.06	Open
Pipe 72	187	50	110	0.10	0.05	0.14	Open
Pipe 73	189	100	110	0.28	0.04	0.03	Open
Pipe 74	176	50	110	0.10	0.05	0.14	Open
Pipe 75	260	100	110	0.18	0.02	0.02	Open
Pipe 76	124	75	110	0.09	0.02	0.02	Open
Pipe 77	34	75	110	0.09	0.02	0.02	Open
Pipe 49	349	75	110	0.85	0.19	1.10	Open
Pipe 78	115	75	110	0.63	0.14	0.63	Open
Pipe 79	730	75	110	0.60	0.13	0.57	Open
Pump 1	#N/A	#N/A	#N/A	5.40	0.00	-61.80	Open

C

Day 1, 12:00 AM

JARINGAN DISTRIBUSI PDAM KULON PROGO
KONDISI EKSISTING



MAP NO. NODE

Network Table - Links

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 2	6	50	110	1.06	0.54	11.90	Open
Pipe 3	156	50	110	1.06	0.54	11.90	Open
Pipe 4	23	75	110	3.73	0.84	16.97	Open
Pipe 5	260	50	110	1.05	0.53	11.69	Open
Pipe 6	245	75	110	2.68	0.61	9.20	Open
Pipe 7	150	50	110	1.32	0.67	17.98	Open
Pipe 8	125	50	110	1.36	0.69	18.76	Open
Pipe 9	150	50	110	1.02	0.52	10.99	Open
Pipe 10	125	50	110	0.98	0.50	10.38	Open
Pipe 11	100	50	110	0.98	0.50	10.29	Open
Pipe 12	3130	200	110	37.93	1.21	10.48	Open
Pipe 13	125	200	110	32.31	1.03	7.79	Open
Pipe 14	117	100	110	5.62	0.72	8.93	Open
Pipe 15	102	50	110	0.98	0.50	10.29	Open
Pipe 16	346	100	110	4.64	0.59	6.26	Open
Pipe 17	104	75	110	2.24	0.51	6.60	Open
Pipe 18	87	50	110	1.10	0.56	12.75	Open
Pipe 19	205	75	110	2.23	0.50	6.55	Open
Pipe 20	128	50	110	1.08	0.55	12.32	Open

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 21	545	200	110	31.96	1.02	7.63	Open
Pipe 22	9	150	110	17.46	0.99	10.11	Open
Pipe 23	4	150	110	8.36	0.47	2.59	Open
Pipe 24	15	75	110	3.59	0.81	15.83	Open
Pipe 25	30	50	110	1.02	0.52	11.08	Open
Pipe 26	50	75	110	2.57	0.58	8.53	Open
Pipe 27	155	75	110	2.41	0.55	7.57	Open
Pipe 28	137.5	50	110	0.98	0.50	10.29	Open
Pipe 29	122	50	110	1.43	0.73	20.78	Open
Pipe 30	175	50	110	1.20	0.61	15.02	Open
Pipe 31	112.5	50	110	0.83	0.42	7.61	Open
Pipe 32	112.4	50	110	1.00	0.51	10.78	Open
Pipe 33	127.4	50	110	0.80	0.40	6.99	Open
Pipe 34	96	50	110	0.98	0.50	10.29	Open
Pipe 35	252	150	110	14.50	0.82	7.17	Open
Pipe 36	4	75	110	4.27	0.97	21.80	Open
Pipe 37	126	50	110	1.01	0.51	10.88	Open
Pipe 38	286	75	110	3.26	0.74	13.23	Open
Pipe 39	65	75	110	2.24	0.51	6.60	Open
Pipe 40	113.4	50	110	1.02	0.52	11.08	Open
Pipe 41	346	50	110	1.01	0.51	10.88	Open

D

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 42	334	50	110	1.02	0.52	11.08	Open
Pipe 43	449	100	110	4.77	0.61	6.60	Open
Pipe 44	176	75	110	2.40	0.54	7.50	Open
Pipe 45	187	50	110	1.03	0.52	11.28	Open
Pipe 46	243	50	110	1.03	0.52	11.28	Open
Pipe 47	300.5	75	110	2.37	0.54	7.34	Open
Pipe 48	225	50	110	1.02	0.52	11.08	Open
Pipe 50	331	100	110	3.93	0.50	4.60	Open
Pipe 51	237	50	110	1.04	0.53	11.49	Open
Pipe 52	202.3	50	110	1.79	0.91	31.55	Open
Pipe 53	203	50	110	0.99	0.50	10.40	Open
Pipe 54	202.5	50	110	0.99	0.50	10.40	Open
Pipe 55	172	50	110	1.09	0.56	12.59	Open
Pipe 56	276	50	110	1.15	0.59	13.90	Open
Pipe 57	245	50	110	1.15	0.59	13.90	Open
Pipe 58	278	50	110	1.02	0.52	11.08	Open
Pipe 59	177.5	50	110	1.15	0.59	13.90	Open
Pipe 60	1470	150	110	10.23	0.58	3.76	Open
Pipe 61	412	50	110	1.01	0.51	10.88	Open
Pipe 62	124	100	110	5.00	0.64	7.19	Open
Pipe 63	40	75	110	1.98	0.45	5.25	Open

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 64	84	50	110	0.98	0.50	10.29	Open
Pipe 65	278.5	50	110	1.00	0.51	10.68	Open
Pipe 66	510	75	110	3.02	0.68	11.48	Open
Pipe 67	78	50	110	0.98	0.50	10.29	Open
Pipe 68	128.5	75	110	2.04	0.46	5.55	Open
Pipe 69	226	50	110	1.02	0.52	11.08	Open
Pipe 70	214	50	110	1.02	0.52	11.08	Open
Pipe 71	625.3	100	110	4.22	0.54	5.25	Open
Pipe 72	187	50	110	1.01	0.51	10.88	Open
Pipe 73	189	75	110	3.21	0.73	12.85	Open
Pipe 74	176	50	110	1.01	0.51	10.88	Open
Pipe 75	260	75	110	2.20	0.50	6.38	Open
Pipe 76	124	50	110	1.10	0.56	12.75	Open
Pipe 77	34	50	110	1.10	0.56	12.75	Open
Pipe 49	349	100	110	8.12	1.03	17.64	Open
Pipe 78	115	100	110	6.05	0.77	10.25	Open
Pipe 79	730	100	110	4.24	0.54	5.29	Open
Pump 1	#N/A	#N/A	#N/A	42.72	0.00	-61.98	Open

Network Table - Nodes

Node ID	Elevation m	Base Demand LPS	Demand LPS	Head m	Pressure m
Junc 2	67	0	0.00	142.98	75.98
Junc 3	67	0	0.00	142.90	75.90
Junc 4	66	1.06	1.06	141.05	75.05
Junc 5	66	0	0.00	142.58	76.58
Junc 6	64	1.05	1.05	139.54	75.54
Junc 7	64	0	0.00	140.33	76.33
Junc 8	63	0.34	0.34	137.63	74.63
Junc 9	63	0.34	0.34	137.99	74.99
Junc 10	62	1.02	1.02	136.34	74.34
Junc 11	61	0.98	0.98	135.31	74.31
Junc 12	69	0	0.00	110.18	41.18
Junc 13	69	0.35	0.35	109.20	40.20
Junc 14	69	0	0.00	109.13	40.13
Junc 15	70	0.98	0.98	108.08	38.08
Junc 16	68	0.17	0.17	106.96	38.96
Junc 17	68	1.14	1.14	106.28	38.28
Junc 18	69	1.1	1.10	105.17	36.17
Junc 19	66	1.15	1.15	105.62	39.62
Junc 20	65	1.08	1.08	104.04	39.04
Junc 21	70	0	0.00	105.04	35.04
Junc 22	70	0	0.00	104.95	34.95
Junc 23	70	0	0.00	104.94	34.94
Junc 24	70	0	0.00	104.70	34.70
Junc 25	70	1.02	1.02	104.37	34.37
Junc 26	71	0.16	0.16	104.28	33.28
Junc 27	69	0	0.00	103.10	34.10
Junc 28	70	0.23	0.23	100.57	30.57
Junc 29	69	0.98	0.98	101.69	32.69

D

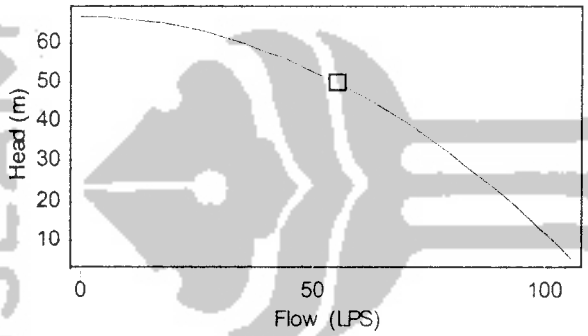
Node ID	Elevation m	Base Demand LPS	Demand LPS	Head m	Pressure m
Junc 61	76	1.01	1.01	93.23	17.23
Junc 62	76	0	0.00	96.82	20.82
Junc 63	76	0	0.00	96.61	20.61
Junc 64	77	0.98	0.98	95.75	18.75
Junc 65	77	1	1.00	93.64	16.64
Junc 66	74	0	0.00	90.97	16.97
Junc 67	73	0.98	0.98	90.16	17.16
Junc 68	75	0	0.00	90.25	15.25
Junc 69	77	1.02	1.02	87.75	10.75
Junc 70	76	1.02	1.02	87.88	11.88
Junc 71	79	0	0.00	94.43	15.43
Junc 72	78	1.01	1.01	92.39	14.39
Junc 73	77	0	0.00	92.00	15.00
Junc 74	76	1.01	1.01	90.08	14.08
Junc 75	78	0	0.00	90.34	12.34
Junc 76	79	1.1	1.10	88.76	9.76
Junc 77	77	1.1	1.10	89.91	12.91
Resvr 1	81	#N/A	-42.72	81.00	0.00

E

Curve 1

X-Values	Y-Values
55	50

Head = 66.67-0.00551(Flow)^2.00



INDONESIA ISLAM UNIVERSITAS

E

Network Table - Links

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 2	6	50	110	1.00	0.51	10.68	Open
Pipe 3	156	50	110	1.00	0.51	10.68	Open
Pipe 4	23	75	110	3.57	0.81	15.65	Open
Pipe 6	245	75	110	2.47	0.56	7.91	Open
Pipe 7	150	50	110	1.23	0.62	15.59	Open
Pipe 8	125	50	110	1.24	0.63	15.99	Open
Pipe 9	150	50	110	1.01	0.52	10.95	Open
Pipe 10	125	50	110	0.99	0.50	10.42	Open
Pipe 11	100	50	110	1.04	0.53	11.49	Open
Pipe 13	125	300	110	38.34	0.54	1.48	Open
Pipe 14	117	100	110	7.67	0.98	15.89	Open
Pipe 15	102	75	110	2.28	0.52	6.82	Open
Pipe 16	346	100	110	5.39	0.69	8.27	Open
Pipe 17	104	75	110	2.55	0.58	8.39	Open
Pipe 18	87	75	110	2.27	0.51	6.77	Open
Pipe 19	205	75	110	2.50	0.57	8.09	Open
Pipe 20	128	75	110	2.24	0.51	6.60	Open
Pipe 21	545	250	110	37.63	0.77	3.48	Open
Pipe 22	9	200	110	17.51	0.56	2.50	Open

E

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 23	4	150	110	9.83	0.56	3.49	Open
Pipe 24	15	75	110	3.63	0.82	16.16	Open
Pipe 25	30	50	110	1.02	0.52	11.08	Open
Pipe 26	50	75	110	2.38	0.54	7.40	Open
Pipe 27	155	75	110	2.22	0.50	6.51	Open
Pipe 28	88	50	110	1.01	0.51	10.88	Open
Pipe 29	122	50	110	1.21	0.62	15.28	Open
Pipe 30	175	50	110	1.03	0.53	11.35	Open
Pipe 31	112.5	50	110	1.00	0.51	10.74	Open
Pipe 32	112.4	50	110	1.04	0.53	11.41	Open
Pipe 33	127.4	50	110	1.04	0.53	11.41	Open
Pipe 34	96	50	110	1.01	0.51	10.88	Open
Pipe 35	252	200	110	20.12	0.64	3.24	Open
Pipe 36	4	75	110	4.28	0.97	21.90	Open
Pipe 37	126	50	110	1.01	0.51	10.88	Open
Pipe 38	286	75	110	3.27	0.74	13.30	Open
Pipe 39	65	75	110	2.28	0.52	6.82	Open
Pipe 40	113.4	50	110	1.03	0.52	11.28	Open
Pipe 41	186	50	110	1.01	0.51	10.88	Open
Pipe 42	334	50	110	0.99	0.50	10.49	Open
Pipe 44	176	75	110	2.28	0.52	6.82	Open

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Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 45	187	50	110	0.99	0.50	10.49	Open
Pipe 46	243	50	110	0.98	0.50	10.29	Open
Pipe 47	300.5	75	110	3.30	0.75	13.53	Open
Pipe 48	225	50	110	0.99	0.50	10.49	Open
Pipe 50	331	100	110	5.17	0.66	7.65	Open
Pipe 51	183	50	110	1.03	0.52	11.28	Open
Pipe 52	202.3	50	110	1.70	0.87	28.64	Open
Pipe 53	203	50	110	1.02	0.52	11.02	Open
Pipe 55	172	75	110	2.44	0.55	7.71	Open
Pipe 56	276	50	110	1.07	0.55	12.12	Open
Pipe 57	245	50	110	1.07	0.55	12.12	Open
Pipe 58	278	50	110	1.02	0.52	11.08	Open
Pipe 61	412	75	110	2.67	0.60	9.14	Open
Pipe 62	124	100	110	6.81	0.87	12.75	Open
Pipe 63	40	75	110	2.43	0.55	7.68	Open
Pipe 64	84	50	110	1.00	0.51	10.68	Open
Pipe 65	278.5	50	110	1.01	0.51	10.88	Open
Pipe 66	510	100	110	3.96	0.50	4.67	Open
Pipe 67	78	50	110	1.14	0.58	13.62	Open
Pipe 68	128.5	75	110	2.82	0.64	10.11	Open
69	226	50	110	1.15	0.59	13.84	Open

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 70	214	50	110	1.14	0.58	13.62	Open
Pipe 71	625.3	100	110	4.65	0.59	6.29	Open
Pipe 72	187	50	110	1.01	0.51	10.88	Open
Pipe 73	189	75	110	3.46	0.78	14.77	Open
Pipe 74	176	50	110	1.01	0.51	10.88	Open
Pipe 75	260	75	110	2.31	0.52	6.99	Open
Pipe 76	124	50	110	1.02	0.52	11.08	Open
Pipe 77	34	50	110	1.03	0.52	11.28	Open
Pipe 12	425	300	110	50.15	0.71	2.44	Open
Pipe 78	231	50	110	1.35	0.69	18.62	Open
Pipe 79	283	50	110	1.00	0.51	10.68	Open
Pipe 80	16	75	110	2.35	0.53	7.21	Open
Pipe 5	134	50	110	1.10	0.56	12.75	Open
Pipe 81	126	50	110	0.98	0.50	10.29	Open
Pipe 43	134	100	110	6.20	0.79	10.71	Open
Pipe 43a	315	100	110	5.99	0.76	10.05	Open
Pipe 54	202.5	50	110	1.02	0.52	11.02	Open
Pipe 59	177.5	50	110	1.38	0.70	19.42	Open
Pipe 13a	1463	300	110	48.80	0.69	2.32	Open
Pipe 13b	814	300	110	47.55	0.67	2.21	Open
Pipe 13c	428	300	110	46.35	0.66	2.11	Open

Link ID	Length m	Diameter mm	Roughness	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
Pipe 82	143	50	110	1.25	0.64	16.15	Open
Pipe 83	229	50	110	1.00	0.51	10.68	Open
Pipe 84	148	50	110	1.20	0.61	14.97	Open
Pipe 85	412	50	110	0.99	0.50	10.49	Open
Pipe 49	349	100	110	6.67	0.85	12.25	Open
Pipe 49a	115	75	110	5.45	1.23	34.30	Open
Pipe 49b	730	100	110	5.55	0.71	8.72	Open
Pipe 87	302.5	50	110	1.01	0.51	10.88	Open
Pipe 88	86	50	110	1.02	0.52	11.08	Open
Pipe 60	1130	200	110	15.84	0.50	2.08	Open
Pipe 60a	340	150	110	14.13	0.80	6.83	Open
Pipe 60b	323	50	110	1.12	0.57	13.18	Open
Pump 1	#N/A	#N/A	#N/A	54.72	0.00	-50.17	Open

E

Network Table - Nodes

Node ID	Elevation m	Base Demand LPS	Demand LPS	Head m	Pressure m
Junc 2	67	0	0.00	131.17	64.17
Junc 3	67	0	0.00	131.11	64.11
Junc 4	66	1.0	1.00	129.44	63.44
Junc 5	66	0	0.00	130.81	64.81
Junc 6	64	0.98	0.98	127.80	63.80
Junc 7	64	0	0.00	128.87	64.87
Junc 8	63	0.24	0.24	126.53	63.53
Junc 9	63	0.23	0.23	126.87	63.87
Junc 10	62	0.96	0.96	125.23	63.23
Junc 11	61	1.04	1.04	124.08	63.08
Junc 12	69	0.34	0.34	124.04	55.04
Junc 13	69	0.71	0.71	123.85	54.85
Junc 14	69	0	0.00	122.18	53.18
Junc 15	70	2.28	2.28	121.48	51.48
Junc 16	68	0.34	0.34	119.32	51.32
Junc 17	68	0.28	0.28	118.45	50.45
Junc 18	69	2.27	2.27	117.86	48.86
Junc 19	66	0.26	0.26	117.66	51.66
Junc 20	65	2.24	2.24	116.82	51.82
Junc 21	70	0	0.00	121.96	51.96
Junc 22	70	0	0.00	121.93	51.93
Junc 23	70	0	0.00	121.92	51.92
Junc 24	70	0.23	0.23	121.68	51.68
Junc 25	70	1.02	1.02	121.34	51.34
Junc 26	71	0.16	0.16	121.31	50.31
Junc 27	69	0	0.00	120.30	51.30
Junc 28	70	0.18	0.18	118.43	48.43
Junc 29	69	1.01	1.01	119.34	50.34

E

Node ID	Elevation m	Base Demand LPS	Demand LPS	Head m	Pressure m
Junc 30	70	1.0	1.00	116.45	46.45
Junc 31	69	0.21	0.21	117.66	48.66
Junc 32	69	0	0.00	115.17	46.17
Junc 33	69	0.94	0.94	113.71	44.71
Junc 34	69	1.01	1.01	120.89	51.89
Junc 35	71	0	0.00	121.14	50.14
Junc 36	71	0	0.00	121.05	50.05
Junc 37	69	1.01	1.01	119.68	50.68
Junc 38	69	0	0.00	117.25	48.25
Junc 39	70	0.24	0.24	116.80	46.80
Junc 40	71	1.03	1.03	115.52	44.52
Junc 41	72	1.01	1.01	114.78	42.78
Junc 42	72	0.99	0.99	113.75	41.75
Junc 43	78	0.41	0.41	117.32	39.32
Junc 44	76	0.31	0.31	116.12	40.12
Junc 46	75	0.99	0.99	114.16	39.16
Junc 47	73	0.98	0.98	113.62	40.62
Junc 48	78	0.93	0.93	113.25	35.25
Junc 49	76	0.99	0.99	110.89	34.89
Junc 50	73	0.38	0.38	107.35	34.35
Junc 51	76	1.03	1.03	102.75	26.75
Junc 53	76	0	0.00	104.81	28.81
Junc 54	75	2.72	2.72	99.02	24.02
Junc 55	76	0	0.00	101.26	25.26
Junc 56	77	1.47	1.47	103.49	26.49
Junc 57	78	0	0.00	106.83	28.83
Junc 58	78	0.31	0.31	109.80	31.80
Junc 59	76	1.02	1.02	100.41	24.41
Junc 60	76	0	0.00	116.47	40.47

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Node ID	Elevation m	Base Demand LPS	Demand LPS	Head m	Pressure m
Junc 61	76	0.32	0.32	112.70	36.70
Junc 62	76	0.42	0.42	114.89	38.89
Junc 63	76	0.42	0.42	114.58	38.58
Junc 64	77	1	1.00	113.68	36.68
Junc 65	77	1.01	1.01	111.55	34.55
Junc 66	74	0	0.00	112.50	38.50
Junc 67	73	1.14	1.14	111.44	38.44
Junc 68	75	0.53	0.53	111.20	36.20
Junc 69	77	1.15	1.15	108.08	31.08
Junc 70	76	1.14	1.14	108.29	32.29
Junc 71	79	0.18	0.18	112.53	33.53
Junc 72	78	1.01	1.01	110.50	32.50
Junc 73	77	0.14	0.14	109.74	32.74
Junc 74	76	1.01	1.01	107.83	31.83
Junc 75	78	0.26	0.26	107.93	29.93
Junc 76	79	1.02	1.02	106.55	27.55
Junc 77	77	1.03	1.03	107.54	30.54
Junc 45	66	0	0.00	130.13	64.13
Junc 52	67	0.35	0.35	125.83	58.83
Junc 78	66	1	1.00	122.81	56.81
Junc 79	77	0.32	0.32	112.59	35.59
Junc 80	65	0.12	0.12	129.10	64.10
Junc 81	72	0.21	0.21	120.48	48.48
Junc 82	67	0	0.00	126.74	59.74
Junc 83	67.5	0	0.00	124.94	57.44
Junc 84	66	0.25	0.25	124.43	58.43
Junc 85	64	1	1.00	121.98	57.98
Junc 86	67	0.21	0.21	122.73	55.73
Junc 87	65	0.99	0.99	118.40	53.40

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Node ID	Elevation m	Base Demand LPS	Demand LPS	Head m	Pressure m
Junc 88	79	1.01	1.01	109.29	30.29
Junc 89	77.5	1.02	1.02	111.63	34.13
Junc 90	73	0.59	0.59	118.79	45.79
Junc 91	75	1.12	1.12	114.53	39.53
Resvr 1	81	#N/A	-54.72	81.00	0.00

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