

PEAK DEMAND (ADF x 4)

RESULTS OBTAINED AFTER 6 TRIALS: ACCURACY = 0.00000

S I M U L A T I O N D E S C R I P T I O N ( L A B E L )

P I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

P I P E N A M E	N O D E N U M B E R S #1 #2	F L O W R A T E (gpm)	H E A D L O S S (ft)	M I N O R L O S S (ft)	L I N E V E L O . (ft/s)	H L + M L / 1000 (ft/ft)	H L / 1000 (ft/ft)
P-1	FGN1 10	561.34	0.23	0.00	1.59	0.77	0.77
P-2	15 20	-530.80	2.09	0.13	2.17	1.78	1.67
P-3	20 30	-323.70	3.33	0.20	2.07	2.11	1.99
P-4	30 40	-527.90	3.32	0.08	2.16	1.70	1.66
P-5	40 50	1343.69	18.67	1.17	3.81	4.09	3.85
P-6	50 60	395.34	2.57	0.07	1.61	1.00	0.97
P-7	60 70	-25.10	0.02	0.00	0.10	0.01	0.01
P-8	70 80	489.23	5.51	0.18	2.00	1.49	1.44
P-9	80 90	288.07	2.27	0.10	1.18	0.57	0.54
P-10	90 100	140.93	0.52	0.02	0.58	0.15	0.14
P-11	100 110	203.05	0.97	0.04	0.83	0.29	0.28
P-12	110 120	198.22	1.35	0.07	0.81	0.28	0.27
P-13	120 125	-789.62	1.55	0.08	2.24	1.52	1.44
P-14	20 140	258.83	0.26	0.02	0.73	0.20	0.18
P-15	140 150	140.35	0.19	0.01	0.57	0.15	0.14
P-16	150 160	-69.85	0.10	0.00	0.29	0.04	0.04
P-17	60 170	369.69	7.05	0.28	2.36	2.64	2.54
P-18	180 185	-390.31	1.33	0.05	2.49	2.92	2.81
P-19	120 190	309.52	0.63	0.02	1.26	0.63	0.62
P-20	185 190	318.40	5.78	0.15	2.03	1.98	1.93
P-21	90 170	-124.86	0.69	0.03	0.80	0.35	0.34
P-22	20 40	-661.33	6.54	0.38	2.70	2.66	2.52
P-23	170 175	37.14	0.10	0.00	0.24	0.04	0.04
P-24	100 175	-202.28	1.10	0.05	1.29	0.87	0.83
P-25	175 180	-165.13	0.30	0.01	1.05	0.59	0.57
P-26	110 180	-154.93	2.38	0.09	0.99	0.53	0.51
P-27	160 165	-150.85	1.32	0.03	0.96	0.49	0.48
P-28	50 185	708.71	8.01	0.36	2.89	2.99	2.86
P-29	10 130	1080.06	19.70	0.43	3.06	2.64	2.58
P-30	130 offsite	264.00	1.99	0.08	1.68	1.43	1.37
P-31	R-1 40	2577.08	0.79	0.48	4.11	5.10	3.17
P-32	30 165	150.85	2.50	0.05	0.96	0.49	0.48
P-33-XX	70 165						
P-34-XX	50 30						
P-35	FGN2 70	717.74	11.57	0.17	2.04	1.22	1.20
P-36	10 15	-530.80	1.09	0.21	2.17	2.00	1.67
P-37	125 130	-789.62	1.04	0.23	2.24	1.75	1.44

PEAK DEMAND (ADF x 4)

N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	HYDRAULIC GRADE (ft)	NODE ELEVATION (ft)	PRESSURE HEAD (ft)	NODE PRESSURE (psi)
10		12.08	138.27	26.00	112.27	48.65
15		0.00	139.57	6.00	133.57	57.88
20		195.40	141.80	26.00	115.80	50.18
30		53.36	145.33	26.00	119.33	51.71
40		44.16	148.73	26.00	122.73	53.18
50		239.64	128.89	26.00	102.89	44.59
60		50.76	126.25	26.00	100.25	43.44
70		203.40	126.27	26.00	100.27	43.45
80		201.16	120.58	26.00	94.58	40.98
90		272.00	118.21	26.00	92.21	39.96
100		140.16	117.67	26.00	91.67	39.72
110		159.76	116.66	26.00	90.66	39.29
120		678.32	115.24	26.00	89.24	38.67
125		0.00	116.87	6.00	110.87	48.04
130		26.44	118.14	26.00	92.14	39.93
140		118.48	141.52	26.00	115.52	50.06
150		210.20	141.33	26.00	115.33	49.98
160		81.00	141.43	26.00	115.43	50.02
165		0.00	142.78	26.00	116.78	50.61
170		207.68	118.92	26.00	92.92	40.27
175		0.00	118.83	26.00	92.83	40.22
180		70.24	119.14	26.00	93.14	40.36
185		0.00	120.52	26.00	94.52	40.96
190		627.92	114.59	26.00	88.59	38.39
FGN1		----	138.50	30.00	108.50	47.02
FGN2		----	138.00	30.00	108.00	46.80
offsite		264.00	116.08	26.00	90.08	39.03
R-1		----	150.00	30.00	120.00	52.00

M A X I M U M A N D M I N I M U M V A L U E S

P R E S S U R E S

JUNCTION NUMBER	MAXIMUM PRESSURES (psi)	JUNCTION NUMBER	MINIMUM PRESSURES (psi)
15	57.88	190	38.39
40	53.18	120	38.67
R-1	52.00	offsite	39.03
30	51.71	110	39.29
165	50.61	100	39.72

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
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PEAK DEMAND (ADF x 4)

P-31	4.11	P-7	0.10
P-5	3.81	P-23	0.24
P-29	3.06	P-16	0.29
P-28	2.89	P-15	0.57
P-22	2.70	P-10	0.58

H L + M L / 1 0 0 0

PIPE NUMBER	MAXIMUM HL+ML/1000 (ft/ft)	PIPE NUMBER	MINIMUM HL+ML/1000 (ft/ft)
P-31	5.10	P-7	0.01
P-5	4.09	P-23	0.04
P-28	2.99	P-16	0.04
P-18	2.92	P-15	0.15
P-22	2.66	P-10	0.15

H L / 1 0 0 0

PIPE NUMBER	MAXIMUM HL/1000 (ft/ft)	PIPE NUMBER	MINIMUM HL/1000 (ft/ft)
P-5	3.85	P-7	0.01
P-31	3.17	P-23	0.04
P-28	2.86	P-16	0.04
P-18	2.81	P-15	0.14
P-29	2.58	P-10	0.14

S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES

(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE (gpm)	NODE TITLE
FGN1	561.34	
FGN2	717.74	
R-1	2577.08	

NET SYSTEM INFLOW = 3856.16  
 NET SYSTEM OUTFLOW = 0.00  
 NET SYSTEM DEMAND = 3856.16