

ONLY PUMP 010 ON

CHANGES FOR NEXT SIMULATION (Change Number = 1)

Pipe ~@Pump-020 is CLOSED
 Pipe ~@Pump-030 is CLOSED

RESULTS OBTAINED AFTER 5 TRIALS: ACCURACY = 0.00000

PIPELINE RESULTS

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE #1	NODE #2	FLOWRATE (gpm)	HEAD LOSS (ft)	MINOR LOSS (ft)	LINE VELO. (ft/s)	HL+ML/1000 (ft/ft)	HL/1000 (ft/ft)
FM-010	O-Pump-010	N-011	581.08	0.39	1.32	3.71	34.19	7.75
FM-011	N-011	N-012	581.08	2.35	0.25	2.37	2.49	2.25
FM-012	N-012	N-013	581.08	0.31	0.03	0.93	0.25	0.23
FM-013	N-013	N-014	581.08	0.20	0.02	0.93	0.25	0.23
FM-014	N-014	FGN-1	581.08	0.46	0.05	0.93	0.25	0.23
FM-020	O-Pump-020	N-021	0.00	0.00	0.00	0.00	0.00	0.00
FM-021	N-021	N-022	0.00	0.00	0.00	0.00	0.00	0.00
FM-022	N-022	N-012	0.00	0.00	0.00	0.00	0.00	0.00
FM-030	O-Pump-030	N-031	0.00	0.00	0.00	0.00	0.00	0.00
FM-031	N-031	N-022	0.00	0.00	0.00	0.00	0.00	0.00

PUMP/LOSS ELEMENT RESULTS

NAME	FLOWRATE (gpm)	INLET HEAD (ft)	OUTLET HEAD (ft)	PUMP HEAD (ft)	EFFIC-ENCY (%)	USEFUL POWER (Hp)	INCREMENTAL COST (\$)	TOTAL COST (\$)	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. (ft)
Pump-010	581.08	3.00	84.53	81.5	75.00	0.	0.0	0.0	**	**	36.2
Device "Pump-020" is closed											
Pump-020	0.00	3.00	80.23	0.0	75.00	0.	0.0	0.0	**	**	36.2
Device "Pump-030" is closed											
Pump-030	0.00	3.00	80.23	0.0	75.00	0.	0.0	0.0	**	**	36.2

NODE RESULTS

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	HYDRAULIC GRADE (ft)	NODE ELEVATION (ft)	PRESSURE HEAD (ft)	NODE PRESSURE (psi)
FGN-1		----	87.15	26.00	61.15	26.50
N-011		0.00	90.82	26.00	64.82	28.09
N-012		0.00	88.23	26.00	62.23	26.96
N-013		0.00	87.88	6.00	81.88	35.48
N-014		0.00	87.66	26.00	61.66	26.72
N-021		0.00	88.23	26.00	62.23	26.96
N-022		0.00	88.23	26.00	62.23	26.96
N-031		0.00	88.23	26.00	62.23	26.96
O-Pump-010		----	92.53	8.00	84.53	36.63
O-Pump-020		----	88.23	8.00	80.23	34.76
O-Pump-030		----	88.23	8.00	80.23	34.76

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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)
O-Pump-010	36.63	FGN-1	26.50
N-013	35.48	N-014	26.72
O-Pump-020	34.76	N-012	26.96
O-Pump-030	34.76	N-021	26.96
N-011	28.09	N-022	26.96

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
FM-010	3.71	FM-012	0.93
FM-011	2.37	FM-013	0.93
FM-014	0.93	FM-014	0.93

H L + M L / 1 0 0 0

PIPE NUMBER	MAXIMUM HL+ML/1000 (ft/ft)	PIPE NUMBER	MINIMUM HL+ML/1000 (ft/ft)
FM-010	34.19	FM-012	0.25
FM-011	2.49	FM-013	0.25
FM-014	0.25	FM-014	0.25

H L / 1 0 0 0

PIPE NUMBER	MAXIMUM HL/1000 (ft/ft)	PIPE NUMBER	MINIMUM HL/1000 (ft/ft)
FM-010	7.75	FM-013	0.23
FM-011	2.25	FM-012	0.23
FM-014	0.23	FM-014	0.23

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
FGN-1	-581.08	
Pump-010	581.08	
NET SYSTEM INFLOW	= 581.08	
NET SYSTEM OUTFLOW	= -581.08	
NET SYSTEM DEMAND	= 0.00	