C H A N G E S F O R N E X T S I M U L A T I O N (Change Number = 3)

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

RESULTS OBTAINED AFTER 5 TRIALS: ACCURACY = 0.00000

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

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#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	0.00	0.00	0.00	0.00	0.00	0.00
FM-011	N-011	N-012	0.00	0.00	0.00	0.00	0.00	0.00
FM-012	N-012	N-013	799.34	0.56	0.06	1.28	0.46	0.41
FM-013	N-013	N-014	799.34	0.36	0.04	1.28	0.46	0.41
FM-014	N-014	FGN-1	799.34	0.83	0.10	1.28	0.46	0.41
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	799.34	3.00	0.11	1.28	0.43	0.41
FM-030	O-Pump-030	N-031	799.34	0.70	2.50	5.10	64.02	13.99
FM-031	N-031	N-022	799.34	4.90	0.32	3.27	4.34	4.07

P U M P/L O S S E L E M E N T R E S U L T S

NAME	FLOWRATE (gpm)	INLET HEAD (ft)	OUTLET HEAD (ft)	PUMP HEAD (ft)	EFFIC- ENCY (%)	USEFUL POWER (Hp)	INCREMTL COST ($)	TOTAL COST ($)	#PUMPS PARALLEL	#PUMPS SERIES	NPSH Avail. (ft)
Device "Pump-010" is closed											
Pump-010	0.00	3.00	81.10	0.0	75.00	0.	0.0	0.0	**	**	36.2
Device "Pump-020" is closed											
Pump-020	0.00	3.00	84.21	0.0	75.00	0.	0.0	0.0	**	**	36.2
Pump-030	799.34	3.00	92.64	89.6	75.00	0.	0.0	0.0	**	**	36.2

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)
FGN-1		----	87.15	26.00	61.15	26.50
N-011		0.00	89.10	26.00	63.10	27.34
N-012		0.00	89.10	26.00	63.10	27.34
N-013		0.00	88.47	6.00	82.47	35.74
N-014		0.00	88.08	26.00	62.08	26.90
N-021		0.00	92.21	26.00	66.21	28.69
N-022		0.00	92.21	26.00	66.21	28.69
N-031		0.00	97.44	26.00	71.44	30.96
O-Pump-010		----	89.10	8.00	81.10	35.14
O-Pump-020		----	92.21	8.00	84.21	36.49
O-Pump-030		----	100.64	8.00	92.64	40.14

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-030	40.14	FGN-1	26.50
O-Pump-020	36.49	N-014	26.90
N-013	35.74	N-011	27.34
O-Pump-010	35.14	N-012	27.34
N-031	30.96	N-021	28.69

V E L O C I T I E S

PIPE NUMBER	MAXIMUM VELOCITY (ft/s)	PIPE NUMBER	MINIMUM VELOCITY (ft/s)
FM-030	5.10	FM-012	1.28
FM-031	3.27	FM-013	1.28
FM-014	1.28	FM-014	1.28
FM-022	1.28	FM-022	1.28

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-030	64.02	FM-022	0.43
FM-031	4.34	FM-012	0.46
FM-014	0.46	FM-013	0.46

H L / 1 0 0 0

PIPE NUMBER	MAXIMUM HL/1000 (ft/ft)	PIPE NUMBER	MINIMUM HL/1000 (ft/ft)
FM-030	13.99	FM-012	0.41
FM-031	4.07	FM-022	0.41
FM-013	0.41	FM-013	0.41
FM-014	0.41	FM-014	0.41

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	-799.34	
Pump-030	799.34	

NET SYSTEM INFLOW =   799.34
NET SYSTEM OUTFLOW =   -799.34
NET SYSTEM DEMAND =   0.00

***** HYDRAULIC ANALYSIS COMPLETED *****