

committente

COMUNE DI CHAMPDEPRAZ

Loc. Capoluogo 164, CHAMPDEPRAZ (AO)

località / oggetto

REGIONE VALLE D'AOSTA

Comuni di Champdepraz - Issogne - Verres - Arnad (AO)

Lavori di potenziamento della rete idrica di Champdepraz al fine del suo collegamento con l'acquedotto comunale di Arnad, con attraversamento del comune di Issogne

servizio

Progetto esecutivo

elaborato / scala

Relazione di calcolo idraulica

codice elaborato

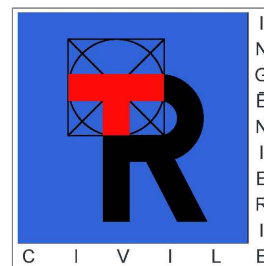
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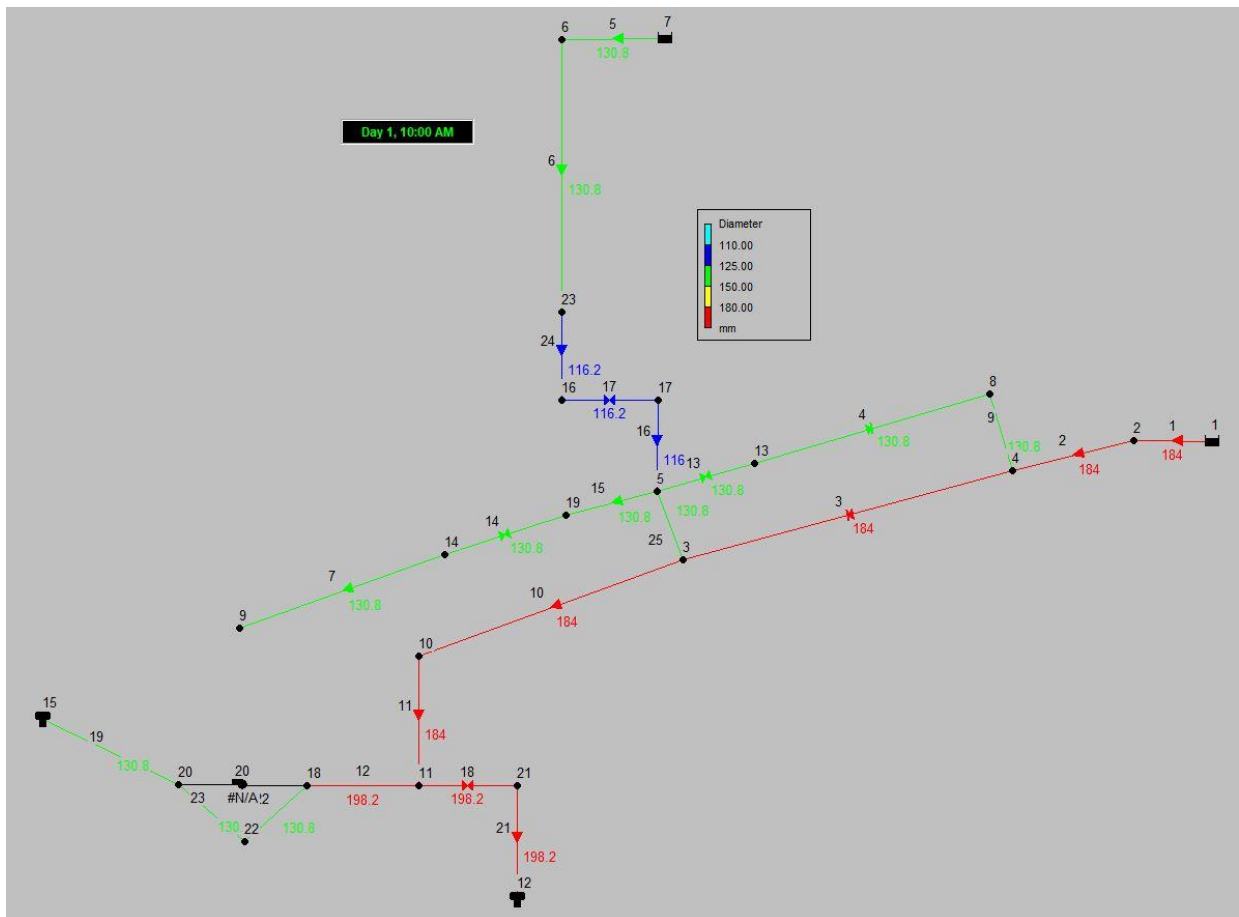
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Relazione di Calcolo – Opere Idrauliche

1 Definizione del modello di calcolo

La presente relazione di calcolo è redatta con l'ausilio del software specialistico "EPA-Net 2.0" secondo i principi dell'idraulica e schematizzando, ai fini della definizione del modello di calcolo, le effettive condizioni di progetto (o esistenti laddove necessario).

Le verifiche sono effettuate con riferimento alla "PARTE BASSA" degli interventi, ovvero interessano la dorsale principale (che collega la vasca di Farbique con le reti di Issogne ed Arnad), il nodo di connessione con la nuova condotta di distribuzione proveniente da Sommet de Ville di Issogne ed, infine, il tratto di connessione con la rete esistente di Arnad per il carico del serbatoio di Clos de Barne e da questo, per il tramite di una pompa di sollevamento, fino all'accumulo di Ville (loc. Castello) attraverso condotte già in esercizio.



Schema della rete: su scala cromatica i diametri interni

Il software EPA-Net simula il comportamento idraulico all'interno di un sistema di distribuzione d'acqua (rete); esso è in grado di dare informazioni sulla portata d'acqua in ogni tubo, sulla pressione in ogni punto di intersezione fra più tubi (nodo) nonché sul livello raggiunto dall'acqua in ogni serbatoio (oltre a numerosi altri output). Operativamente il software permette di strutturare un file in ingresso che descrive la rete idrica, di effettuare simulazioni sul flusso in questa rete, di osservare il comportamento del sistema nel tempo e di riassumere i risultati ottenuti su tabelle e/o grafici. La rete idrica in ambiente EPA-Net è composta da archi (LINKS), connessi tra di loro tramite nodi (NODES): gli archi possono essere di tre tipologie (tubi, pompe

e valvole), i nodi possono rappresentare punti di consumo/prelievo (nodi di domanda), di immissione (nodi sorgente) o di conservazione (nodi di deposito) dell'acqua.

Le verifiche sono state effettuate analizzando le modalità di funzionamento, tra quelle previste a progetto, ritenute significative ai fini del dimensionamento della rete e delle principali valvole di regolazione; in particolare, con riferimento alle otto modalità di funzionamento illustrate nella "Relazione Generale", sono state effettuate verifiche per le quattro modalità significative ai fini del dimensionamento idraulico (Mod. n°1, n°3, n°5 e n°7). Le verifiche sono state effettuate sia in condizione di tubi nuovi che di tubi usati, rilevando che i valori di calcolo ottenuti in entrambi i casi fossero compatibili con la funzionalità cui è destinata l'opera. Tali valutazioni hanno consentito di prevedere i dispositivi di regolazione utili a garantire la corretta fruibilità delle opere nell'immediato ed in futuro. Le principali regolazioni inserite nel modello sono rinvenibili nei tabulati di calcolo (valvole e controlli) e corrispondono, sotto il profilo funzionale, a quanto previsto e meglio dettagliato negli elaborati di progetto; le condotte impiegate per le verifiche sono in PE ed i diametri interni di calcolo sono riportati nei tabulati.

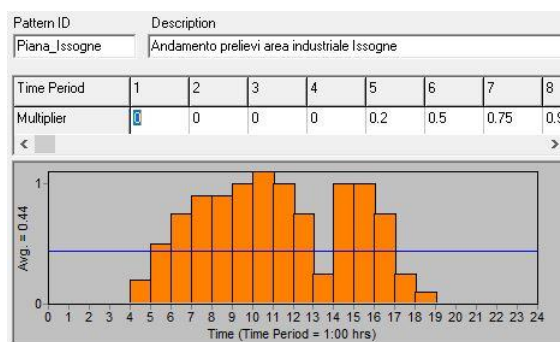
La rete è puntualmente definita in termini geometrici/spaziali tramite l'imputazione delle lunghezze delle condotte e della quota dei nodi; altresì le caratteristiche delle condotte sono definite per mezzo dell'imputazione del coefficiente di scabrezza. Lo sviluppo delle condotte, rapportato al diametro delle stesse, fa sì che la fattispecie di verifica rientri nell'ambito delle lunghe condotte ($L \gg 1000D$), possono così ritenersi trascurabili le perdite di carico concentrate. Per i tratti maggiormente articolati (in prossimità dei nodi principali), tuttavia, si sono comunque adottati valori dei coefficienti di scabrezza maggiormente cautelativi.

Ai fini di una più agevole comprensione dello schema di calcolo riportato in figura, si evidenziano le seguenti corrispondenze:

- nodo 1 serbatoio di Fabrique (Champdepraz);
- nodo 7 serbatoio di Sommet de Ville (Issogne);
- nodo 12 serbatoio di Clos de Barme (Arnad);
- nodo 15 serbatoio di Ville – loc. Castello (Arnad);
- nodo 5 camera di manovra di Garines (Issogne);
- nodi 18-20 by-pass e sollevamento Clos de Barme (Arnad).

La valutazione dei prelievi dalla rete di Issogne, corrispondenti alle utenze servite dall'acquedotto comunale, è illustrata nella "Relazione Generale" ed è quantificata secondo parametri di dotazione idrica giornaliera reperiti in letteratura, adeguatamente incrementati da coefficienti di picco orario e giornaliero.

Per quanto riguarda la distribuzione nella parte bassa del Comune di Issogne, l'andamento della domanda idrica nell'arco delle 24 ore è stato ipotizzato facendo riferimento ad una funzione di domanda per consumo produttivo, opportunamente scalata alla realtà locale. L'andamento nel tempo del moltiplicatore della portata di base, calcolata in funzione della dotazione idrica di riferimento (rif. "Relazione Generale"), è illustrato nell'immagine seguente:



Prelievi ad Issogne: moltiplicatore della domanda di base (Max=1,1@10h00; min=0,1@18h00)

Non dovendo procedere al dimensionamento di volumi d'accumulo, l'analisi nell'arco delle 24 ore è finalizzata a valutare l'andamento dei diversi parametri della rete al variare della domanda; è altresì possibile verificare l'incidenza delle variazioni rispetto alle portate addotte dalla dorsale principale ai serbatoi di Arnad (ipotizzate permanenti nell'arco della giornata).

Il nuovo sistema acquedottistico intercomunale potrà consentire, mediante manovre automatiche da remoto ed, in caso di manutenzione, mediante manovre manuali, l'approvvigionamento idrico delle reti di distribuzione, ottimizzando le risorse idriche disponibili secondo 8 (otto) possibili configurazioni.

Le otto diverse modalità di funzionamento sono sintetizzate nella seguente tabella dove è riportato lo stato delle valvole e delle pompe di sollevamento; la nomenclatura dei componenti è coerente con la simbologia degli elaborati grafici di progetto.

TABELLA MODALITA' DI FUNZIONAMENTO

Posizione/Funzione	Componente Valvola/Pompa	MODALITA'							
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>
tra Issogne ed intercomunale	V1	0	0	0	I	I	I	I	I
da Issogne alta	V2	I	I	I	I	I	0	0	0
carico Arnad bassa	Va	0	I	0	0	I	I	0	0
carico/scar. Arnad alta	Vb	0	0	I	0	0	I	0	I
carico Arnad alta	P1	0	0	I	0	0	0	0	I

Condizione valvole: I = aperta; 0 = chiusa;
 Condizione pompa: I = accesa; 0 = spenta.

Per le modalità significative ai fini del dimensionamento/verifica della rete, è stata effettuata la verifica idraulica con l'ausilio del software EPA-Net; le modalità considerate sono la n°1, n°3, n°5 e n°7.

2 Valutazione delle perdite di carico

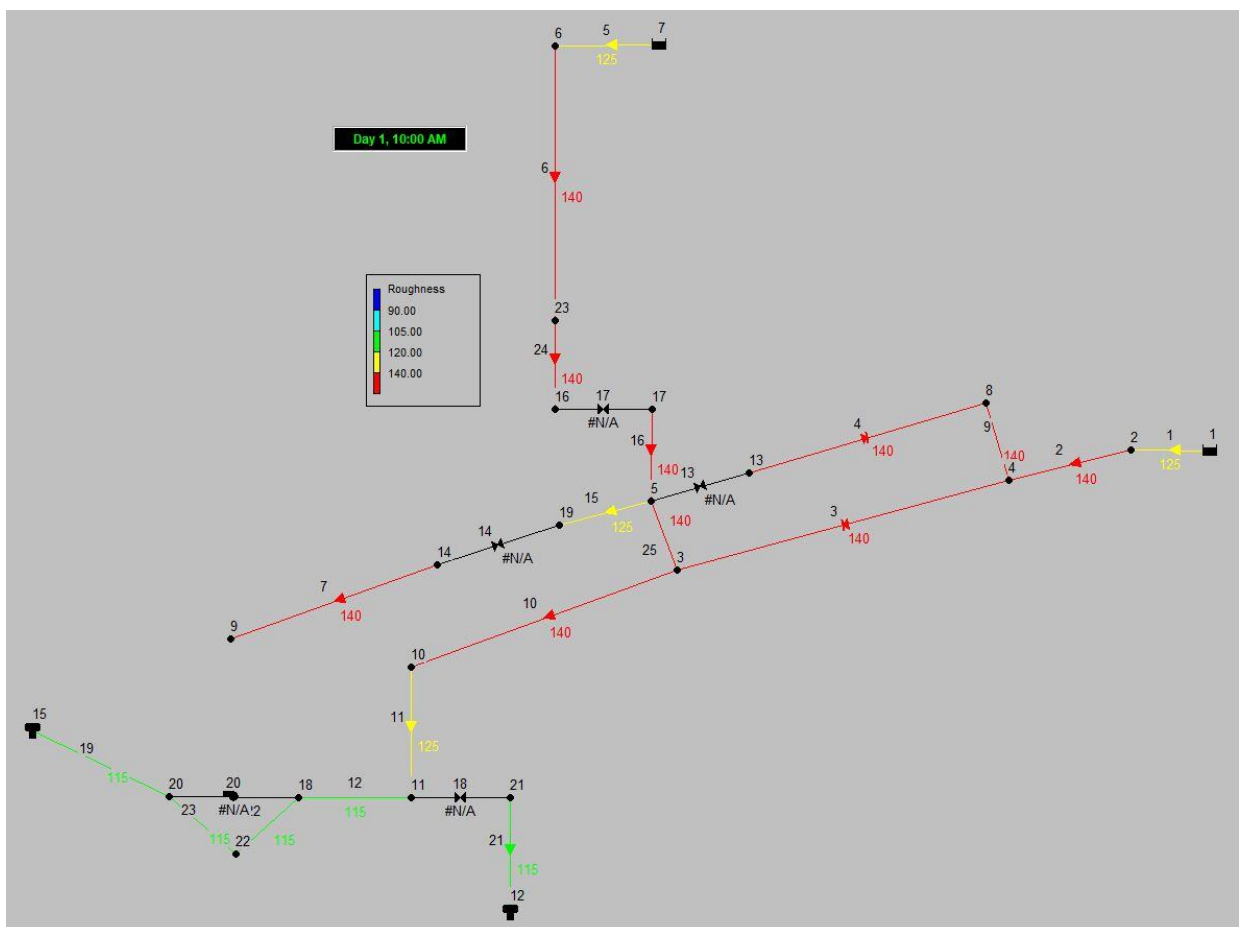
Nel modello di calcolo, la quantificazione delle perdite di carico avviene con l'impiego della relazione di Hazen-Williams, di seguito riportata:

$$\Delta = J \cdot L = \frac{10.675 \cdot Q^{1.852}}{C^{1.852} \cdot D^{4.8704}} \cdot L$$

dove:

L	rappresenta lo sviluppo della condotta	[m]
Δ	rappresenta il dislivello piezometrico	[m]
Q	rappresenta la portata liquida	[m ³ /s]
C	è il coefficiente di scabrezza di H-W	[-]
D	è il diametro di calcolo della condotta	[m]

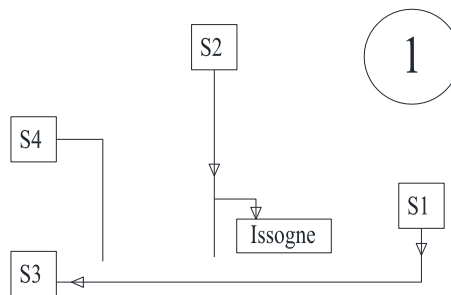
Per le verifiche effettuate a tubi nuovi, il coefficiente di scabrezza C è stato adottato pari a 140 mentre per le verifiche a tubi vecchi (usati) il coefficiente C è stato cautelativamente assunto pari a 105.



Schema della rete: scabrezza delle condotte per verifica a tubi nuovi

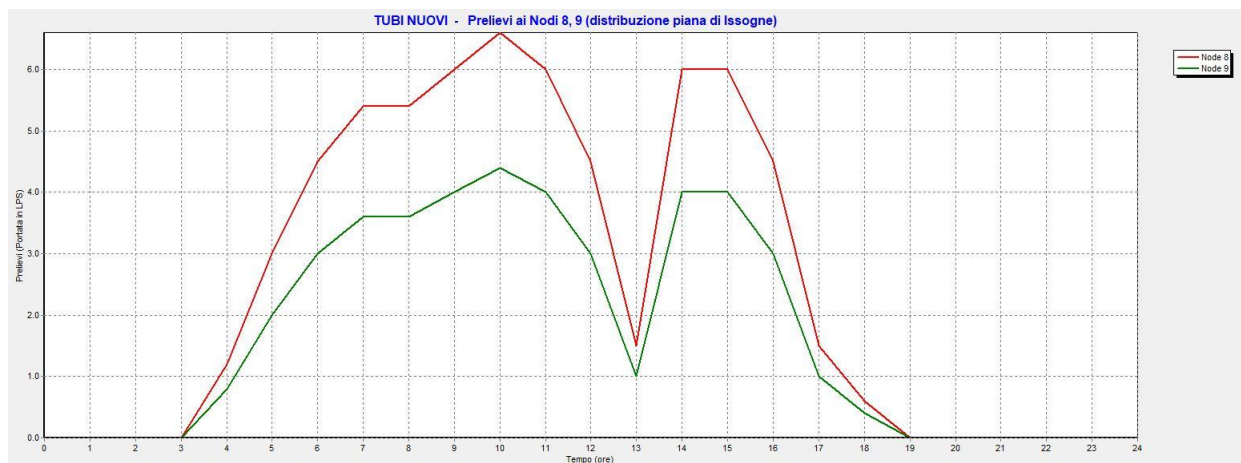
3 Verifiche idrauliche per la Modalità n°1

Lo schema di principio è il seguente:



In questa modalità:

- il serbatoio S3 (Clos de Barme di Arnad) viene caricato dal serbatoio S1 (Fabrique di Champdepraz);
- la distribuzione nella piana di Issogne avviene mediante l'approvvigionamento dal serbatoio S2 (Sommet de la Ville di Issogne);
- il serbatoio S4 (Ville loc. Castello di Arnad-alta) non carica S3, è libero per la distribuzione nella parte alta di Arnad e può quindi essere ricaricato dalle proprie sorgenti.



Modello di calcolo: andamento nel tempo dei prelievi ai nodi 8 e 9 (piana di Issogne)

Seguono i tabulati di calcolo ed i grafici significativi per la Modalità n°1 per tubi nuovi prima e per tubi vecchi poi.

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*****
*                               E P A N E T                               *
*                               Hydraulic and Water Quality                 *
*                               Analysis for Pipe Networks                   *
*                               Version 2.0                                 *
*****
    
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MODALITA' di FUNZIONAMENTO 1

VERIFICHE a TUBI NUOVI (coefficiente di H-W pari a 140)

Link - Node Table:

Link ID	Start Node	End Node	Length m	Diameter mm	
1	1	2	1	184	
2	2	4	1060	184	
3	4	3	2875	184	
4	13	8	2875	130.8	
5	7	6	1	130.8	
6	6	23	850	130.8	
7	14	9	535	130.8	
9	4	8	10	130.8	
10	3	10	2780	184	
11	10	11	805	184	
12	11	18	10	184	
15	5	19	1	130.8	
16	17	5	1	116.2	
19	20	15	2310	130.8	
21	21	12	1	184	
22	18	22	3	130.8	
23	22	20	3	130.8	
24	23	16	560	116.2	
25	5	3	2	130.8	
20	18	20	#N/A	#N/A	Pump
13	5	13	#N/A	130.8	Valve
14	19	14	#N/A	130.8	Valve
17	16	17	#N/A	116.2	Valve
18	11	21	#N/A	184	Valve

Energy Usage:

Pump	Usage Factor	Avg. Effic.	Kw-hr /m3	Avg. Kw	Peak Kw	Cost /day
20	0.00	0.00	0.00	0.00	0.00	0.00
					Demand Charge:	0.00
					Total Cost:	0.00

Node Results at 0:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	456.65	93.65	0.00	
4	0.00	459.10	70.10	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	454.28	99.28	0.00	
11	0.00	453.43	48.43	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	510.00	85.00	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	10.00	415.00	10.00	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 0:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open

Link Results at 0:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	38.43	Active Valve

Node Results at 1:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.02	10.02	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.02	10.02	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 1:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open

Link Results at 1:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	38.41	Active Valve

Node Results at 2:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.04	10.04	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.04	10.04	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 2:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	38.39	Active Valve

Node Results at 3:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00

Node Results at 3:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.06	10.06	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.05	10.06	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 3:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	38.37	Active Valve

Node Results at 4:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	456.65	93.65	0.00	
4	0.00	459.10	70.10	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	1.20	437.75	48.75	0.00	
9	0.80	422.98	64.98	0.00	
10	0.00	454.28	99.28	0.00	
11	0.00	453.43	48.43	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	509.58	146.58	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.07	10.07	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	509.81	84.81	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	-2.00	510.00	0.00	0.00	Reservoir
12	10.00	415.07	10.07	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 4:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	1.20	0.09	0.09	Open
5	2.00	0.15	0.30	Open
6	2.00	0.15	0.23	Open
7	0.80	0.06	0.04	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.80	0.06	0.04	Open
16	2.00	0.19	0.41	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	2.00	0.19	0.41	Open

Link Results at 4:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	1.20	0.09	35.00	Active Valve
14	0.80	0.06	50.00	Active Valve
17	2.00	0.19	36.58	Active Valve
18	10.00	0.38	38.36	Active Valve

Node Results at 5:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	3.00	436.61	47.61	0.00
9	2.00	422.88	64.88	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	507.70	144.70	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.09	10.09	0.00
22	0.00	445.00	40.00	0.00
23	0.00	508.94	83.94	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-5.00	510.00	0.00	0.00 Reservoir
12	10.00	415.09	10.09	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 5:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	3.00	0.22	0.48	Open
5	5.00	0.37	1.56	Open
6	5.00	0.37	1.24	Open

Link Results at 5:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	2.00	0.15	0.23	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	2.00	0.15	0.26	Open
16	5.00	0.47	2.23	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	5.00	0.47	2.21	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	3.00	0.22	35.00	Active Valve
14	2.00	0.15	50.00	Active Valve
17	5.00	0.47	34.70	Active Valve
18	10.00	0.38	38.34	Active Valve

Node Results at 6:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	4.50	435.06	46.06	0.00
9	3.00	422.74	64.74	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	505.13	142.13	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.11	10.11	0.00
22	0.00	445.00	40.00	0.00
23	0.00	507.76	82.76	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-7.50	510.00	0.00	0.00 Reservoir
12	10.00	415.11	10.11	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 6:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	4.50	0.33	1.02	Open
5	7.50	0.56	3.27	Open
6	7.50	0.56	2.64	Open
7	3.00	0.22	0.48	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.00	0.22	0.60	Open
16	7.50	0.71	4.69	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	7.50	0.71	4.69	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	35.00	Active Valve
14	3.00	0.22	49.99	Active Valve
17	7.50	0.71	32.13	Active Valve
18	10.00	0.38	38.32	Active Valve

Node Results at 7:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	472.99	109.99	0.00
6	0.00	510.00	0.00	0.00
8	5.40	433.87	44.87	0.00
9	3.60	422.64	64.64	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	503.17	140.17	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00

Node Results at 7:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.13	10.13	0.00
22	0.00	445.00	40.00	0.00
23	0.00	506.85	81.85	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-9.00	510.00	0.00	0.00 Reservoir
12	10.00	415.13	10.13	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 7:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	5.40	0.40	1.43	Open
5	9.00	0.67	4.58	Open
6	9.00	0.67	3.70	Open
7	3.60	0.27	0.68	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.60	0.27	0.82	Open
16	9.00	0.85	6.59	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	9.00	0.85	6.58	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	5.40	0.40	34.99	Active Valve
14	3.60	0.27	49.99	Active Valve
17	9.00	0.85	30.17	Active Valve
18	10.00	0.38	38.30	Active Valve

Node Results at 8:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	456.65	93.65	0.00	
4	0.00	459.10	70.10	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	510.00	0.00	0.00	
8	5.40	433.87	44.87	0.00	
9	3.60	422.64	64.64	0.00	
10	0.00	454.28	99.28	0.00	
11	0.00	453.43	48.43	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	503.17	140.17	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.15	10.15	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	506.85	81.85	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	-9.00	510.00	0.00	0.00	Reservoir
12	10.00	415.15	10.15	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 8:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	5.40	0.40	1.43	Open
5	9.00	0.67	4.58	Open
6	9.00	0.67	3.70	Open
7	3.60	0.27	0.68	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.60	0.27	0.82	Open
16	9.00	0.85	6.59	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	9.00	0.85	6.58	Open

Link Results at 8:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	5.40	0.40	34.99	Active Valve
14	3.60	0.27	49.99	Active Valve
17	9.00	0.85	30.17	Active Valve
18	10.00	0.38	38.28	Active Valve

Node Results at 9:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	432.99	43.99	0.00
9	4.00	422.56	64.56	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	501.70	138.70	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.17	10.17	0.00
22	0.00	445.00	40.00	0.00
23	0.00	506.18	81.18	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	10.00	415.17	10.17	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 9:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	6.00	0.45	1.74	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	4.49	Open

Link Results at 9:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.00	0.30	1.00	Open
16	10.00	0.94	8.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	10.00	0.94	7.99	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	28.70	Active Valve
18	10.00	0.38	38.26	Active Valve

Node Results at 10:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.60	432.02	43.02	0.00
9	4.40	422.47	64.47	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	500.10	137.10	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.18	10.18	0.00
22	0.00	445.00	40.00	0.00
23	0.00	505.44	80.44	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-11.00	510.00	0.00	0.00 Reservoir
12	10.00	415.18	10.18	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 10:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	6.60	0.49	2.08	Open
5	11.00	0.82	6.62	Open
6	11.00	0.82	5.36	Open
7	4.40	0.33	0.98	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.40	0.33	1.23	Open
16	11.00	1.04	9.52	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.19	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	11.00	1.04	9.54	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.60	0.49	34.99	Active Valve
14	4.40	0.33	49.99	Active Valve
17	11.00	1.04	27.10	Active Valve
18	10.00	0.38	38.25	Active Valve

Node Results at 11:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	432.99	43.99	0.00
9	4.00	422.56	64.56	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	501.70	138.70	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00

Node Results at 11:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.20	10.20	0.00
22	0.00	445.00	40.00	0.00
23	0.00	506.18	81.18	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	10.00	415.20	10.20	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 11:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	6.00	0.45	1.74	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	4.49	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.00	0.30	1.00	Open
16	10.00	0.94	8.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	10.00	0.94	7.99	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	28.70	Active Valve
18	10.00	0.38	38.23	Active Valve

Node Results at 12:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	456.65	93.65	0.00	
4	0.00	459.10	70.10	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	4.50	435.06	46.06	0.00	
9	3.00	422.74	64.74	0.00	
10	0.00	454.28	99.28	0.00	
11	0.00	453.43	48.43	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	505.13	142.13	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.22	10.22	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	507.76	82.76	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	-7.50	510.00	0.00	0.00	Reservoir
12	10.00	415.22	10.22	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 12:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	4.50	0.33	1.02	Open
5	7.50	0.56	3.27	Open
6	7.50	0.56	2.64	Open
7	3.00	0.22	0.48	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.00	0.22	0.60	Open
16	7.50	0.71	4.69	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	7.50	0.71	4.69	Open

Link Results at 12:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	35.00	Active Valve
14	3.00	0.22	49.99	Active Valve
17	7.50	0.71	32.13	Active Valve
18	10.00	0.38	38.21	Active Valve

Node Results at 13:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	1.50	437.62	48.62	0.00
9	1.00	422.97	64.97	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	509.36	146.36	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.24	10.24	0.00
22	0.00	445.00	40.00	0.00
23	0.00	509.71	84.71	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-2.50	510.00	0.00	0.00 Reservoir
12	10.00	415.24	10.24	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 13:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	1.50	0.11	0.13	Open
5	2.50	0.19	0.45	Open
6	2.50	0.19	0.34	Open

Link Results at 13:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	1.00	0.07	0.06	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	1.00	0.07	0.07	Open
16	2.50	0.24	0.63	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	2.50	0.24	0.61	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	1.50	0.11	35.00	Active Valve
14	1.00	0.07	50.00	Active Valve
17	2.50	0.24	36.36	Active Valve
18	10.00	0.38	38.19	Active Valve

Node Results at 14:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	432.99	43.99	0.00
9	4.00	422.56	64.56	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	501.70	138.70	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.26	10.26	0.00
22	0.00	445.00	40.00	0.00
23	0.00	506.18	81.18	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	10.00	415.26	10.26	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 14:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	6.00	0.45	1.74	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	4.49	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.00	0.30	1.00	Open
16	10.00	0.94	8.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	10.00	0.94	7.99	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	28.70	Active Valve
18	10.00	0.38	38.17	Active Valve

Node Results at 15:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	432.99	43.99	0.00
9	4.00	422.56	64.56	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	501.70	138.70	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00

Node Results at 15:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.28	10.28	0.00
22	0.00	445.00	40.00	0.00
23	0.00	506.18	81.18	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	10.00	415.27	10.28	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 15:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	6.00	0.45	1.74	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	4.49	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.00	0.30	1.00	Open
16	10.00	0.94	8.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	10.00	0.94	7.99	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	28.70	Active Valve
18	10.00	0.38	38.15	Active Valve

Node Results at 16:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	456.65	93.65	0.00	
4	0.00	459.10	70.10	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	4.50	435.06	46.06	0.00	
9	3.00	422.74	64.74	0.00	
10	0.00	454.28	99.28	0.00	
11	0.00	453.43	48.43	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	505.13	142.13	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.29	10.29	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	507.76	82.76	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	-7.50	510.00	0.00	0.00	Reservoir
12	10.00	415.29	10.29	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 16:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	4.50	0.33	1.02	Open
5	7.50	0.56	3.27	Open
6	7.50	0.56	2.64	Open
7	3.00	0.22	0.48	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.00	0.22	0.60	Open
16	7.50	0.71	4.69	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	7.50	0.71	4.69	Open

Link Results at 16:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	35.00	Active Valve
14	3.00	0.22	49.99	Active Valve
17	7.50	0.71	32.13	Active Valve
18	10.00	0.38	38.14	Active Valve

Node Results at 17:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	1.50	437.62	48.62	0.00
9	1.00	422.97	64.97	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	509.36	146.36	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.31	10.31	0.00
22	0.00	445.00	40.00	0.00
23	0.00	509.71	84.71	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-2.50	510.00	0.00	0.00 Reservoir
12	10.00	415.31	10.31	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 17:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	1.50	0.11	0.13	Open
5	2.50	0.19	0.45	Open
6	2.50	0.19	0.34	Open

Link Results at 17:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	1.00	0.07	0.06	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	1.00	0.07	0.07	Open
16	2.50	0.24	0.63	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	2.50	0.24	0.61	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	1.50	0.11	35.00	Active Valve
14	1.00	0.07	50.00	Active Valve
17	2.50	0.24	36.36	Active Valve
18	10.00	0.38	38.12	Active Valve

Node Results at 18:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.60	437.93	48.93	0.00
9	0.40	422.99	64.99	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	509.88	146.88	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.33	10.33	0.00
22	0.00	445.00	40.00	0.00
23	0.00	509.95	84.95	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-1.00	510.00	0.00	0.00 Reservoir
12	10.00	415.33	10.33	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 18:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.60	0.04	0.02	Open
5	1.00	0.07	0.07	Open
6	1.00	0.07	0.06	Open
7	0.40	0.03	0.01	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.40	0.03	0.00	Open
16	1.00	0.09	0.11	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	1.00	0.09	0.11	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.60	0.04	35.00	Active Valve
14	0.40	0.03	50.00	Active Valve
17	1.00	0.09	36.88	Active Valve
18	10.00	0.38	38.10	Active Valve

Node Results at 19:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00

Node Results at 19:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.35	10.35	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.35	10.35	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 19:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	38.08	Active Valve

Node Results at 20:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	456.65	93.65	0.00	
4	0.00	459.10	70.10	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	454.28	99.28	0.00	
11	0.00	453.43	48.43	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.37	10.37	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	510.00	85.00	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	10.00	415.37	10.37	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 20:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open

Link Results at 20:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	38.06	Active Valve

Node Results at 21:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.39	10.39	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.39	10.39	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 21:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open

Link Results at 21:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	38.04	Active Valve

Node Results at 22:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.40	10.40	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.40	10.40	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 22:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	38.03	Active Valve

Node Results at 23:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.65	93.65	0.00
4	0.00	459.10	70.10	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	454.28	99.28	0.00
11	0.00	453.43	48.43	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00

Node Results at 23:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.42	10.42	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.42	10.42	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 23:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	38.01	Active Valve

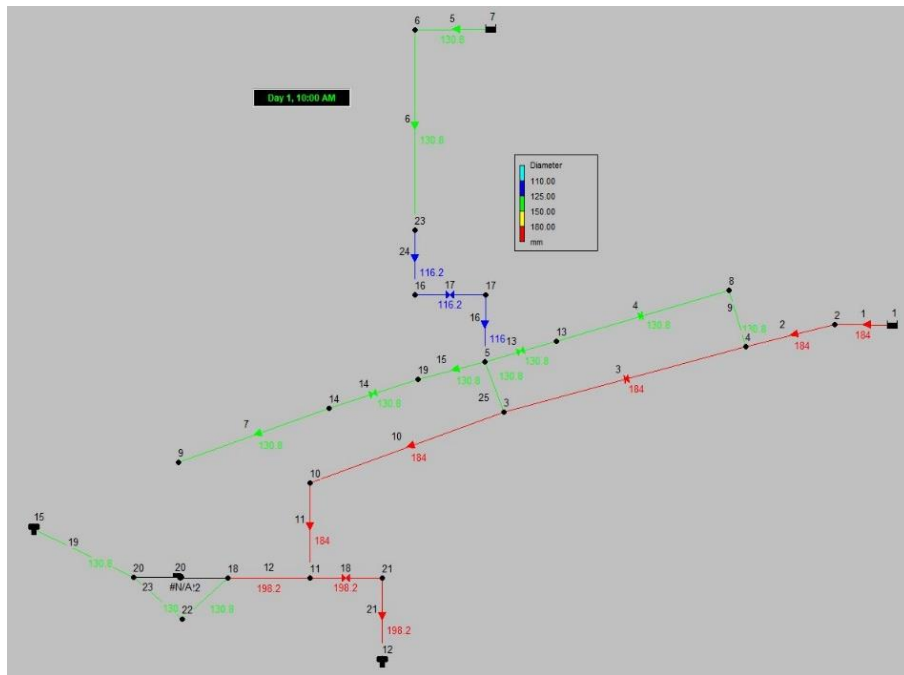
Node Results at 24:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	456.65	93.65	0.00	
4	0.00	459.10	70.10	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	454.28	99.28	0.00	
11	0.00	453.43	48.43	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.44	10.44	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	510.00	85.00	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	10.00	415.44	10.44	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

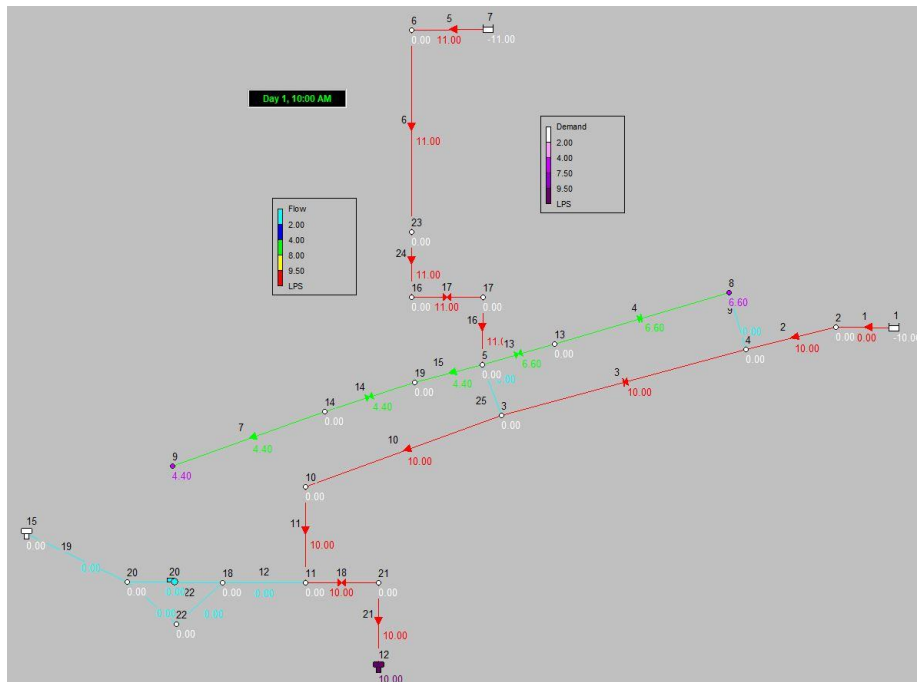
Link Results at 24:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	10.00	0.38	0.85	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open

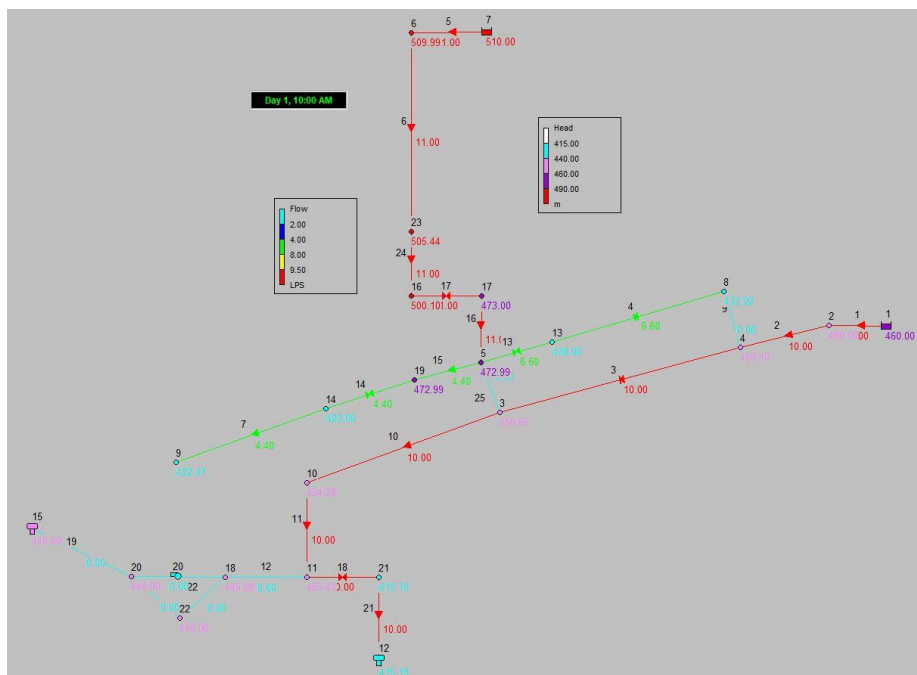
Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	37.99	Active Valve



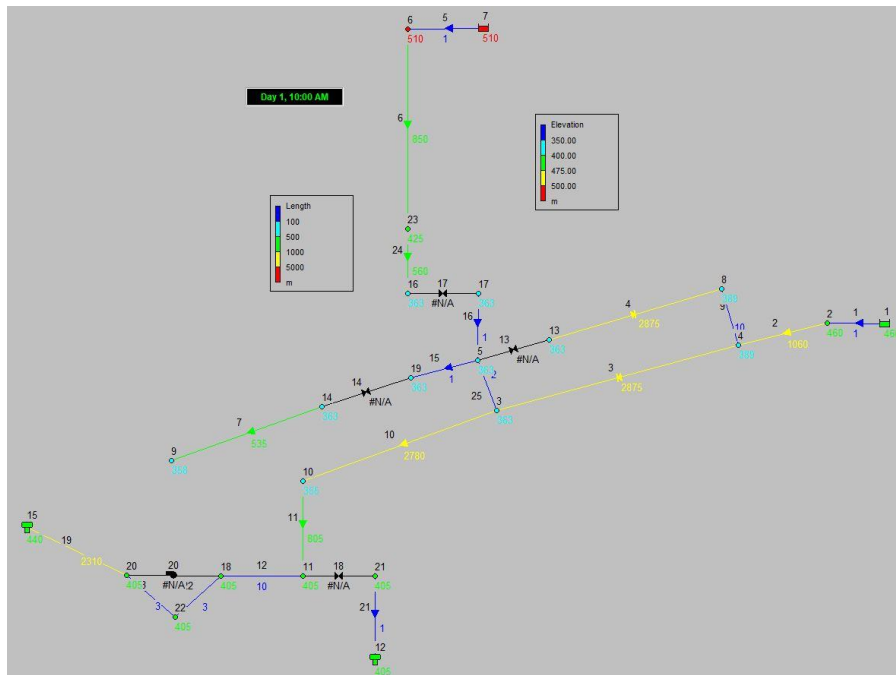
Schema della rete: diametri condotte in progetto



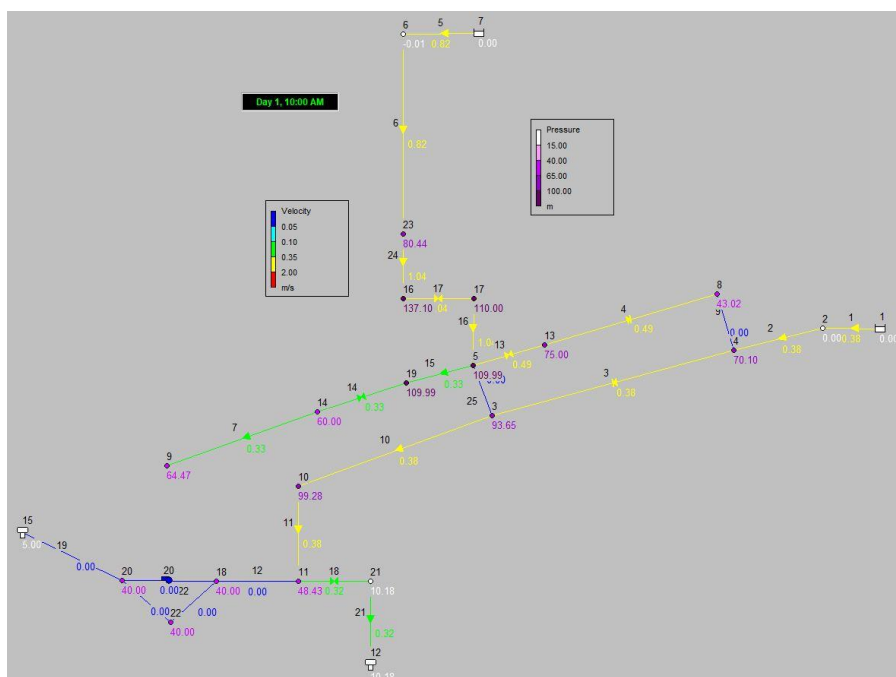
Output di calcolo (TUBI NUOVI): prelievi (ai nodi) e portate (nelle condotte) alle ore 10h00



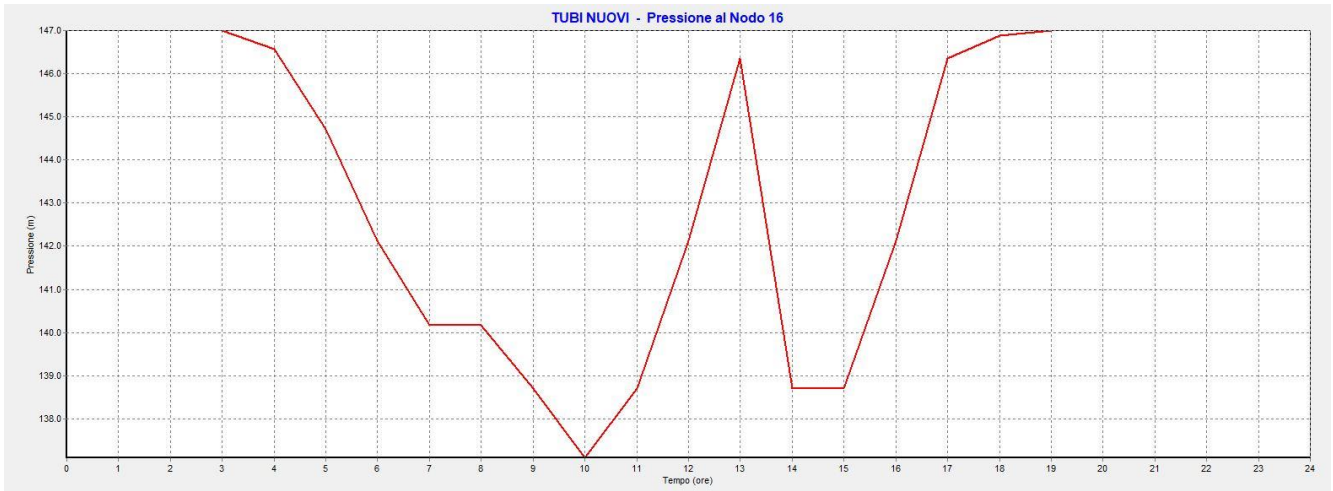
Output di calcolo (TUBI NUOVI): carico (ai nodi) e portate (nelle condotte) alle ore 10h00



Schema della rete: lunghezze condotte in progetto e quota nodi



Output di calcolo (TUBI NUOVI): pressione (ai nodi) e velocità (nelle condotte) alle ore 10h00



Output di calcolo (TUBI NUOVI): pressione al nodo 16 nell'arco della giornata



Output di calcolo (TUBI NUOVI): pressione ai nodi 17, 5, 8 e 9 nell'arco della giornata

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*****
*                               E P A N E T                               *
*                               Hydraulic and Water Quality                *
*                               Analysis for Pipe Networks                  *
*                               Version 2.0                                *
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MODALITA' di FUNZIONAMENTO 1

VERIFICHE a TUBI VECCHI (coefficiente di H-W pari a 105)

Link - Node Table:

Link ID	Start Node	End Node	Length m	Diameter mm	
1	1	2	1	184	
2	2	4	1060	184	
3	4	3	2875	184	
4	13	8	2875	130.8	
5	7	6	1	130.8	
6	6	23	850	130.8	
7	14	9	535	130.8	
9	4	8	10	130.8	
10	3	10	2780	184	
11	10	11	805	184	
12	11	18	10	184	
15	5	19	1	130.8	
16	17	5	1	116.2	
19	20	15	2310	130.8	
21	21	12	1	184	
22	18	22	3	130.8	
23	22	20	3	130.8	
24	23	16	560	116.2	
25	5	3	2	130.8	
20	18	20	#N/A	#N/A	Pump
13	5	13	#N/A	130.8	Valve
14	19	14	#N/A	130.8	Valve
17	16	17	#N/A	116.2	Valve
18	11	21	#N/A	184	Valve

Energy Usage:

Pump	Usage Factor	Avg. Effic.	Kw-hr /m3	Avg. Kw	Peak Kw	Cost /day
20	0.00	0.00	0.00	0.00	0.00	0.00
					Demand Charge:	0.00
					Total Cost:	0.00

Node Results at 0:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	454.29	91.29	0.00	
4	0.00	458.46	69.46	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	450.25	95.25	0.00	
11	0.00	449.40	44.40	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	510.00	85.00	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	10.00	415.00	10.00	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 0:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open

Link Results at 0:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	34.40	Active Valve

Node Results at 1:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.02	10.02	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.02	10.02	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 1:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open

Link Results at 1:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	34.39	Active Valve

Node Results at 2:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.04	10.04	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.04	10.04	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 2:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	34.37	Active Valve

Node Results at 3:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00

Node Results at 3:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.06	10.06	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.05	10.06	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 3:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	34.35	Active Valve

Node Results at 4:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	454.29	91.29	0.00	
4	0.00	458.46	69.46	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	1.20	437.57	48.57	0.00	
9	0.80	422.96	64.96	0.00	
10	0.00	450.25	95.25	0.00	
11	0.00	449.40	44.40	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	509.28	146.28	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.07	10.07	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	509.67	84.67	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	-2.00	510.00	0.00	0.00	Reservoir
12	10.00	415.07	10.07	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 4:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	1.20	0.09	0.15	Open
5	2.00	0.15	0.30	Open
6	2.00	0.15	0.39	Open
7	0.80	0.06	0.07	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.80	0.06	0.04	Open
16	2.00	0.19	0.71	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	2.00	0.19	0.69	Open

Link Results at 4:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	1.20	0.09	35.00	Active Valve
14	0.80	0.06	50.00	Active Valve
17	2.00	0.19	36.28	Active Valve
18	10.00	0.38	34.33	Active Valve

Node Results at 5:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	3.00	435.63	46.63	0.00
9	2.00	422.79	64.79	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	506.08	143.08	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.09	10.09	0.00
22	0.00	445.00	40.00	0.00
23	0.00	508.20	83.20	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-5.00	510.00	0.00	0.00 Reservoir
12	10.00	415.09	10.09	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 5:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	3.00	0.22	0.82	Open
5	5.00	0.37	1.56	Open
6	5.00	0.37	2.12	Open

Link Results at 5:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	2.00	0.15	0.39	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	2.00	0.15	0.30	Open
16	5.00	0.47	3.76	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	5.00	0.47	3.77	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	3.00	0.22	35.00	Active Valve
14	2.00	0.15	50.00	Active Valve
17	5.00	0.47	33.08	Active Valve
18	10.00	0.38	34.31	Active Valve

Node Results at 6:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	472.99	109.99	0.00
6	0.00	510.00	0.00	0.00
8	4.50	432.99	43.99	0.00
9	3.00	422.56	64.56	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	501.70	138.70	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.11	10.11	0.00
22	0.00	445.00	40.00	0.00
23	0.00	506.18	81.18	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-7.50	510.00	0.00	0.00 Reservoir
12	10.00	415.11	10.11	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 6:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	4.50	0.33	1.74	Open
5	7.50	0.56	3.27	Open
6	7.50	0.56	4.49	Open
7	3.00	0.22	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.00	0.22	0.60	Open
16	7.50	0.71	8.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	7.50	0.71	7.99	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	34.99	Active Valve
14	3.00	0.22	49.99	Active Valve
17	7.50	0.71	28.70	Active Valve
18	10.00	0.38	34.29	Active Valve

Node Results at 7:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	472.99	109.99	0.00
6	0.00	510.00	0.00	0.00
8	5.40	430.97	41.97	0.00
9	3.60	422.38	64.38	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	498.37	135.37	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00

Node Results at 7:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.13	10.13	0.00
22	0.00	445.00	40.00	0.00
23	0.00	504.64	79.64	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-9.00	510.00	0.00	0.00 Reservoir
12	10.00	415.13	10.13	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 7:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	5.40	0.40	2.44	Open
5	9.00	0.67	4.58	Open
6	9.00	0.67	6.30	Open
7	3.60	0.27	1.15	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.60	0.27	0.86	Open
16	9.00	0.85	11.20	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	9.00	0.85	11.21	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	5.40	0.40	34.99	Active Valve
14	3.60	0.27	49.99	Active Valve
17	9.00	0.85	25.37	Active Valve
18	10.00	0.38	34.28	Active Valve

Node Results at 8:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	454.29	91.29	0.00	
4	0.00	458.46	69.46	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	510.00	0.00	0.00	
8	5.40	430.97	41.97	0.00	
9	3.60	422.38	64.38	0.00	
10	0.00	450.25	95.25	0.00	
11	0.00	449.40	44.40	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	498.37	135.37	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.15	10.15	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	504.64	79.64	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	-9.00	510.00	0.00	0.00	Reservoir
12	10.00	415.15	10.15	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 8:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	5.40	0.40	2.44	Open
5	9.00	0.67	4.58	Open
6	9.00	0.67	6.30	Open
7	3.60	0.27	1.15	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.60	0.27	0.86	Open
16	9.00	0.85	11.20	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	9.00	0.85	11.21	Open

Link Results at 8:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	5.40	0.40	34.99	Active Valve
14	3.60	0.27	49.99	Active Valve
17	9.00	0.85	25.37	Active Valve
18	10.00	0.38	34.26	Active Valve

Node Results at 9:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	429.46	40.46	0.00
9	4.00	422.25	64.25	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	495.86	132.86	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.17	10.17	0.00
22	0.00	445.00	40.00	0.00
23	0.00	503.49	78.49	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	10.00	415.17	10.17	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 9:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	6.00	0.45	2.97	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	7.65	Open

Link Results at 9:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	4.00	0.30	1.40	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.00	0.30	1.00	Open
16	10.00	0.94	13.62	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	10.00	0.94	13.62	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	22.86	Active Valve
18	10.00	0.38	34.24	Active Valve

Node Results at 10:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	6.60	427.81	38.81	0.00
9	4.40	422.10	64.10	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	493.13	130.13	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.98	109.98	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.18	10.18	0.00
22	0.00	445.00	40.00	0.00
23	0.00	502.23	77.23	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-11.00	510.00	0.00	0.00 Reservoir
12	10.00	415.18	10.18	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 10:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	6.60	0.49	3.54	Open
5	11.00	0.82	6.62	Open
6	11.00	0.82	9.13	Open
7	4.40	0.33	1.67	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.40	0.33	1.19	Open
16	11.00	1.04	16.26	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.19	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	11.00	1.04	16.25	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.60	0.49	34.98	Active Valve
14	4.40	0.33	49.98	Active Valve
17	11.00	1.04	20.13	Active Valve
18	10.00	0.38	34.22	Active Valve

Node Results at 11:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	429.46	40.46	0.00
9	4.00	422.25	64.25	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	495.86	132.86	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00

Node Results at 11:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.20	10.20	0.00
22	0.00	445.00	40.00	0.00
23	0.00	503.49	78.49	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	10.00	415.20	10.20	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 11:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	6.00	0.45	2.97	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	7.65	Open
7	4.00	0.30	1.40	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.00	0.30	1.00	Open
16	10.00	0.94	13.62	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	10.00	0.94	13.62	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	22.86	Active Valve
18	10.00	0.38	34.20	Active Valve

Node Results at 12:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	454.29	91.29	0.00	
4	0.00	458.46	69.46	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	510.00	0.00	0.00	
8	4.50	432.99	43.99	0.00	
9	3.00	422.56	64.56	0.00	
10	0.00	450.25	95.25	0.00	
11	0.00	449.40	44.40	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	501.70	138.70	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.22	10.22	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	506.18	81.18	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	-7.50	510.00	0.00	0.00	Reservoir
12	10.00	415.22	10.22	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 12:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	4.50	0.33	1.74	Open
5	7.50	0.56	3.27	Open
6	7.50	0.56	4.49	Open
7	3.00	0.22	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.00	0.22	0.60	Open
16	7.50	0.71	8.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	7.50	0.71	7.99	Open

Link Results at 12:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	34.99	Active Valve
14	3.00	0.22	49.99	Active Valve
17	7.50	0.71	28.70	Active Valve
18	10.00	0.38	34.18	Active Valve

Node Results at 13:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	1.50	437.34	48.34	0.00
9	1.00	422.94	64.94	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	508.92	145.92	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.24	10.24	0.00
22	0.00	445.00	40.00	0.00
23	0.00	509.50	84.50	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-2.50	510.00	0.00	0.00 Reservoir
12	10.00	415.24	10.24	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 13:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	1.50	0.11	0.23	Open
5	2.50	0.19	0.45	Open
6	2.50	0.19	0.59	Open

Link Results at 13:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	1.00	0.07	0.11	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	1.00	0.07	0.07	Open
16	2.50	0.24	1.04	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	2.50	0.24	1.05	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	1.50	0.11	35.00	Active Valve
14	1.00	0.07	50.00	Active Valve
17	2.50	0.24	35.92	Active Valve
18	10.00	0.38	34.17	Active Valve

Node Results at 14:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	429.46	40.46	0.00
9	4.00	422.25	64.25	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	495.86	132.86	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.26	10.26	0.00
22	0.00	445.00	40.00	0.00
23	0.00	503.49	78.49	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	10.00	415.26	10.26	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 14:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	6.00	0.45	2.97	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	7.65	Open
7	4.00	0.30	1.40	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.00	0.30	1.00	Open
16	10.00	0.94	13.62	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	10.00	0.94	13.62	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	22.86	Active Valve
18	10.00	0.38	34.15	Active Valve

Node Results at 15:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	429.46	40.46	0.00
9	4.00	422.25	64.25	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	495.86	132.86	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	472.99	109.99	0.00
20	0.00	445.00	40.00	0.00

Node Results at 15:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.28	10.28	0.00
22	0.00	445.00	40.00	0.00
23	0.00	503.49	78.49	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	10.00	415.27	10.28	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 15:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	6.00	0.45	2.97	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	7.65	Open
7	4.00	0.30	1.40	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	4.00	0.30	1.00	Open
16	10.00	0.94	13.62	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	10.00	0.94	13.62	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	22.86	Active Valve
18	10.00	0.38	34.13	Active Valve

Node Results at 16:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	454.29	91.29	0.00	
4	0.00	458.46	69.46	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	510.00	0.00	0.00	
8	4.50	432.99	43.99	0.00	
9	3.00	422.56	64.56	0.00	
10	0.00	450.25	95.25	0.00	
11	0.00	449.40	44.40	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	501.70	138.70	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.29	10.29	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	506.18	81.18	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	-7.50	510.00	0.00	0.00	Reservoir
12	10.00	415.29	10.29	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 16:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	4.50	0.33	1.74	Open
5	7.50	0.56	3.27	Open
6	7.50	0.56	4.49	Open
7	3.00	0.22	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	3.00	0.22	0.60	Open
16	7.50	0.71	8.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	7.50	0.71	7.99	Open

Link Results at 16:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	34.99	Active Valve
14	3.00	0.22	49.99	Active Valve
17	7.50	0.71	28.70	Active Valve
18	10.00	0.38	34.11	Active Valve

Node Results at 17:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	1.50	437.34	48.34	0.00
9	1.00	422.94	64.94	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	508.92	145.92	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.31	10.31	0.00
22	0.00	445.00	40.00	0.00
23	0.00	509.50	84.50	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-2.50	510.00	0.00	0.00 Reservoir
12	10.00	415.31	10.31	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 17:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	1.50	0.11	0.23	Open
5	2.50	0.19	0.45	Open
6	2.50	0.19	0.59	Open

Link Results at 17:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	1.00	0.07	0.11	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	1.00	0.07	0.07	Open
16	2.50	0.24	1.04	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	2.50	0.24	1.05	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	1.50	0.11	35.00	Active Valve
14	1.00	0.07	50.00	Active Valve
17	2.50	0.24	35.92	Active Valve
18	10.00	0.38	34.09	Active Valve

Node Results at 18:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.60	437.88	48.88	0.00
9	0.40	422.99	64.99	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	509.80	146.80	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.33	10.33	0.00
22	0.00	445.00	40.00	0.00
23	0.00	509.91	84.91	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	-1.00	510.00	0.00	0.00 Reservoir
12	10.00	415.33	10.33	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 18:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.60	0.04	0.04	Open
5	1.00	0.07	0.07	Open
6	1.00	0.07	0.11	Open
7	0.40	0.03	0.02	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.40	0.03	0.04	Open
16	1.00	0.09	0.19	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	1.00	0.09	0.19	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.60	0.04	35.00	Active Valve
14	0.40	0.03	50.00	Active Valve
17	1.00	0.09	36.80	Active Valve
18	10.00	0.38	34.07	Active Valve

Node Results at 19:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00

Node Results at 19:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.35	10.35	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.35	10.35	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 19:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	34.06	Active Valve

Node Results at 20:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	454.29	91.29	0.00	
4	0.00	458.46	69.46	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	450.25	95.25	0.00	
11	0.00	449.40	44.40	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.37	10.37	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	510.00	85.00	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	10.00	415.37	10.37	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

Link Results at 20:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open

Link Results at 20:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	34.04	Active Valve

Node Results at 21:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.39	10.39	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.39	10.39	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 21:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open

Link Results at 21:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	34.02	Active Valve

Node Results at 22:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00
21	0.00	415.40	10.40	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.40	10.40	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 22:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	34.00	Active Valve

Node Results at 23:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.29	91.29	0.00
4	0.00	458.46	69.46	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	450.25	95.25	0.00
11	0.00	449.40	44.40	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	445.00	40.00	0.00
19	0.00	473.00	110.00	0.00
20	0.00	445.00	40.00	0.00

Node Results at 23:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.42	10.42	0.00
22	0.00	445.00	40.00	0.00
23	0.00	510.00	85.00	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	10.00	415.42	10.42	0.00 Tank
15	0.00	445.00	5.00	0.00 Tank

Link Results at 23:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	33.98	Active Valve

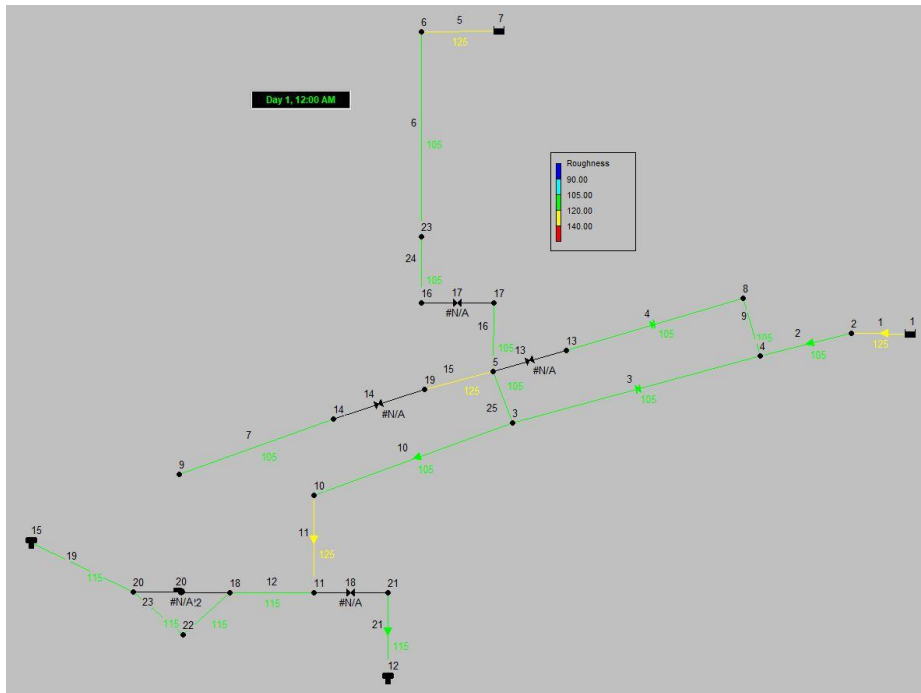
Node Results at 24:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	454.29	91.29	0.00	
4	0.00	458.46	69.46	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	450.25	95.25	0.00	
11	0.00	449.40	44.40	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	445.00	40.00	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	445.00	40.00	0.00	
21	0.00	415.44	10.44	0.00	
22	0.00	445.00	40.00	0.00	
23	0.00	510.00	85.00	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	10.00	415.44	10.44	0.00	Tank
15	0.00	445.00	5.00	0.00	Tank

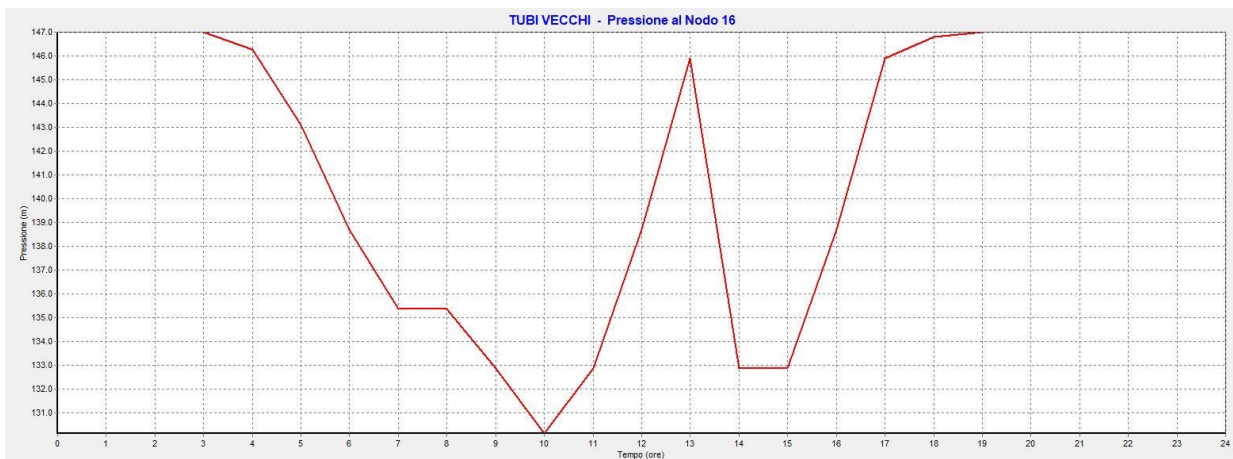
Link Results at 24:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	10.00	0.38	1.45	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
12	0.00	0.00	0.00	Closed
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
22	0.00	0.00	0.00	Open
23	0.00	0.00	0.00	Open
24	0.00	0.00	0.00	Open

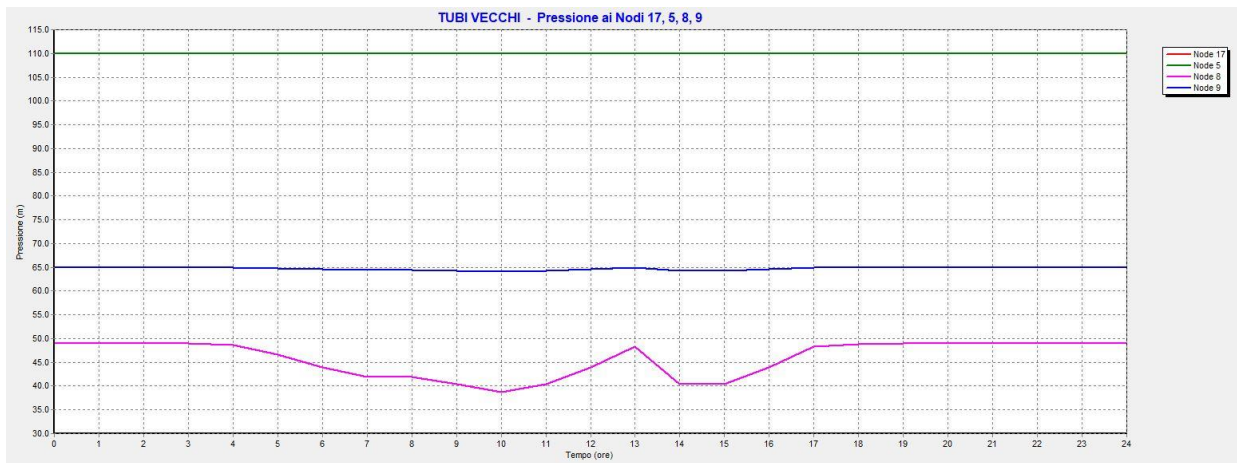
Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
25	0.00	0.00	0.00	Closed
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	10.00	0.38	33.96	Active Valve



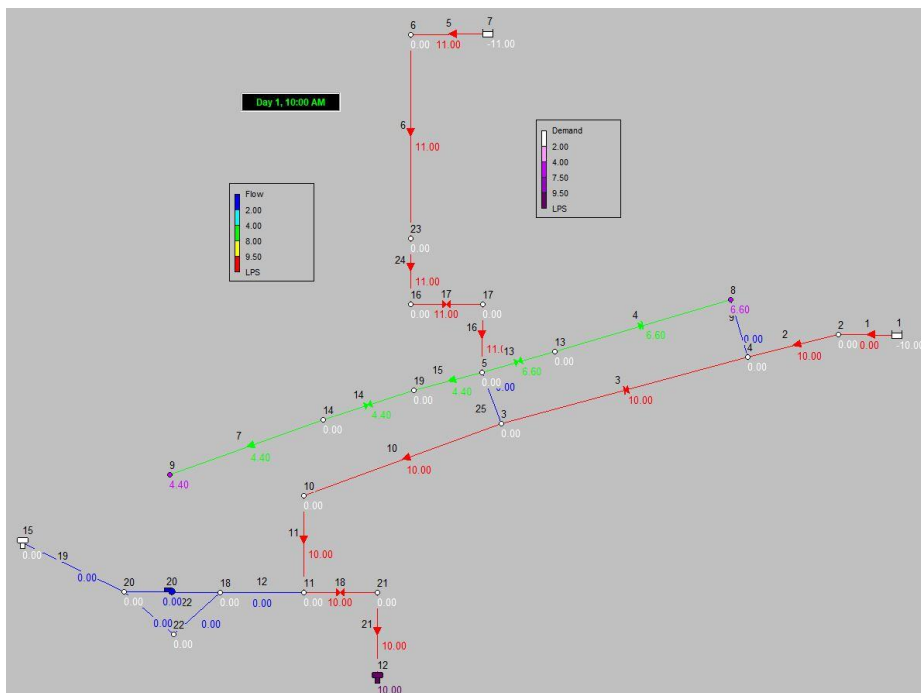
Schema della rete (TUBI VECCHI): scabrezza condotte



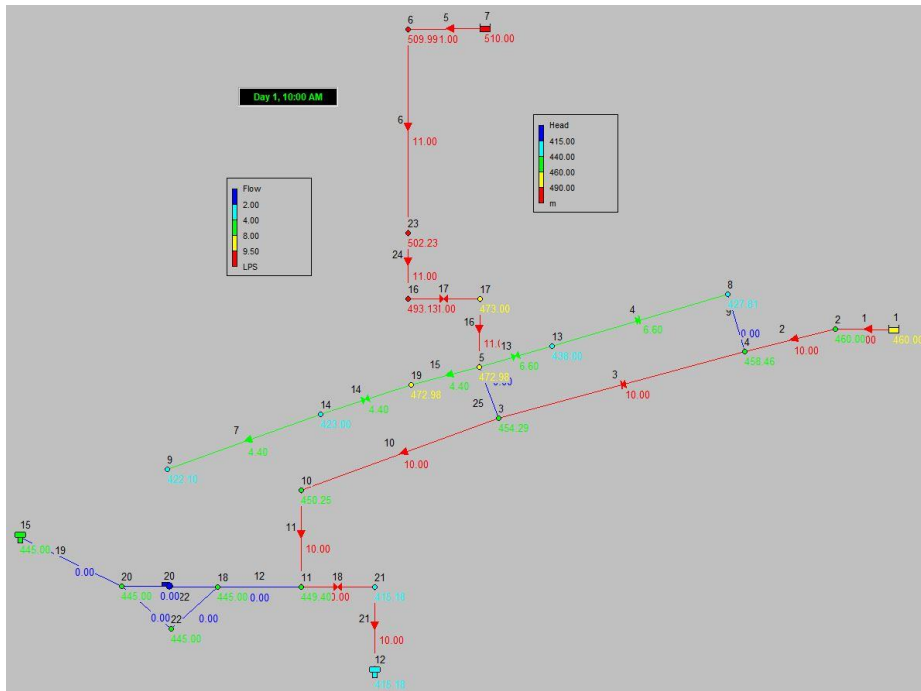
Output di calcolo (TUBI VECCHI): pressione al nodo 16 nell'arco della giornata



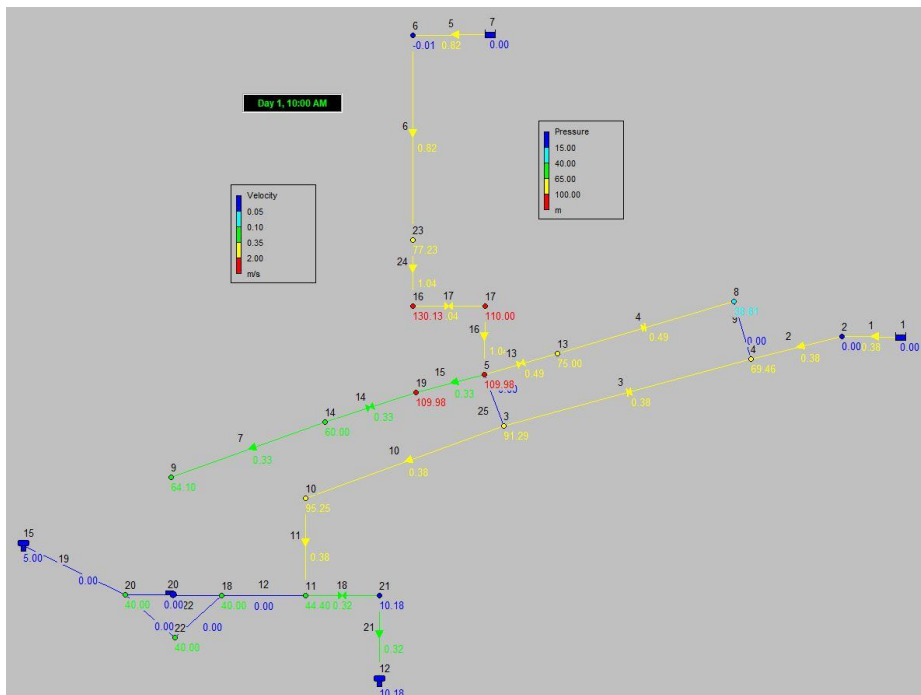
Output di calcolo (TUBI VECCHI): pressione ai nodi 17, 5, 8 e 9 nell'arco della giornata



Output di calcolo (TUBI VECCHI): prelievi (ai nodi) e portate (nelle condotte) alle 10h00



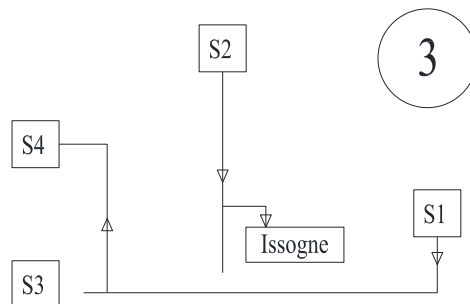
Output di calcolo (TUBI VECCHI): carico (ai nodi) e portate (nelle condotte) alle 10h00



Output di calcolo (TUBI VECCHI): pressione (ai nodi) e velocità (nelle condotte) alle 10h00

4 Verifiche idrauliche per la Modalità n°3

Lo schema di principio è il seguente:



In questa modalità:

- il serbatoio S3 Clos de Barne (Arnad) viene caricato fino al raggiungimento del suo livello massimo;
- il serbatoio S4 Ville loc. Castello (Arnad alta) viene caricato dal serbatoio S1 Fabrique (Champdepraz) mediante l'ausilio di una pompa sollevatrice presso la camera di manovra di Clos de Barne;
- la distribuzione nella piana di Issogne avviene mediante l'approvvigionamento dal serbatoio S2 Sommet de la Ville (Issogne);

Seguono i tabulati di calcolo ed i grafici significativi per la Modalità n°3, per la quale le verifiche sono state eseguite esclusivamente a tubi vecchi.

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*****
*                               E P A N E T                               *
*                               Hydraulic and Water Quality                 *
*                               Analysis for Pipe Networks                   *
*                               Version 2.0                                 *
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MODALITA' di FUNZIONAMENTO 3

VERIFICHE a TUBI VECCHI (coefficiente di H-W pari a 105)

Link - Node Table:

Link ID	Start Node	End Node	Length m	Diameter mm	
1	1	2	1	184	
2	2	4	1060	184	
3	4	3	2875	184	
4	13	8	2875	130.8	
5	7	6	1	130.8	
6	6	23	850	130.8	
7	14	9	535	130.8	
9	4	8	10	130.8	
10	3	10	2780	184	
11	10	11	805	184	
12	11	18	10	184	
15	5	19	1	130.8	
16	17	5	1	116.2	
19	24	15	2310	130.8	
21	21	12	1	184	
22	18	22	3	130.8	
23	22	20	3	130.8	
24	23	16	560	116.2	
25	5	3	2	130.8	
20	18	20	#N/A	#N/A	Pump
13	5	13	#N/A	130.8	Valve
14	19	14	#N/A	130.8	Valve
17	16	17	#N/A	116.2	Valve
18	11	21	#N/A	184	Valve
8	20	24	#N/A	130.8	Valve

Energy Usage:

Pump	Usage Factor	Avg. Effic.	Kw-hr /m3	Avg. Kw	Peak Kw	Cost /day
20	100.00	75.00	0.11	5.69	5.70	0.00
					Demand Charge:	0.00
					Total Cost:	0.00

Node Results at 0:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	449.59	86.59	0.00	
4	0.00	457.19	68.19	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	442.23	87.23	0.00	
11	0.00	440.69	35.69	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	440.66	35.66	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	472.23	67.23	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	456.45	51.45	0.00	
23	0.00	510.00	85.00	0.00	
24	0.00	472.23	32.23	0.00	
1	-13.83	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	13.83	445.00	5.00	0.00	Tank

Link Results at 0:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	13.83	0.52	1.93	Open
2	13.83	0.52	2.65	Open
3	13.83	0.52	2.65	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.83	0.52	2.65	Open
11	13.83	0.52	1.92	Open
12	13.83	0.52	2.24	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.83	1.03	11.79	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed

Link Results at 0:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.83	0.00	-31.56	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.83	1.03	0.00	Open Valve

Node Results at 1:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.59	86.59	0.00
4	0.00	457.19	68.19	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	442.24	87.24	0.00
11	0.00	440.70	35.70	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.67	35.67	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.24	67.24	0.00
21	0.00	415.00	10.00	0.00
22	0.00	456.46	51.46	0.00
23	0.00	510.00	85.00	0.00
24	0.00	472.24	32.24	0.00
1	-13.83	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.83	445.03	5.03	0.00 Tank

Link Results at 1:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.83	0.52	1.93	Open
2	13.83	0.52	2.64	Open
3	13.83	0.52	2.64	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.83	0.52	2.64	Open
11	13.83	0.52	1.91	Open
12	13.83	0.52	2.23	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.83	1.03	11.78	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.83	0.00	-31.56	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.83	1.03	0.00	Open Valve

Node Results at 2:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.60	86.60	0.00
4	0.00	457.20	68.20	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	442.25	87.25	0.00
11	0.00	440.71	35.71	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.68	35.68	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.25	67.25	0.00

Node Results at 2:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	456.47	51.47	0.00
23	0.00	510.00	85.00	0.00
24	0.00	472.25	32.25	0.00
1	-13.82	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.82	445.05	5.05	0.00 Tank

Link Results at 2:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.82	0.52	1.93	Open
2	13.82	0.52	2.64	Open
3	13.82	0.52	2.64	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.82	0.52	2.64	Open
11	13.82	0.52	1.91	Open
12	13.82	0.52	2.23	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.82	1.03	11.77	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.82	0.00	-31.56	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.82	1.03	0.00	Open Valve

Node Results at 3:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	449.60	86.60	0.00	
4	0.00	457.20	68.20	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	442.26	87.26	0.00	
11	0.00	440.72	35.72	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	440.69	35.69	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	472.26	67.26	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	456.48	51.48	0.00	
23	0.00	510.00	85.00	0.00	
24	0.00	472.26	32.26	0.00	
1	-13.82	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	13.82	445.08	5.08	0.00	Tank

Link Results at 3:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	13.82	0.52	1.93	Open
2	13.82	0.52	2.64	Open
3	13.82	0.52	2.64	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.82	0.52	2.64	Open
11	13.82	0.52	1.91	Open
12	13.82	0.52	2.23	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.82	1.03	11.77	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed

Link Results at 3:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.82	0.00	-31.57	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.82	1.03	0.00	Open Valve

Node Results at 4:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.61	86.61	0.00
4	0.00	457.20	68.20	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	1.20	437.75	48.75	0.00
9	0.80	422.98	64.98	0.00
10	0.00	442.27	87.27	0.00
11	0.00	440.73	35.73	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	509.58	146.58	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.70	35.70	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.27	67.27	0.00
21	0.00	415.00	10.00	0.00
22	0.00	456.49	51.49	0.00
23	0.00	509.81	84.81	0.00
24	0.00	472.27	32.27	0.00
1	-13.81	460.00	0.00	0.00 Reservoir
7	-2.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.81	445.10	5.10	0.00 Tank

Link Results at 4:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.81	0.52	1.93	Open
2	13.81	0.52	2.64	Open
3	13.81	0.52	2.64	Open
4	1.20	0.09	0.09	Open
5	2.00	0.15	0.30	Open
6	2.00	0.15	0.23	Open
7	0.80	0.06	0.04	Open
9	0.00	0.00	0.00	Closed
10	13.81	0.52	2.64	Open
11	13.81	0.52	1.91	Open
12	13.81	0.52	2.23	Open
15	0.80	0.06	0.04	Open
16	2.00	0.19	0.41	Open
19	13.81	1.03	11.76	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	2.00	0.19	0.41	Open
25	0.00	0.00	0.00	Closed
20	13.81	0.00	-31.57	Open Pump
13	1.20	0.09	35.00	Active Valve
14	0.80	0.06	50.00	Active Valve
17	2.00	0.19	36.58	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.81	1.03	0.00	Open Valve

Node Results at 5:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.61	86.61	0.00
4	0.00	457.20	68.20	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	3.00	436.61	47.61	0.00
9	2.00	422.88	64.88	0.00
10	0.00	442.28	87.28	0.00
11	0.00	440.74	35.74	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	507.70	144.70	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.71	35.71	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.28	67.28	0.00

Node Results at 5:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	456.50	51.50	0.00
23	0.00	508.94	83.94	0.00
24	0.00	472.28	32.28	0.00
1	-13.81	460.00	0.00	0.00 Reservoir
7	-5.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.81	445.13	5.13	0.00 Tank

Link Results at 5:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.81	0.52	1.93	Open
2	13.81	0.52	2.64	Open
3	13.81	0.52	2.64	Open
4	3.00	0.22	0.48	Open
5	5.00	0.37	1.56	Open
6	5.00	0.37	1.24	Open
7	2.00	0.15	0.23	Open
9	0.00	0.00	0.00	Closed
10	13.81	0.52	2.64	Open
11	13.81	0.52	1.91	Open
12	13.81	0.52	2.23	Open
15	2.00	0.15	0.26	Open
16	5.00	0.47	2.23	Open
19	13.81	1.03	11.76	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	5.00	0.47	2.21	Open
25	0.00	0.00	0.00	Closed
20	13.81	0.00	-31.57	Open Pump
13	3.00	0.22	35.00	Active Valve
14	2.00	0.15	50.00	Active Valve
17	5.00	0.47	34.70	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.81	1.03	0.00	Open Valve

Node Results at 6:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	449.62	86.62	0.00	
4	0.00	457.20	68.20	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	4.50	435.06	46.06	0.00	
9	3.00	422.74	64.74	0.00	
10	0.00	442.28	87.28	0.00	
11	0.00	440.75	35.75	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	505.13	142.13	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	440.72	35.72	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	472.29	67.29	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	456.51	51.51	0.00	
23	0.00	507.76	82.76	0.00	
24	0.00	472.29	32.29	0.00	
1	-13.81	460.00	0.00	0.00	Reservoir
7	-7.50	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	13.81	445.15	5.15	0.00	Tank

Link Results at 6:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	13.81	0.52	1.93	Open
2	13.81	0.52	2.64	Open
3	13.81	0.52	2.64	Open
4	4.50	0.33	1.02	Open
5	7.50	0.56	3.27	Open
6	7.50	0.56	2.64	Open
7	3.00	0.22	0.48	Open
9	0.00	0.00	0.00	Closed
10	13.81	0.52	2.64	Open
11	13.81	0.52	1.91	Open
12	13.81	0.52	2.23	Open
15	3.00	0.22	0.60	Open
16	7.50	0.71	4.69	Open
19	13.81	1.03	11.75	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed

Link Results at 6:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	7.50	0.71	4.69	Open
25	0.00	0.00	0.00	Closed
20	13.81	0.00	-31.57	Open Pump
13	4.50	0.33	35.00	Active Valve
14	3.00	0.22	49.99	Active Valve
17	7.50	0.71	32.13	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.81	1.03	0.00	Open Valve

Node Results at 7:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.62	86.62	0.00
4	0.00	457.20	68.20	0.00
5	0.00	472.99	109.99	0.00
6	0.00	510.00	0.00	0.00
8	5.40	433.87	44.87	0.00
9	3.60	422.64	64.64	0.00
10	0.00	442.29	87.29	0.00
11	0.00	440.76	35.76	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	503.17	140.17	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.73	35.73	0.00
19	0.00	472.99	109.99	0.00
20	0.00	472.30	67.30	0.00
21	0.00	415.00	10.00	0.00
22	0.00	456.52	51.52	0.00
23	0.00	506.85	81.85	0.00
24	0.00	472.30	32.30	0.00
1	-13.80	460.00	0.00	0.00 Reservoir
7	-9.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.80	445.18	5.18	0.00 Tank

Link Results at 7:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.80	0.52	1.93	Open
2	13.80	0.52	2.64	Open
3	13.80	0.52	2.64	Open
4	5.40	0.40	1.43	Open
5	9.00	0.67	4.58	Open
6	9.00	0.67	3.70	Open
7	3.60	0.27	0.68	Open
9	0.00	0.00	0.00	Closed
10	13.80	0.52	2.64	Open
11	13.80	0.52	1.91	Open
12	13.80	0.52	2.23	Open
15	3.60	0.27	0.82	Open
16	9.00	0.85	6.59	Open
19	13.80	1.03	11.74	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	9.00	0.85	6.58	Open
25	0.00	0.00	0.00	Closed
20	13.80	0.00	-31.57	Open Pump
13	5.40	0.40	34.99	Active Valve
14	3.60	0.27	49.99	Active Valve
17	9.00	0.85	30.17	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.80	1.03	0.00	Open Valve

Node Results at 8:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.63	86.63	0.00
4	0.00	457.20	68.20	0.00
5	0.00	472.99	109.99	0.00
6	0.00	510.00	0.00	0.00
8	5.40	433.87	44.87	0.00
9	3.60	422.64	64.64	0.00
10	0.00	442.30	87.30	0.00
11	0.00	440.77	35.77	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	503.17	140.17	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.74	35.74	0.00
19	0.00	472.99	109.99	0.00
20	0.00	472.32	67.32	0.00

Node Results at 8:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	456.53	51.53	0.00
23	0.00	506.85	81.85	0.00
24	0.00	472.32	32.32	0.00
1	-13.80	460.00	0.00	0.00 Reservoir
7	-9.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.80	445.20	5.20	0.00 Tank

Link Results at 8:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.80	0.52	1.93	Open
2	13.80	0.52	2.64	Open
3	13.80	0.52	2.64	Open
4	5.40	0.40	1.43	Open
5	9.00	0.67	4.58	Open
6	9.00	0.67	3.70	Open
7	3.60	0.27	0.68	Open
9	0.00	0.00	0.00	Closed
10	13.80	0.52	2.64	Open
11	13.80	0.52	1.91	Open
12	13.80	0.52	2.22	Open
15	3.60	0.27	0.82	Open
16	9.00	0.85	6.59	Open
19	13.80	1.03	11.74	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	9.00	0.85	6.58	Open
25	0.00	0.00	0.00	Closed
20	13.80	0.00	-31.57	Open Pump
13	5.40	0.40	34.99	Active Valve
14	3.60	0.27	49.99	Active Valve
17	9.00	0.85	30.17	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.80	1.03	0.00	Open Valve

Node Results at 9:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	449.63	86.63	0.00	
4	0.00	457.21	68.21	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	509.99	-0.01	0.00	
8	6.00	432.99	43.99	0.00	
9	4.00	422.56	64.56	0.00	
10	0.00	442.31	87.31	0.00	
11	0.00	440.78	35.78	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	501.70	138.70	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	440.75	35.75	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	472.33	67.33	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	456.54	51.54	0.00	
23	0.00	506.18	81.18	0.00	
24	0.00	472.33	32.33	0.00	
1	-13.79	460.00	0.00	0.00	Reservoir
7	-10.00	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	13.79	445.23	5.23	0.00	Tank

Link Results at 9:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	13.79	0.52	1.93	Open
2	13.79	0.52	2.63	Open
3	13.79	0.52	2.63	Open
4	6.00	0.45	1.74	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	4.49	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	13.79	0.52	2.63	Open
11	13.79	0.52	1.91	Open
12	13.79	0.52	2.22	Open
15	4.00	0.30	1.00	Open
16	10.00	0.94	8.00	Open
19	13.79	1.03	11.73	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed

Link Results at 9:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	10.00	0.94	7.99	Open
25	0.00	0.00	0.00	Closed
20	13.79	0.00	-31.57	Open Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	28.70	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.79	1.03	0.00	Open Valve

Node Results at 10:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.64	86.64	0.00
4	0.00	457.21	68.21	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.60	432.02	43.02	0.00
9	4.40	422.47	64.47	0.00
10	0.00	442.32	87.32	0.00
11	0.00	440.79	35.79	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	500.10	137.10	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.77	35.77	0.00
19	0.00	472.99	109.99	0.00
20	0.00	472.34	67.34	0.00
21	0.00	415.00	10.00	0.00
22	0.00	456.55	51.55	0.00
23	0.00	505.44	80.44	0.00
24	0.00	472.34	32.34	0.00
1	-13.79	460.00	0.00	0.00 Reservoir
7	-11.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.79	445.25	5.25	0.00 Tank

Link Results at 10:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.79	0.52	1.93	Open
2	13.79	0.52	2.63	Open
3	13.79	0.52	2.63	Open
4	6.60	0.49	2.08	Open
5	11.00	0.82	6.62	Open
6	11.00	0.82	5.36	Open
7	4.40	0.33	0.98	Open
9	0.00	0.00	0.00	Closed
10	13.79	0.52	2.63	Open
11	13.79	0.52	1.91	Open
12	13.79	0.52	2.22	Open
15	4.40	0.33	1.23	Open
16	11.00	1.04	9.52	Open
19	13.79	1.03	11.72	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	11.00	1.04	9.54	Open
25	0.00	0.00	0.00	Closed
20	13.79	0.00	-31.57	Open Pump
13	6.60	0.49	34.99	Active Valve
14	4.40	0.33	49.99	Active Valve
17	11.00	1.04	27.10	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.79	1.03	0.00	Open Valve

Node Results at 11:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.65	86.65	0.00
4	0.00	457.21	68.21	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	432.99	43.99	0.00
9	4.00	422.56	64.56	0.00
10	0.00	442.33	87.33	0.00
11	0.00	440.80	35.80	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	501.70	138.70	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.78	35.78	0.00
19	0.00	472.99	109.99	0.00
20	0.00	472.35	67.35	0.00

Node Results at 11:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	456.56	51.56	0.00
23	0.00	506.18	81.18	0.00
24	0.00	472.35	32.35	0.00
1	-13.79	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.79	445.28	5.28	0.00 Tank

Link Results at 11:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.79	0.52	1.93	Open
2	13.79	0.52	2.63	Open
3	13.79	0.52	2.63	Open
4	6.00	0.45	1.74	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	4.49	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	13.79	0.52	2.63	Open
11	13.79	0.52	1.90	Open
12	13.79	0.52	2.22	Open
15	4.00	0.30	1.00	Open
16	10.00	0.94	8.00	Open
19	13.79	1.03	11.72	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	10.00	0.94	7.99	Open
25	0.00	0.00	0.00	Closed
20	13.79	0.00	-31.57	Open Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	28.70	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.79	1.03	0.00	Open Valve

Node Results at 12:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	449.65	86.65	0.00	
4	0.00	457.21	68.21	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	4.50	435.06	46.06	0.00	
9	3.00	422.74	64.74	0.00	
10	0.00	442.34	87.34	0.00	
11	0.00	440.81	35.81	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	505.13	142.13	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	440.79	35.79	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	472.36	67.36	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	456.57	51.57	0.00	
23	0.00	507.76	82.76	0.00	
24	0.00	472.36	32.36	0.00	
1	-13.78	460.00	0.00	0.00	Reservoir
7	-7.50	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	13.78	445.30	5.30	0.00	Tank

Link Results at 12:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	13.78	0.52	1.93	Open
2	13.78	0.52	2.63	Open
3	13.78	0.52	2.63	Open
4	4.50	0.33	1.02	Open
5	7.50	0.56	3.27	Open
6	7.50	0.56	2.64	Open
7	3.00	0.22	0.48	Open
9	0.00	0.00	0.00	Closed
10	13.78	0.52	2.63	Open
11	13.78	0.52	1.90	Open
12	13.78	0.52	2.22	Open
15	3.00	0.22	0.60	Open
16	7.50	0.71	4.69	Open
19	13.78	1.03	11.71	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed

Link Results at 12:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	7.50	0.71	4.69	Open
25	0.00	0.00	0.00	Closed
20	13.78	0.00	-31.57	Open Pump
13	4.50	0.33	35.00	Active Valve
14	3.00	0.22	49.99	Active Valve
17	7.50	0.71	32.13	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.78	1.03	0.00	Open Valve

Node Results at 13:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.66	86.66	0.00
4	0.00	457.21	68.21	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	1.50	437.62	48.62	0.00
9	1.00	422.97	64.97	0.00
10	0.00	442.35	87.35	0.00
11	0.00	440.82	35.82	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	509.36	146.36	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.80	35.80	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.37	67.37	0.00
21	0.00	415.00	10.00	0.00
22	0.00	456.58	51.58	0.00
23	0.00	509.71	84.71	0.00
24	0.00	472.37	32.37	0.00
1	-13.78	460.00	0.00	0.00 Reservoir
7	-2.50	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.78	445.33	5.33	0.00 Tank

Link Results at 13:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.78	0.52	1.93	Open
2	13.78	0.52	2.63	Open
3	13.78	0.52	2.63	Open
4	1.50	0.11	0.13	Open
5	2.50	0.19	0.45	Open
6	2.50	0.19	0.34	Open
7	1.00	0.07	0.06	Open
9	0.00	0.00	0.00	Closed
10	13.78	0.52	2.63	Open
11	13.78	0.52	1.90	Open
12	13.78	0.52	2.22	Open
15	1.00	0.07	0.07	Open
16	2.50	0.24	0.63	Open
19	13.78	1.03	11.71	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	2.50	0.24	0.61	Open
25	0.00	0.00	0.00	Closed
20	13.78	0.00	-31.58	Open Pump
13	1.50	0.11	35.00	Active Valve
14	1.00	0.07	50.00	Active Valve
17	2.50	0.24	36.36	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.78	1.03	0.00	Open Valve

Node Results at 14:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.66	86.66	0.00
4	0.00	457.21	68.21	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	6.00	432.99	43.99	0.00
9	4.00	422.56	64.56	0.00
10	0.00	442.36	87.36	0.00
11	0.00	440.83	35.83	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	501.70	138.70	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.81	35.81	0.00
19	0.00	472.99	109.99	0.00
20	0.00	472.38	67.38	0.00

Node Results at 14:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	456.59	51.59	0.00
23	0.00	506.18	81.18	0.00
24	0.00	472.38	32.38	0.00
1	-13.77	460.00	0.00	0.00 Reservoir
7	-10.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.77	445.35	5.35	0.00 Tank

Link Results at 14:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.77	0.52	1.93	Open
2	13.77	0.52	2.63	Open
3	13.77	0.52	2.63	Open
4	6.00	0.45	1.74	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	4.49	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	13.77	0.52	2.63	Open
11	13.77	0.52	1.90	Open
12	13.77	0.52	2.22	Open
15	4.00	0.30	1.00	Open
16	10.00	0.94	8.00	Open
19	13.77	1.03	11.70	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	10.00	0.94	7.99	Open
25	0.00	0.00	0.00	Closed
20	13.77	0.00	-31.58	Open Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	28.70	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.77	1.03	0.00	Open Valve

Node Results at 15:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	449.67	86.67	0.00	
4	0.00	457.22	68.22	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	509.99	-0.01	0.00	
8	6.00	432.99	43.99	0.00	
9	4.00	422.56	64.56	0.00	
10	0.00	442.37	87.37	0.00	
11	0.00	440.84	35.84	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	501.70	138.70	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	440.82	35.82	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	472.39	67.39	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	456.60	51.60	0.00	
23	0.00	506.18	81.18	0.00	
24	0.00	472.39	32.39	0.00	
1	-13.77	460.00	0.00	0.00	Reservoir
7	-10.00	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	13.77	445.38	5.38	0.00	Tank

Link Results at 15:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	13.77	0.52	1.90	Open
2	13.77	0.52	2.63	Open
3	13.77	0.52	2.63	Open
4	6.00	0.45	1.74	Open
5	10.00	0.74	5.54	Open
6	10.00	0.74	4.49	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	13.77	0.52	2.63	Open
11	13.77	0.52	1.90	Open
12	13.77	0.52	2.22	Open
15	4.00	0.30	1.00	Open
16	10.00	0.94	8.00	Open
19	13.77	1.02	11.69	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed

Link Results at 15:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	10.00	0.94	7.99	Open
25	0.00	0.00	0.00	Closed
20	13.77	0.00	-31.58	Open Pump
13	6.00	0.45	34.99	Active Valve
14	4.00	0.30	49.99	Active Valve
17	10.00	0.94	28.70	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.77	1.02	0.00	Open Valve

Node Results at 16:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.67	86.67	0.00
4	0.00	457.22	68.22	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	4.50	435.06	46.06	0.00
9	3.00	422.74	64.74	0.00
10	0.00	442.38	87.38	0.00
11	0.00	440.85	35.85	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	505.13	142.13	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.83	35.83	0.00
19	0.00	472.99	109.99	0.00
20	0.00	472.40	67.40	0.00
21	0.00	415.00	10.00	0.00
22	0.00	456.61	51.61	0.00
23	0.00	507.76	82.76	0.00
24	0.00	472.40	32.40	0.00
1	-13.77	460.00	0.00	0.00 Reservoir
7	-7.50	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.77	445.40	5.40	0.00 Tank

Link Results at 16:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.77	0.52	1.90	Open
2	13.77	0.52	2.62	Open
3	13.77	0.52	2.62	Open
4	4.50	0.33	1.02	Open
5	7.50	0.56	3.27	Open
6	7.50	0.56	2.64	Open
7	3.00	0.22	0.48	Open
9	0.00	0.00	0.00	Closed
10	13.77	0.52	2.62	Open
11	13.77	0.52	1.90	Open
12	13.77	0.52	2.21	Open
15	3.00	0.22	0.60	Open
16	7.50	0.71	4.69	Open
19	13.77	1.02	11.69	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	7.50	0.71	4.69	Open
25	0.00	0.00	0.00	Closed
20	13.77	0.00	-31.58	Open Pump
13	4.50	0.33	35.00	Active Valve
14	3.00	0.22	49.99	Active Valve
17	7.50	0.71	32.13	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.77	1.02	0.00	Open Valve

Node Results at 17:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.68	86.68	0.00
4	0.00	457.22	68.22	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	1.50	437.62	48.62	0.00
9	1.00	422.97	64.97	0.00
10	0.00	442.39	87.39	0.00
11	0.00	440.86	35.86	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	509.36	146.36	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.84	35.84	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.42	67.42	0.00

Node Results at 17:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	456.63	51.63	0.00
23	0.00	509.71	84.71	0.00
24	0.00	472.42	32.42	0.00
1	-13.76	460.00	0.00	0.00 Reservoir
7	-2.50	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.76	445.43	5.43	0.00 Tank

Link Results at 17:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.76	0.52	1.90	Open
2	13.76	0.52	2.62	Open
3	13.76	0.52	2.62	Open
4	1.50	0.11	0.13	Open
5	2.50	0.19	0.45	Open
6	2.50	0.19	0.34	Open
7	1.00	0.07	0.06	Open
9	0.00	0.00	0.00	Closed
10	13.76	0.52	2.62	Open
11	13.76	0.52	1.90	Open
12	13.76	0.52	2.21	Open
15	1.00	0.07	0.07	Open
16	2.50	0.24	0.63	Open
19	13.76	1.02	11.68	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	2.50	0.24	0.61	Open
25	0.00	0.00	0.00	Closed
20	13.76	0.00	-31.58	Open Pump
13	1.50	0.11	35.00	Active Valve
14	1.00	0.07	50.00	Active Valve
17	2.50	0.24	36.36	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.76	1.02	0.00	Open Valve

Node Results at 18:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	449.68	86.68	0.00	
4	0.00	457.22	68.22	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.60	437.93	48.93	0.00	
9	0.40	422.99	64.99	0.00	
10	0.00	442.40	87.40	0.00	
11	0.00	440.87	35.87	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	509.88	146.88	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	440.85	35.85	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	472.43	67.43	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	456.64	51.64	0.00	
23	0.00	509.95	84.95	0.00	
24	0.00	472.43	32.43	0.00	
1	-13.76	460.00	0.00	0.00	Reservoir
7	-1.00	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	13.76	445.46	5.46	0.00	Tank

Link Results at 18:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	13.76	0.52	1.90	Open
2	13.76	0.52	2.62	Open
3	13.76	0.52	2.62	Open
4	0.60	0.04	0.02	Open
5	1.00	0.07	0.07	Open
6	1.00	0.07	0.06	Open
7	0.40	0.03	0.01	Open
9	0.00	0.00	0.00	Closed
10	13.76	0.52	2.62	Open
11	13.76	0.52	1.90	Open
12	13.76	0.52	2.22	Open
15	0.40	0.03	0.00	Open
16	1.00	0.09	0.11	Open
19	13.76	1.02	11.68	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed

Link Results at 18:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	1.00	0.09	0.11	Open
25	0.00	0.00	0.00	Closed
20	13.76	0.00	-31.58	Open Pump
13	0.60	0.04	35.00	Active Valve
14	0.40	0.03	50.00	Active Valve
17	1.00	0.09	36.88	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.76	1.02	0.00	Open Valve

Node Results at 19:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.69	86.69	0.00
4	0.00	457.22	68.22	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	442.40	87.40	0.00
11	0.00	440.88	35.88	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.86	35.86	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.44	67.44	0.00
21	0.00	415.00	10.00	0.00
22	0.00	456.65	51.65	0.00
23	0.00	510.00	85.00	0.00
24	0.00	472.44	32.44	0.00
1	-13.76	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.76	445.48	5.48	0.00 Tank

Link Results at 19:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.76	0.52	1.90	Open
2	13.76	0.52	2.62	Open
3	13.76	0.52	2.62	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.76	0.52	2.62	Open
11	13.76	0.52	1.90	Open
12	13.76	0.52	2.21	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.76	1.02	11.67	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.76	0.00	-31.58	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.76	1.02	0.00	Open Valve

Node Results at 20:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.69	86.69	0.00
4	0.00	457.22	68.22	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	442.41	87.41	0.00
11	0.00	440.89	35.89	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.87	35.87	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.45	67.45	0.00

Node Results at 20:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	456.66	51.66	0.00
23	0.00	510.00	85.00	0.00
24	0.00	472.45	32.45	0.00
1	-13.75	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.75	445.51	5.51	0.00 Tank

Link Results at 20:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.75	0.52	1.90	Open
2	13.75	0.52	2.62	Open
3	13.75	0.52	2.62	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.75	0.52	2.62	Open
11	13.75	0.52	1.90	Open
12	13.75	0.52	2.21	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.75	1.02	11.66	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.75	0.00	-31.58	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.75	1.02	0.00	Open Valve

Node Results at 21:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	449.70	86.70	0.00	
4	0.00	457.22	68.22	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	442.42	87.42	0.00	
11	0.00	440.90	35.90	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	440.88	35.88	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	472.46	67.46	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	456.67	51.67	0.00	
23	0.00	510.00	85.00	0.00	
24	0.00	472.46	32.46	0.00	
1	-13.75	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	13.75	445.53	5.53	0.00	Tank

Link Results at 21:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	13.75	0.52	1.90	Open
2	13.75	0.52	2.62	Open
3	13.75	0.52	2.62	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.75	0.52	2.62	Open
11	13.75	0.52	1.90	Open
12	13.75	0.52	2.21	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.75	1.02	11.66	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed

Link Results at 21:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.75	0.00	-31.58	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.75	1.02	0.00	Open Valve

Node Results at 22:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.70	86.70	0.00
4	0.00	457.23	68.23	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	442.43	87.43	0.00
11	0.00	440.91	35.91	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.89	35.89	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.47	67.47	0.00
21	0.00	415.00	10.00	0.00
22	0.00	456.68	51.68	0.00
23	0.00	510.00	85.00	0.00
24	0.00	472.47	32.47	0.00
1	-13.74	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.74	445.56	5.56	0.00 Tank

Link Results at 22:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.74	0.52	1.90	Open
2	13.74	0.52	2.62	Open
3	13.74	0.52	2.62	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.74	0.52	2.62	Open
11	13.74	0.52	1.89	Open
12	13.74	0.52	2.21	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.74	1.02	11.65	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.74	0.00	-31.58	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.74	1.02	0.00	Open Valve

Node Results at 23:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.71	86.71	0.00
4	0.00	457.23	68.23	0.00
5	0.00	473.00	110.00	0.00
6	0.00	510.00	0.00	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	442.44	87.44	0.00
11	0.00	440.92	35.92	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	510.00	147.00	0.00
17	0.00	473.00	110.00	0.00
18	0.00	440.90	35.90	0.00
19	0.00	473.00	110.00	0.00
20	0.00	472.48	67.48	0.00

Node Results at 23:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	456.69	51.69	0.00
23	0.00	510.00	85.00	0.00
24	0.00	472.48	32.48	0.00
1	-13.74	460.00	0.00	0.00 Reservoir
7	0.00	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	13.74	445.58	5.58	0.00 Tank

Link Results at 23:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	13.74	0.52	1.90	Open
2	13.74	0.52	2.61	Open
3	13.74	0.52	2.61	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.74	0.52	2.61	Open
11	13.74	0.52	1.89	Open
12	13.74	0.52	2.21	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.74	1.02	11.65	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.74	0.00	-31.59	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.74	1.02	0.00	Open Valve

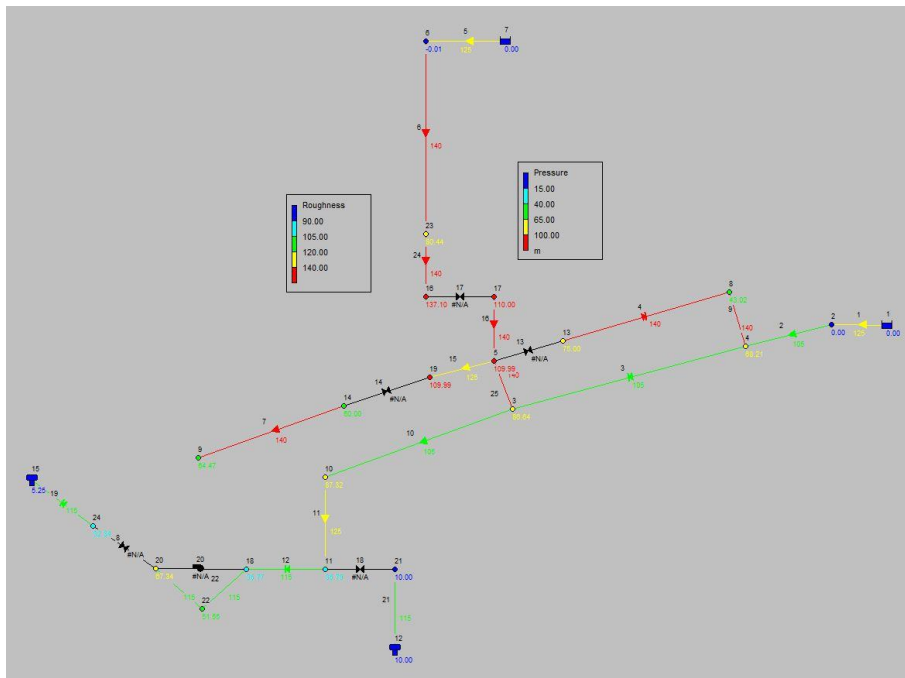
Node Results at 24:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	449.72	86.72	0.00	
4	0.00	457.23	68.23	0.00	
5	0.00	473.00	110.00	0.00	
6	0.00	510.00	0.00	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	442.45	87.45	0.00	
11	0.00	440.93	35.93	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	510.00	147.00	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	440.91	35.91	0.00	
19	0.00	473.00	110.00	0.00	
20	0.00	472.49	67.49	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	456.70	51.70	0.00	
23	0.00	510.00	85.00	0.00	
24	0.00	472.49	32.49	0.00	
1	-13.74	460.00	0.00	0.00	Reservoir
7	0.00	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	13.74	445.61	5.61	0.00	Tank

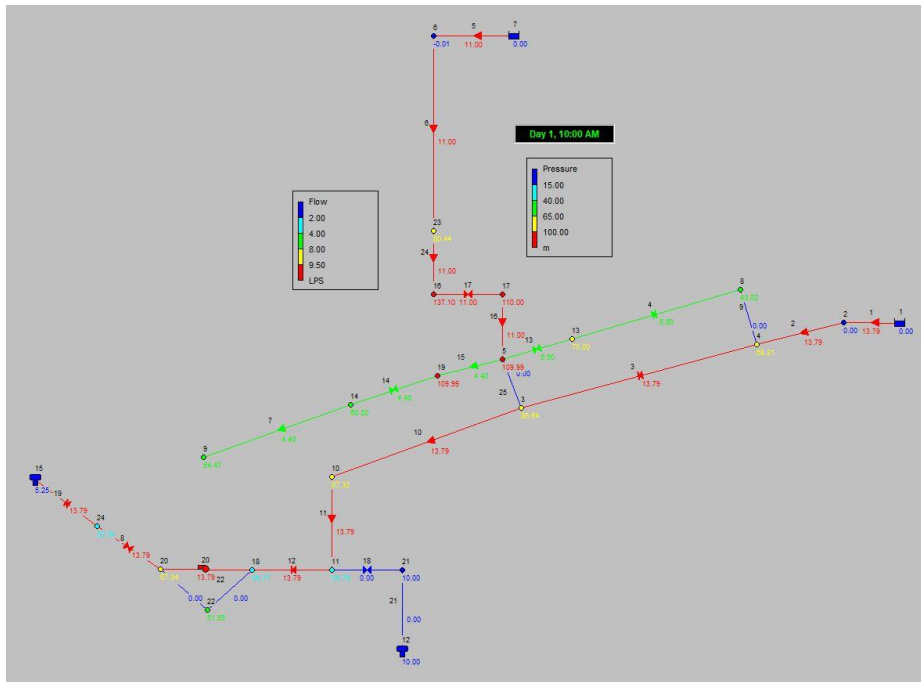
Link Results at 24:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	13.74	0.52	1.90	Open
2	13.74	0.52	2.61	Open
3	13.74	0.52	2.61	Open
4	0.00	0.00	0.00	Open
5	0.00	0.00	0.00	Open
6	0.00	0.00	0.00	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	13.74	0.52	2.61	Open
11	13.74	0.52	1.89	Open
12	13.74	0.52	2.21	Open
15	0.00	0.00	0.00	Open
16	0.00	0.00	0.00	Open
19	13.74	1.02	11.64	Open
21	0.00	0.00	0.00	Open
22	0.00	0.00	0.00	Closed
23	0.00	0.00	0.00	Closed

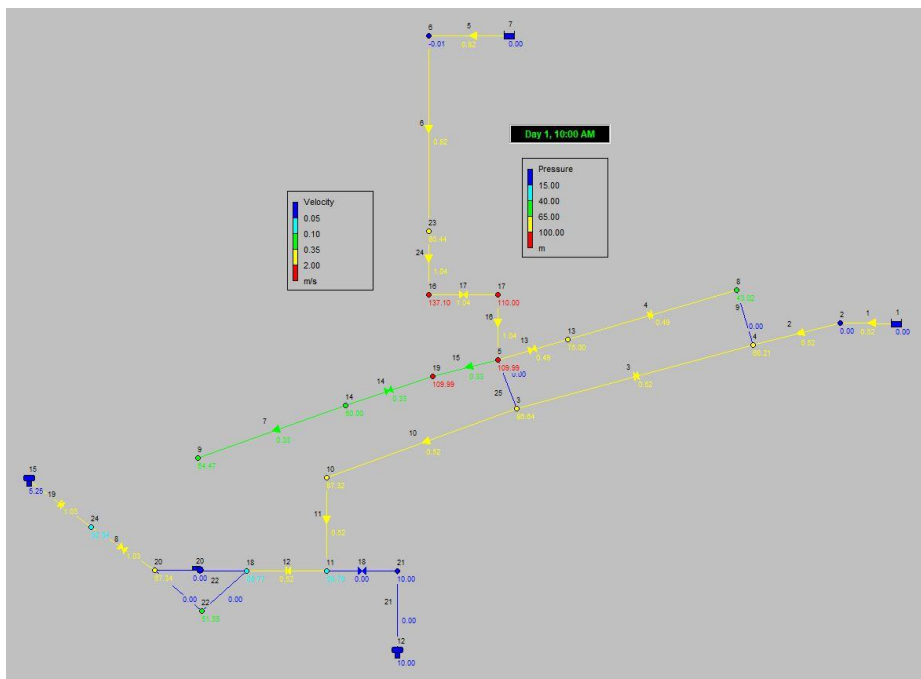
Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	0.00	0.00	0.00	Open
25	0.00	0.00	0.00	Closed
20	13.74	0.00	-31.59	Open Pump
13	0.00	0.00	35.00	Active Valve
14	0.00	0.00	50.00	Active Valve
17	0.00	0.00	37.00	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	13.74	1.02	0.00	Open Valve



Schema della rete: scabrezza condotte per verifiche Mod. n°3



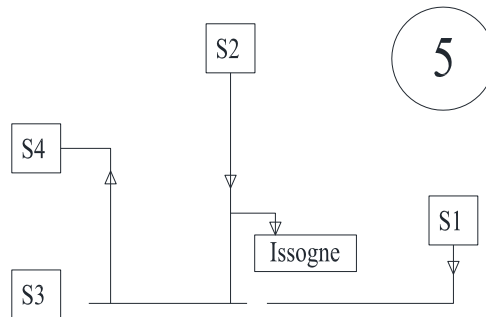
Output di calcolo (**TUBI VECCHI**): pressione (ai nodi) e portata (nelle condotte) alle ore 10h00



Output di calcolo (**TUBI VECCHI**): pressione (ai nodi) e velocità (nelle condotte) alle ore 10h00

5 Verifiche idrauliche per la Modalità n°5

Lo schema di principio è il seguente:



In questa modalità:

- il serbatoio S3 Clos de Barme (Arnad) viene caricato dal serbatoio S2 Sommet de la Ville (Issogne) solo fino al raggiungimento del livello massimo;
- il serbatoio S4 di Ville loc. Castello (Arnad alta) viene caricato dal serbatoio S2 Sommet de la Ville (Issogne);
- la distribuzione nella piana di Issogne avviene mediante l'approvvigionamento dal serbatoio S2 Sommet de la Ville (Issogne);
- Il serbatoio S1 Fabrique (Champdepraz) non viene utilizzato per alimentare la parte di acquedotto intercomunale.

Seguono i tabulati di calcolo ed i grafici significativi per la Modalità n°5, sia per la condizione di tubi nuovi che di tubi vecchi.

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*                               E P A N E T                               *
*                               Hydraulic and Water Quality                 *
*                               Analysis for Pipe Networks                   *
*                               Version 2.0                                 *
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MODALITA' di FUNZIONAMENTO 5

VERIFICHE a TUBI NUOVI (coefficiente di H-W pari a 140)

Link - Node Table:

Link ID	Start Node	End Node	Length m	Diameter mm	
1	1	2	1	184	
2	2	4	1060	184	
3	4	3	2875	184	
4	13	8	2875	130.8	
5	7	6	1	130.8	
6	6	23	850	130.8	
7	14	9	535	130.8	
9	4	8	10	130.8	
10	3	10	2780	184	
11	10	11	805	184	
12	11	18	10	184	
15	5	19	1	130.8	
16	17	5	1	116.2	
19	24	15	2310	130.8	
21	21	12	1	184	
22	18	22	3	130.8	
23	22	20	3	130.8	
24	23	16	560	116.2	
25	5	3	2	130.8	
20	18	20	#N/A	#N/A	Pump
13	5	13	#N/A	130.8	Valve
14	19	14	#N/A	130.8	Valve
17	16	17	#N/A	116.2	Valve
18	11	21	#N/A	184	Valve
8	20	24	#N/A	130.8	Valve

Energy Usage:

Pump	Usage Factor	Avg. Effic.	Kw-hr /m3	Avg. Kw	Peak Kw	Cost /day
20	0.00	0.00	0.00	0.00	0.00	0.00
					Demand Charge:	0.00
					Total Cost:	0.00

Node Results at 0:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	469.33	114.33	0.00	
11	0.00	468.03	63.03	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	497.24	134.24	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	468.01	63.01	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	467.95	62.95	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	467.98	62.98	0.00	
23	0.00	504.12	79.12	0.00	
24	0.00	467.95	27.95	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-12.61	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.61	445.00	5.00	0.00	Tank

Link Results at 0:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.61	0.94	8.52	Open
6	12.61	0.94	6.90	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.61	0.47	1.31	Open
11	12.61	0.47	1.62	Open
12	12.61	0.47	1.89	Open
15	0.00	0.00	0.00	Open
16	12.61	1.19	12.28	Open
19	12.61	0.94	9.94	Open
21	0.00	0.00	0.00	Open
22	12.61	0.94	9.93	Open
23	12.61	0.94	9.93	Open

Link Results at 0:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	12.61	1.19	12.29	Open
25	12.61	0.94	6.90	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.61	1.19	24.24	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.61	0.94	0.00	Open Valve

Node Results at 1:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	469.34	114.34	0.00
11	0.00	468.04	63.04	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	497.24	134.24	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.02	63.02	0.00
19	0.00	472.99	109.99	0.00
20	0.00	467.96	62.96	0.00
21	0.00	415.00	10.00	0.00
22	0.00	467.99	62.99	0.00
23	0.00	504.12	79.12	0.00
24	0.00	467.96	27.96	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-12.61	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.61	445.02	5.02	0.00 Tank

Link Results at 1:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.61	0.94	8.52	Open
6	12.61	0.94	6.90	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.61	0.47	1.31	Open
11	12.61	0.47	1.61	Open
12	12.61	0.47	1.89	Open
15	0.00	0.00	0.00	Open
16	12.61	1.19	12.28	Open
19	12.61	0.94	9.93	Open
21	0.00	0.00	0.00	Open
22	12.61	0.94	9.92	Open
23	12.61	0.94	9.93	Open
24	12.61	1.19	12.29	Open
25	12.61	0.94	6.90	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.61	1.19	24.24	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.61	0.94	0.00	Open Valve

Node Results at 2:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	469.34	114.34	0.00
11	0.00	468.04	63.04	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	497.25	134.25	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.02	63.02	0.00
19	0.00	472.99	109.99	0.00
20	0.00	467.96	62.96	0.00

Node Results at 2:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	467.99	62.99	0.00
23	0.00	504.13	79.13	0.00
24	0.00	467.96	27.96	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-12.61	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.60	445.05	5.05	0.00 Tank

Link Results at 2:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.61	0.94	8.52	Open
6	12.61	0.94	6.90	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.60	0.47	1.31	Open
11	12.60	0.47	1.61	Open
12	12.60	0.47	1.88	Open
15	0.00	0.00	0.00	Open
16	12.60	1.19	12.28	Open
19	12.60	0.94	9.92	Open
21	0.00	0.00	0.00	Open
22	12.60	0.94	9.92	Open
23	12.60	0.94	9.92	Open
24	12.61	1.19	12.28	Open
25	12.60	0.94	6.88	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.61	1.19	24.25	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.60	0.94	0.00	Open Valve

Node Results at 3:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	469.34	114.34	0.00	
11	0.00	468.05	63.05	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	497.26	134.26	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	468.03	63.03	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	467.97	62.97	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	468.00	63.00	0.00	
23	0.00	504.13	79.13	0.00	
24	0.00	467.97	27.97	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-12.60	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.59	445.07	5.07	0.00	Tank

Link Results at 3:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.60	0.94	8.52	Open
6	12.60	0.94	6.89	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.59	0.47	1.31	Open
11	12.59	0.47	1.61	Open
12	12.59	0.47	1.88	Open
15	0.00	0.00	0.00	Open
16	12.59	1.19	12.24	Open
19	12.59	0.94	9.91	Open
21	0.00	0.00	0.00	Open
22	12.59	0.94	9.92	Open
23	12.59	0.94	9.91	Open

Link Results at 3:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	12.60	1.19	12.27	Open
25	12.59	0.94	6.90	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.60	1.19	24.26	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.59	0.94	0.00	Open Valve

Node Results at 4:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	1.20	437.75	48.75	0.00
9	0.80	422.98	64.98	0.00
10	0.00	469.34	114.34	0.00
11	0.00	468.05	63.05	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	493.30	130.30	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.03	63.03	0.00
19	0.00	472.98	109.98	0.00
20	0.00	467.97	62.97	0.00
21	0.00	415.00	10.00	0.00
22	0.00	468.00	63.00	0.00
23	0.00	502.31	77.31	0.00
24	0.00	467.97	27.97	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-14.59	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.59	445.09	5.09	0.00 Tank

Link Results at 4:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	1.20	0.09	0.09	Open
5	14.59	1.09	11.16	Open
6	14.59	1.09	9.04	Open
7	0.80	0.06	0.04	Open
9	0.00	0.00	0.00	Closed
10	12.59	0.47	1.31	Open
11	12.59	0.47	1.61	Open
12	12.59	0.47	1.88	Open
15	0.80	0.06	0.07	Open
16	14.59	1.38	16.07	Open
19	12.59	0.94	9.90	Open
21	0.00	0.00	0.00	Open
22	12.59	0.94	9.90	Open
23	12.59	0.94	9.91	Open
24	14.59	1.38	16.09	Open
25	12.59	0.94	6.88	Open
20	0.00	0.00	0.00	Closed Pump
13	1.20	0.09	34.98	Active Valve
14	0.80	0.06	49.98	Active Valve
17	14.59	1.38	20.30	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.59	0.94	0.00	Open Valve

Node Results at 5:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.96	12.96	0.00
3	0.00	472.96	109.96	0.00
4	0.00	472.96	83.96	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.98	-0.02	0.00
8	3.00	436.61	47.61	0.00
9	2.00	422.88	64.88	0.00
10	0.00	469.34	114.34	0.00
11	0.00	468.04	63.04	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	486.40	123.40	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.03	63.03	0.00
19	0.00	472.98	109.98	0.00
20	0.00	467.97	62.97	0.00

Node Results at 5:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	468.00	63.00	0.00
23	0.00	499.13	74.13	0.00
24	0.00	467.97	27.97	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-17.58	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.58	445.12	5.12	0.00 Tank

Link Results at 5:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	3.00	0.22	0.48	Open
5	17.58	1.31	15.78	Open
6	17.58	1.31	12.77	Open
7	2.00	0.15	0.23	Open
9	0.00	0.00	0.00	Closed
10	12.58	0.47	1.30	Open
11	12.58	0.47	1.61	Open
12	12.58	0.47	1.88	Open
15	2.00	0.15	0.30	Open
16	17.58	1.66	22.73	Open
19	12.58	0.94	9.89	Open
21	0.00	0.00	0.00	Open
22	12.58	0.94	9.90	Open
23	12.58	0.94	9.88	Open
24	17.58	1.66	22.73	Open
25	12.58	0.94	6.86	Open
20	0.00	0.00	0.00	Closed Pump
13	3.00	0.22	34.98	Active Valve
14	2.00	0.15	49.98	Active Valve
17	17.58	1.66	13.40	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.58	0.94	0.00	Open Valve

Node Results at 6:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.96	12.96	0.00	
3	0.00	472.96	109.96	0.00	
4	0.00	472.96	83.96	0.00	
5	0.00	472.97	109.97	0.00	
6	0.00	509.98	-0.02	0.00	
8	4.50	435.06	46.06	0.00	
9	3.00	422.74	64.74	0.00	
10	0.00	469.34	114.34	0.00	
11	0.00	468.04	63.04	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	479.83	116.83	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	468.02	63.02	0.00	
19	0.00	472.97	109.97	0.00	
20	0.00	467.97	62.97	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	468.00	63.00	0.00	
23	0.00	496.10	71.10	0.00	
24	0.00	467.97	27.97	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-20.07	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.57	445.14	5.14	0.00	Tank

Link Results at 6:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit	Headloss m/km	Status
1	0.00	0.00		0.00	Closed
2	0.00	0.00		0.00	Open
3	0.00	0.00		0.00	Open
4	4.50	0.33		1.02	Open
5	20.07	1.49		20.17	Open
6	20.07	1.49		16.33	Open
7	3.00	0.22		0.48	Open
9	0.00	0.00		0.00	Closed
10	12.57	0.47		1.30	Open
11	12.57	0.47		1.61	Open
12	12.57	0.47		1.88	Open
15	3.00	0.22		0.60	Open
16	20.07	1.89		29.06	Open
19	12.57	0.94		9.88	Open
21	0.00	0.00		0.00	Open
22	12.57	0.94		9.88	Open
23	12.57	0.94		9.87	Open

Link Results at 6:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	20.07	1.89	29.06	Open
25	12.57	0.94	6.86	Open
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	34.97	Active Valve
14	3.00	0.22	49.97	Active Valve
17	20.07	1.89	6.83	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.57	0.94	0.00	Open Valve

Node Results at 7:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.95	12.95	0.00
3	0.00	472.95	109.95	0.00
4	0.00	472.95	83.95	0.00
5	0.00	472.97	109.97	0.00
6	0.00	509.98	-0.02	0.00
8	5.40	433.87	44.87	0.00
9	3.60	422.64	64.64	0.00
10	0.00	469.34	114.34	0.00
11	0.00	468.04	63.04	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	475.54	112.54	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.03	63.03	0.00
19	0.00	472.97	109.97	0.00
20	0.00	467.97	62.97	0.00
21	0.00	415.00	10.00	0.00
22	0.00	468.00	63.00	0.00
23	0.00	494.13	69.13	0.00
24	0.00	467.97	27.97	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-21.57	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.57	445.16	5.16	0.00 Tank

Link Results at 7:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	5.40	0.40	1.43	Open
5	21.57	1.61	23.03	Open
6	21.57	1.61	18.65	Open
7	3.60	0.27	0.68	Open
9	0.00	0.00	0.00	Closed
10	12.57	0.47	1.30	Open
11	12.57	0.47	1.60	Open
12	12.57	0.47	1.88	Open
15	3.60	0.27	0.86	Open
16	21.57	2.03	33.19	Open
19	12.57	0.94	9.87	Open
21	0.00	0.00	0.00	Open
22	12.57	0.94	9.87	Open
23	12.57	0.94	9.87	Open
24	21.57	2.03	33.19	Open
25	12.57	0.94	6.86	Open
20	0.00	0.00	0.00	Closed Pump
13	5.40	0.40	34.97	Active Valve
14	3.60	0.27	49.97	Active Valve
17	21.57	2.03	2.54	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.57	0.94	0.00	Open Valve

Node Results at 8:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.95	12.95	0.00
3	0.00	472.95	109.95	0.00
4	0.00	472.95	83.95	0.00
5	0.00	472.97	109.97	0.00
6	0.00	509.98	-0.02	0.00
8	5.40	433.87	44.87	0.00
9	3.60	422.64	64.64	0.00
10	0.00	469.34	114.34	0.00
11	0.00	468.05	63.05	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	475.54	112.54	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.03	63.03	0.00
19	0.00	472.97	109.97	0.00
20	0.00	467.97	62.97	0.00

Node Results at 8:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	468.00	63.00	0.00
23	0.00	494.13	69.13	0.00
24	0.00	467.97	27.97	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-21.57	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.56	445.18	5.18	0.00 Tank

Link Results at 8:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	5.40	0.40	1.43	Open
5	21.57	1.61	23.03	Open
6	21.57	1.61	18.65	Open
7	3.60	0.27	0.68	Open
9	0.00	0.00	0.00	Closed
10	12.56	0.47	1.30	Open
11	12.56	0.47	1.60	Open
12	12.56	0.47	1.87	Open
15	3.60	0.27	0.82	Open
16	21.56	2.03	33.19	Open
19	12.56	0.93	9.86	Open
21	0.00	0.00	0.00	Open
22	12.56	0.93	9.87	Open
23	12.56	0.93	9.86	Open
24	21.57	2.03	33.19	Open
25	12.56	0.93	6.85	Open
20	0.00	0.00	0.00	Closed Pump
13	5.40	0.40	34.97	Active Valve
14	3.60	0.27	49.97	Active Valve
17	21.57	2.03	2.54	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.56	0.93	0.00	Open Valve

Node Results at 9:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.70	12.70	0.00	
3	0.00	472.70	109.70	0.00	
4	0.00	472.70	83.70	0.00	
5	0.00	472.71	109.71	0.00	
6	0.00	509.98	-0.02	0.00	
8	6.00	432.99	43.99	0.00	
9	4.00	422.56	64.56	0.00	
10	0.00	469.12	114.12	0.00	
11	0.00	467.84	62.84	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	472.75	109.75	0.00	
17	0.00	472.75	109.75	0.00	
18	0.00	467.83	62.83	0.00	
19	0.00	472.71	109.71	0.00	
20	0.00	467.77	62.77	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	467.80	62.80	0.00	
23	0.00	492.84	67.84	0.00	
24	0.00	467.77	27.77	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-22.49	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.49	445.21	5.21	0.00	Tank

Link Results at 9:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.00	0.45	1.74	Open
5	22.49	1.67	24.89	Open
6	22.49	1.67	20.16	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	12.49	0.47	1.29	Open
11	12.49	0.47	1.59	Open
12	12.49	0.47	1.85	Open
15	4.00	0.30	1.00	Open
16	22.49	2.12	35.90	Open
19	12.49	0.93	9.77	Open
21	0.00	0.00	0.00	Open
22	12.49	0.93	9.77	Open
23	12.49	0.93	9.76	Open

Link Results at 9:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	22.49	2.12	35.88	Open
25	12.49	0.93	6.77	Open
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.71	Active Valve
14	4.00	0.30	49.71	Active Valve
17	22.49	2.12	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	12.49	0.93	0.00	Open Valve

Node Results at 10:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	470.96	10.96	0.00
3	0.00	470.96	107.96	0.00
4	0.00	470.96	81.96	0.00
5	0.00	470.97	107.97	0.00
6	0.00	509.97	-0.03	0.00
8	6.60	432.02	43.02	0.00
9	4.40	422.47	64.47	0.00
10	0.00	467.61	112.61	0.00
11	0.00	466.42	61.42	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	471.01	108.01	0.00
17	0.00	471.01	108.01	0.00
18	0.00	466.40	61.40	0.00
19	0.00	470.97	107.97	0.00
20	0.00	466.34	61.34	0.00
21	0.00	415.00	10.00	0.00
22	0.00	466.37	61.37	0.00
23	0.00	492.04	67.04	0.00
24	0.00	466.34	26.34	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-23.06	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.06	445.23	5.23	0.00 Tank

Link Results at 10:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.60	0.49	2.08	Open
5	23.06	1.72	26.04	Open
6	23.06	1.72	21.10	Open
7	4.40	0.33	0.98	Open
9	0.00	0.00	0.00	Closed
10	12.06	0.45	1.20	Open
11	12.06	0.45	1.49	Open
12	12.06	0.45	1.73	Open
15	4.40	0.33	1.23	Open
16	23.06	2.17	37.54	Open
19	12.06	0.90	9.14	Open
21	0.00	0.00	0.00	Open
22	12.06	0.90	9.14	Open
23	12.06	0.90	9.14	Open
24	23.06	2.17	37.55	Open
25	12.06	0.90	6.36	Open
20	0.00	0.00	0.00	Closed Pump
13	6.60	0.49	32.97	Active Valve
14	4.40	0.33	47.97	Active Valve
17	23.06	2.17	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	12.06	0.90	0.00	Open Valve

Node Results at 11:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.72	12.72	0.00
3	0.00	472.72	109.72	0.00
4	0.00	472.72	83.72	0.00
5	0.00	472.73	109.73	0.00
6	0.00	509.98	-0.02	0.00
8	6.00	432.99	43.99	0.00
9	4.00	422.56	64.56	0.00
10	0.00	469.15	114.15	0.00
11	0.00	467.87	62.87	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	472.77	109.77	0.00
17	0.00	472.77	109.77	0.00
18	0.00	467.85	62.85	0.00
19	0.00	472.73	109.73	0.00
20	0.00	467.79	62.79	0.00

Node Results at 11:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	467.82	62.82	0.00
23	0.00	492.85	67.85	0.00
24	0.00	467.79	27.79	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-22.49	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.49	445.25	5.25	0.00 Tank

Link Results at 11:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.00	0.45	1.74	Open
5	22.49	1.67	24.85	Open
6	22.49	1.67	20.15	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	12.49	0.47	1.29	Open
11	12.49	0.47	1.59	Open
12	12.49	0.47	1.85	Open
15	4.00	0.30	1.04	Open
16	22.49	2.12	35.83	Open
19	12.49	0.93	9.76	Open
21	0.00	0.00	0.00	Open
22	12.49	0.93	9.76	Open
23	12.49	0.93	9.76	Open
24	22.49	2.12	35.86	Open
25	12.49	0.93	6.79	Open
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.73	Active Valve
14	4.00	0.30	49.73	Active Valve
17	22.49	2.12	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	12.49	0.93	0.00	Open Valve

Node Results at 12:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.96	12.96	0.00	
3	0.00	472.96	109.96	0.00	
4	0.00	472.96	83.96	0.00	
5	0.00	472.97	109.97	0.00	
6	0.00	509.98	-0.02	0.00	
8	4.50	435.06	46.06	0.00	
9	3.00	422.74	64.74	0.00	
10	0.00	469.35	114.35	0.00	
11	0.00	468.07	63.07	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	479.92	116.92	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	468.05	63.05	0.00	
19	0.00	472.97	109.97	0.00	
20	0.00	467.99	62.99	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	468.02	63.02	0.00	
23	0.00	496.15	71.15	0.00	
24	0.00	467.99	27.99	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-20.04	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.54	445.28	5.28	0.00	Tank

Link Results at 12:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	4.50	0.33	1.02	Open
5	20.04	1.49	20.09	Open
6	20.04	1.49	16.28	Open
7	3.00	0.22	0.48	Open
9	0.00	0.00	0.00	Closed
10	12.54	0.47	1.30	Open
11	12.54	0.47	1.60	Open
12	12.54	0.47	1.86	Open
15	3.00	0.22	0.60	Open
16	20.04	1.89	28.98	Open
19	12.54	0.93	9.83	Open
21	0.00	0.00	0.00	Open
22	12.54	0.93	9.84	Open
23	12.54	0.93	9.84	Open

Link Results at 12:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	20.04	1.89	28.97	Open
25	12.54	0.93	6.83	Open
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	34.97	Active Valve
14	3.00	0.22	49.97	Active Valve
17	20.04	1.89	6.92	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.54	0.93	0.00	Open Valve

Node Results at 13:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	1.50	437.62	48.62	0.00
9	1.00	422.97	64.97	0.00
10	0.00	469.37	114.37	0.00
11	0.00	468.08	63.08	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	492.33	129.33	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.06	63.06	0.00
19	0.00	472.98	109.98	0.00
20	0.00	468.00	63.00	0.00
21	0.00	415.00	10.00	0.00
22	0.00	468.03	63.03	0.00
23	0.00	501.86	76.86	0.00
24	0.00	468.00	28.00	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-15.04	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.54	445.30	5.30	0.00 Tank

Link Results at 13:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	1.50	0.11	0.13	Open
5	15.04	1.12	11.79	Open
6	15.04	1.12	9.56	Open
7	1.00	0.07	0.06	Open
9	0.00	0.00	0.00	Closed
10	12.54	0.47	1.30	Open
11	12.54	0.47	1.60	Open
12	12.54	0.47	1.86	Open
15	1.00	0.07	0.11	Open
16	15.04	1.42	17.00	Open
19	12.54	0.93	9.83	Open
21	0.00	0.00	0.00	Open
22	12.54	0.93	9.82	Open
23	12.54	0.93	9.84	Open
24	15.04	1.42	17.02	Open
25	12.54	0.93	6.85	Open
20	0.00	0.00	0.00	Closed Pump
13	1.50	0.11	34.98	Active Valve
14	1.00	0.07	49.98	Active Valve
17	15.04	1.42	19.33	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.54	0.93	0.00	Open Valve

Node Results at 14:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.75	12.75	0.00
3	0.00	472.75	109.75	0.00
4	0.00	472.75	83.75	0.00
5	0.00	472.76	109.76	0.00
6	0.00	509.98	-0.02	0.00
8	6.00	432.99	43.99	0.00
9	4.00	422.56	64.56	0.00
10	0.00	469.18	114.18	0.00
11	0.00	467.90	62.90	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	472.80	109.80	0.00
17	0.00	472.80	109.80	0.00
18	0.00	467.89	62.89	0.00
19	0.00	472.76	109.76	0.00
20	0.00	467.83	62.83	0.00

Node Results at 14:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	467.86	62.86	0.00
23	0.00	492.86	67.86	0.00
24	0.00	467.83	27.83	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-22.48	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.48	445.32	5.32	0.00 Tank

Link Results at 14:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.00	0.45	1.74	Open
5	22.48	1.67	24.85	Open
6	22.48	1.67	20.13	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	12.48	0.47	1.28	Open
11	12.48	0.47	1.58	Open
12	12.48	0.47	1.85	Open
15	4.00	0.30	1.00	Open
16	22.48	2.12	35.83	Open
19	12.48	0.93	9.74	Open
21	0.00	0.00	0.00	Open
22	12.48	0.93	9.75	Open
23	12.48	0.93	9.74	Open
24	22.48	2.12	35.83	Open
25	12.48	0.93	6.75	Open
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.76	Active Valve
14	4.00	0.30	49.76	Active Valve
17	22.48	2.12	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	12.48	0.93	0.00	Open Valve

Node Results at 15:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.76	12.76	0.00	
3	0.00	472.76	109.76	0.00	
4	0.00	472.76	83.76	0.00	
5	0.00	472.77	109.77	0.00	
6	0.00	509.98	-0.02	0.00	
8	6.00	432.99	43.99	0.00	
9	4.00	422.56	64.56	0.00	
10	0.00	469.19	114.19	0.00	
11	0.00	467.92	62.92	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	472.81	109.81	0.00	
17	0.00	472.81	109.81	0.00	
18	0.00	467.90	62.90	0.00	
19	0.00	472.77	109.77	0.00	
20	0.00	467.84	62.84	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	467.87	62.87	0.00	
23	0.00	492.87	67.87	0.00	
24	0.00	467.84	27.84	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-22.48	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.47	445.34	5.34	0.00	Tank

Link Results at 15:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.00	0.45	1.74	Open
5	22.48	1.67	24.85	Open
6	22.48	1.67	20.13	Open
7	4.00	0.30	0.82	Open
9	0.00	0.00	0.00	Closed
10	12.48	0.47	1.28	Open
11	12.48	0.47	1.58	Open
12	12.47	0.47	1.85	Open
15	4.00	0.30	1.04	Open
16	22.48	2.12	35.79	Open
19	12.47	0.93	9.74	Open
21	0.00	0.00	0.00	Open
22	12.47	0.93	9.74	Open
23	12.47	0.93	9.74	Open

Link Results at 15:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	22.48	2.12	35.82	Open
25	12.48	0.93	6.77	Open
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	34.77	Active Valve
14	4.00	0.30	49.77	Active Valve
17	22.48	2.12	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	12.47	0.93	0.00	Open Valve

Node Results at 16:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.96	12.96	0.00
3	0.00	472.96	109.96	0.00
4	0.00	472.96	83.96	0.00
5	0.00	472.97	109.97	0.00
6	0.00	509.98	-0.02	0.00
8	4.50	435.06	46.06	0.00
9	3.00	422.74	64.74	0.00
10	0.00	469.37	114.37	0.00
11	0.00	468.08	63.08	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	479.99	116.99	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.07	63.07	0.00
19	0.00	472.97	109.97	0.00
20	0.00	468.01	63.01	0.00
21	0.00	415.00	10.00	0.00
22	0.00	468.04	63.04	0.00
23	0.00	496.17	71.17	0.00
24	0.00	468.01	28.01	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-20.02	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.52	445.37	5.37	0.00 Tank

Link Results at 16:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	4.50	0.33	1.02	Open
5	20.02	1.49	20.05	Open
6	20.02	1.49	16.24	Open
7	3.00	0.22	0.48	Open
9	0.00	0.00	0.00	Closed
10	12.52	0.47	1.29	Open
11	12.52	0.47	1.59	Open
12	12.52	0.47	1.86	Open
15	3.00	0.22	0.60	Open
16	20.02	1.89	28.91	Open
19	12.52	0.93	9.80	Open
21	0.00	0.00	0.00	Open
22	12.52	0.93	9.80	Open
23	12.52	0.93	9.80	Open
24	20.02	1.89	28.91	Open
25	12.52	0.93	6.81	Open
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	34.97	Active Valve
14	3.00	0.22	49.97	Active Valve
17	20.02	1.89	6.99	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.52	0.93	0.00	Open Valve

Node Results at 17:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	1.50	437.62	48.62	0.00
9	1.00	422.97	64.97	0.00
10	0.00	469.38	114.38	0.00
11	0.00	468.10	63.10	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	492.38	129.38	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.08	63.08	0.00
19	0.00	472.98	109.98	0.00
20	0.00	468.02	63.02	0.00

Node Results at 17:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	468.05	63.05	0.00
23	0.00	501.88	76.88	0.00
24	0.00	468.02	28.02	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-15.02	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.52	445.39	5.39	0.00 Tank

Link Results at 17:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	1.50	0.11	0.13	Open
5	15.02	1.12	11.79	Open
6	15.02	1.12	9.54	Open
7	1.00	0.07	0.06	Open
9	0.00	0.00	0.00	Closed
10	12.52	0.47	1.29	Open
11	12.52	0.47	1.59	Open
12	12.52	0.47	1.86	Open
15	1.00	0.07	0.07	Open
16	15.02	1.42	16.97	Open
19	12.52	0.93	9.80	Open
21	0.00	0.00	0.00	Open
22	12.52	0.93	9.80	Open
23	12.52	0.93	9.80	Open
24	15.02	1.42	16.97	Open
25	12.52	0.93	6.81	Open
20	0.00	0.00	0.00	Closed Pump
13	1.50	0.11	34.98	Active Valve
14	1.00	0.07	49.98	Active Valve
17	15.02	1.42	19.38	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.52	0.93	0.00	Open Valve

Node Results at 18:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.60	437.93	48.93	0.00	
9	0.40	422.99	64.99	0.00	
10	0.00	469.39	114.39	0.00	
11	0.00	468.10	63.10	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	495.51	132.51	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	468.09	63.09	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	468.03	63.03	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	468.06	63.06	0.00	
23	0.00	503.32	78.32	0.00	
24	0.00	468.03	28.03	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-13.51	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.51	445.41	5.41	0.00	Tank

Link Results at 18:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.60	0.04	0.02	Open
5	13.51	1.01	9.67	Open
6	13.51	1.01	7.84	Open
7	0.40	0.03	0.01	Open
9	0.00	0.00	0.00	Closed
10	12.51	0.47	1.29	Open
11	12.51	0.47	1.59	Open
12	12.51	0.47	1.86	Open
15	0.40	0.03	0.04	Open
16	13.51	1.27	13.95	Open
19	12.51	0.93	9.79	Open
21	0.00	0.00	0.00	Open
22	12.51	0.93	9.80	Open
23	12.51	0.93	9.79	Open

Link Results at 18:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	13.51	1.27	13.96	Open
25	12.51	0.93	6.81	Open
20	0.00	0.00	0.00	Closed Pump
13	0.60	0.04	34.99	Active Valve
14	0.40	0.03	49.99	Active Valve
17	13.51	1.27	22.51	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.51	0.93	0.00	Open Valve

Node Results at 19:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	469.39	114.39	0.00
11	0.00	468.11	63.11	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	497.44	134.44	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.09	63.09	0.00
19	0.00	472.99	109.99	0.00
20	0.00	468.03	63.03	0.00
21	0.00	415.00	10.00	0.00
22	0.00	468.06	63.06	0.00
23	0.00	504.22	79.22	0.00
24	0.00	468.03	28.03	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-12.51	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.51	445.44	5.44	0.00 Tank

Link Results at 19:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.51	0.93	8.41	Open
6	12.51	0.93	6.80	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.51	0.47	1.29	Open
11	12.51	0.47	1.59	Open
12	12.51	0.47	1.85	Open
15	0.00	0.00	0.00	Open
16	12.51	1.18	12.09	Open
19	12.51	0.93	9.78	Open
21	0.00	0.00	0.00	Open
22	12.51	0.93	9.79	Open
23	12.51	0.93	9.79	Open
24	12.51	1.18	12.10	Open
25	12.51	0.93	6.79	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.51	1.18	24.44	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.51	0.93	0.00	Open Valve

Node Results at 20:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	469.39	114.39	0.00
11	0.00	468.11	63.11	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	497.44	134.44	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.10	63.10	0.00
19	0.00	472.99	109.99	0.00
20	0.00	468.04	63.04	0.00

Node Results at 20:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	468.07	63.07	0.00
23	0.00	504.22	79.22	0.00
24	0.00	468.04	28.04	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-12.51	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.50	445.46	5.46	0.00 Tank

Link Results at 20:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.51	0.93	8.41	Open
6	12.51	0.93	6.80	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.50	0.47	1.29	Open
11	12.50	0.47	1.59	Open
12	12.50	0.47	1.85	Open
15	0.00	0.00	0.00	Open
16	12.50	1.18	12.09	Open
19	12.50	0.93	9.77	Open
21	0.00	0.00	0.00	Open
22	12.50	0.93	9.77	Open
23	12.50	0.93	9.77	Open
24	12.51	1.18	12.10	Open
25	12.50	0.93	6.79	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.51	1.18	24.44	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.50	0.93	0.00	Open Valve

Node Results at 21:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	469.40	114.40	0.00	
11	0.00	468.12	63.12	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	497.45	134.45	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	468.10	63.10	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	468.04	63.04	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	468.07	63.07	0.00	
23	0.00	504.22	79.22	0.00	
24	0.00	468.04	28.04	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-12.50	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.49	445.48	5.48	0.00	Tank

Link Results at 21:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.50	0.93	8.41	Open
6	12.50	0.93	6.79	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.49	0.47	1.29	Open
11	12.49	0.47	1.59	Open
12	12.49	0.47	1.85	Open
15	0.00	0.00	0.00	Open
16	12.49	1.18	12.09	Open
19	12.49	0.93	9.77	Open
21	0.00	0.00	0.00	Open
22	12.49	0.93	9.76	Open
23	12.49	0.93	9.77	Open

Link Results at 21:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	12.50	1.18	12.09	Open
25	12.49	0.93	6.77	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.50	1.18	24.45	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.49	0.93	0.00	Open Valve

Node Results at 22:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	469.40	114.40	0.00
11	0.00	468.12	63.12	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	497.46	134.46	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.10	63.10	0.00
19	0.00	472.99	109.99	0.00
20	0.00	468.05	63.05	0.00
21	0.00	415.00	10.00	0.00
22	0.00	468.07	63.07	0.00
23	0.00	504.22	79.22	0.00
24	0.00	468.05	28.05	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-12.49	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.49	445.50	5.50	0.00 Tank

Link Results at 22:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.49	0.93	8.37	Open
6	12.49	0.93	6.78	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.49	0.47	1.29	Open
11	12.49	0.47	1.59	Open
12	12.49	0.47	1.85	Open
15	0.00	0.00	0.00	Open
16	12.49	1.18	12.06	Open
19	12.49	0.93	9.76	Open
21	0.00	0.00	0.00	Open
22	12.49	0.93	9.76	Open
23	12.49	0.93	9.75	Open
24	12.49	1.18	12.07	Open
25	12.49	0.93	6.79	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.49	1.18	24.46	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.49	0.93	0.00	Open Valve

Node Results at 23:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.99	109.99	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	469.40	114.40	0.00
11	0.00	468.13	63.13	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	497.47	134.47	0.00
17	0.00	473.00	110.00	0.00
18	0.00	468.11	63.11	0.00
19	0.00	472.99	109.99	0.00
20	0.00	468.05	63.05	0.00

Node Results at 23:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	468.08	63.08	0.00
23	0.00	504.23	79.23	0.00
24	0.00	468.05	28.05	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-12.49	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.48	445.53	5.53	0.00 Tank

Link Results at 23:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.49	0.93	8.37	Open
6	12.49	0.93	6.78	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.48	0.47	1.28	Open
11	12.48	0.47	1.58	Open
12	12.48	0.47	1.85	Open
15	0.00	0.00	0.00	Open
16	12.48	1.18	12.06	Open
19	12.48	0.93	9.75	Open
21	0.00	0.00	0.00	Open
22	12.48	0.93	9.76	Open
23	12.48	0.93	9.75	Open
24	12.49	1.18	12.07	Open
25	12.48	0.93	6.77	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.49	1.18	24.47	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.48	0.93	0.00	Open Valve

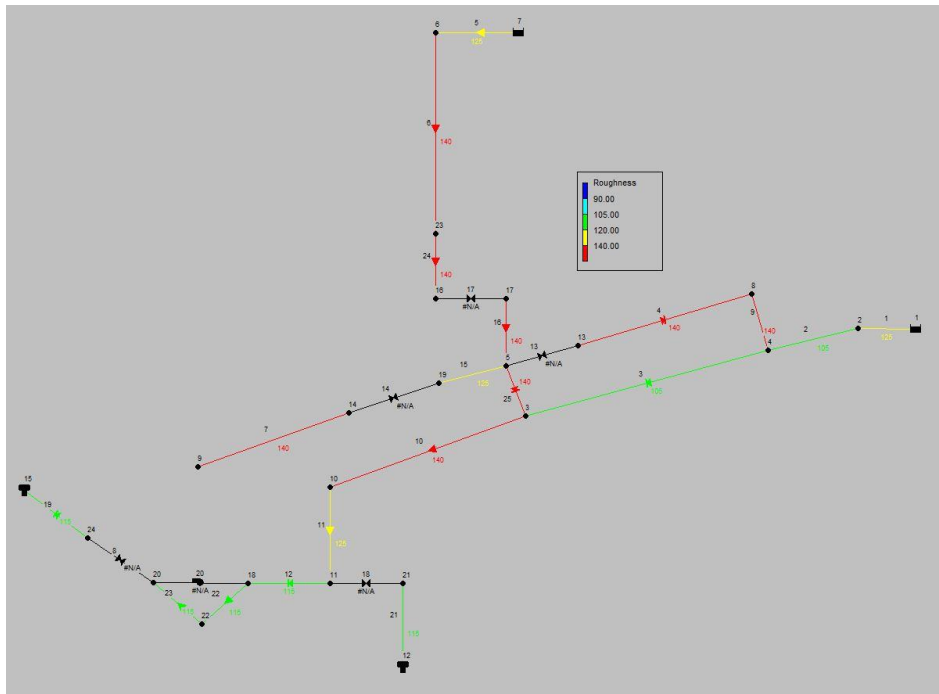
Node Results at 24:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.99	109.99	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	469.41	114.41	0.00	
11	0.00	468.13	63.13	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	497.48	134.48	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	468.11	63.11	0.00	
19	0.00	472.99	109.99	0.00	
20	0.00	468.05	63.05	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	468.08	63.08	0.00	
23	0.00	504.23	79.23	0.00	
24	0.00	468.05	28.05	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-12.48	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.48	445.55	5.55	0.00	Tank

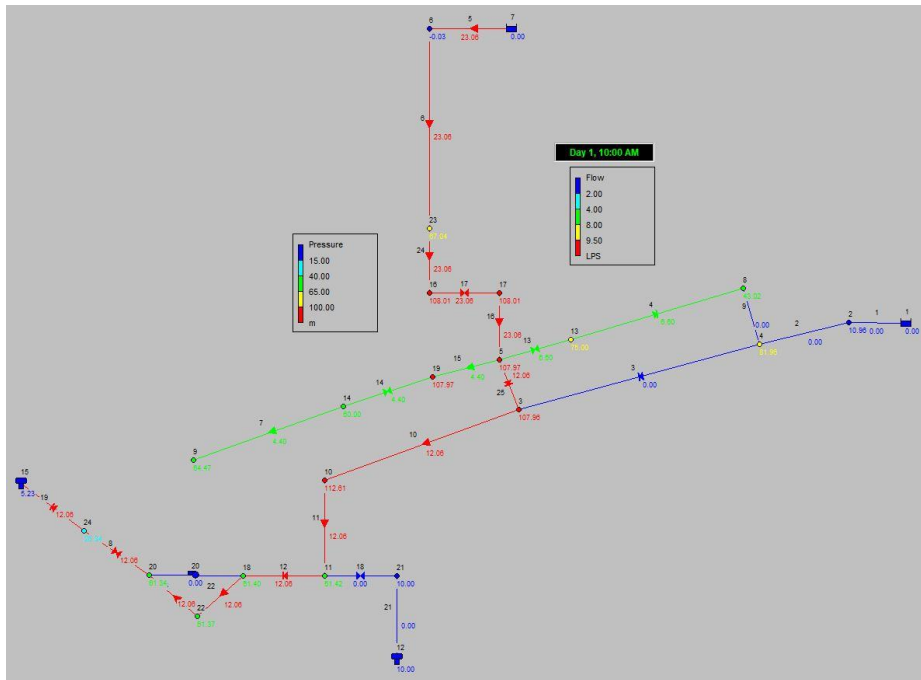
Link Results at 24:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.48	0.93	8.37	Open
6	12.48	0.93	6.77	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.48	0.47	1.28	Open
11	12.48	0.47	1.58	Open
12	12.48	0.47	1.85	Open
15	0.00	0.00	0.00	Open
16	12.48	1.18	12.06	Open
19	12.48	0.93	9.74	Open
21	0.00	0.00	0.00	Open
22	12.48	0.93	9.75	Open
23	12.48	0.93	9.74	Open

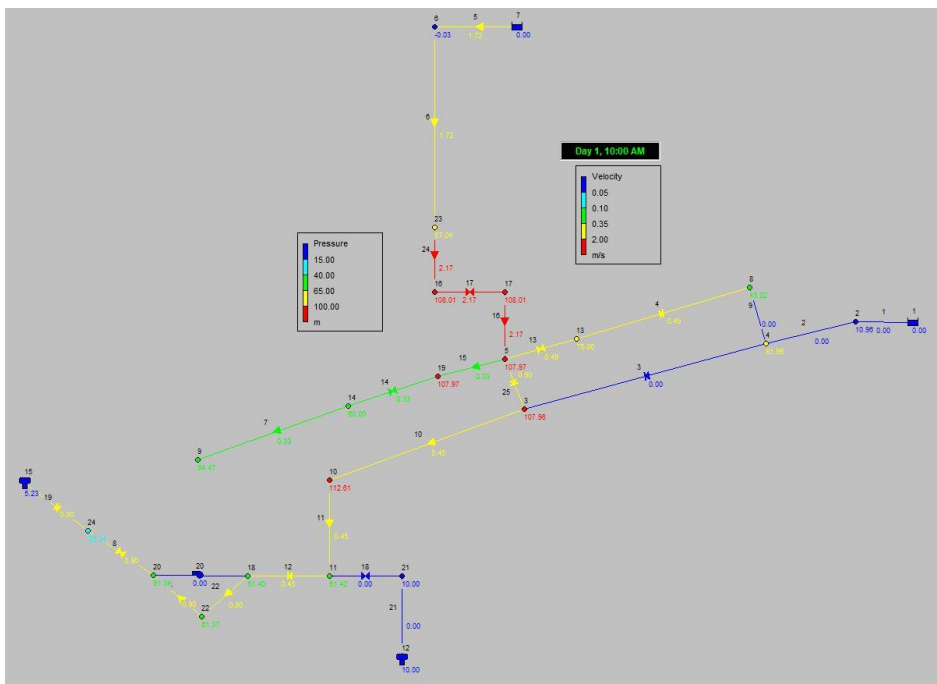
Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	12.48	1.18	12.05	Open
25	12.48	0.93	6.77	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.99	Active Valve
14	0.00	0.00	49.99	Active Valve
17	12.48	1.18	24.48	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.48	0.93	0.00	Open Valve



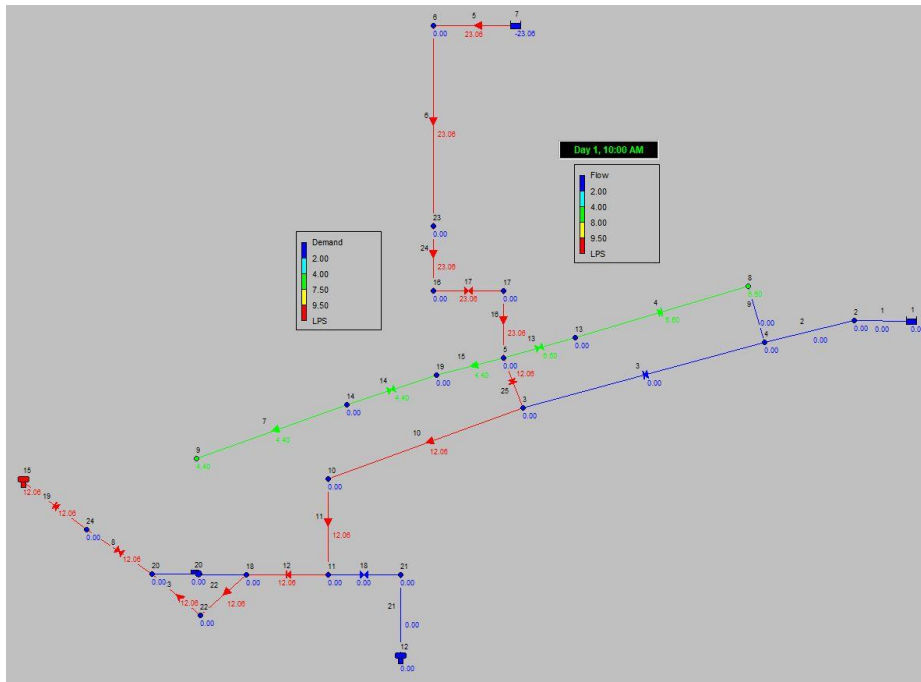
Schema della rete (TUBI NUOVI): scabrezza condotte



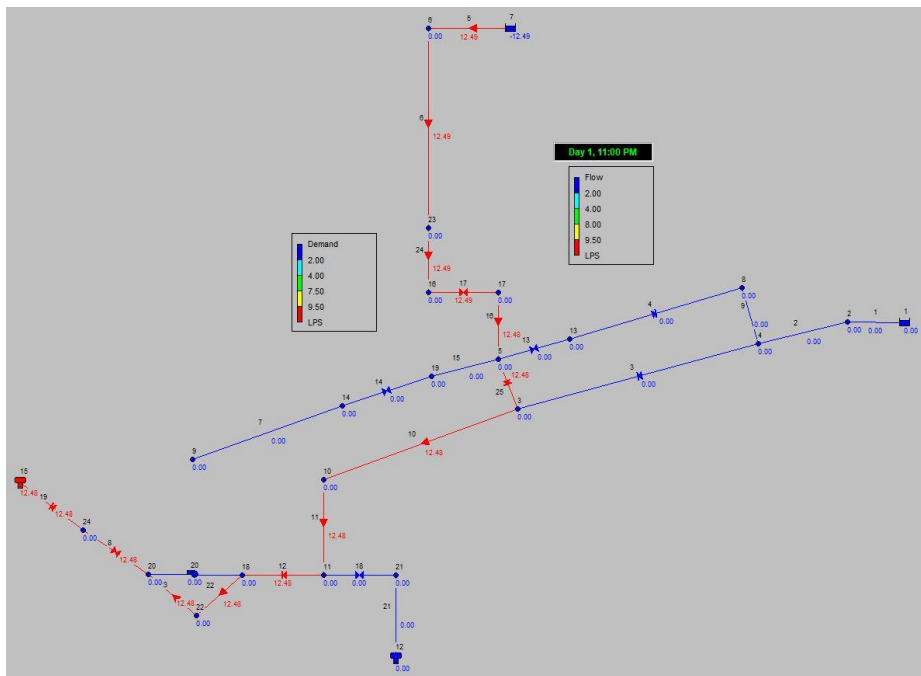
Output di calcolo (**TUBI NUOVI**): pressione (ai nodi) e portata (nelle condotte) alle 10h00



Output di calcolo (**TUBI NUOVI**): pressione (ai nodi) e velocità (nelle condotte) alle 10h00



Output di calcolo (TUBI NUOVI): prelievi (ai nodi) e portata (nelle condotte) alle 10h00



Output di calcolo (TUBI NUOVI): prelievi (ai nodi) e portata (nelle condotte) alle 23h00

 * E P A N E T *
 * Hydraulic and Water Quality *
 * Analysis for Pipe Networks *
 * Version 2.0 *

MODALITA' di FUNZIONAMENTO 5

VERIFICHE a TUBI VECCHI (coefficiente di H-W pari a 105)

Link - Node Table:

Link ID	Start Node	End Node	Length m	Diameter mm	
1	1	2	1	184	
2	2	4	1060	184	
3	4	3	2875	184	
4	13	8	2875	130.8	
5	7	6	1	130.8	
6	6	23	850	130.8	
7	14	9	535	130.8	
9	4	8	10	130.8	
10	3	10	2780	184	
11	10	11	805	184	
12	11	18	10	184	
15	5	19	1	130.8	
16	17	5	1	116.2	
19	24	15	2310	130.8	
21	21	12	1	184	
22	18	22	3	130.8	
23	22	20	3	130.8	
24	23	16	560	116.2	
25	5	3	2	130.8	
20	18	20	#N/A	#N/A	Pump
13	5	13	#N/A	130.8	Valve
14	19	14	#N/A	130.8	Valve
17	16	17	#N/A	116.2	Valve
18	11	21	#N/A	184	Valve
8	20	24	#N/A	130.8	Valve

Energy Usage:

Pump	Usage Factor	Avg. Effic.	Kw-hr /m3	Avg. Kw	Peak Kw	Cost /day
20	0.00	0.00	0.00	0.00	0.00	0.00
					Demand Charge:	0.00
					Total Cost:	0.00

Node Results at 0:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.98	109.98	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	467.29	112.29	0.00	
11	0.00	466.10	61.10	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	490.10	127.10	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	466.08	61.08	0.00	
19	0.00	472.98	109.98	0.00	
20	0.00	466.02	61.02	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	466.05	61.05	0.00	
23	0.00	500.84	75.84	0.00	
24	0.00	466.02	26.02	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-12.03	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.03	445.00	5.00	0.00	Tank

Link Results at 0:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.03	0.90	7.81	Open
6	12.03	0.90	10.77	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.03	0.45	2.04	Open
11	12.03	0.45	1.48	Open
12	12.03	0.45	1.73	Open
15	0.00	0.00	0.00	Open
16	12.03	1.13	19.16	Open
19	12.03	0.90	9.10	Open
21	0.00	0.00	0.00	Open
22	12.03	0.90	9.10	Open
23	12.03	0.90	9.10	Open

Link Results at 0:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	12.03	1.13	19.17	Open
25	12.03	0.90	6.33	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	12.03	1.13	17.10	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.03	0.90	0.00	Open Valve

Node Results at 1:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	467.29	112.29	0.00
11	0.00	466.10	61.10	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	490.10	127.10	0.00
17	0.00	473.00	110.00	0.00
18	0.00	466.08	61.08	0.00
19	0.00	472.98	109.98	0.00
20	0.00	466.03	61.03	0.00
21	0.00	415.00	10.00	0.00
22	0.00	466.06	61.06	0.00
23	0.00	500.84	75.84	0.00
24	0.00	466.03	26.03	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-12.03	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.02	445.02	5.02	0.00 Tank

Link Results at 1:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.03	0.90	7.81	Open
6	12.03	0.90	10.77	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.02	0.45	2.04	Open
11	12.02	0.45	1.48	Open
12	12.02	0.45	1.73	Open
15	0.00	0.00	0.00	Open
16	12.02	1.13	19.16	Open
19	12.02	0.89	9.09	Open
21	0.00	0.00	0.00	Open
22	12.02	0.89	9.09	Open
23	12.02	0.89	9.09	Open
24	12.03	1.13	19.17	Open
25	12.02	0.89	6.33	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	12.03	1.13	17.10	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.02	0.89	0.00	Open Valve

Node Results at 2:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	467.30	112.30	0.00
11	0.00	466.11	61.11	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	490.12	127.12	0.00
17	0.00	473.00	110.00	0.00
18	0.00	466.09	61.09	0.00
19	0.00	472.98	109.98	0.00
20	0.00	466.04	61.04	0.00

Node Results at 2:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	466.06	61.06	0.00
23	0.00	500.84	75.84	0.00
24	0.00	466.04	26.04	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-12.02	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.02	445.04	5.04	0.00 Tank

Link Results at 2:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.02	0.89	7.81	Open
6	12.02	0.89	10.76	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.02	0.45	2.04	Open
11	12.02	0.45	1.48	Open
12	12.02	0.45	1.72	Open
15	0.00	0.00	0.00	Open
16	12.02	1.13	19.16	Open
19	12.02	0.89	9.09	Open
21	0.00	0.00	0.00	Open
22	12.02	0.89	9.09	Open
23	12.02	0.89	9.09	Open
24	12.02	1.13	19.16	Open
25	12.02	0.89	6.31	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	12.02	1.13	17.12	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.02	0.89	0.00	Open Valve

Node Results at 3:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.98	109.98	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	467.30	112.30	0.00	
11	0.00	466.11	61.11	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	490.13	127.13	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	466.10	61.10	0.00	
19	0.00	472.98	109.98	0.00	
20	0.00	466.04	61.04	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	466.07	61.07	0.00	
23	0.00	500.85	75.85	0.00	
24	0.00	466.04	26.04	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-12.02	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	12.01	445.07	5.07	0.00	Tank

Link Results at 3:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	12.02	0.89	7.81	Open
6	12.02	0.89	10.76	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	12.01	0.45	2.04	Open
11	12.01	0.45	1.48	Open
12	12.01	0.45	1.72	Open
15	0.00	0.00	0.00	Open
16	12.01	1.13	19.12	Open
19	12.01	0.89	9.08	Open
21	0.00	0.00	0.00	Open
22	12.01	0.89	9.09	Open
23	12.01	0.89	9.08	Open

Link Results at 3:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	12.02	1.13	19.14	Open
25	12.01	0.89	6.31	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	12.02	1.13	17.13	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.01	0.89	0.00	Open Valve

Node Results at 4:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.96	12.96	0.00
3	0.00	472.96	109.96	0.00
4	0.00	472.96	83.96	0.00
5	0.00	472.97	109.97	0.00
6	0.00	509.99	-0.01	0.00
8	1.20	437.57	48.57	0.00
9	0.80	422.96	64.96	0.00
10	0.00	467.30	112.30	0.00
11	0.00	466.11	61.11	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	483.62	120.62	0.00
17	0.00	473.00	110.00	0.00
18	0.00	466.10	61.10	0.00
19	0.00	472.97	109.97	0.00
20	0.00	466.04	61.04	0.00
21	0.00	415.00	10.00	0.00
22	0.00	466.07	61.07	0.00
23	0.00	497.85	72.85	0.00
24	0.00	466.04	26.04	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-14.01	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	12.01	445.09	5.09	0.00 Tank

Link Results at 4:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	1.20	0.09	0.15	Open
5	14.01	1.04	10.34	Open
6	14.01	1.04	14.28	Open
7	0.80	0.06	0.07	Open
9	0.00	0.00	0.00	Closed
10	12.01	0.45	2.04	Open
11	12.01	0.45	1.47	Open
12	12.01	0.45	1.72	Open
15	0.80	0.06	0.07	Open
16	14.01	1.32	25.41	Open
19	12.01	0.89	9.07	Open
21	0.00	0.00	0.00	Open
22	12.01	0.89	9.08	Open
23	12.01	0.89	9.07	Open
24	14.01	1.32	25.42	Open
25	12.01	0.89	6.31	Open
20	0.00	0.00	0.00	Closed Pump
13	1.20	0.09	34.97	Active Valve
14	0.80	0.06	49.97	Active Valve
17	14.01	1.32	10.62	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	12.01	0.89	0.00	Open Valve

Node Results at 5:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.56	12.56	0.00
3	0.00	472.56	109.56	0.00
4	0.00	472.56	83.56	0.00
5	0.00	472.57	109.57	0.00
6	0.00	509.99	-0.01	0.00
8	3.00	435.63	46.63	0.00
9	2.00	422.79	64.79	0.00
10	0.00	466.99	111.99	0.00
11	0.00	465.82	60.82	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	472.61	109.61	0.00
17	0.00	472.61	109.61	0.00
18	0.00	465.80	60.80	0.00
19	0.00	472.57	109.57	0.00
20	0.00	465.75	60.75	0.00

Node Results at 5:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	465.77	60.77	0.00
23	0.00	492.78	67.78	0.00
24	0.00	465.75	25.75	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-16.91	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	11.91	445.11	5.11	0.00 Tank

Link Results at 5:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	3.00	0.22	0.82	Open
5	16.91	1.26	14.66	Open
6	16.91	1.26	20.24	Open
7	2.00	0.15	0.39	Open
9	0.00	0.00	0.00	Closed
10	11.91	0.45	2.01	Open
11	11.91	0.45	1.45	Open
12	11.91	0.45	1.69	Open
15	2.00	0.15	0.30	Open
16	16.91	1.59	36.02	Open
19	11.91	0.89	8.93	Open
21	0.00	0.00	0.00	Open
22	11.91	0.89	8.94	Open
23	11.91	0.89	8.93	Open
24	16.91	1.59	36.02	Open
25	11.91	0.89	6.21	Open
20	0.00	0.00	0.00	Closed Pump
13	3.00	0.22	34.57	Active Valve
14	2.00	0.15	49.57	Active Valve
17	16.91	1.59	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	11.91	0.89	0.00	Open Valve

Node Results at 6:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	467.39	7.39	0.00	
3	0.00	467.39	104.39	0.00	
4	0.00	467.39	78.39	0.00	
5	0.00	467.40	104.40	0.00	
6	0.00	509.98	-0.02	0.00	
8	4.50	432.99	43.99	0.00	
9	3.00	422.56	64.56	0.00	
10	0.00	462.87	107.87	0.00	
11	0.00	461.92	56.92	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	467.44	104.44	0.00	
17	0.00	467.44	104.44	0.00	
18	0.00	461.91	56.91	0.00	
19	0.00	467.40	104.40	0.00	
20	0.00	461.86	56.86	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	461.88	56.88	0.00	
23	0.00	490.40	65.40	0.00	
24	0.00	461.86	21.86	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-18.13	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	10.63	445.13	5.13	0.00	Tank

Link Results at 6:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	4.50	0.33	1.74	Open
5	18.13	1.35	16.71	Open
6	18.13	1.35	23.04	Open
7	3.00	0.22	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.63	0.40	1.63	Open
11	10.63	0.40	1.18	Open
12	10.63	0.40	1.37	Open
15	3.00	0.22	0.60	Open
16	18.13	1.71	41.00	Open
19	10.63	0.79	7.24	Open
21	0.00	0.00	0.00	Open
22	10.63	0.79	7.24	Open
23	10.63	0.79	7.24	Open

Link Results at 6:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	18.13	1.71	41.00	Open
25	10.63	0.79	5.02	Open
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	29.40	Active Valve
14	3.00	0.22	44.40	Active Valve
17	18.13	1.71	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	10.63	0.79	0.00	Open Valve

Node Results at 7:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	464.36	4.36	0.00
3	0.00	464.36	101.36	0.00
4	0.00	464.36	75.36	0.00
5	0.00	464.37	101.37	0.00
6	0.00	509.98	-0.02	0.00
8	5.40	430.97	41.97	0.00
9	3.60	422.38	64.38	0.00
10	0.00	460.46	105.46	0.00
11	0.00	459.64	54.64	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	464.41	101.41	0.00
17	0.00	464.41	101.41	0.00
18	0.00	459.63	54.63	0.00
19	0.00	464.36	101.36	0.00
20	0.00	459.59	54.59	0.00
21	0.00	415.00	10.00	0.00
22	0.00	459.61	54.61	0.00
23	0.00	489.01	64.01	0.00
24	0.00	459.59	19.59	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-18.82	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	9.82	445.15	5.15	0.00 Tank

Link Results at 7:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	5.40	0.40	2.44	Open
5	18.82	1.40	17.90	Open
6	18.82	1.40	24.68	Open
7	3.60	0.27	1.15	Open
9	0.00	0.00	0.00	Closed
10	9.82	0.37	1.40	Open
11	9.82	0.37	1.02	Open
12	9.82	0.37	1.18	Open
15	3.60	0.27	0.82	Open
16	18.82	1.77	43.94	Open
19	9.82	0.73	6.25	Open
21	0.00	0.00	0.00	Open
22	9.82	0.73	6.25	Open
23	9.82	0.73	6.25	Open
24	18.82	1.77	43.92	Open
25	9.82	0.73	4.33	Open
20	0.00	0.00	0.00	Closed Pump
13	5.40	0.40	26.37	Active Valve
14	3.60	0.27	41.36	Active Valve
17	18.82	1.77	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	9.82	0.73	0.00	Open Valve

Node Results at 8:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	464.37	4.37	0.00
3	0.00	464.37	101.37	0.00
4	0.00	464.37	75.37	0.00
5	0.00	464.37	101.37	0.00
6	0.00	509.98	-0.02	0.00
8	5.40	430.97	41.97	0.00
9	3.60	422.38	64.38	0.00
10	0.00	460.47	105.47	0.00
11	0.00	459.65	54.65	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	464.42	101.42	0.00
17	0.00	464.42	101.42	0.00
18	0.00	459.64	54.64	0.00
19	0.00	464.37	101.37	0.00
20	0.00	459.60	54.60	0.00

Node Results at 8:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	459.62	54.62	0.00
23	0.00	489.01	64.01	0.00
24	0.00	459.60	19.60	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-18.82	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	9.82	445.17	5.17	0.00 Tank

Link Results at 8:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	5.40	0.40	2.44	Open
5	18.82	1.40	17.90	Open
6	18.82	1.40	24.67	Open
7	3.60	0.27	1.15	Open
9	0.00	0.00	0.00	Closed
10	9.82	0.37	1.40	Open
11	9.82	0.37	1.02	Open
12	9.82	0.37	1.19	Open
15	3.60	0.27	0.82	Open
16	18.82	1.77	43.90	Open
19	9.82	0.73	6.25	Open
21	0.00	0.00	0.00	Open
22	9.82	0.73	6.25	Open
23	9.82	0.73	6.24	Open
24	18.82	1.77	43.91	Open
25	9.82	0.73	4.33	Open
20	0.00	0.00	0.00	Closed Pump
13	5.40	0.40	26.37	Active Valve
14	3.60	0.27	41.37	Active Valve
17	18.82	1.77	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	9.82	0.73	0.00	Open Valve

Node Results at 9:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	462.39	2.39	0.00	
3	0.00	462.39	99.39	0.00	
4	0.00	462.39	73.39	0.00	
5	0.00	462.40	99.40	0.00	
6	0.00	509.98	-0.02	0.00	
8	6.00	429.46	40.46	0.00	
9	4.00	422.25	64.25	0.00	
10	0.00	458.90	103.90	0.00	
11	0.00	458.16	53.16	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	462.44	99.44	0.00	
17	0.00	462.44	99.44	0.00	
18	0.00	458.15	53.15	0.00	
19	0.00	462.40	99.40	0.00	
20	0.00	458.12	53.12	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	458.14	53.14	0.00	
23	0.00	488.10	63.10	0.00	
24	0.00	458.12	18.12	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-19.25	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	9.25	445.19	5.19	0.00	Tank

Link Results at 9:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.00	0.45	2.97	Open
5	19.25	1.43	18.64	Open
6	19.25	1.43	25.74	Open
7	4.00	0.30	1.40	Open
9	0.00	0.00	0.00	Closed
10	9.25	0.35	1.26	Open
11	9.25	0.35	0.91	Open
12	9.25	0.35	1.06	Open
15	4.00	0.30	1.00	Open
16	19.25	1.82	45.84	Open
19	9.25	0.69	5.60	Open
21	0.00	0.00	0.00	Open
22	9.25	0.69	5.59	Open
23	9.25	0.69	5.59	Open

Link Results at 9:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	19.25	1.82	45.82	Open
25	9.25	0.69	3.89	Open
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	24.40	Active Valve
14	4.00	0.30	39.40	Active Valve
17	19.25	1.82	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	9.25	0.69	0.00	Open Valve

Node Results at 10:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.46	0.46	0.00
3	0.00	460.46	97.46	0.00
4	0.00	460.46	71.46	0.00
5	0.00	460.47	97.47	0.00
6	0.00	509.98	-0.02	0.00
8	6.60	427.81	38.81	0.00
9	4.40	422.10	64.10	0.00
10	0.00	457.36	102.36	0.00
11	0.00	456.71	51.71	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	460.51	97.51	0.00
17	0.00	460.51	97.51	0.00
18	0.00	456.70	51.70	0.00
19	0.00	460.46	97.46	0.00
20	0.00	456.67	51.67	0.00
21	0.00	415.00	10.00	0.00
22	0.00	456.69	51.69	0.00
23	0.00	487.21	62.21	0.00
24	0.00	456.67	16.67	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-19.67	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	8.67	445.20	5.20	0.00 Tank

Link Results at 10:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.60	0.49	3.54	Open
5	19.67	1.46	19.42	Open
6	19.67	1.46	26.79	Open
7	4.40	0.33	1.67	Open
9	0.00	0.00	0.00	Closed
10	8.67	0.33	1.11	Open
11	8.67	0.33	0.81	Open
12	8.67	0.33	0.94	Open
15	4.40	0.33	1.23	Open
16	19.67	1.85	47.66	Open
19	8.67	0.65	4.96	Open
21	0.00	0.00	0.00	Open
22	8.67	0.65	4.96	Open
23	8.67	0.65	4.97	Open
24	19.67	1.85	47.68	Open
25	8.67	0.65	3.46	Open
20	0.00	0.00	0.00	Closed Pump
13	6.60	0.49	22.47	Active Valve
14	4.40	0.33	37.46	Active Valve
17	19.67	1.85	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	8.67	0.65	0.00	Open Valve

Node Results at 11:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	462.41	2.41	0.00
3	0.00	462.41	99.41	0.00
4	0.00	462.41	73.41	0.00
5	0.00	462.42	99.42	0.00
6	0.00	509.98	-0.02	0.00
8	6.00	429.46	40.46	0.00
9	4.00	422.25	64.25	0.00
10	0.00	458.92	103.92	0.00
11	0.00	458.19	53.19	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	462.46	99.46	0.00
17	0.00	462.46	99.46	0.00
18	0.00	458.18	53.18	0.00
19	0.00	462.42	99.42	0.00
20	0.00	458.14	53.14	0.00

Node Results at 11:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	458.16	53.16	0.00
23	0.00	488.11	63.11	0.00
24	0.00	458.14	18.14	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-19.25	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	9.25	445.22	5.22	0.00 Tank

Link Results at 11:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.00	0.45	2.97	Open
5	19.25	1.43	18.64	Open
6	19.25	1.43	25.73	Open
7	4.00	0.30	1.40	Open
9	0.00	0.00	0.00	Closed
10	9.25	0.35	1.26	Open
11	9.25	0.35	0.91	Open
12	9.25	0.35	1.06	Open
15	4.00	0.30	1.00	Open
16	19.25	1.81	45.80	Open
19	9.25	0.69	5.59	Open
21	0.00	0.00	0.00	Open
22	9.25	0.69	5.59	Open
23	9.25	0.69	5.59	Open
24	19.25	1.81	45.80	Open
25	9.25	0.69	3.89	Open
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	24.42	Active Valve
14	4.00	0.30	39.42	Active Valve
17	19.25	1.81	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	9.25	0.69	0.00	Open Valve

Node Results at 12:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	467.44	7.44	0.00	
3	0.00	467.44	104.44	0.00	
4	0.00	467.44	78.44	0.00	
5	0.00	467.45	104.45	0.00	
6	0.00	509.98	-0.02	0.00	
8	4.50	432.99	43.99	0.00	
9	3.00	422.56	64.56	0.00	
10	0.00	462.93	107.93	0.00	
11	0.00	461.99	56.99	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	467.50	104.50	0.00	
17	0.00	467.50	104.50	0.00	
18	0.00	461.97	56.97	0.00	
19	0.00	467.45	104.45	0.00	
20	0.00	461.93	56.93	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	461.95	56.95	0.00	
23	0.00	490.43	65.43	0.00	
24	0.00	461.93	21.93	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-18.12	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	10.62	445.24	5.24	0.00	Tank

Link Results at 12:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	4.50	0.33	1.74	Open
5	18.12	1.35	16.67	Open
6	18.12	1.35	23.01	Open
7	3.00	0.22	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.62	0.40	1.62	Open
11	10.62	0.40	1.17	Open
12	10.62	0.40	1.37	Open
15	3.00	0.22	0.60	Open
16	18.12	1.71	40.96	Open
19	10.62	0.79	7.23	Open
21	0.00	0.00	0.00	Open
22	10.62	0.79	7.23	Open
23	10.62	0.79	7.22	Open

Link Results at 12:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	18.12	1.71	40.95	Open
25	10.62	0.79	5.02	Open
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	29.45	Active Valve
14	3.00	0.22	44.45	Active Valve
17	18.12	1.71	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	10.62	0.79	0.00	Open Valve

Node Results at 13:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.96	12.96	0.00
3	0.00	472.96	109.96	0.00
4	0.00	472.96	83.96	0.00
5	0.00	472.97	109.97	0.00
6	0.00	509.99	-0.01	0.00
8	1.50	437.34	48.34	0.00
9	1.00	422.94	64.94	0.00
10	0.00	467.33	112.33	0.00
11	0.00	466.15	61.15	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	481.99	118.99	0.00
17	0.00	473.00	110.00	0.00
18	0.00	466.14	61.14	0.00
19	0.00	472.97	109.97	0.00
20	0.00	466.08	61.08	0.00
21	0.00	415.00	10.00	0.00
22	0.00	466.11	61.11	0.00
23	0.00	497.10	72.10	0.00
24	0.00	466.08	26.08	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-14.47	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	11.97	445.26	5.26	0.00 Tank

Link Results at 13:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	1.50	0.11	0.23	Open
5	14.47	1.08	10.98	Open
6	14.47	1.08	15.16	Open
7	1.00	0.07	0.11	Open
9	0.00	0.00	0.00	Closed
10	11.97	0.45	2.02	Open
11	11.97	0.45	1.47	Open
12	11.97	0.45	1.71	Open
15	1.00	0.07	0.07	Open
16	14.47	1.36	26.98	Open
19	11.97	0.89	9.02	Open
21	0.00	0.00	0.00	Open
22	11.97	0.89	9.02	Open
23	11.97	0.89	9.02	Open
24	14.47	1.36	26.99	Open
25	11.97	0.89	6.27	Open
20	0.00	0.00	0.00	Closed Pump
13	1.50	0.11	34.97	Active Valve
14	1.00	0.07	49.97	Active Valve
17	14.47	1.36	8.99	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	11.97	0.89	0.00	Open Valve

Node Results at 14:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	462.44	2.44	0.00
3	0.00	462.44	99.44	0.00
4	0.00	462.44	73.44	0.00
5	0.00	462.45	99.45	0.00
6	0.00	509.98	-0.02	0.00
8	6.00	429.46	40.46	0.00
9	4.00	422.25	64.25	0.00
10	0.00	458.96	103.96	0.00
11	0.00	458.23	53.23	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	462.50	99.50	0.00
17	0.00	462.50	99.50	0.00
18	0.00	458.22	53.22	0.00
19	0.00	462.45	99.45	0.00
20	0.00	458.18	53.18	0.00

Node Results at 14:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	458.20	53.20	0.00
23	0.00	488.13	63.13	0.00
24	0.00	458.18	18.18	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-19.24	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	9.24	445.28	5.28	0.00 Tank

Link Results at 14:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.00	0.45	2.97	Open
5	19.24	1.43	18.64	Open
6	19.24	1.43	25.71	Open
7	4.00	0.30	1.40	Open
9	0.00	0.00	0.00	Closed
10	9.24	0.35	1.25	Open
11	9.24	0.35	0.91	Open
12	9.24	0.35	1.06	Open
15	4.00	0.30	1.00	Open
16	19.24	1.81	45.76	Open
19	9.24	0.69	5.59	Open
21	0.00	0.00	0.00	Open
22	9.24	0.69	5.59	Open
23	9.24	0.69	5.58	Open
24	19.24	1.81	45.77	Open
25	9.24	0.69	3.87	Open
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	24.45	Active Valve
14	4.00	0.30	39.45	Active Valve
17	19.24	1.81	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	9.24	0.69	0.00	Open Valve

Node Results at 15:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	462.45	2.45	0.00	
3	0.00	462.45	99.45	0.00	
4	0.00	462.45	73.45	0.00	
5	0.00	462.46	99.46	0.00	
6	0.00	509.98	-0.02	0.00	
8	6.00	429.46	40.46	0.00	
9	4.00	422.25	64.25	0.00	
10	0.00	458.97	103.97	0.00	
11	0.00	458.24	53.24	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	462.51	99.51	0.00	
17	0.00	462.51	99.51	0.00	
18	0.00	458.23	53.23	0.00	
19	0.00	462.46	99.46	0.00	
20	0.00	458.19	53.19	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	458.21	53.21	0.00	
23	0.00	488.13	63.13	0.00	
24	0.00	458.19	18.19	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-19.24	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	9.24	445.30	5.30	0.00	Tank

Link Results at 15:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	6.00	0.45	2.97	Open
5	19.24	1.43	18.64	Open
6	19.24	1.43	25.71	Open
7	4.00	0.30	1.40	Open
9	0.00	0.00	0.00	Closed
10	9.24	0.35	1.25	Open
11	9.24	0.35	0.91	Open
12	9.24	0.35	1.06	Open
15	4.00	0.30	1.00	Open
16	19.24	1.81	45.76	Open
19	9.24	0.69	5.58	Open
21	0.00	0.00	0.00	Open
22	9.24	0.69	5.58	Open
23	9.24	0.69	5.58	Open

Link Results at 15:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	19.24	1.81	45.76	Open
25	9.24	0.69	3.89	Open
20	0.00	0.00	0.00	Closed Pump
13	6.00	0.45	24.46	Active Valve
14	4.00	0.30	39.46	Active Valve
17	19.24	1.81	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	9.24	0.69	0.00	Open Valve

Node Results at 16:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	467.48	7.48	0.00
3	0.00	467.48	104.48	0.00
4	0.00	467.48	78.48	0.00
5	0.00	467.49	104.49	0.00
6	0.00	509.98	-0.02	0.00
8	4.50	432.99	43.99	0.00
9	3.00	422.56	64.56	0.00
10	0.00	462.98	107.98	0.00
11	0.00	462.04	57.04	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	467.53	104.53	0.00
17	0.00	467.53	104.53	0.00
18	0.00	462.02	57.02	0.00
19	0.00	467.49	104.49	0.00
20	0.00	461.98	56.98	0.00
21	0.00	415.00	10.00	0.00
22	0.00	462.00	57.00	0.00
23	0.00	490.45	65.45	0.00
24	0.00	461.98	21.98	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-18.11	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	10.61	445.31	5.31	0.00 Tank

Link Results at 16:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	4.50	0.33	1.74	Open
5	18.11	1.35	16.67	Open
6	18.11	1.35	22.99	Open
7	3.00	0.22	0.82	Open
9	0.00	0.00	0.00	Closed
10	10.61	0.40	1.62	Open
11	10.61	0.40	1.17	Open
12	10.61	0.40	1.37	Open
15	3.00	0.22	0.60	Open
16	18.11	1.71	40.93	Open
19	10.61	0.79	7.22	Open
21	0.00	0.00	0.00	Open
22	10.61	0.79	7.22	Open
23	10.61	0.79	7.21	Open
24	18.11	1.71	40.91	Open
25	10.61	0.79	5.00	Open
20	0.00	0.00	0.00	Closed Pump
13	4.50	0.33	29.49	Active Valve
14	3.00	0.22	44.49	Active Valve
17	18.11	1.71	0.00	Open Valve
18	0.00	0.00	0.00	Closed Valve
8	10.61	0.79	0.00	Open Valve

Node Results at 17:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.96	12.96	0.00
3	0.00	472.96	109.96	0.00
4	0.00	472.96	83.96	0.00
5	0.00	472.97	109.97	0.00
6	0.00	509.99	-0.01	0.00
8	1.50	437.34	48.34	0.00
9	1.00	422.94	64.94	0.00
10	0.00	467.35	112.35	0.00
11	0.00	466.17	61.17	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	482.05	119.05	0.00
17	0.00	473.00	110.00	0.00
18	0.00	466.16	61.16	0.00
19	0.00	472.97	109.97	0.00
20	0.00	466.10	61.10	0.00

Node Results at 17:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	466.13	61.13	0.00
23	0.00	497.13	72.13	0.00
24	0.00	466.10	26.10	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-14.45	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	11.95	445.33	5.33	0.00 Tank

Link Results at 17:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	1.50	0.11	0.23	Open
5	14.45	1.08	10.98	Open
6	14.45	1.08	15.13	Open
7	1.00	0.07	0.11	Open
9	0.00	0.00	0.00	Closed
10	11.95	0.45	2.02	Open
11	11.95	0.45	1.46	Open
12	11.95	0.45	1.70	Open
15	1.00	0.07	0.07	Open
16	14.45	1.36	26.94	Open
19	11.95	0.89	8.99	Open
21	0.00	0.00	0.00	Open
22	11.95	0.89	8.99	Open
23	11.95	0.89	8.99	Open
24	14.45	1.36	26.93	Open
25	11.95	0.89	6.23	Open
20	0.00	0.00	0.00	Closed Pump
13	1.50	0.11	34.97	Active Valve
14	1.00	0.07	49.97	Active Valve
17	14.45	1.36	9.05	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	11.95	0.89	0.00	Open Valve

Node Results at 18:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.98	109.98	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.60	437.88	48.88	0.00	
9	0.40	422.99	64.99	0.00	
10	0.00	467.36	112.36	0.00	
11	0.00	466.18	61.18	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	487.20	124.20	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	466.16	61.16	0.00	
19	0.00	472.98	109.98	0.00	
20	0.00	466.11	61.11	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	466.14	61.14	0.00	
23	0.00	499.50	74.50	0.00	
24	0.00	466.11	26.11	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-12.94	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	11.94	445.35	5.35	0.00	Tank

Link Results at 18:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.60	0.04	0.04	Open
5	12.94	0.96	8.97	Open
6	12.94	0.96	12.34	Open
7	0.40	0.03	0.02	Open
9	0.00	0.00	0.00	Closed
10	11.94	0.45	2.02	Open
11	11.94	0.45	1.46	Open
12	11.94	0.45	1.70	Open
15	0.40	0.03	0.04	Open
16	12.94	1.22	21.95	Open
19	11.94	0.89	8.99	Open
21	0.00	0.00	0.00	Open
22	11.94	0.89	8.98	Open
23	11.94	0.89	8.99	Open

Link Results at 18:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	12.94	1.22	21.97	Open
25	11.94	0.89	6.25	Open
20	0.00	0.00	0.00	Closed Pump
13	0.60	0.04	34.98	Active Valve
14	0.40	0.03	49.98	Active Valve
17	12.94	1.22	14.20	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	11.94	0.89	0.00	Open Valve

Node Results at 19:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	467.36	112.36	0.00
11	0.00	466.19	61.19	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	490.37	127.37	0.00
17	0.00	473.00	110.00	0.00
18	0.00	466.17	61.17	0.00
19	0.00	472.98	109.98	0.00
20	0.00	466.12	61.12	0.00
21	0.00	415.00	10.00	0.00
22	0.00	466.15	61.15	0.00
23	0.00	500.96	75.96	0.00
24	0.00	466.12	26.12	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-11.94	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	11.94	445.38	5.38	0.00 Tank

Link Results at 19:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	11.94	0.89	7.70	Open
6	11.94	0.89	10.63	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	11.94	0.45	2.02	Open
11	11.94	0.45	1.46	Open
12	11.94	0.45	1.70	Open
15	0.00	0.00	0.00	Open
16	11.94	1.13	18.90	Open
19	11.94	0.89	8.98	Open
21	0.00	0.00	0.00	Open
22	11.94	0.89	8.98	Open
23	11.94	0.89	8.98	Open
24	11.94	1.13	18.92	Open
25	11.94	0.89	6.25	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	11.94	1.13	17.37	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	11.94	0.89	0.00	Open Valve

Node Results at 20:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	467.37	112.37	0.00
11	0.00	466.19	61.19	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	490.37	127.37	0.00
17	0.00	473.00	110.00	0.00
18	0.00	466.18	61.18	0.00
19	0.00	472.98	109.98	0.00
20	0.00	466.12	61.12	0.00

Node Results at 20:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	466.15	61.15	0.00
23	0.00	500.96	75.96	0.00
24	0.00	466.12	26.12	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-11.94	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	11.94	445.40	5.40	0.00 Tank

Link Results at 20:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	11.94	0.89	7.70	Open
6	11.94	0.89	10.63	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	11.94	0.45	2.01	Open
11	11.94	0.45	1.46	Open
12	11.94	0.45	1.70	Open
15	0.00	0.00	0.00	Open
16	11.94	1.13	18.90	Open
19	11.94	0.89	8.97	Open
21	0.00	0.00	0.00	Open
22	11.94	0.89	8.98	Open
23	11.94	0.89	8.97	Open
24	11.94	1.13	18.91	Open
25	11.94	0.89	6.23	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	11.94	1.13	17.37	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	11.93	0.89	0.00	Open Valve

Node Results at 21:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.98	109.98	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	467.37	112.37	0.00	
11	0.00	466.20	61.20	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	490.38	127.38	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	466.18	61.18	0.00	
19	0.00	472.98	109.98	0.00	
20	0.00	466.13	61.13	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	466.16	61.16	0.00	
23	0.00	500.97	75.97	0.00	
24	0.00	466.13	26.13	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-11.94	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	11.93	445.42	5.42	0.00	Tank

Link Results at 21:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	11.94	0.89	7.70	Open
6	11.94	0.89	10.62	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	11.93	0.45	2.01	Open
11	11.93	0.45	1.46	Open
12	11.93	0.45	1.70	Open
15	0.00	0.00	0.00	Open
16	11.93	1.12	18.90	Open
19	11.93	0.89	8.97	Open
21	0.00	0.00	0.00	Open
22	11.93	0.89	8.97	Open
23	11.93	0.89	8.97	Open

Link Results at 21:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	11.94	1.13	18.90	Open
25	11.93	0.89	6.21	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	11.94	1.13	17.38	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	11.93	0.89	0.00	Open Valve

Node Results at 22:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	467.38	112.38	0.00
11	0.00	466.21	61.21	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	490.40	127.40	0.00
17	0.00	473.00	110.00	0.00
18	0.00	466.19	61.19	0.00
19	0.00	472.98	109.98	0.00
20	0.00	466.13	61.13	0.00
21	0.00	415.00	10.00	0.00
22	0.00	466.16	61.16	0.00
23	0.00	500.97	75.97	0.00
24	0.00	466.13	26.13	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-11.93	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	11.92	445.44	5.44	0.00 Tank

Link Results at 22:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	11.93	0.89	7.70	Open
6	11.93	0.89	10.61	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	11.92	0.45	2.01	Open
11	11.92	0.45	1.46	Open
12	11.92	0.45	1.70	Open
15	0.00	0.00	0.00	Open
16	11.93	1.12	18.86	Open
19	11.92	0.89	8.96	Open
21	0.00	0.00	0.00	Open
22	11.92	0.89	8.97	Open
23	11.92	0.89	8.95	Open
24	11.93	1.12	18.88	Open
25	11.92	0.89	6.23	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	11.93	1.12	17.40	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	11.92	0.89	0.00	Open Valve

Node Results at 23:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	472.97	12.97	0.00
3	0.00	472.97	109.97	0.00
4	0.00	472.97	83.97	0.00
5	0.00	472.98	109.98	0.00
6	0.00	509.99	-0.01	0.00
8	0.00	438.00	49.00	0.00
9	0.00	423.00	65.00	0.00
10	0.00	467.38	112.38	0.00
11	0.00	466.21	61.21	0.00
13	0.00	438.00	75.00	0.00
14	0.00	423.00	60.00	0.00
16	0.00	490.41	127.41	0.00
17	0.00	473.00	110.00	0.00
18	0.00	466.19	61.19	0.00
19	0.00	472.98	109.98	0.00
20	0.00	466.14	61.14	0.00

Node Results at 23:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
21	0.00	415.00	10.00	0.00
22	0.00	466.17	61.17	0.00
23	0.00	500.98	75.98	0.00
24	0.00	466.14	26.14	0.00
1	0.00	460.00	0.00	0.00 Reservoir
7	-11.93	510.00	0.00	0.00 Reservoir
12	0.00	415.00	10.00	0.00 Tank
15	11.92	445.46	5.46	0.00 Tank

Link Results at 23:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	11.93	0.89	7.70	Open
6	11.93	0.89	10.60	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	11.92	0.45	2.01	Open
11	11.92	0.45	1.46	Open
12	11.92	0.45	1.70	Open
15	0.00	0.00	0.00	Open
16	11.92	1.12	18.86	Open
19	11.92	0.89	8.95	Open
21	0.00	0.00	0.00	Open
22	11.92	0.89	8.95	Open
23	11.92	0.89	8.95	Open
24	11.93	1.12	18.87	Open
25	11.92	0.89	6.21	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	11.93	1.12	17.41	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	11.92	0.89	0.00	Open Valve

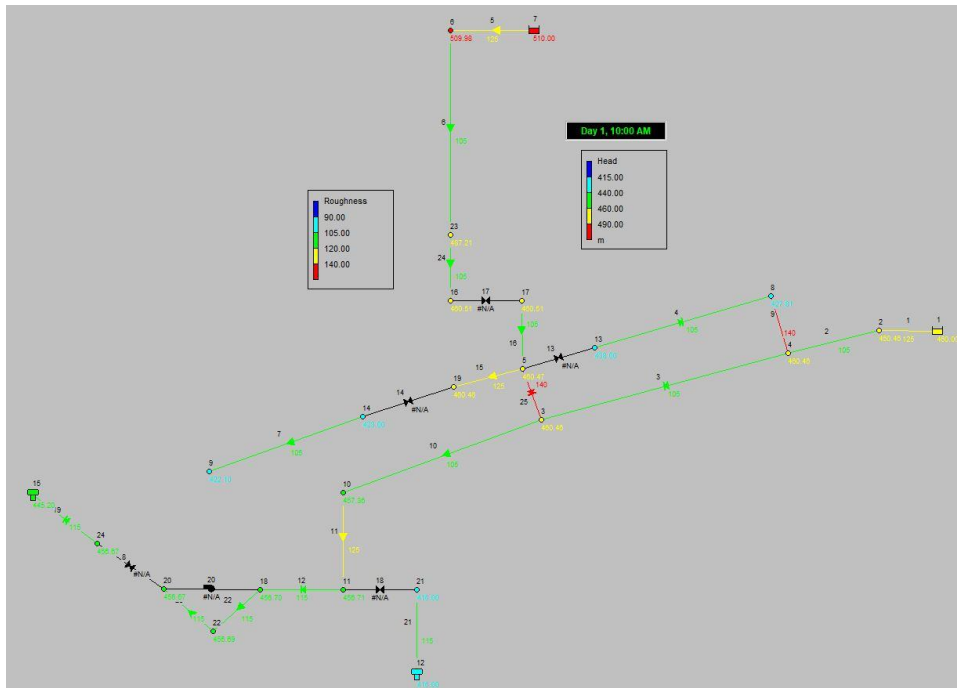
Node Results at 24:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	472.97	12.97	0.00	
3	0.00	472.97	109.97	0.00	
4	0.00	472.97	83.97	0.00	
5	0.00	472.98	109.98	0.00	
6	0.00	509.99	-0.01	0.00	
8	0.00	438.00	49.00	0.00	
9	0.00	423.00	65.00	0.00	
10	0.00	467.39	112.39	0.00	
11	0.00	466.22	61.22	0.00	
13	0.00	438.00	75.00	0.00	
14	0.00	423.00	60.00	0.00	
16	0.00	490.43	127.43	0.00	
17	0.00	473.00	110.00	0.00	
18	0.00	466.20	61.20	0.00	
19	0.00	472.98	109.98	0.00	
20	0.00	466.15	61.15	0.00	
21	0.00	415.00	10.00	0.00	
22	0.00	466.17	61.17	0.00	
23	0.00	500.99	75.99	0.00	
24	0.00	466.15	26.15	0.00	
1	0.00	460.00	0.00	0.00	Reservoir
7	-11.92	510.00	0.00	0.00	Reservoir
12	0.00	415.00	10.00	0.00	Tank
15	11.91	445.49	5.49	0.00	Tank

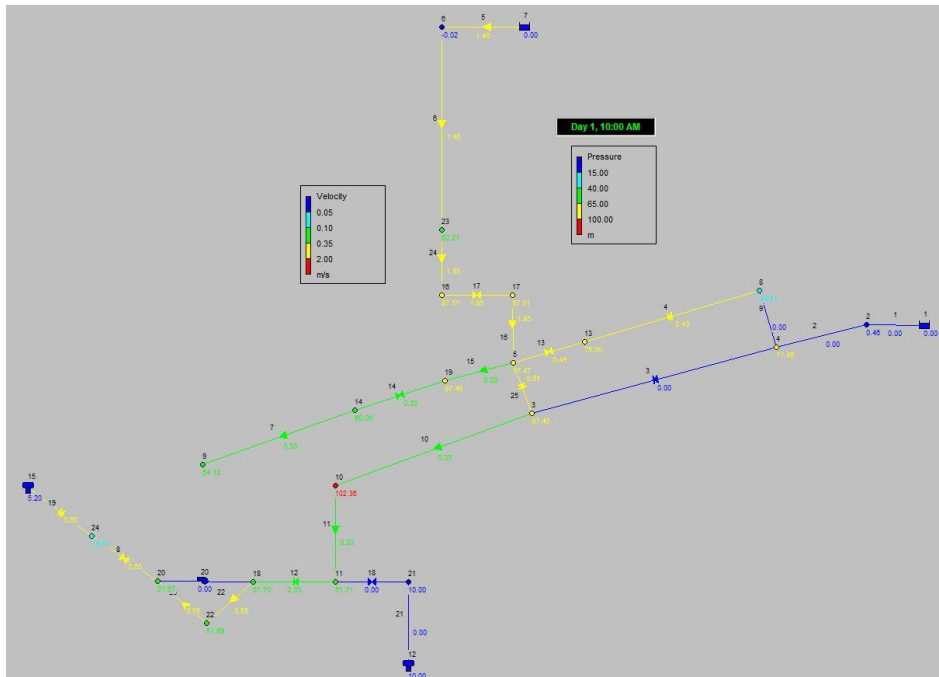
Link Results at 24:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	0.00	0.00	0.00	Closed
2	0.00	0.00	0.00	Open
3	0.00	0.00	0.00	Open
4	0.00	0.00	0.00	Open
5	11.92	0.89	7.70	Open
6	11.92	0.89	10.59	Open
7	0.00	0.00	0.00	Open
9	0.00	0.00	0.00	Closed
10	11.91	0.45	2.01	Open
11	11.91	0.45	1.45	Open
12	11.91	0.45	1.70	Open
15	0.00	0.00	0.00	Open
16	11.91	1.12	18.83	Open
19	11.91	0.89	8.94	Open
21	0.00	0.00	0.00	Open
22	11.91	0.89	8.94	Open
23	11.91	0.89	8.94	Open

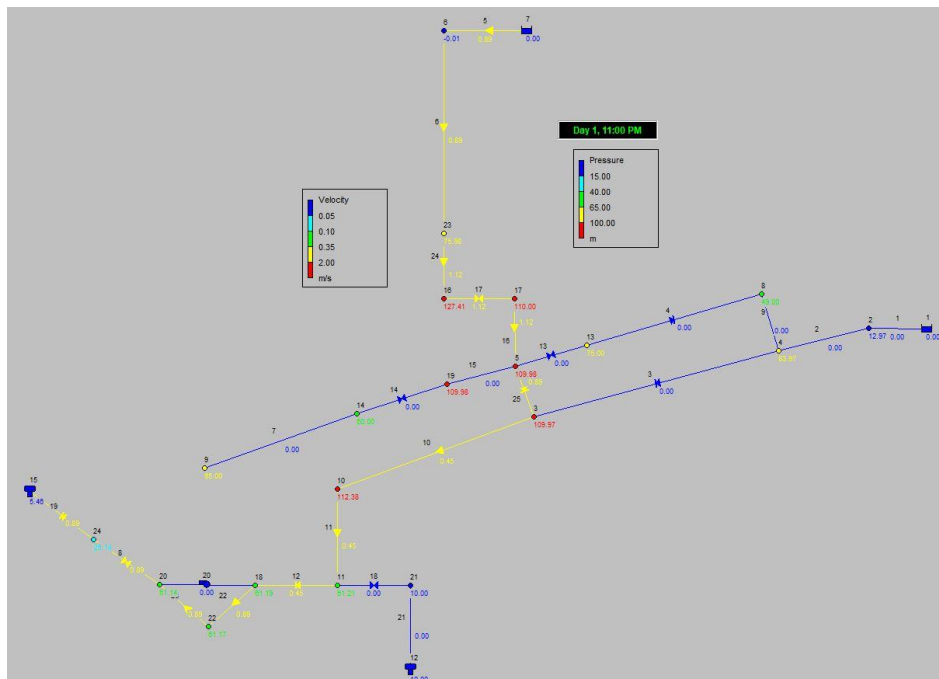
Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
24	11.92	1.12	18.85	Open
25	11.91	0.89	6.21	Open
20	0.00	0.00	0.00	Closed Pump
13	0.00	0.00	34.98	Active Valve
14	0.00	0.00	49.98	Active Valve
17	11.92	1.12	17.43	Active Valve
18	0.00	0.00	0.00	Closed Valve
8	11.91	0.89	0.00	Open Valve



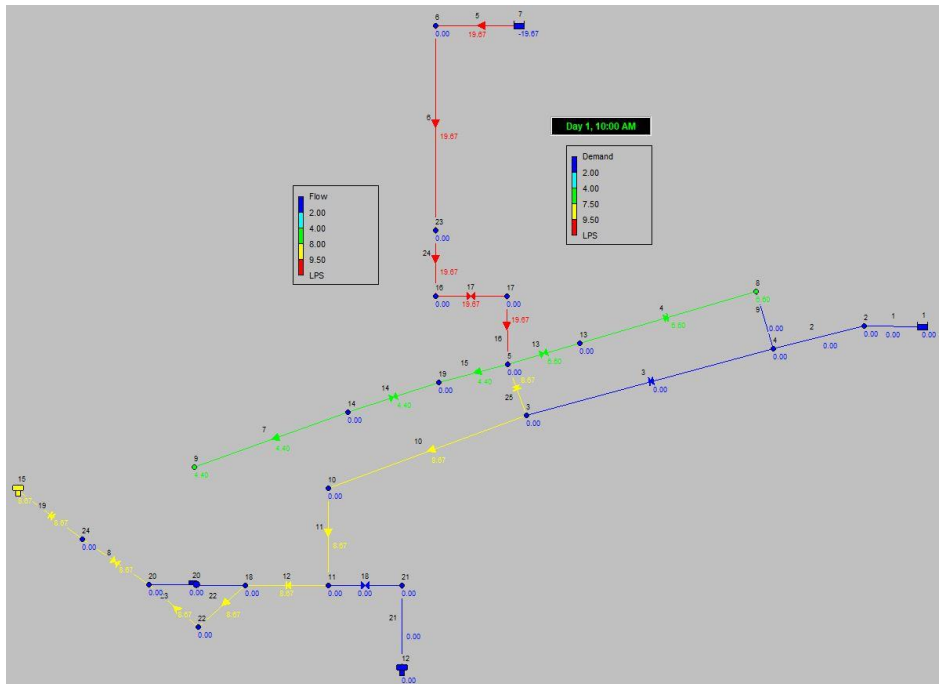
Schema della rete (TUBI VECCHI): scabrezza condotte



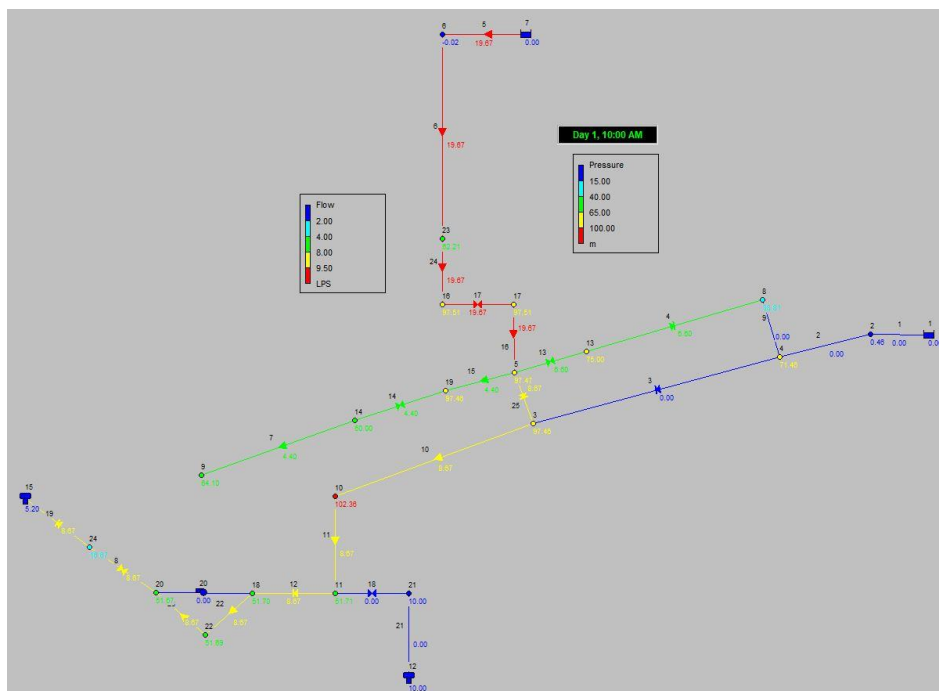
Output di calcolo (TUBI VECCHI): pressione (ai nodi) e velocità (nelle condotte) alle 10h00



Output di calcolo (TUBI VECCHI): pressione (ai nodi) e velocità (nelle condotte) alle 23h00



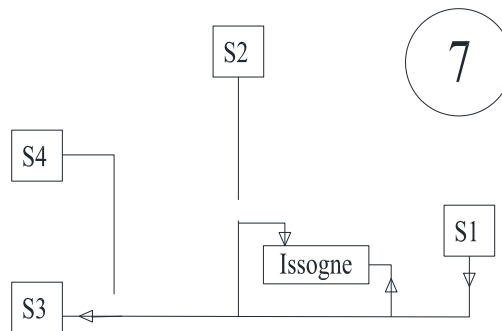
Output di calcolo (**TUBI VECCHI**): prelievi (ai nodi) e portate (nelle condotte) alle 10h00



Output di calcolo (**TUBI VECCHI**): pressioni (ai nodi) e portate (nelle condotte) alle 10h00

6 Verifiche idrauliche per la Modalità n°7

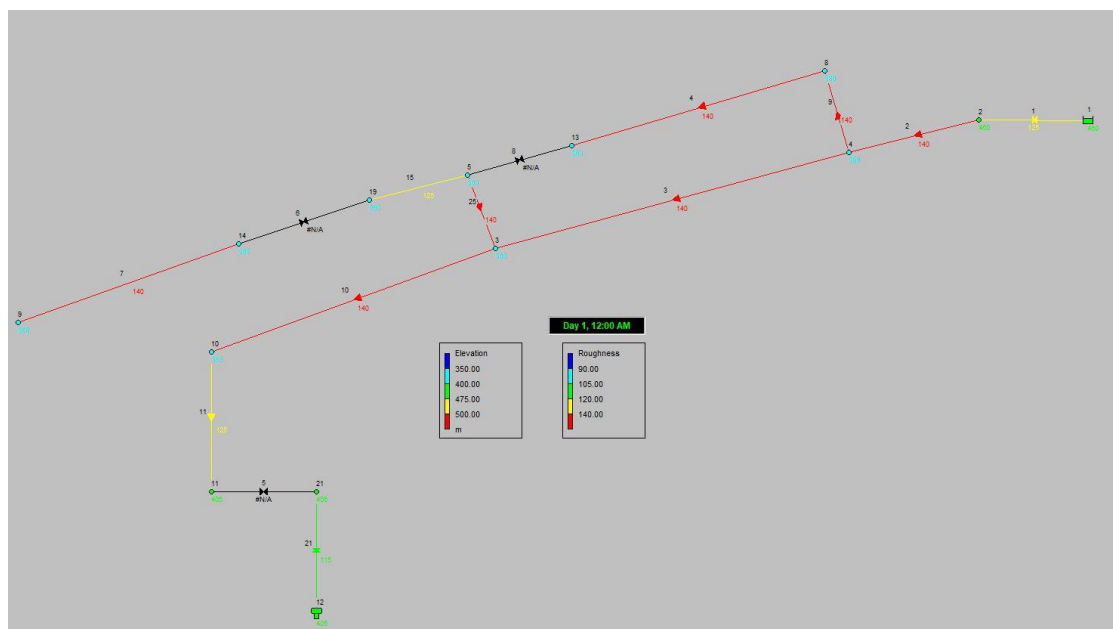
Lo schema di principio è il seguente:



In questa modalità:

- il serbatoio S3 Clos de Barne (Arnad) viene caricato dal serbatoio S1 Fabrique (Champdepraz) fino al raggiungimento del livello massimo;
- la distribuzione nella piana di Issogne avviene mediante l'approvvigionamento dal serbatoio S1 Fabrique (Champdepraz);
- Il serbatoio S2 Sommet de la Ville (Issogne) non viene utilizzato;
- il serbatoio S4 di Ville loc. Castello (Arnad alta) non carica S3 ed è libero per la distribuzione nella parte alta di Arnad e può ricaricarsi con le proprie sorgenti.

Seguono i tabulati di calcolo ed i grafici significativi per la Modalità n°7, sia per la condizione di tubi nuovi che di tubi vecchi.



Schema della rete (**TUBI NUOVI**): scabrezza condotte

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*****
*                               E P A N E T                               *
*                               Hydraulic and Water Quality              *
*                               Analysis for Pipe Networks                *
*                               Version 2.0                              *
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MODALITA' di FUNZIONAMENTO 7

VERIFICHE a TUBI NUOVI (coefficiente di H-W pari a 140)

Link - Node Table:

Link ID	Start Node	End Node	Length m	Diameter mm	
1	1	2	1	184	
2	2	4	1060	184	
3	4	3	2875	184	
4	13	8	2875	130.8	
7	14	9	535	130.8	
9	4	8	10	130.8	
10	3	10	2780	184	
11	10	11	805	184	
15	5	19	1	130.8	
21	21	12	1	184	
25	3	5	2	130.8	
5	11	21	#N/A	184	Valve
6	19	14	#N/A	130.8	Valve
8	13	5	#N/A	130.8	Valve

Node Results at 0:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	457.79	94.79	0.00	
4	0.00	459.10	70.10	0.00	
5	0.00	457.79	94.79	0.00	
8	0.00	459.09	70.09	0.00	
9	0.00	428.00	70.00	0.00	
10	0.00	455.42	100.42	0.00	
11	0.00	454.58	49.58	0.00	
13	0.00	457.79	94.79	0.00	
14	0.00	428.00	65.00	0.00	
19	0.00	457.79	94.79	0.00	
21	0.00	415.00	10.00	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
12	10.00	415.00	10.00	0.00	Tank

Link Results at 0:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.45	Open
5	10.00	0.38	39.58	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 1:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.79	94.79	0.00
4	0.00	459.10	70.10	0.00
5	0.00	457.79	94.79	0.00
8	0.00	459.09	70.09	0.00
9	0.00	428.00	70.00	0.00
10	0.00	455.42	100.42	0.00
11	0.00	454.58	49.58	0.00
13	0.00	457.79	94.79	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.79	94.79	0.00
21	0.00	415.02	10.02	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.02	10.02	0.00 Tank

Link Results at 1:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open

Link Results at 1:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.45	Open
5	10.00	0.38	39.56	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 2:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.79	94.79	0.00
4	0.00	459.10	70.10	0.00
5	0.00	457.79	94.79	0.00
8	0.00	459.09	70.09	0.00
9	0.00	428.00	70.00	0.00
10	0.00	455.42	100.42	0.00
11	0.00	454.58	49.58	0.00
13	0.00	457.79	94.79	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.79	94.79	0.00
21	0.00	415.04	10.04	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.04	10.04	0.00 Tank

Link Results at 2:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.45	Open
5	10.00	0.38	39.54	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 3:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.79	94.79	0.00
4	0.00	459.10	70.10	0.00
5	0.00	457.79	94.79	0.00
8	0.00	459.09	70.09	0.00
9	0.00	428.00	70.00	0.00
10	0.00	455.42	100.42	0.00
11	0.00	454.58	49.58	0.00
13	0.00	457.79	94.79	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.79	94.79	0.00
21	0.00	415.06	10.06	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.05	10.06	0.00 Tank

Link Results at 3:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.45	Open
5	10.00	0.38	39.52	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 4:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.23	94.23	0.00
4	0.00	458.73	69.73	0.00
5	0.00	457.23	94.23	0.00
8	1.20	458.72	69.72	0.00
9	0.80	427.98	69.98	0.00

Node Results at 4:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
10	0.00	454.86	99.86	0.00
11	0.00	454.01	49.01	0.00
13	0.00	457.23	94.23	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.23	94.23	0.00
21	0.00	415.07	10.07	0.00
1	-12.00	460.00	0.00	0.00 Reservoir
12	10.00	415.07	10.07	0.00 Tank

Link Results at 4:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	12.00	0.45	1.49	Open
2	12.00	0.45	1.19	Open
3	7.68	0.29	0.52	Open
4	-3.12	0.23	0.52	Open
7	0.80	0.06	0.04	Open
9	4.32	0.32	0.95	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.80	0.06	0.04	Open
21	10.00	0.38	1.23	Open
25	-2.32	0.17	0.30	Open
5	10.00	0.38	38.94	Active Valve
6	0.80	0.06	29.23	Active Valve
8	3.12	0.23	0.00	Open Valve

Node Results at 5:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.26	93.26	0.00
4	0.00	458.08	69.08	0.00
5	0.00	456.26	93.26	0.00
8	3.00	458.06	69.06	0.00
9	2.00	427.88	69.88	0.00
10	0.00	453.89	98.89	0.00
11	0.00	453.04	48.04	0.00
13	0.00	456.26	93.26	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.25	93.25	0.00
21	0.00	415.09	10.09	0.00
1	-15.00	460.00	0.00	0.00 Reservoir

Node Results at 5:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
12	10.00	415.09	10.09	0.00 Tank

Link Results at 5:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	15.00	0.56	2.23	Open
2	15.00	0.56	1.81	Open
3	8.54	0.32	0.64	Open
4	-3.46	0.26	0.63	Open
7	2.00	0.15	0.23	Open
9	6.46	0.48	2.00	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	2.00	0.15	0.30	Open
21	10.00	0.38	1.23	Open
25	-1.46	0.11	0.13	Open
5	10.00	0.38	37.95	Active Valve
6	2.00	0.15	28.25	Active Valve
8	3.46	0.26	0.00	Open Valve

Node Results at 6:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	455.33	92.33	0.00
4	0.00	457.45	68.45	0.00
5	0.00	455.33	92.33	0.00
8	4.50	457.42	68.42	0.00
9	3.00	427.74	69.74	0.00
10	0.00	452.96	97.96	0.00
11	0.00	452.11	47.11	0.00
13	0.00	455.33	92.33	0.00
14	0.00	428.00	65.00	0.00
19	0.00	455.33	92.33	0.00
21	0.00	415.11	10.11	0.00
1	-17.50	460.00	0.00	0.00 Reservoir
12	10.00	415.11	10.11	0.00 Tank

Link Results at 6:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	17.50	0.66	2.98	Open
2	17.50	0.66	2.40	Open
3	9.26	0.35	0.74	Open
4	-3.74	0.28	0.73	Open
7	3.00	0.22	0.48	Open
9	8.24	0.61	3.14	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	3.00	0.22	0.60	Open
21	10.00	0.38	1.23	Open
25	-0.74	0.06	0.04	Open
5	10.00	0.38	37.00	Active Valve
6	3.00	0.22	27.33	Active Valve
8	3.74	0.28	0.00	Open Valve

Node Results at 7:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.72	91.72	0.00
4	0.00	457.03	68.03	0.00
5	0.00	454.72	91.72	0.00
8	5.40	456.99	67.99	0.00
9	3.60	427.64	69.64	0.00
10	0.00	452.35	97.35	0.00
11	0.00	451.51	46.51	0.00
13	0.00	454.72	91.72	0.00
14	0.00	428.00	65.00	0.00
19	0.00	454.72	91.72	0.00
21	0.00	415.13	10.13	0.00
1	-19.00	460.00	0.00	0.00 Reservoir
12	10.00	415.13	10.13	0.00 Tank

Link Results at 7:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	19.00	0.71	3.46	Open
2	19.00	0.71	2.80	Open
3	9.69	0.36	0.80	Open
4	-3.91	0.29	0.79	Open
7	3.60	0.27	0.68	Open
9	9.31	0.69	3.94	Open
10	10.00	0.38	0.85	Open

Link Results at 7:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
11	10.00	0.38	1.05	Open
15	3.60	0.27	0.82	Open
21	10.00	0.38	1.23	Open
25	-0.31	0.02	0.00	Open
5	10.00	0.38	36.38	Active Valve
6	3.60	0.27	26.72	Active Valve
8	3.91	0.29	0.00	Open Valve

Node Results at 8:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.72	91.72	0.00
4	0.00	457.03	68.03	0.00
5	0.00	454.72	91.72	0.00
8	5.40	456.99	67.99	0.00
9	3.60	427.64	69.64	0.00
10	0.00	452.35	97.35	0.00
11	0.00	451.51	46.51	0.00
13	0.00	454.72	91.72	0.00
14	0.00	428.00	65.00	0.00
19	0.00	454.72	91.72	0.00
21	0.00	415.15	10.15	0.00
1	-19.00	460.00	0.00	0.00 Reservoir
12	10.00	415.15	10.15	0.00 Tank

Link Results at 8:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	19.00	0.71	3.46	Open
2	19.00	0.71	2.80	Open
3	9.69	0.36	0.80	Open
4	-3.91	0.29	0.79	Open
7	3.60	0.27	0.68	Open
9	9.31	0.69	3.94	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	3.60	0.27	0.86	Open
21	10.00	0.38	1.23	Open
25	-0.31	0.02	0.02	Open
5	10.00	0.38	36.36	Active Valve
6	3.60	0.27	26.72	Active Valve
8	3.91	0.29	0.00	Open Valve

Node Results at 9:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.30	91.30	0.00
4	0.00	456.74	67.74	0.00
5	0.00	454.30	91.30	0.00
8	6.00	456.69	67.69	0.00
9	4.00	427.56	69.56	0.00
10	0.00	451.93	96.93	0.00
11	0.00	451.08	46.08	0.00
13	0.00	454.30	91.30	0.00
14	0.00	428.00	65.00	0.00
19	0.00	454.30	91.30	0.00
21	0.00	415.17	10.17	0.00
1	-20.00	460.00	0.00	0.00 Reservoir
12	10.00	415.17	10.17	0.00 Tank

Link Results at 9:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	20.00	0.75	3.80	Open
2	20.00	0.75	3.08	Open
3	9.98	0.38	0.85	Open
4	-4.02	0.30	0.83	Open
7	4.00	0.30	0.82	Open
9	10.02	0.75	4.51	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	4.00	0.30	1.00	Open
21	10.00	0.38	1.23	Open
25	-0.02	0.00	0.00	Open
5	10.00	0.38	35.92	Active Valve
6	4.00	0.30	26.30	Active Valve
8	4.02	0.30	0.00	Open Valve

Node Results at 10:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	453.86	90.86	0.00
4	0.00	456.43	67.43	0.00
5	0.00	453.86	90.86	0.00
8	6.60	456.38	67.38	0.00
9	4.40	427.47	69.47	0.00

Node Results at 10:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
10	0.00	451.49	96.49	0.00
11	0.00	450.64	45.64	0.00
13	0.00	453.86	90.86	0.00
14	0.00	428.00	65.00	0.00
19	0.00	453.86	90.86	0.00
21	0.00	415.18	10.18	0.00
1	-21.00	460.00	0.00	0.00 Reservoir
12	10.00	415.18	10.18	0.00 Tank

Link Results at 10:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	21.00	0.79	4.17	Open
2	21.00	0.79	3.37	Open
3	10.26	0.39	0.89	Open
4	-4.14	0.31	0.88	Open
7	4.40	0.33	0.98	Open
9	10.74	0.80	5.12	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	4.40	0.33	1.23	Open
21	10.00	0.38	1.19	Open
25	0.26	0.02	0.00	Open
5	10.00	0.38	35.46	Active Valve
6	4.40	0.33	25.86	Active Valve
8	4.14	0.31	0.00	Open Valve

Node Results at 11:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.30	91.30	0.00
4	0.00	456.74	67.74	0.00
5	0.00	454.30	91.30	0.00
8	6.00	456.69	67.69	0.00
9	4.00	427.56	69.56	0.00
10	0.00	451.93	96.93	0.00
11	0.00	451.08	46.08	0.00
13	0.00	454.30	91.30	0.00
14	0.00	428.00	65.00	0.00
19	0.00	454.30	91.30	0.00
21	0.00	415.20	10.20	0.00
1	-20.00	460.00	0.00	0.00 Reservoir

Node Results at 11:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
12	10.00	415.20	10.20	0.00 Tank

Link Results at 11:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	20.00	0.75	3.80	Open
2	20.00	0.75	3.08	Open
3	9.98	0.38	0.85	Open
4	-4.02	0.30	0.83	Open
7	4.00	0.30	0.82	Open
9	10.02	0.75	4.51	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	4.00	0.30	1.00	Open
21	10.00	0.38	1.23	Open
25	-0.02	0.00	0.00	Open
5	10.00	0.38	35.88	Active Valve
6	4.00	0.30	26.30	Active Valve
8	4.02	0.30	0.00	Open Valve

Node Results at 12:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	455.33	92.33	0.00
4	0.00	457.45	68.45	0.00
5	0.00	455.33	92.33	0.00
8	4.50	457.42	68.42	0.00
9	3.00	427.74	69.74	0.00
10	0.00	452.96	97.96	0.00
11	0.00	452.11	47.11	0.00
13	0.00	455.33	92.33	0.00
14	0.00	428.00	65.00	0.00
19	0.00	455.33	92.33	0.00
21	0.00	415.22	10.22	0.00
1	-17.50	460.00	0.00	0.00 Reservoir
12	10.00	415.22	10.22	0.00 Tank

Link Results at 12:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	17.50	0.66	2.98	Open
2	17.50	0.66	2.40	Open
3	9.26	0.35	0.74	Open
4	-3.74	0.28	0.73	Open
7	3.00	0.22	0.48	Open
9	8.24	0.61	3.14	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	3.00	0.22	0.60	Open
21	10.00	0.38	1.23	Open
25	-0.74	0.06	0.04	Open
5	10.00	0.38	36.89	Active Valve
6	3.00	0.22	27.33	Active Valve
8	3.74	0.28	0.00	Open Valve

Node Results at 13:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.08	94.08	0.00
4	0.00	458.63	69.63	0.00
5	0.00	457.08	94.08	0.00
8	1.50	458.62	69.62	0.00
9	1.00	427.97	69.97	0.00
10	0.00	454.71	99.71	0.00
11	0.00	453.86	48.86	0.00
13	0.00	457.08	94.08	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.08	94.08	0.00
21	0.00	415.24	10.24	0.00
1	-12.50	460.00	0.00	0.00 Reservoir
12	10.00	415.24	10.24	0.00 Tank

Link Results at 13:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	12.50	0.47	1.60	Open
2	12.50	0.47	1.29	Open
3	7.82	0.29	0.54	Open
4	-3.18	0.24	0.54	Open
7	1.00	0.07	0.06	Open
9	4.68	0.35	1.10	Open
10	10.00	0.38	0.85	Open

Link Results at 13:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
11	10.00	0.38	1.05	Open
15	1.00	0.07	0.07	Open
21	10.00	0.38	1.23	Open
25	-2.18	0.16	0.26	Open
5	10.00	0.38	38.62	Active Valve
6	1.00	0.07	29.08	Active Valve
8	3.18	0.24	0.00	Open Valve

Node Results at 14:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.30	91.30	0.00
4	0.00	456.74	67.74	0.00
5	0.00	454.30	91.30	0.00
8	6.00	456.69	67.69	0.00
9	4.00	427.56	69.56	0.00
10	0.00	451.93	96.93	0.00
11	0.00	451.08	46.08	0.00
13	0.00	454.30	91.30	0.00
14	0.00	428.00	65.00	0.00
19	0.00	454.30	91.30	0.00
21	0.00	415.26	10.26	0.00
1	-20.00	460.00	0.00	0.00 Reservoir
12	10.00	415.26	10.26	0.00 Tank

Link Results at 14:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	20.00	0.75	3.80	Open
2	20.00	0.75	3.08	Open
3	9.98	0.38	0.85	Open
4	-4.02	0.30	0.83	Open
7	4.00	0.30	0.82	Open
9	10.02	0.75	4.51	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	4.00	0.30	1.04	Open
21	10.00	0.38	1.23	Open
25	-0.02	0.00	0.00	Open
5	10.00	0.38	35.82	Active Valve
6	4.00	0.30	26.30	Active Valve
8	4.02	0.30	0.00	Open Valve

Node Results at 15:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	454.30	91.30	0.00
4	0.00	456.74	67.74	0.00
5	0.00	454.30	91.30	0.00
8	6.00	456.69	67.69	0.00
9	4.00	427.56	69.56	0.00
10	0.00	451.93	96.93	0.00
11	0.00	451.08	46.08	0.00
13	0.00	454.30	91.30	0.00
14	0.00	428.00	65.00	0.00
19	0.00	454.30	91.30	0.00
21	0.00	415.28	10.28	0.00
1	-20.00	460.00	0.00	0.00 Reservoir
12	10.00	415.27	10.28	0.00 Tank

Link Results at 15:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	20.00	0.75	3.80	Open
2	20.00	0.75	3.08	Open
3	9.98	0.38	0.85	Open
4	-4.02	0.30	0.83	Open
7	4.00	0.30	0.82	Open
9	10.02	0.75	4.51	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	4.00	0.30	1.00	Open
21	10.00	0.38	1.23	Open
25	-0.02	0.00	0.00	Open
5	10.00	0.38	35.81	Active Valve
6	4.00	0.30	26.30	Active Valve
8	4.02	0.30	0.00	Open Valve

Node Results at 16:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	455.33	92.33	0.00
4	0.00	457.45	68.45	0.00
5	0.00	455.33	92.33	0.00
8	4.50	457.42	68.42	0.00
9	3.00	427.74	69.74	0.00

Node Results at 16:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
10	0.00	452.96	97.96	0.00
11	0.00	452.11	47.11	0.00
13	0.00	455.33	92.33	0.00
14	0.00	428.00	65.00	0.00
19	0.00	455.33	92.33	0.00
21	0.00	415.29	10.29	0.00
1	-17.50	460.00	0.00	0.00 Reservoir
12	10.00	415.29	10.29	0.00 Tank

Link Results at 16:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	17.50	0.66	2.98	Open
2	17.50	0.66	2.40	Open
3	9.26	0.35	0.74	Open
4	-3.74	0.28	0.73	Open
7	3.00	0.22	0.48	Open
9	8.24	0.61	3.14	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	3.00	0.22	0.60	Open
21	10.00	0.38	1.23	Open
25	-0.74	0.06	0.04	Open
5	10.00	0.38	36.82	Active Valve
6	3.00	0.22	27.33	Active Valve
8	3.74	0.28	0.00	Open Valve

Node Results at 17:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.08	94.08	0.00
4	0.00	458.63	69.63	0.00
5	0.00	457.08	94.08	0.00
8	1.50	458.62	69.62	0.00
9	1.00	427.97	69.97	0.00
10	0.00	454.71	99.71	0.00
11	0.00	453.86	48.86	0.00
13	0.00	457.08	94.08	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.08	94.08	0.00
21	0.00	415.31	10.31	0.00
1	-12.50	460.00	0.00	0.00 Reservoir

Node Results at 17:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
12	10.00	415.31	10.31	0.00 Tank

Link Results at 17:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	12.50	0.47	1.60	Open
2	12.50	0.47	1.29	Open
3	7.82	0.29	0.54	Open
4	-3.18	0.24	0.54	Open
7	1.00	0.07	0.06	Open
9	4.68	0.35	1.10	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	1.00	0.07	0.07	Open
21	10.00	0.38	1.23	Open
25	-2.18	0.16	0.28	Open
5	10.00	0.38	38.55	Active Valve
6	1.00	0.07	29.08	Active Valve
8	3.18	0.24	0.00	Open Valve

Node Results at 18:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.52	94.52	0.00
4	0.00	458.92	69.92	0.00
5	0.00	457.52	94.52	0.00
8	0.60	458.91	69.91	0.00
9	0.40	427.99	69.99	0.00
10	0.00	455.15	100.15	0.00
11	0.00	454.31	49.31	0.00
13	0.00	457.52	94.52	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.52	94.52	0.00
21	0.00	415.33	10.33	0.00
1	-11.00	460.00	0.00	0.00 Reservoir
12	10.00	415.33	10.33	0.00 Tank

Link Results at 18:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	11.00	0.41	1.27	Open
2	11.00	0.41	1.02	Open
3	7.39	0.28	0.49	Open
4	-3.01	0.22	0.48	Open
7	0.40	0.03	0.01	Open
9	3.61	0.27	0.68	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.40	0.03	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.61	0.19	0.37	Open
5	10.00	0.38	38.97	Active Valve
6	0.40	0.03	29.52	Active Valve
8	3.01	0.22	0.00	Open Valve

Node Results at 19:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.79	94.79	0.00
4	0.00	459.10	70.10	0.00
5	0.00	457.79	94.79	0.00
8	0.00	459.09	70.09	0.00
9	0.00	428.00	70.00	0.00
10	0.00	455.42	100.42	0.00
11	0.00	454.58	49.58	0.00
13	0.00	457.79	94.79	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.79	94.79	0.00
21	0.00	415.35	10.35	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.35	10.35	0.00 Tank

Link Results at 19:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open

Link Results at 19:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.45	Open
5	10.00	0.38	39.23	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 20:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.79	94.79	0.00
4	0.00	459.10	70.10	0.00
5	0.00	457.79	94.79	0.00
8	0.00	459.09	70.09	0.00
9	0.00	428.00	70.00	0.00
10	0.00	455.42	100.42	0.00
11	0.00	454.58	49.58	0.00
13	0.00	457.79	94.79	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.79	94.79	0.00
21	0.00	415.37	10.37	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.37	10.37	0.00 Tank

Link Results at 20:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.47	Open
5	10.00	0.38	39.21	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 21:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.79	94.79	0.00
4	0.00	459.10	70.10	0.00
5	0.00	457.79	94.79	0.00
8	0.00	459.09	70.09	0.00
9	0.00	428.00	70.00	0.00
10	0.00	455.42	100.42	0.00
11	0.00	454.58	49.58	0.00
13	0.00	457.79	94.79	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.79	94.79	0.00
21	0.00	415.39	10.39	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.39	10.39	0.00 Tank

Link Results at 21:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.47	Open
5	10.00	0.38	39.19	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 22:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.79	94.79	0.00
4	0.00	459.10	70.10	0.00
5	0.00	457.79	94.79	0.00
8	0.00	459.09	70.09	0.00
9	0.00	428.00	70.00	0.00

Node Results at 22:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
10	0.00	455.42	100.42	0.00
11	0.00	454.58	49.58	0.00
13	0.00	457.79	94.79	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.79	94.79	0.00
21	0.00	415.40	10.40	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.40	10.40	0.00 Tank

Link Results at 22:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.45	Open
5	10.00	0.38	39.17	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 23:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.79	94.79	0.00
4	0.00	459.10	70.10	0.00
5	0.00	457.79	94.79	0.00
8	0.00	459.09	70.09	0.00
9	0.00	428.00	70.00	0.00
10	0.00	455.42	100.42	0.00
11	0.00	454.58	49.58	0.00
13	0.00	457.79	94.79	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.79	94.79	0.00
21	0.00	415.42	10.42	0.00
1	-10.00	460.00	0.00	0.00 Reservoir

Node Results at 23:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
12	10.00	415.42	10.42	0.00 Tank

Link Results at 23:00 Hrs:

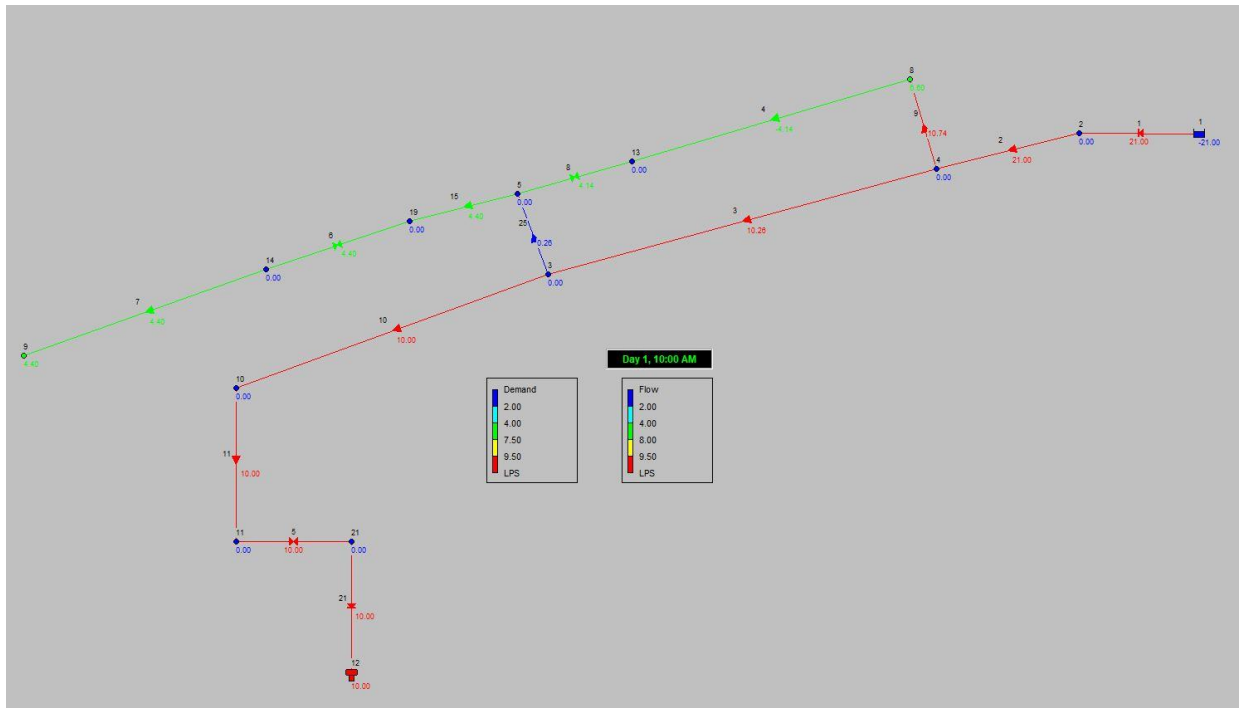
Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.45	Open
5	10.00	0.38	39.16	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 24:00 Hrs:

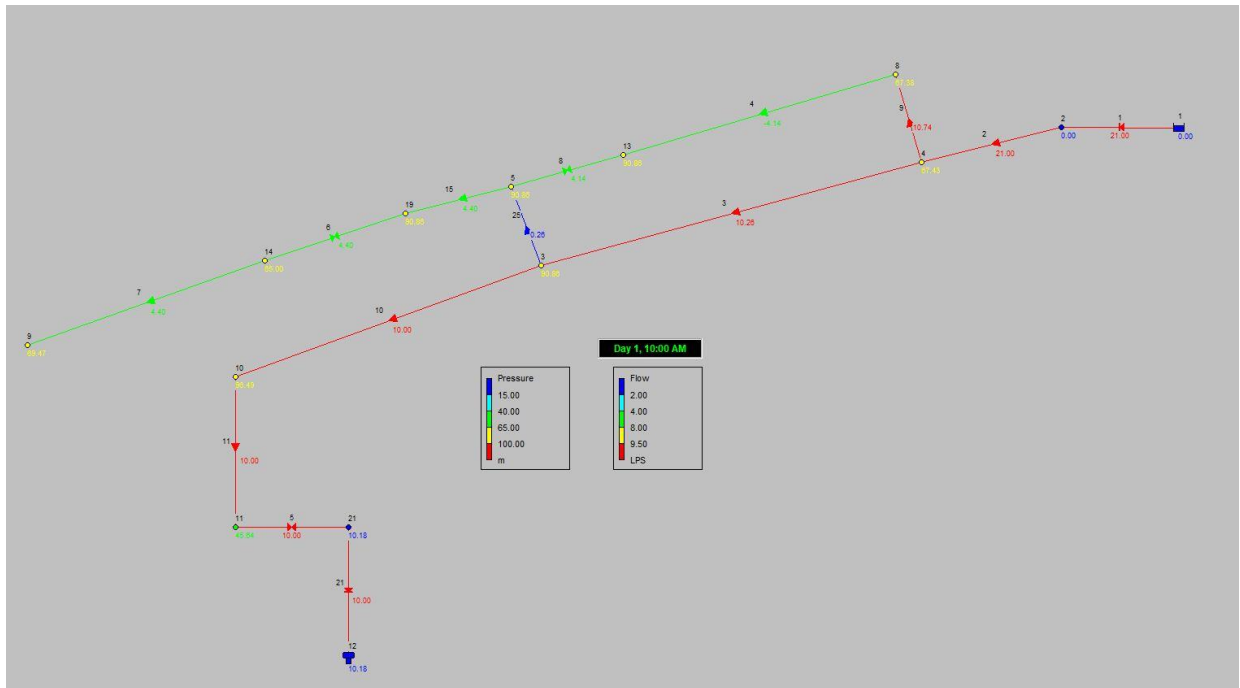
Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	457.79	94.79	0.00
4	0.00	459.10	70.10	0.00
5	0.00	457.79	94.79	0.00
8	0.00	459.09	70.09	0.00
9	0.00	428.00	70.00	0.00
10	0.00	455.42	100.42	0.00
11	0.00	454.58	49.58	0.00
13	0.00	457.79	94.79	0.00
14	0.00	428.00	65.00	0.00
19	0.00	457.79	94.79	0.00
21	0.00	415.44	10.44	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.44	10.44	0.00 Tank

Link Results at 24:00 Hrs:

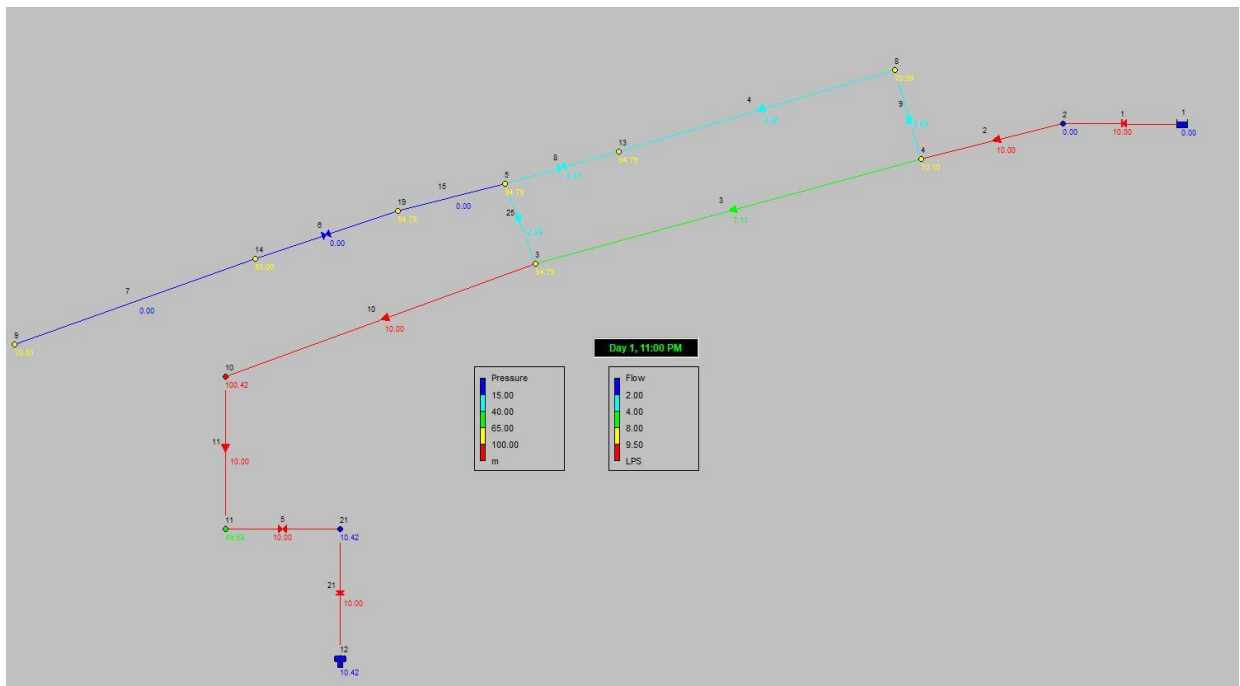
Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	0.85	Open
3	7.11	0.27	0.45	Open
4	-2.89	0.22	0.45	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.45	Open
10	10.00	0.38	0.85	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.45	Open
5	10.00	0.38	39.14	Active Valve
6	0.00	0.00	29.79	Active Valve
8	2.89	0.22	0.00	Open Valve



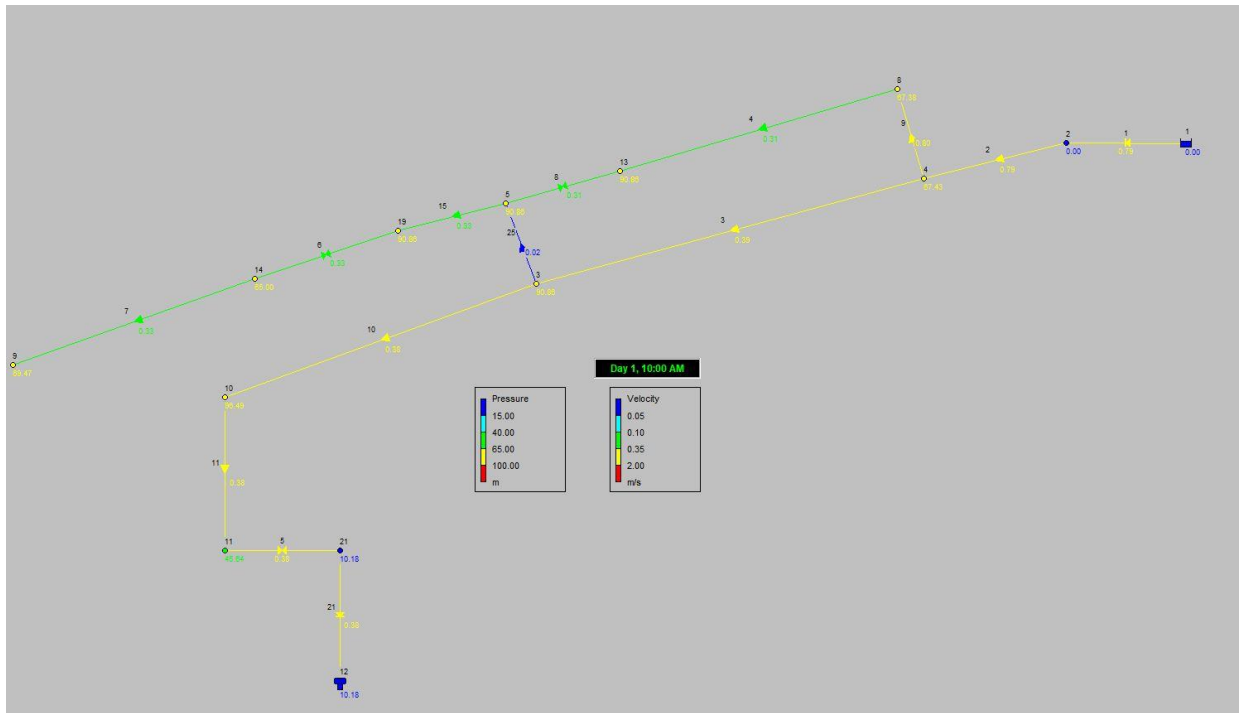
Output di calcolo (TUBI NUOVI): prelievi (ai nodi) e portata (nelle condotte) alle 10h00



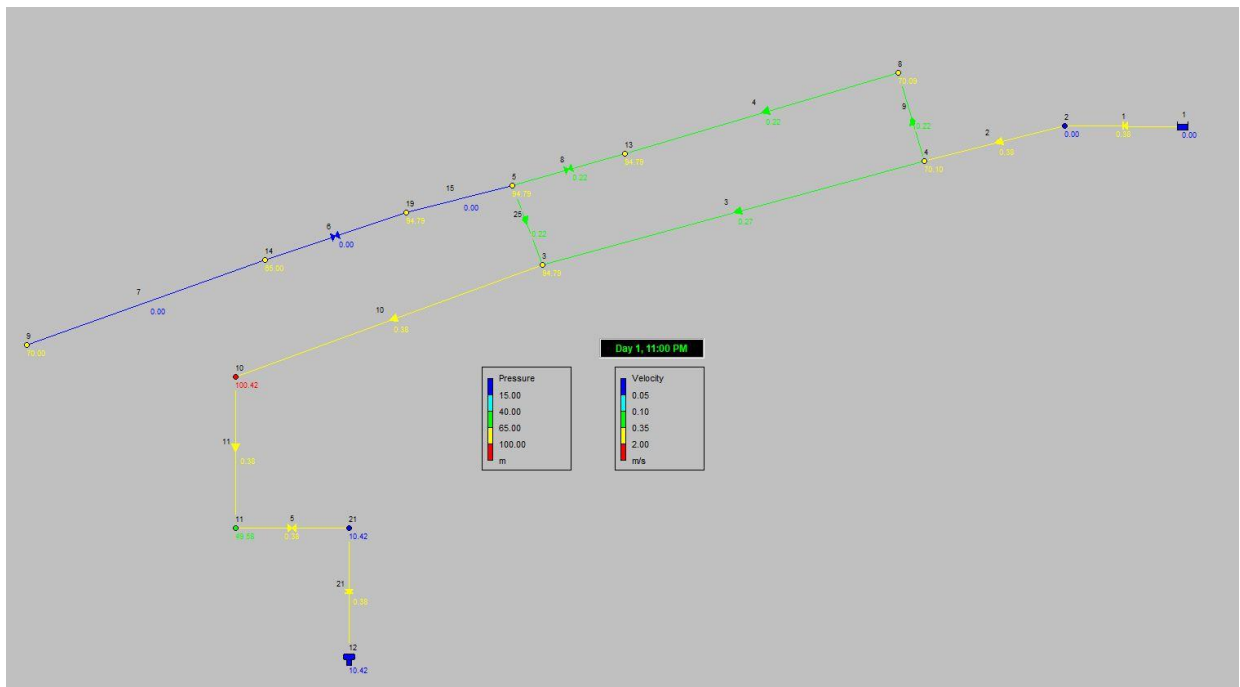
Output di calcolo (TUBI NUOVI): pressioni (ai nodi) e portata (nelle condotte) alle 10h00



Output di calcolo (TUBI NUOVI): pressioni (ai nodi) e portata (nelle condotte) alle 23h00



Output di calcolo (TUBI NUOVI): pressioni (ai nodi) e velocità (nelle condotte) alle 10h00



Output di calcolo (TUBI NUOVI): pressioni (ai nodi) e velocità (nelle condotte) alle 23h00

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*****
*                               E P A N E T                               *
*                               Hydraulic and Water Quality                 *
*                               Analysis for Pipe Networks                   *
*                               Version 2.0                                 *
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MODALITA' di FUNZIONAMENTO 7

VERIFICHE a TUBI VECCHI (coefficiente di H-W pari a 105)

Link - Node Table:

Link ID	Start Node	End Node	Length m	Diameter mm	
1	1	2	1	184	
2	2	4	1060	184	
3	4	3	2875	184	
4	13	8	2875	130.8	
7	14	9	535	130.8	
9	4	8	10	130.8	
10	3	10	2780	184	
11	10	11	805	184	
15	5	19	1	130.8	
21	21	12	1	184	
25	3	5	2	130.8	
5	11	21	#N/A	184	Valve
6	19	14	#N/A	130.8	Valve
8	13	5	#N/A	130.8	Valve

Node Results at 0:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality	
2	0.00	460.00	0.00	0.00	
3	0.00	456.24	93.24	0.00	
4	0.00	458.46	69.46	0.00	
5	0.00	456.24	93.24	0.00	
8	0.00	458.45	69.45	0.00	
9	0.00	428.00	70.00	0.00	
10	0.00	452.21	97.21	0.00	
11	0.00	451.36	46.36	0.00	
13	0.00	456.24	93.24	0.00	
14	0.00	428.00	65.00	0.00	
19	0.00	456.24	93.24	0.00	
21	0.00	415.00	10.00	0.00	
1	-10.00	460.00	0.00	0.00	Reservoir
12	10.00	415.00	10.00	0.00	Tank

Link Results at 0:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.78	Open
5	10.00	0.38	36.36	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 1:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.24	93.24	0.00
4	0.00	458.46	69.46	0.00
5	0.00	456.24	93.24	0.00
8	0.00	458.45	69.45	0.00
9	0.00	428.00	70.00	0.00
10	0.00	452.21	97.21	0.00
11	0.00	451.36	46.36	0.00
13	0.00	456.24	93.24	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.24	93.24	0.00
21	0.00	415.02	10.02	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.02	10.02	0.00 Tank

Link Results at 1:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open

Link Results at 1:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.76	Open
5	10.00	0.38	36.34	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 2:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.24	93.24	0.00
4	0.00	458.46	69.46	0.00
5	0.00	456.24	93.24	0.00
8	0.00	458.45	69.45	0.00
9	0.00	428.00	70.00	0.00
10	0.00	452.21	97.21	0.00
11	0.00	451.36	46.36	0.00
13	0.00	456.24	93.24	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.24	93.24	0.00
21	0.00	415.04	10.04	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.04	10.04	0.00 Tank

Link Results at 2:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.78	Open
5	10.00	0.38	36.32	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 3:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.24	93.24	0.00
4	0.00	458.46	69.46	0.00
5	0.00	456.24	93.24	0.00
8	0.00	458.45	69.45	0.00
9	0.00	428.00	70.00	0.00
10	0.00	452.21	97.21	0.00
11	0.00	451.36	46.36	0.00
13	0.00	456.24	93.24	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.24	93.24	0.00
21	0.00	415.06	10.06	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.05	10.06	0.00 Tank

Link Results at 3:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.76	Open
5	10.00	0.38	36.30	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 4:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	455.28	92.28	0.00
4	0.00	457.84	68.84	0.00
5	0.00	455.28	92.28	0.00
8	1.20	457.83	68.83	0.00
9	0.80	427.96	69.96	0.00

Node Results at 4:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
10	0.00	451.25	96.25	0.00
11	0.00	450.40	45.40	0.00
13	0.00	455.28	92.28	0.00
14	0.00	428.00	65.00	0.00
19	0.00	455.28	92.28	0.00
21	0.00	415.07	10.07	0.00
1	-12.00	460.00	0.00	0.00 Reservoir
12	10.00	415.07	10.07	0.00 Tank

Link Results at 4:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	12.00	0.45	1.49	Open
2	12.00	0.45	2.03	Open
3	7.68	0.29	0.89	Open
4	-3.12	0.23	0.88	Open
7	0.80	0.06	0.07	Open
9	4.32	0.32	1.62	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.80	0.06	0.07	Open
21	10.00	0.38	1.23	Open
25	-2.32	0.17	0.52	Open
5	10.00	0.38	35.33	Active Valve
6	0.80	0.06	27.28	Active Valve
8	3.12	0.23	0.00	Open Valve

Node Results at 5:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	453.62	90.62	0.00
4	0.00	456.74	67.74	0.00
5	0.00	453.62	90.62	0.00
8	3.00	456.70	67.70	0.00
9	2.00	427.79	69.79	0.00
10	0.00	449.59	94.59	0.00
11	0.00	448.74	43.74	0.00
13	0.00	453.62	90.62	0.00
14	0.00	428.00	65.00	0.00
19	0.00	453.62	90.62	0.00
21	0.00	415.09	10.09	0.00
1	-15.00	460.00	0.00	0.00 Reservoir

Node Results at 5:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
12	10.00	415.09	10.09	0.00 Tank

Link Results at 5:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	15.00	0.56	2.23	Open
2	15.00	0.56	3.08	Open
3	8.54	0.32	1.08	Open
4	-3.46	0.26	1.07	Open
7	2.00	0.15	0.39	Open
9	6.46	0.48	3.41	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	2.00	0.15	0.30	Open
21	10.00	0.38	1.23	Open
25	-1.46	0.11	0.22	Open
5	10.00	0.38	33.65	Active Valve
6	2.00	0.15	25.62	Active Valve
8	3.46	0.26	0.00	Open Valve

Node Results at 6:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	452.04	89.04	0.00
4	0.00	455.66	66.66	0.00
5	0.00	452.04	89.04	0.00
8	4.50	455.61	66.61	0.00
9	3.00	427.56	69.56	0.00
10	0.00	448.01	93.01	0.00
11	0.00	447.16	42.16	0.00
13	0.00	452.04	89.04	0.00
14	0.00	428.00	65.00	0.00
19	0.00	452.04	89.04	0.00
21	0.00	415.11	10.11	0.00
1	-17.50	460.00	0.00	0.00 Reservoir
12	10.00	415.11	10.11	0.00 Tank

Link Results at 6:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	17.50	0.66	2.98	Open
2	17.50	0.66	4.09	Open
3	9.26	0.35	1.26	Open
4	-3.74	0.28	1.24	Open
7	3.00	0.22	0.82	Open
9	8.24	0.61	5.35	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	3.00	0.22	0.60	Open
21	10.00	0.38	1.23	Open
25	-0.74	0.06	0.06	Open
5	10.00	0.38	32.05	Active Valve
6	3.00	0.22	24.04	Active Valve
8	3.74	0.28	0.00	Open Valve

Node Results at 7:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	451.01	88.01	0.00
4	0.00	454.95	65.95	0.00
5	0.00	451.01	88.01	0.00
8	5.40	454.88	65.88	0.00
9	3.60	427.38	69.38	0.00
10	0.00	446.97	91.97	0.00
11	0.00	446.13	41.13	0.00
13	0.00	451.01	88.01	0.00
14	0.00	428.00	65.00	0.00
19	0.00	451.01	88.01	0.00
21	0.00	415.13	10.13	0.00
1	-19.00	460.00	0.00	0.00 Reservoir
12	10.00	415.13	10.13	0.00 Tank

Link Results at 7:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	19.00	0.71	3.46	Open
2	19.00	0.71	4.77	Open
3	9.69	0.36	1.37	Open
4	-3.91	0.29	1.35	Open
7	3.60	0.27	1.15	Open
9	9.31	0.69	6.70	Open
10	10.00	0.38	1.45	Open

Link Results at 7:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
11	10.00	0.38	1.05	Open
15	3.60	0.27	0.82	Open
21	10.00	0.38	1.23	Open
25	-0.31	0.02	0.00	Open
5	10.00	0.38	31.00	Active Valve
6	3.60	0.27	23.01	Active Valve
8	3.91	0.29	0.00	Open Valve

Node Results at 8:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	451.01	88.01	0.00
4	0.00	454.95	65.95	0.00
5	0.00	451.01	88.01	0.00
8	5.40	454.88	65.88	0.00
9	3.60	427.38	69.38	0.00
10	0.00	446.97	91.97	0.00
11	0.00	446.13	41.13	0.00
13	0.00	451.01	88.01	0.00
14	0.00	428.00	65.00	0.00
19	0.00	451.01	88.01	0.00
21	0.00	415.15	10.15	0.00
1	-19.00	460.00	0.00	0.00 Reservoir
12	10.00	415.15	10.15	0.00 Tank

Link Results at 8:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	19.00	0.71	3.46	Open
2	19.00	0.71	4.77	Open
3	9.69	0.36	1.37	Open
4	-3.91	0.29	1.35	Open
7	3.60	0.27	1.15	Open
9	9.31	0.69	6.70	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	3.60	0.27	0.86	Open
21	10.00	0.38	1.23	Open
25	-0.31	0.02	0.02	Open
5	10.00	0.38	30.98	Active Valve
6	3.60	0.27	23.01	Active Valve
8	3.91	0.29	0.00	Open Valve

Node Results at 9:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	450.29	87.29	0.00
4	0.00	454.44	65.44	0.00
5	0.00	450.29	87.29	0.00
8	6.00	454.36	65.36	0.00
9	4.00	427.25	69.25	0.00
10	0.00	446.25	91.25	0.00
11	0.00	445.41	40.41	0.00
13	0.00	450.29	87.29	0.00
14	0.00	428.00	65.00	0.00
19	0.00	450.29	87.29	0.00
21	0.00	415.17	10.17	0.00
1	-20.00	460.00	0.00	0.00 Reservoir
12	10.00	415.17	10.17	0.00 Tank

Link Results at 9:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	20.00	0.75	3.80	Open
2	20.00	0.75	5.24	Open
3	9.98	0.38	1.45	Open
4	-4.02	0.30	1.42	Open
7	4.00	0.30	1.40	Open
9	10.02	0.75	7.69	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	4.00	0.30	1.00	Open
21	10.00	0.38	1.23	Open
25	-0.02	0.00	0.00	Open
5	10.00	0.38	30.24	Active Valve
6	4.00	0.30	22.29	Active Valve
8	4.02	0.30	0.00	Open Valve

Node Results at 10:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	449.54	86.54	0.00
4	0.00	453.92	64.92	0.00
5	0.00	449.54	86.54	0.00
8	6.60	453.83	64.83	0.00
9	4.40	427.11	69.11	0.00

Node Results at 10:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
10	0.00	445.50	90.50	0.00
11	0.00	444.66	39.66	0.00
13	0.00	449.54	86.54	0.00
14	0.00	428.00	65.00	0.00
19	0.00	449.54	86.54	0.00
21	0.00	415.18	10.18	0.00
1	-21.00	460.00	0.00	0.00 Reservoir
12	10.00	415.18	10.18	0.00 Tank

Link Results at 10:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	21.00	0.79	4.17	Open
2	21.00	0.79	5.74	Open
3	10.26	0.39	1.52	Open
4	-4.14	0.31	1.49	Open
7	4.40	0.33	1.67	Open
9	10.74	0.80	8.73	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	4.40	0.33	1.19	Open
21	10.00	0.38	1.19	Open
25	0.26	0.02	0.02	Open
5	10.00	0.38	29.47	Active Valve
6	4.40	0.33	21.54	Active Valve
8	4.14	0.31	0.00	Open Valve

Node Results at 11:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	450.29	87.29	0.00
4	0.00	454.44	65.44	0.00
5	0.00	450.29	87.29	0.00
8	6.00	454.36	65.36	0.00
9	4.00	427.25	69.25	0.00
10	0.00	446.25	91.25	0.00
11	0.00	445.41	40.41	0.00
13	0.00	450.29	87.29	0.00
14	0.00	428.00	65.00	0.00
19	0.00	450.29	87.29	0.00
21	0.00	415.20	10.20	0.00
1	-20.00	460.00	0.00	0.00 Reservoir

Node Results at 11:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
12	10.00	415.20	10.20	0.00 Tank

Link Results at 11:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	20.00	0.75	3.80	Open
2	20.00	0.75	5.24	Open
3	9.98	0.38	1.45	Open
4	-4.02	0.30	1.42	Open
7	4.00	0.30	1.40	Open
9	10.02	0.75	7.69	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	4.00	0.30	1.04	Open
21	10.00	0.38	1.23	Open
25	-0.02	0.00	0.00	Open
5	10.00	0.38	30.20	Active Valve
6	4.00	0.30	22.29	Active Valve
8	4.02	0.30	0.00	Open Valve

Node Results at 12:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	452.04	89.04	0.00
4	0.00	455.66	66.66	0.00
5	0.00	452.04	89.04	0.00
8	4.50	455.61	66.61	0.00
9	3.00	427.56	69.56	0.00
10	0.00	448.01	93.01	0.00
11	0.00	447.16	42.16	0.00
13	0.00	452.04	89.04	0.00
14	0.00	428.00	65.00	0.00
19	0.00	452.04	89.04	0.00
21	0.00	415.22	10.22	0.00
1	-17.50	460.00	0.00	0.00 Reservoir
12	10.00	415.22	10.22	0.00 Tank

Link Results at 12:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	17.50	0.66	2.98	Open
2	17.50	0.66	4.09	Open
3	9.26	0.35	1.26	Open
4	-3.74	0.28	1.24	Open
7	3.00	0.22	0.82	Open
9	8.24	0.61	5.35	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	3.00	0.22	0.63	Open
21	10.00	0.38	1.23	Open
25	-0.74	0.06	0.07	Open
5	10.00	0.38	31.94	Active Valve
6	3.00	0.22	24.04	Active Valve
8	3.74	0.28	0.00	Open Valve

Node Results at 13:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	455.02	92.02	0.00
4	0.00	457.67	68.67	0.00
5	0.00	455.02	92.02	0.00
8	1.50	457.65	68.65	0.00
9	1.00	427.94	69.94	0.00
10	0.00	450.99	95.99	0.00
11	0.00	450.14	45.14	0.00
13	0.00	455.02	92.02	0.00
14	0.00	428.00	65.00	0.00
19	0.00	455.02	92.02	0.00
21	0.00	415.24	10.24	0.00
1	-12.50	460.00	0.00	0.00 Reservoir
12	10.00	415.24	10.24	0.00 Tank

Link Results at 13:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	12.50	0.47	1.60	Open
2	12.50	0.47	2.19	Open
3	7.82	0.29	0.92	Open
4	-3.18	0.24	0.91	Open
7	1.00	0.07	0.11	Open
9	4.68	0.35	1.87	Open
10	10.00	0.38	1.45	Open

Link Results at 13:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
11	10.00	0.38	1.05	Open
15	1.00	0.07	0.07	Open
21	10.00	0.38	1.23	Open
25	-2.18	0.16	0.47	Open
5	10.00	0.38	34.90	Active Valve
6	1.00	0.07	27.02	Active Valve
8	3.18	0.24	0.00	Open Valve

Node Results at 14:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	450.29	87.29	0.00
4	0.00	454.44	65.44	0.00
5	0.00	450.29	87.29	0.00
8	6.00	454.36	65.36	0.00
9	4.00	427.25	69.25	0.00
10	0.00	446.25	91.25	0.00
11	0.00	445.41	40.41	0.00
13	0.00	450.29	87.29	0.00
14	0.00	428.00	65.00	0.00
19	0.00	450.29	87.29	0.00
21	0.00	415.26	10.26	0.00
1	-20.00	460.00	0.00	0.00 Reservoir
12	10.00	415.26	10.26	0.00 Tank

Link Results at 14:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	20.00	0.75	3.80	Open
2	20.00	0.75	5.24	Open
3	9.98	0.38	1.45	Open
4	-4.02	0.30	1.42	Open
7	4.00	0.30	1.40	Open
9	10.02	0.75	7.69	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	4.00	0.30	1.00	Open
21	10.00	0.38	1.23	Open
25	-0.02	0.00	0.00	Open
5	10.00	0.38	30.15	Active Valve
6	4.00	0.30	22.29	Active Valve
8	4.02	0.30	0.00	Open Valve

Node Results at 15:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	450.29	87.29	0.00
4	0.00	454.44	65.44	0.00
5	0.00	450.29	87.29	0.00
8	6.00	454.36	65.36	0.00
9	4.00	427.25	69.25	0.00
10	0.00	446.25	91.25	0.00
11	0.00	445.41	40.41	0.00
13	0.00	450.29	87.29	0.00
14	0.00	428.00	65.00	0.00
19	0.00	450.29	87.29	0.00
21	0.00	415.28	10.28	0.00
1	-20.00	460.00	0.00	0.00 Reservoir
12	10.00	415.27	10.28	0.00 Tank

Link Results at 15:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	20.00	0.75	3.80	Open
2	20.00	0.75	5.24	Open
3	9.98	0.38	1.45	Open
4	-4.02	0.30	1.42	Open
7	4.00	0.30	1.40	Open
9	10.02	0.75	7.69	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	4.00	0.30	1.00	Open
21	10.00	0.38	1.23	Open
25	-0.02	0.00	0.00	Open
5	10.00	0.38	30.13	Active Valve
6	4.00	0.30	22.29	Active Valve
8	4.02	0.30	0.00	Open Valve

Node Results at 16:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	452.04	89.04	0.00
4	0.00	455.66	66.66	0.00
5	0.00	452.04	89.04	0.00
8	4.50	455.61	66.61	0.00
9	3.00	427.56	69.56	0.00

Node Results at 16:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
10	0.00	448.01	93.01	0.00
11	0.00	447.16	42.16	0.00
13	0.00	452.04	89.04	0.00
14	0.00	428.00	65.00	0.00
19	0.00	452.04	89.04	0.00
21	0.00	415.29	10.29	0.00
1	-17.50	460.00	0.00	0.00 Reservoir
12	10.00	415.29	10.29	0.00 Tank

Link Results at 16:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	17.50	0.66	2.98	Open
2	17.50	0.66	4.09	Open
3	9.26	0.35	1.26	Open
4	-3.74	0.28	1.24	Open
7	3.00	0.22	0.82	Open
9	8.24	0.61	5.35	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	3.00	0.22	0.60	Open
21	10.00	0.38	1.23	Open
25	-0.74	0.06	0.06	Open
5	10.00	0.38	31.87	Active Valve
6	3.00	0.22	24.04	Active Valve
8	3.74	0.28	0.00	Open Valve

Node Results at 17:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	455.02	92.02	0.00
4	0.00	457.67	68.67	0.00
5	0.00	455.02	92.02	0.00
8	1.50	457.65	68.65	0.00
9	1.00	427.94	69.94	0.00
10	0.00	450.99	95.99	0.00
11	0.00	450.14	45.14	0.00
13	0.00	455.02	92.02	0.00
14	0.00	428.00	65.00	0.00
19	0.00	455.02	92.02	0.00
21	0.00	415.31	10.31	0.00
1	-12.50	460.00	0.00	0.00 Reservoir

Node Results at 17:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
12	10.00	415.31	10.31	0.00 Tank

Link Results at 17:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	12.50	0.47	1.60	Open
2	12.50	0.47	2.19	Open
3	7.82	0.29	0.92	Open
4	-3.18	0.24	0.91	Open
7	1.00	0.07	0.11	Open
9	4.68	0.35	1.87	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	1.00	0.07	0.07	Open
21	10.00	0.38	1.23	Open
25	-2.18	0.16	0.47	Open
5	10.00	0.38	34.83	Active Valve
6	1.00	0.07	27.02	Active Valve
8	3.18	0.24	0.00	Open Valve

Node Results at 18:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	455.78	92.78	0.00
4	0.00	458.16	69.16	0.00
5	0.00	455.78	92.78	0.00
8	0.60	458.15	69.15	0.00
9	0.40	427.99	69.99	0.00
10	0.00	451.74	96.74	0.00
11	0.00	450.89	45.89	0.00
13	0.00	455.78	92.78	0.00
14	0.00	428.00	65.00	0.00
19	0.00	455.78	92.78	0.00
21	0.00	415.33	10.33	0.00
1	-11.00	460.00	0.00	0.00 Reservoir
12	10.00	415.33	10.33	0.00 Tank

Link Results at 18:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	11.00	0.41	1.27	Open
2	11.00	0.41	1.73	Open
3	7.40	0.28	0.83	Open
4	-3.01	0.22	0.83	Open
7	0.40	0.03	0.02	Open
9	3.61	0.27	1.15	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.40	0.03	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.61	0.19	0.63	Open
5	10.00	0.38	35.56	Active Valve
6	0.40	0.03	27.78	Active Valve
8	3.00	0.22	0.00	Open Valve

Node Results at 19:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.24	93.24	0.00
4	0.00	458.46	69.46	0.00
5	0.00	456.24	93.24	0.00
8	0.00	458.45	69.45	0.00
9	0.00	428.00	70.00	0.00
10	0.00	452.21	97.21	0.00
11	0.00	451.36	46.36	0.00
13	0.00	456.24	93.24	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.24	93.24	0.00
21	0.00	415.35	10.35	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.35	10.35	0.00 Tank

Link Results at 19:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open

Link Results at 19:00 Hrs: (continued)

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.76	Open
5	10.00	0.38	36.01	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 20:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.24	93.24	0.00
4	0.00	458.46	69.46	0.00
5	0.00	456.24	93.24	0.00
8	0.00	458.45	69.45	0.00
9	0.00	428.00	70.00	0.00
10	0.00	452.21	97.21	0.00
11	0.00	451.36	46.36	0.00
13	0.00	456.24	93.24	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.24	93.24	0.00
21	0.00	415.37	10.37	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.37	10.37	0.00 Tank

Link Results at 20:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.76	Open
5	10.00	0.38	35.99	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 21:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.24	93.24	0.00
4	0.00	458.46	69.46	0.00
5	0.00	456.24	93.24	0.00
8	0.00	458.45	69.45	0.00
9	0.00	428.00	70.00	0.00
10	0.00	452.21	97.21	0.00
11	0.00	451.36	46.36	0.00
13	0.00	456.24	93.24	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.24	93.24	0.00
21	0.00	415.39	10.39	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.39	10.39	0.00 Tank

Link Results at 21:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.76	Open
5	10.00	0.38	35.97	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 22:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.24	93.24	0.00
4	0.00	458.46	69.46	0.00
5	0.00	456.24	93.24	0.00
8	0.00	458.45	69.45	0.00
9	0.00	428.00	70.00	0.00

Node Results at 22:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
10	0.00	452.21	97.21	0.00
11	0.00	451.36	46.36	0.00
13	0.00	456.24	93.24	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.24	93.24	0.00
21	0.00	415.40	10.40	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.40	10.40	0.00 Tank

Link Results at 22:00 Hrs:

Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.76	Open
5	10.00	0.38	35.96	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 23:00 Hrs:

Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.24	93.24	0.00
4	0.00	458.46	69.46	0.00
5	0.00	456.24	93.24	0.00
8	0.00	458.45	69.45	0.00
9	0.00	428.00	70.00	0.00
10	0.00	452.21	97.21	0.00
11	0.00	451.36	46.36	0.00
13	0.00	456.24	93.24	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.24	93.24	0.00
21	0.00	415.42	10.42	0.00
1	-10.00	460.00	0.00	0.00 Reservoir

Node Results at 23:00 Hrs: (continued)

Node ID	Demand LPS	Head m	Pressure m	Quality
12	10.00	415.42	10.42	0.00 Tank

Link Results at 23:00 Hrs:

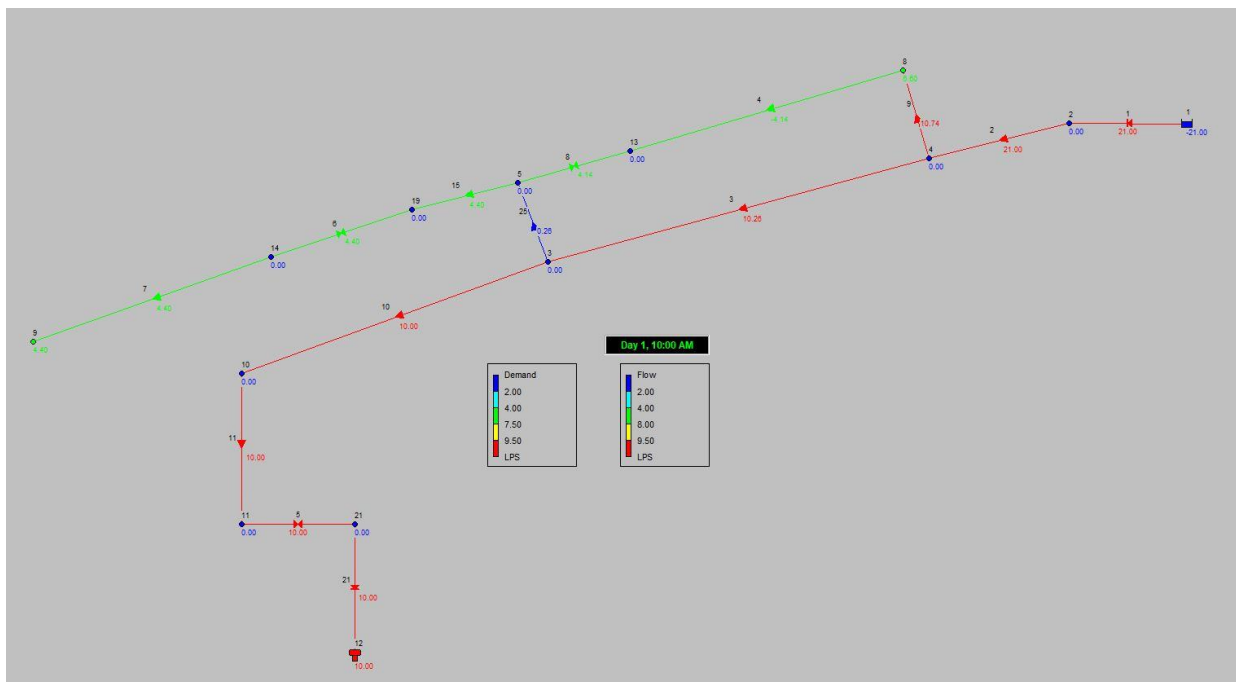
Link ID	Flow LPS	Velocity m/s	Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.76	Open
5	10.00	0.38	35.94	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve

Node Results at 24:00 Hrs:

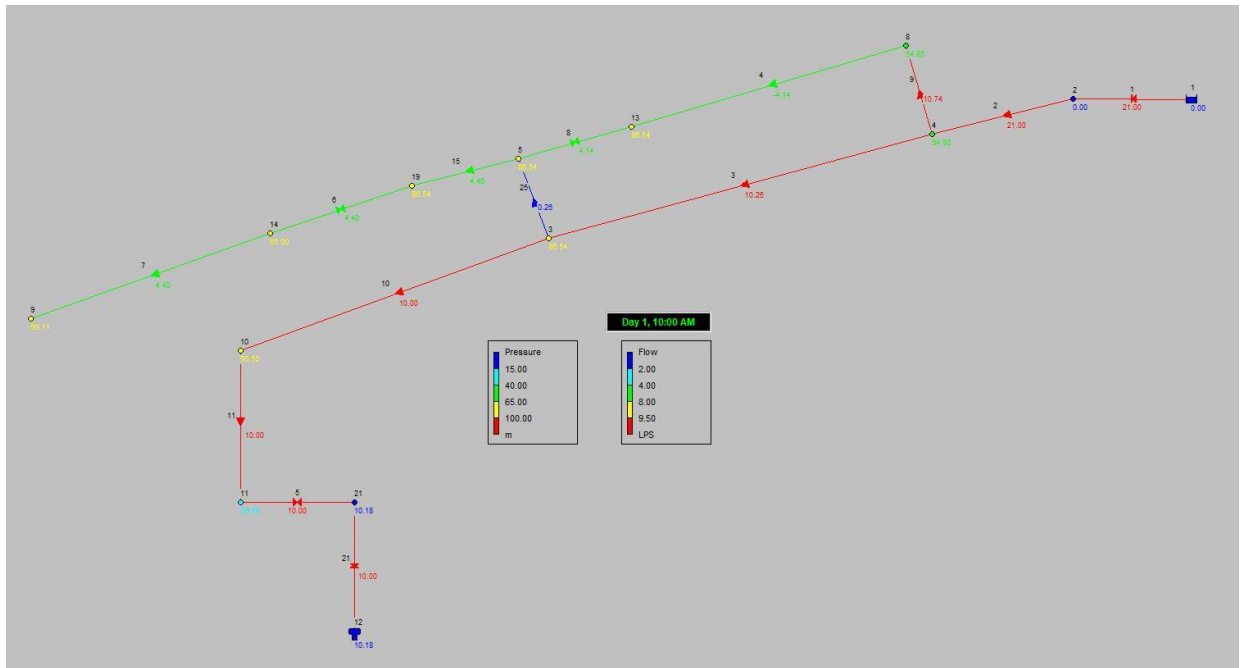
Node ID	Demand LPS	Head m	Pressure m	Quality
2	0.00	460.00	0.00	0.00
3	0.00	456.24	93.24	0.00
4	0.00	458.46	69.46	0.00
5	0.00	456.24	93.24	0.00
8	0.00	458.45	69.45	0.00
9	0.00	428.00	70.00	0.00
10	0.00	452.21	97.21	0.00
11	0.00	451.36	46.36	0.00
13	0.00	456.24	93.24	0.00
14	0.00	428.00	65.00	0.00
19	0.00	456.24	93.24	0.00
21	0.00	415.44	10.44	0.00
1	-10.00	460.00	0.00	0.00 Reservoir
12	10.00	415.44	10.44	0.00 Tank

Link Results at 24:00 Hrs:

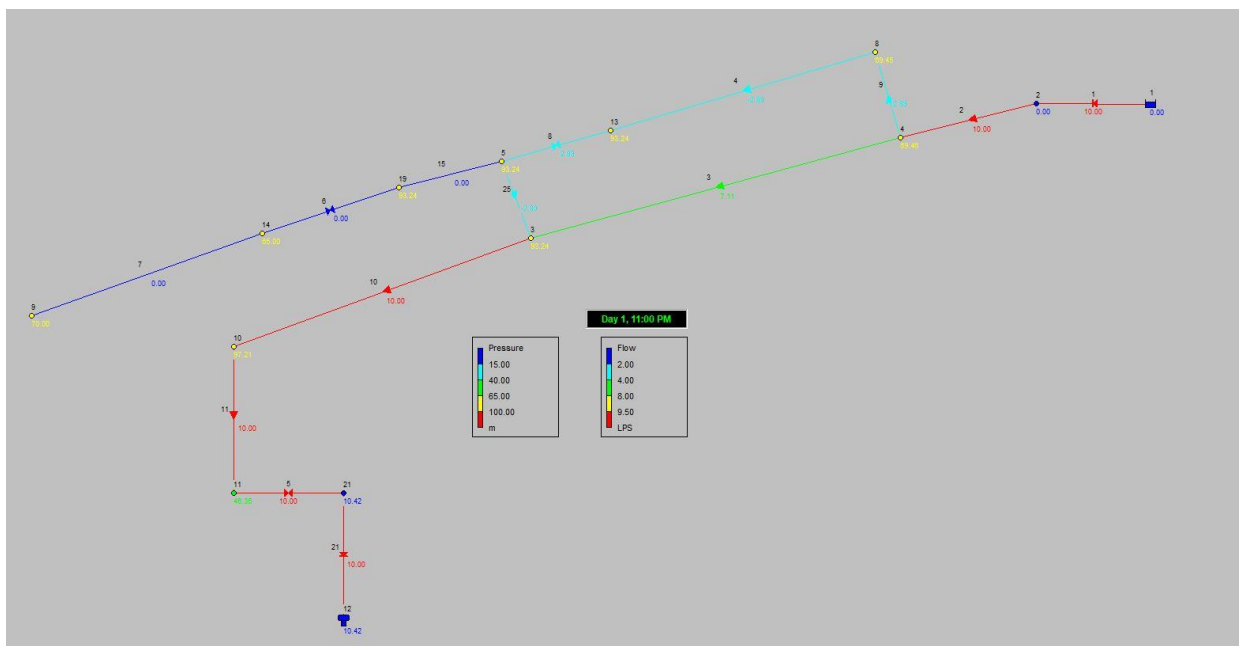
Link ID	Flow LPS	Velocity m/s	Unit Headloss m/km	Status
1	10.00	0.38	1.08	Open
2	10.00	0.38	1.45	Open
3	7.11	0.27	0.77	Open
4	-2.89	0.22	0.77	Open
7	0.00	0.00	0.00	Open
9	2.89	0.22	0.77	Open
10	10.00	0.38	1.45	Open
11	10.00	0.38	1.05	Open
15	0.00	0.00	0.00	Open
21	10.00	0.38	1.23	Open
25	-2.89	0.22	0.78	Open
5	10.00	0.38	35.92	Active Valve
6	0.00	0.00	28.24	Active Valve
8	2.89	0.22	0.00	Open Valve



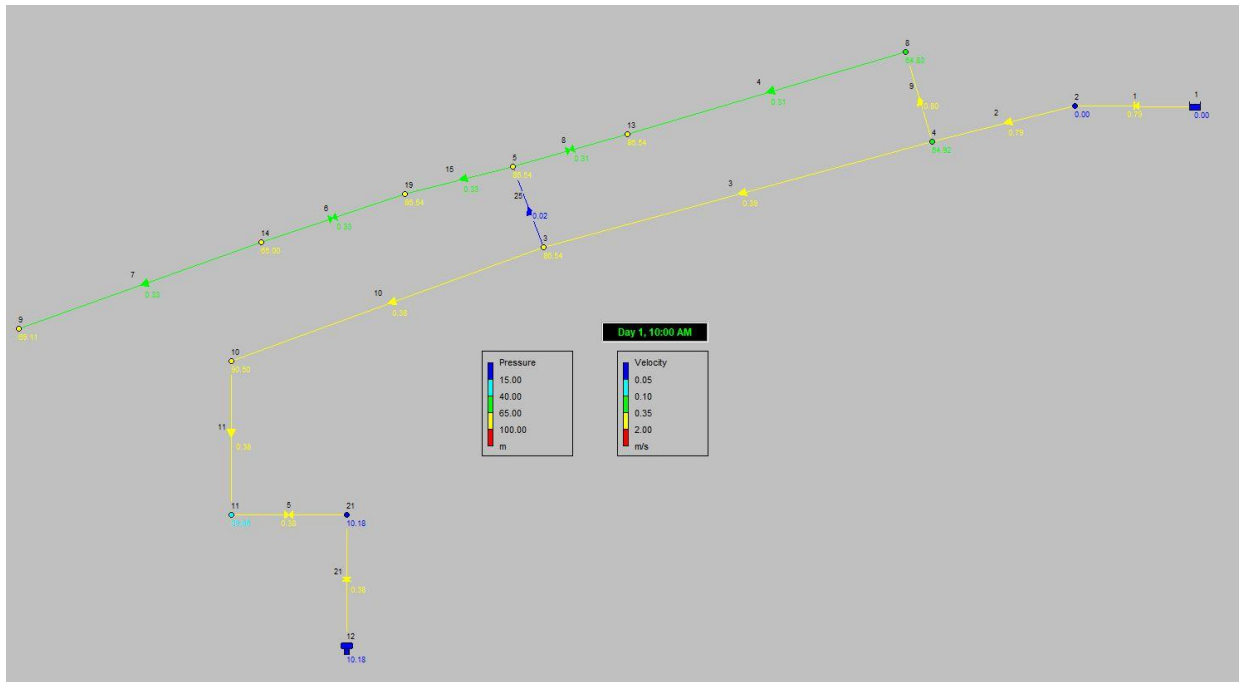
Output di calcolo (TUBI VECCHI): prelievi (ai nodi) e portate (nelle condotte) alle 10h00



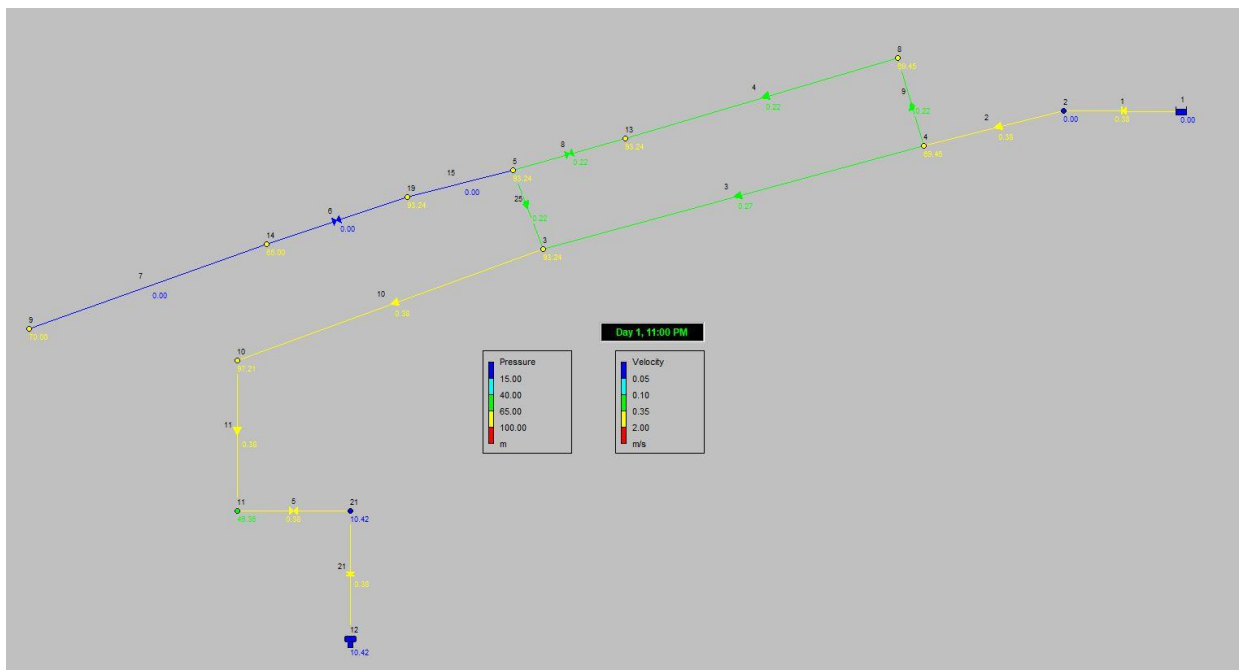
Output di calcolo (TUBI VECCHI): pressioni (ai nodi) e portate (nelle condotte) alle 10h00



Output di calcolo (TUBI VECCHI): pressioni (ai nodi) e portate (nelle condotte) alle 23h00



Output di calcolo (TUBI VECCHI): pressioni (ai nodi) e velocità (nelle condotte) alle 10h00



Output di calcolo (TUBI VECCHI): pressioni (ai nodi) e velocità (nelle condotte) alle 23h00