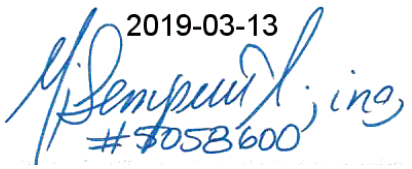
2019-03-13



Protection Incendie VIKING Inc
4062, boul. Industriel
Sherbrooke, Qc, Canada
J1L 2T8
819-821-3377

Projet	:	Savaria
Secteur	:	Local 6 (Partie haute)
Adresse	:	115 Chemin du Tremblay, Boucherville, Qc
Système	:	1
Contrat	:	VMC04304
Fichier	:	M4304R0.wx1

Information sur la Conception Hydraulique

Nom: Savaria — Date: 12 mar 2019
Adresse: 115 Chemin du Tremblay, Boucherville, Qc
Secteur: Local 6 (Partie haute) — Système No: 1
Contracteur: Consortium Pier-Jal Inc. — Contrat No: VMC04304
Calculé par: I.Boisvert — Dessin No:
Construction: ( ) Combustible (X) Incombustible — Hauteur du Toit: 27'-1"
Affectation: LOCAUX COMMERCIAUX

(X) NFPA 13 ( ) Faible Ord. Gr. ( ) 1 (X) 2 Gr.Risque ( ) 1 ( ) 2
( ) NFPA 15 ( ) NFPA 30 ( ) Figure: - Courbe:

CONCEPTION
Autre:
Norme Spéciale: Par: Date:

Superficie d'Application	: 1500	TYPE de SYSTEME	GICLEUR-BUSE
Densité (guspm/pi²)	: 0.20	(X) Eau	Marque: Viking
Superficie par Gicleur	: 124	( ) Air	Modèle: VK100
Elévation plus Haute Tête	: 26'-6"	( ) Déluge	Diamètre: 1/2"
Allocation Boyaux(Intérieur)	: 0	( ) Préaction	Facteur-K: 5.6
Débit pour Etagères	: N.A.	( ) Autre	Températ.:155°F
Allocation Boyaux(Extérieur)	: 250		

Notes:

SOMMAIRE DES RESULTATS — Débit: 555 guspm @ Pression: 49 lb/po² TEST
Facteur-C du Tuyau: 120 =Aérien 140 =Souterrain

SOURCE D'EAU

ESSAI D'ECOULEMENT	POMPE INCENDIE	CITERNE/RESERVOIR
Date de l'Essai :		Cap. :
Heure de l'Essai:	Capacité :	Elév.:
Press.Statique : 56	@ Pression:	
Press.Résiduelle: 51	Elévation :	Puit
Débit (guspm) : 1088		Débit Eprouvé
Elévation (pied):		

Emplacement:

Source des Informations:

EMPILAGE

Produits: Classe : Emplacement:
Hauteur d'Empilage: Surface: Largeur des Allées:
Méthode : Piles Pleines % Sur Palettes % Etagères

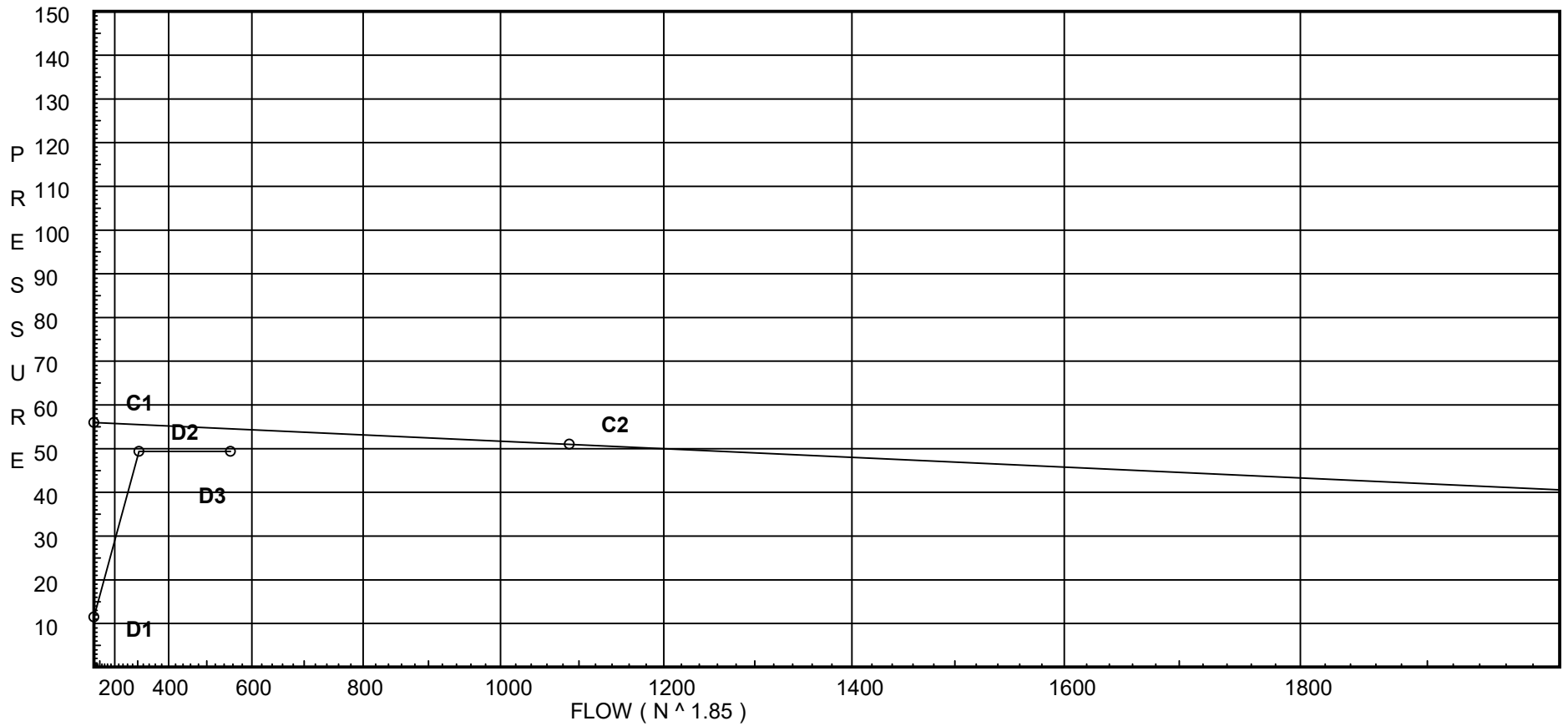
( ) Rangée Simple	( ) Palette Con.	( ) Automatique	( ) Encapsulé
( ) Rangée Double	( ) Palette	( ) Tablette Pleine	( ) Non-Encap.
( ) Rangée Multiple	Asservie	( ) Tablette Ajourée	

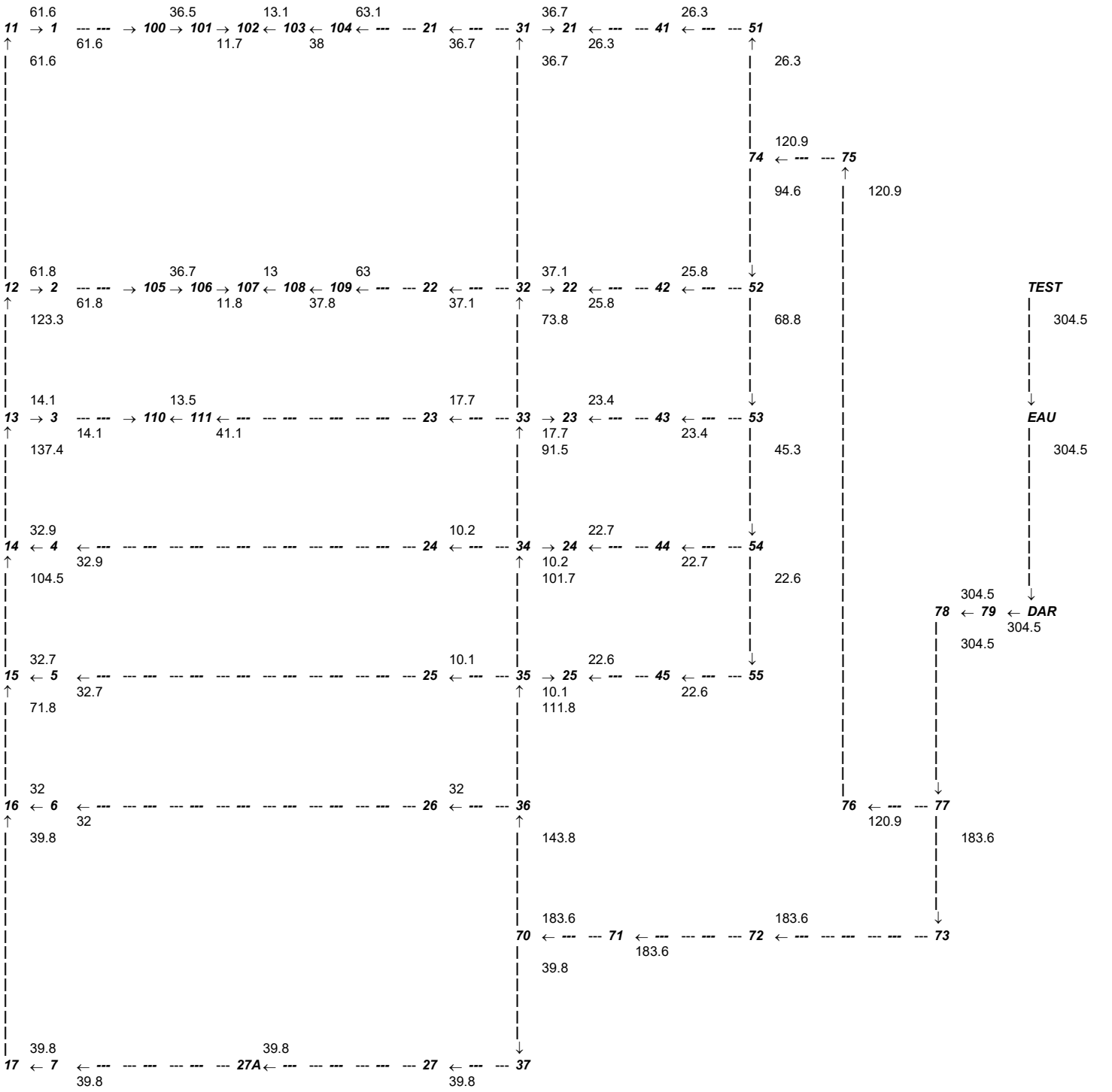
Espace(flue space) Longitudinal — Dégagement(Toit vs Empilage): Transversal

Barrières Horizontale :

Alimentation de la Ville:
C1 - Press. Stat. : 56
C2 - Press. Résid. : 51
C2 - Débit Résiduel: 1088

Demand:
D1 - Elévation : 11.477
D2 - Débit du Syst. : 304.529
D2 - Press. du Syst. : 49.403
Boyaux (Demande) : 250
D3 - Débit Total : 554.529
Marge : 5.160




11 → 1 → 100 → 101 → 102 ← 103 ← 104 ← 21 ← 31
61.6 36.5 13.1 63.1 36.7 26.3
61.6 11.7 38 36.7 26.3
61.6 36.7 26.3
21 ← 41 ← 51
120.9
74 ← 75
94.6 120.9
12 → 2 → 105 → 106 → 107 ← 108 ← 109 ← 22 ← 32
61.8 36.7 13 63 37.1 25.8
61.8 11.8 37.8 37.1 25.8
123.3 73.8 68.8
22 ← 42 ← 52
TEST
304.5
13 → 3 → 110 ← 111 ← 23 ← 33
14.1 13.5 17.7 23.4
14.1 41.1 17.7 23.4
137.4 91.5 45.3
23 ← 43 ← 53
EAU
304.5
14 ← 4 ← 24 ← 34
32.9 10.2 22.7
32.9 10.2 22.7
104.5 101.7 22.6
24 ← 44 ← 54
304.5
78 ← 79 ← DAR
304.5
304.5
15 ← 5 ← 25 ← 35
32.7 10.1 22.6
32.7 10.1 22.6
71.8 111.8
25 ← 45 ← 55
16 ← 6 ← 26 ← 36
32 32
32 120.9
39.8 143.8 183.6
76 ← 77
183.6 183.6
70 ← 71 ← 72 ← 73
183.6
39.8
17 ← 7 ← 27A ← 27 ← 37
39.8 39.8 39.8
39.8 39.8

Légende des Raccords

Abrev.	Nom	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
B	Generic Butterfly Valve	0	0	0	0	0	6	7	10	0	12	9	10	12	19	21	0	0	0	0	0
E	Generic 90 Standard Elbow	1	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
G	Generic Gate Valve	0	0	0	0	0	1	1	1	1	2	2	3	4	5	6	7	8	9	10	12
T	Generic 90 T-Branch	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121
Zim	Wilkins 350AST	Fitting generates a Fixed Loss Based on Flow																			

Units Summary

Diameter Units	Inches
Length Units	Feet
Flow Units	US Gallons per Minute
Pressure Units	Pounds per Square Inch

Pressure / Flow Summary - STANDARD

Node No.	Elévation	Fact-K	Pt Réelle	Pn	Débit Réelle	Densité	Superficie	Press Req.
1	26.5		23.0	na				
100	26.5	5.6	20.04	na	25.07	0.2	124	7.0
101	26.5	5.6	19.66	na	24.83	0.2	124	7.0
102	26.5	5.6	19.61	na	24.8	0.2	124	7.0
103	26.5	5.6	19.67	na	24.84	0.2	124	7.0
104	26.5	5.6	20.08	na	25.09	0.2	124	7.0
2	26.5		23.04	na				
105	26.5	5.6	20.07	na	25.09	0.2	124	7.0
106	26.5	5.6	19.69	na	24.85	0.2	124	7.0
107	26.5	5.6	19.64	na	24.82	0.2	124	7.0
108	26.5	5.6	19.69	na	24.85	0.2	124	7.0
109	26.5	5.6	20.1	na	25.11	0.2	124	7.0
3	26.5		24.45	na				
110	26.5	5.6	24.26	na	27.58	0.2	124	7.0
111	26.5	5.6	24.32	na	27.62	0.2	124	7.0
4	26.5		25.13	na				
5	26.5		25.22	na				
6	26.5		25.26	na				
7	26.5		25.47	na				
27A	26.5		29.57	na				
21	26.5		29.7	na				
22	26.5		29.69	na				
23	26.5		30.09	na				
24	26.5		30.2	na				
25	26.5		30.22	na				
26	26.5		29.92	na				
27	26.5		29.91	na				
41	26.5		32.03	na				
42	26.5		31.95	na				
43	26.5		31.97	na				
44	26.5		31.98	na				
45	26.5		31.98	na				
11	24.5		25.16	na				
12	24.5		25.21	na				
13	24.5		25.41	na				
14	24.5		25.6	na				
15	24.5		25.68	na				
16	24.5		25.74	na				
31	24.5		31.06	na				
32	24.5		31.07	na				
33	24.5		31.09	na				
34	24.5		31.11	na				
35	24.5		31.13	na				
36	24.5		31.17	na				
37	24.5		31.35	na				
51	24.5		33.16	na				
52	24.5		33.07	na				
53	24.5		33.06	na				
54	24.5		33.05	na				
70	24.5		31.37	na				
71	24.5		31.51	na				
72	11.5		37.37	na				
73	11.5		38.64	na				
74	24.5		33.17	na				
75	24.5		33.26	na				
76	11.5		38.99	na				
77	11.5		39.14	na				
78	11.5		39.86	na				
79	3.0		44.64	na				
DAR	3.0		44.7	na				
EAU	0.0		48.89	na				
TEST	0.0		49.4	na	250.0			

Node No.	Elévation	Fact-K	Pt Réelle	Pn	Débit Réelle	Densité	Superficie	Press Req.

La vitesse maximale est de 9.73 et est localisée entre les points 2 et 12

Point Ref. Hyd.	Qa Qt	Dia. "C" Pf/UM	Raccord ou Eqv.	Ln.	Tuyau Raccords Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
1	-61.57	1.682	T	9.9	18.417	22.996		
to		120.0		0.0	9.900	0.0		
100	-61.57	-0.1045		0.0	28.317	-2.960		Vel = 8.89
100	25.06	1.682		0.0	9.500	20.036		K Factor = 5.60
to		120.0		0.0	0.0	0.0		
101	-36.51	-0.0398		0.0	9.500	-0.378		Vel = 5.27
101	24.83	1.682		0.0	9.500	19.658		K Factor = 5.60
to		120.0		0.0	0.0	0.0		
102	-11.68	-0.0048		0.0	9.500	-0.046		Vel = 1.69
102	24.80	1.682		0.0	9.500	19.612		K Factor = 5.60
to		120.0		0.0	0.0	0.0		
103	13.12	0.0060		0.0	9.500	0.057		Vel = 1.89
103	24.84	1.682		0.0	9.500	19.669		K Factor = 5.60
to		120.0		0.0	0.0	0.0		
104	37.96	0.0427		0.0	9.500	0.406		Vel = 5.48
104	25.09	1.682	T	9.9	78.208	20.075		K Factor = 5.60
to		120.0		0.0	9.900	0.0		
21	63.05	0.1092		0.0	88.108	9.623		Vel = 9.10
	0.0							
	63.05					29.698		K Factor = 11.57
2	-61.75	1.682	T	9.9	18.417	23.043		
to		120.0		0.0	9.900	0.0		
105	-61.75	-0.1051		0.0	28.317	-2.977		Vel = 8.92
105	25.08	1.682		0.0	9.500	20.066		K Factor = 5.60
to		120.0		0.0	0.0	0.0		
106	-36.67	-0.0400		0.0	9.500	-0.380		Vel = 5.29
106	24.85	1.682		0.0	9.500	19.686		K Factor = 5.60
to		120.0		0.0	0.0	0.0		
107	-11.82	-0.0049		0.0	9.500	-0.047		Vel = 1.71
107	24.82	1.682		0.0	9.500	19.639		K Factor = 5.60
to		120.0		0.0	0.0	0.0		
108	13.0	0.0059		0.0	9.500	0.056		Vel = 1.88
108	24.85	1.682		0.0	9.500	19.695		K Factor = 5.60
to		120.0		0.0	0.0	0.0		
109	37.85	0.0424		0.0	9.500	0.403		Vel = 5.47
109	25.10	1.682	T	9.9	78.208	20.098		K Factor = 5.60
to		120.0		0.0	9.900	0.0		
22	62.95	0.1089		0.0	88.108	9.596		Vel = 9.09
	0.0							
	62.95					29.694		K Factor = 11.55
3	-14.09	1.682	T	9.9	18.417	24.454		
to		120.0		0.0	9.900	0.0		
110	-14.09	-0.0068		0.0	28.317	-0.193		Vel = 2.03
110	27.58	1.682		0.0	9.500	24.261		K Factor = 5.60
to		120.0		0.0	0.0	0.0		
111	13.49	0.0063		0.0	9.500	0.060		Vel = 1.95
111	27.62	1.682	T	9.9	106.708	24.321		K Factor = 5.60
to		120.0		0.0	9.900	0.0		
23	41.11	0.0495		0.0	116.608	5.772		Vel = 5.94

Point Ref. Hyd.	Qa Qt	Dia. "C" Pf/UM	Raccord ou Eqv.	Ln.	Tuyau Raccords Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
	0.0							
	41.11					30.093		K Factor = 7.49
4	32.91	1.682	2T	19.799	134.625	25.135		
to		120.0		0.0	19.799	0.0		
24	32.91	0.0328		0.0	154.424	5.065		Vel = 4.75
	0.0							
	32.91					30.200		K Factor = 5.99
5	32.70	1.682	2T	19.799	134.625	25.215		
to		120.0		0.0	19.799	0.0		
25	32.7	0.0324		0.0	154.424	5.007		Vel = 4.72
	0.0							
	32.70					30.222		K Factor = 5.95
6	32.02	1.682	T	9.9	134.625	25.257		
to		120.0	E	4.95	14.850	0.0		
26	32.02	0.0312		0.0	149.475	4.661		Vel = 4.62
	0.0							
	32.02					29.918		K Factor = 5.85
7	39.79	1.682	T	9.9	78.167	25.469		
to		120.0		0.0	9.900	0.0		
27A	39.79	0.0466		0.0	88.067	4.104		Vel = 5.75
27A	0.0	2.635	E	8.237	56.500	29.573		
to		120.0		0.0	8.237	0.0		
27	39.79	0.0052		0.0	64.737	0.339		Vel = 2.34
	0.0							
	39.79					29.912		K Factor = 7.28
21	26.32	1.682	2T	19.799	87.583	29.698		
to		120.0		0.0	19.799	0.0		
41	26.32	0.0217		0.0	107.382	2.330		Vel = 3.80
	0.0							
	26.32					32.028		K Factor = 4.65
22	25.85	1.682	2T	19.799	87.583	29.694		
to		120.0		0.0	19.799	0.0		
42	25.85	0.0210		0.0	107.382	2.254		Vel = 3.73
	0.0							
	25.85					31.948		K Factor = 4.57
23	23.43	1.682	2T	19.799	87.583	30.093		
to		120.0		0.0	19.799	0.0		
43	23.43	0.0175		0.0	107.382	1.880		Vel = 3.38
	0.0							
	23.43					31.973		K Factor = 4.14
24	22.74	1.682	2T	19.799	87.583	30.200		
to		120.0		0.0	19.799	0.0		
44	22.74	0.0166		0.0	107.382	1.778		Vel = 3.28
	0.0							
	22.74					31.978		K Factor = 4.02
25	22.59	1.682	2T	19.799	87.583	30.222		
to		120.0		0.0	19.799	0.0		
45	22.59	0.0164		0.0	107.382	1.757		Vel = 3.26

Point Ref. Hyd.	Qa Qt	Dia. "C" Pf/UM	Raccord ou Eqv.	Ln.	Tuyau Raccords Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
	0.0							
	22.59					31.979		K Factor = 3.99
1	61.57	1.61	T	8.0	2.000	22.996		
to		120.0		0.0	8.000	0.866		
11	61.57	0.1293		0.0	10.000	1.293		Vel = 9.70
	0.0							
	61.57					25.155		K Factor = 12.28
2	61.75	1.61	T	8.0	2.000	23.043		
to		120.0		0.0	8.000	0.866		
12	61.75	0.1300		0.0	10.000	1.300		Vel = 9.73
	0.0							
	61.75					25.209		K Factor = 12.30
3	14.09	1.61	T	8.0	2.000	24.454		
to		120.0		0.0	8.000	0.866		
13	14.09	0.0085		0.0	10.000	0.085		Vel = 2.22
	0.0							
	14.09					25.405		K Factor = 2.80
4	-32.91	1.61	T	8.0	2.000	25.135		
to		120.0		0.0	8.000	0.866		
14	-32.91	-0.0406		0.0	10.000	-0.406		Vel = 5.19
	0.0							
	-32.91					25.595		K Factor = -6.51
5	-32.70	1.61	T	8.0	2.000	25.215		
to		120.0		0.0	8.000	0.866		
15	-32.7	-0.0401		0.0	10.000	-0.401		Vel = 5.15
	0.0							
	-32.70					25.680		K Factor = -6.45
6	-32.02	1.61	T	8.0	2.000	25.257		
to		120.0		0.0	8.000	0.866		
16	-32.02	-0.0385		0.0	10.000	-0.385		Vel = 5.05
	0.0							
	-32.02					25.738		K Factor = -6.31
7	-39.79	1.61	T	8.0	2.000	25.469		
to		120.0		0.0	8.000	11.477		
17	-39.79	-0.0577		0.0	10.000	-0.577		Vel = 6.27
	0.0							
	-39.79					36.369		K Factor = -6.60
21	36.73	1.61	T	8.0	2.000	29.698		
to		120.0		0.0	8.000	0.866		
31	36.73	0.0498		0.0	10.000	0.498		Vel = 5.79
	0.0							
	36.73					31.062		K Factor = 6.59
22	37.10	1.61	T	8.0	2.000	29.694		
to		120.0		0.0	8.000	0.866		
32	37.1	0.0507		0.0	10.000	0.507		Vel = 5.85
	0.0							
	37.10					31.067		K Factor = 6.66

Point Ref. Hyd.	Qa Qt	Dia. "C" Pf/UM	Raccord ou Eqv.	Ln.	Tuyau Raccords Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
23	17.67	1.61	T	8.0	2.000	30.093		
to		120.0		0.0	8.000	0.866		
33	17.67	0.0129		0.0	10.000	0.129		Vel = 2.78
	0.0							
	17.67					31.088		K Factor = 3.17
24	10.17	1.61	T	8.0	2.000	30.200		
to		120.0		0.0	8.000	0.866		
34	10.17	0.0046		0.0	10.000	0.046		Vel = 1.60
	0.0							
	10.17					31.112		K Factor = 1.82
25	10.11	1.61	T	8.0	2.000	30.222		
to		120.0		0.0	8.000	0.866		
35	10.11	0.0046		0.0	10.000	0.046		Vel = 1.59
	0.0							
	10.11					31.134		K Factor = 1.81
26	32.02	1.61	T	8.0	2.000	29.918		
to		120.0		0.0	8.000	0.866		
36	32.02	0.0386		0.0	10.000	0.386		Vel = 5.05
	0.0							
	32.02					31.170		K Factor = 5.74
27	39.79	1.61	T	8.0	2.000	29.912		
to		120.0		0.0	8.000	0.866		
37	39.79	0.0577		0.0	10.000	0.577		Vel = 6.27
	0.0							
	39.79					31.355		K Factor = 7.11
41	26.32	1.61	T	8.0	2.000	32.028		
to		120.0		0.0	8.000	0.866		
51	26.32	0.0269		0.0	10.000	0.269		Vel = 4.15
	0.0							
	26.32					33.163		K Factor = 4.57
42	25.85	1.61	T	8.0	2.000	31.948		
to		120.0		0.0	8.000	0.866		
52	25.85	0.0260		0.0	10.000	0.260		Vel = 4.07
	0.0							
	25.85					33.074		K Factor = 4.49
43	23.43	1.61	T	8.0	2.000	31.973		
to		120.0		0.0	8.000	0.866		
53	23.43	0.0217		0.0	10.000	0.217		Vel = 3.69
	0.0							
	23.43					33.056		K Factor = 4.08
44	22.74	1.61	T	8.0	2.000	31.978		
to		120.0		0.0	8.000	0.866		
54	22.74	0.0205		0.0	10.000	0.205		Vel = 3.58
	0.0							
	22.74					33.049		K Factor = 3.96
45	22.59	1.61	T	8.0	2.000	31.979		
to		120.0		0.0	8.000	11.477		
55	22.59	0.0202		0.0	10.000	0.202		Vel = 3.56

Point Ref. Hyd.	Qa Qt	Dia. "C" Pf/UM	Raccord ou Eqv.	Ln.	Tuyau Raccords Total	Pt Pe Pf	Pt Pv Pn	*******	Notes	******
	0.0									
	22.59					43.658		K Factor = 3.42		
11	61.57	3.26		0.0	13.000	25.155				
to		120.0		0.0	0.0	0.0				
12	61.57	0.0042		0.0	13.000	0.054		Vel = 2.37		
12	61.75	3.26		0.0	13.000	25.209				
to		120.0		0.0	0.0	0.0				
13	123.32	0.0151		0.0	13.000	0.196		Vel = 4.74		
13	14.10	3.26		0.0	10.333	25.405				
to		120.0		0.0	0.0	0.0				
14	137.42	0.0184		0.0	10.333	0.190		Vel = 5.28		
14	-32.91	3.26		0.0	7.667	25.595				
to		120.0		0.0	0.0	0.0				
15	104.51	0.0111		0.0	7.667	0.085		Vel = 4.02		
15	-32.70	3.26		0.0	10.375	25.680				
to		120.0		0.0	0.0	0.0				
16	71.81	0.0056		0.0	10.375	0.058		Vel = 2.76		
16	-32.02	3.26		0.0	11.208	25.738				
to		120.0		0.0	0.0	10.611				
17	39.79	0.0018		0.0	11.208	0.020		Vel = 1.53		
	0.0									
	39.79					36.369		K Factor = 6.60		
31	36.73	4.26		0.0	13.000	31.062				
to		120.0		0.0	0.0	0.0				
32	36.73	0.0004		0.0	13.000	0.005		Vel = 0.83		
32	37.10	4.26		0.0	13.000	31.067				
to		120.0		0.0	0.0	0.0				
33	73.83	0.0016		0.0	13.000	0.021		Vel = 1.66		
33	17.68	4.26		0.0	10.333	31.088				
to		120.0		0.0	0.0	0.0				
34	91.51	0.0023		0.0	10.333	0.024		Vel = 2.06		
34	10.16	4.26		0.0	7.667	31.112				
to		120.0		0.0	0.0	0.0				
35	101.67	0.0029		0.0	7.667	0.022		Vel = 2.29		
35	10.11	4.26		0.0	10.375	31.134				
to		120.0		0.0	0.0	0.0				
36	111.78	0.0035		0.0	10.375	0.036		Vel = 2.52		
36	32.02	4.26	T	26.334	10.250	31.170				
to		120.0		0.0	26.334	0.0				
70	143.8	0.0054		0.0	36.584	0.199		Vel = 3.24		
	0.0									
	143.80					31.369		K Factor = 25.67		
37	39.79	4.26	T	26.334	0.958	31.355				
to		120.0		0.0	26.334	0.0				
70	39.79	0.0005		0.0	27.292	0.014		Vel = 0.90		
	0.0									
	39.79					31.369		K Factor = 7.10		

Point Ref. Hyd.	Qa Qt	Dia. "C" Pf/UM	Raccord ou Eqv.	Ln.	Tuyau Raccords Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
51	26.32	4.26	T	26.334	1.042	33.163		
to		120.0		0.0	26.334	0.0		
74	26.32	0.0003		0.0	27.376	0.007		Vel = 0.59
	0.0							
	26.32					33.170		K Factor = 4.57
52	94.62	4.26	T	26.334	11.958	33.074		
to		120.0		0.0	26.334	0.0		
74	94.62	0.0025		0.0	38.292	0.096		Vel = 2.13
	0.0							
	94.62					33.170		K Factor = 16.43
52	-68.77	4.26		0.0	13.000	33.074		
to		120.0		0.0	0.0	0.0		
53	-68.77	-0.0014		0.0	13.000	-0.018		Vel = 1.55
53	23.44	4.26		0.0	10.333	33.056		
to		120.0		0.0	0.0	0.0		
54	-45.33	-0.0007		0.0	10.333	-0.007		Vel = 1.02
54	22.74	4.26		0.0	7.667	33.049		
to		120.0		0.0	0.0	10.611		
55	-22.59	-0.0003		0.0	7.667	-0.002		Vel = 0.51
	0.0							
	-22.59					43.658		K Factor = -3.42
70	183.59	4.26	E	13.167	3.917	31.369		
to		120.0		0.0	13.167	0.0		
71	183.59	0.0085		0.0	17.084	0.145		Vel = 4.13
71	0.0	4.26	E	13.167	13.000	31.514		
to		120.0		0.0	13.167	5.630		
72	183.59	0.0086		0.0	26.167	0.224		Vel = 4.13
72	0.0	4.26	3E	39.501	109.583	37.368		
to		120.0		0.0	39.501	0.0		
73	183.59	0.0085		0.0	149.084	1.274		Vel = 4.13
73	0.0	4.26		0.0	58.375	38.642		
to		120.0		0.0	0.0	0.0		
77	183.59	0.0085		0.0	58.375	0.498		Vel = 4.13
	0.0							
	183.59					39.140		K Factor = 29.35
74	120.94	4.26	E	13.167	9.667	33.170		
to		120.0		0.0	13.167	0.0		
75	120.94	0.0039		0.0	22.834	0.090		Vel = 2.72
75	0.0	4.26	E	13.167	13.000	33.260		
to		120.0		0.0	13.167	5.630		
76	120.94	0.0039		0.0	26.167	0.103		Vel = 2.72
76	0.0	4.26	T	26.334	10.958	38.993		
to		120.0		0.0	26.334	0.0		
77	120.94	0.0039		0.0	37.292	0.147		Vel = 2.72
	0.0							
	120.94					39.140		K Factor = 19.33
77	304.53	4.26	E	13.167	19.708	39.140		
to		120.0		0.0	13.167	0.0		
78	304.53	0.0218		0.0	32.875	0.717		Vel = 6.85

Final Calculations - Hazen-Williams

Point Ref. Hyd.	Qa Qt	Dia. "C" Pf/UM	Raccord ou Eqv.	Ln.	Tuyau Raccords Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
78	0.0	4.26	B	15.8	8.500	39.857		
to		120.0	T	26.334	42.134	3.681		
79	304.53	0.0218		0.0	50.634	1.103		Vel = 6.85
79	0.0	6.357	E	17.603	3.000	44.641		
to		120.0		0.0	17.603	0.0		
DAR	304.53	0.0031		0.0	20.603	0.064		Vel = 3.08
DAR	0.0	6.357	Zim	0.0	1.000	44.705		
to		120.0	E	17.603	17.603	4.131		* * Fixed Loss = 2.831
EAU	304.53	0.0031		0.0	18.603	0.057		Vel = 3.08
EAU	0.0	6.16	2E	40.168	100.000	48.893		
to		140.0	G	4.304	87.509	0.0		
TEST	304.53	0.0027	T	43.037	187.509	0.510		Vel = 3.28
	250.00							Qa = 250.00
	554.53					49.403		K Factor = 78.89