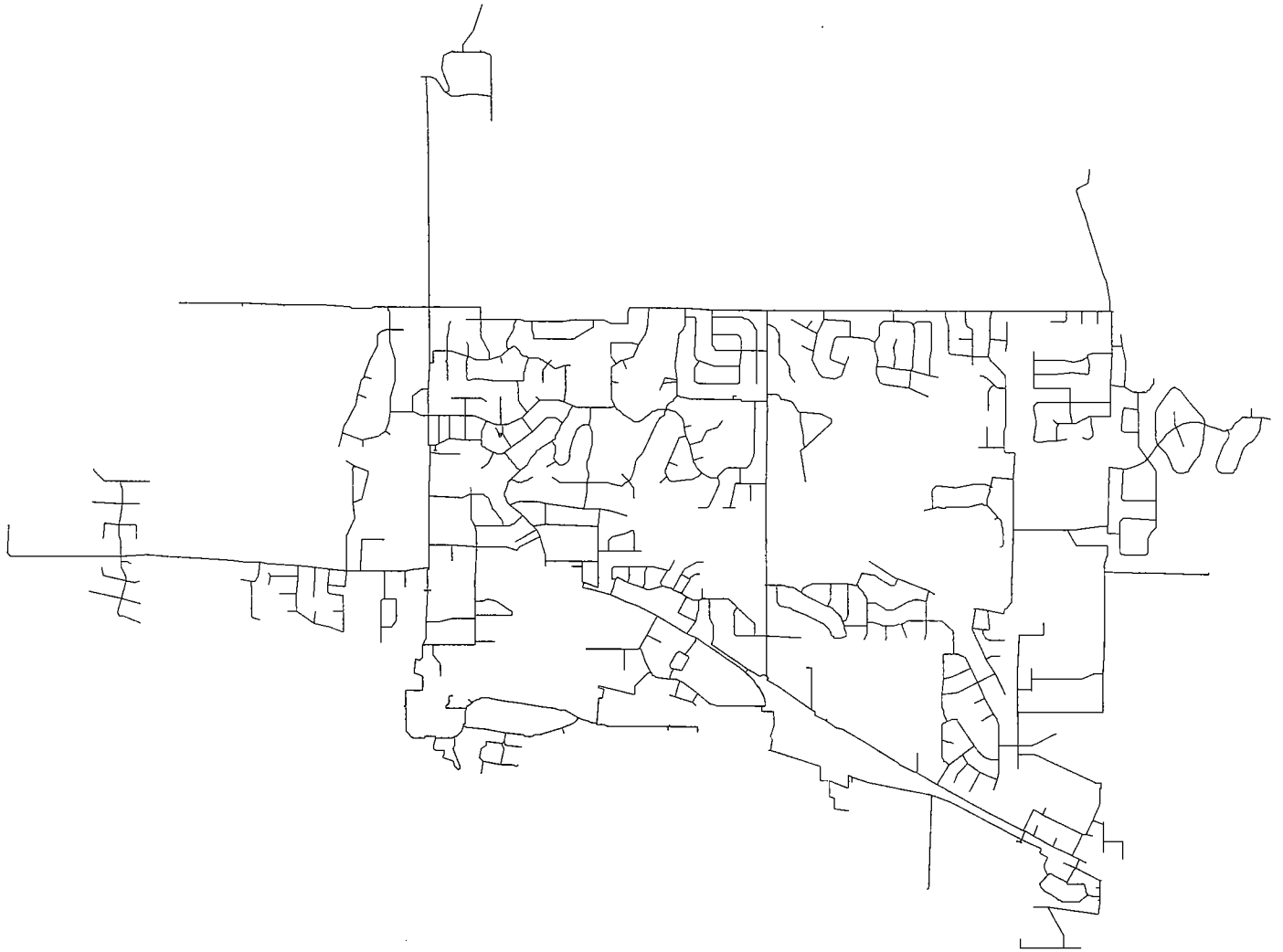


2010 Scenario

Scenario: 2010



Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-1	false	4.69	0.00	N/A	N/A	N/A	N/A	N/A
J-2	false	10.75	0.00	N/A	N/A	N/A	N/A	N/A
J-3	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-4	true	1.49	1,500.00	1,501.49	90.65	J-981	40.20	5,000.00
J-5	true	2.76	1,500.00	1,502.76	90.47	J-981	39.78	5,000.00
J-6	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-7	false	1.16	0.00	N/A	N/A	N/A	N/A	N/A
J-8	true	103.96	1,500.00	1,603.96	91.78	J-981	37.63	5,000.00
J-9	false	6.02	0.00	N/A	N/A	N/A	N/A	N/A
J-10	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-11	true	0.02	1,500.00	1,500.02	91.09	J-981	36.41	5,000.00
J-12	true	10.70	1,500.00	1,510.70	91.48	J-981	36.92	5,000.00
J-13	true	16.54	1,500.00	1,516.54	90.50	J-981	35.69	5,000.00
J-14	true	4.87	1,500.00	1,504.87	92.00	J-981	36.08	5,000.00
J-15	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-16	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-17	true	6.81	1,500.00	1,506.81	92.58	J-981	35.64	5,000.00
J-18	true	1.95	1,500.00	1,501.95	92.62	J-981	35.71	5,000.00
J-19	false	9.44	0.00	N/A	N/A	N/A	N/A	N/A
J-20	true	6.09	1,500.00	1,506.09	90.18	J-981	34.61	4,838.74
J-21	true	0.00	1,500.00	1,500.00	91.87	J-981	36.25	5,000.00
J-22	true	7.93	1,500.00	1,507.93	92.29	J-981	36.05	5,000.00
J-23	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-24	true	5.98	1,500.00	1,505.98	92.23	J-981	35.16	5,000.00
J-25	true	0.00	1,500.00	1,500.00	90.71	J-981	33.41	5,000.00
J-26	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-27	false	9.73	0.00	N/A	N/A	N/A	N/A	N/A
J-28	true	15.57	1,500.00	1,515.57	90.40	J-981	34.94	5,000.00
J-29	true	13.62	1,500.00	1,513.62	92.09	J-981	35.01	5,000.00
J-30	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-31	false	4.57	0.00	N/A	N/A	N/A	N/A	N/A
J-32	true	12.65	1,500.00	1,512.65	78.45	J-981	32.75	5,000.00
J-33	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-34	true	3.89	1,500.00	1,503.89	70.22	J-981	20.01	4,063.63
J-35	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-36	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-37	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-38	true	3.89	1,500.00	1,503.89	71.63	J-981	43.33	5,000.00
J-39	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-40	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-41	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-42	true	0.00	1,500.00	1,500.00	77.98	J-981	43.10	5,000.00
J-43	true	9.92	1,500.00	1,509.92	81.55	J-981	24.44	5,000.00
J-44	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-45	true	2.92	1,500.00	1,502.92	74.54	J-981	43.29	5,000.00
J-46	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-47	true	4.86	1,500.00	1,504.86	59.98	J-981	20.02	2,695.66
J-48	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-49	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-50	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-51	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-52	true	9.73	1,500.00	1,509.73	34.12	J-981	42.85	1,751.25
J-53	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-54	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-55	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-56	true	6.81	1,500.00	1,506.81	69.50	J-981	29.29	5,000.00
J-57	true	21.40	1,500.00	1,521.40	68.02	J-981	26.87	4,972.84
J-58	false	6.80	0.00	N/A	N/A	N/A	N/A	N/A
J-59	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-60	true	2.81	1,500.00	1,502.81	55.92	J-981	40.53	2,812.17
J-61	true	10.70	1,500.00	1,510.70	70.97	J-981	28.85	5,000.00
J-62	false	10.73	0.00	N/A	N/A	N/A	N/A	N/A
J-63	true	10.73	1,500.00	1,510.73	73.95	J-981	33.48	5,000.00
J-64	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-65	true	13.62	1,500.00	1,513.62	69.87	J-981	26.56	3,922.78
J-66	true	15.57	1,500.00	1,515.57	58.96	J-981	20.00	2,792.46
J-67	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-68	true	29.19	1,500.00	1,529.19	70.80	J-981	31.52	4,878.10
J-69	true	23.35	1,500.00	1,523.35	78.18	J-981	20.00	4,961.22
J-70	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-71	true	19.46	1,500.00	1,519.46	55.76	J-981	20.00	2,448.81
J-72	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-73	false	9.73	0.00	N/A	N/A	N/A	N/A	N/A
J-74	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-75	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-76	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-77	true	3.89	1,500.00	1,503.89	63.26	J-981	20.00	4,150.61
J-78	false	4.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-79	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-80	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-81	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-83	true	11.67	1,500.00	1,511.67	62.17	J-981	27.10	4,095.30
J-84	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-85	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-86	true	12.63	1,500.00	1,512.63	61.32	J-981	28.92	3,908.86
J-87	false	8.75	0.00	N/A	N/A	N/A	N/A	N/A
J-88	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-89	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-90	false	6.82	0.00	N/A	N/A	N/A	N/A	N/A
J-91	true	7.79	1,500.00	1,507.79	60.77	J-981	25.08	3,441.14
J-92	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-93	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-94	true	3.90	1,500.00	1,503.90	48.97	J-981	20.00	2,280.20
J-95	false	14.59	0.00	N/A	N/A	N/A	N/A	N/A
J-96	false	3.71	0.00	N/A	N/A	N/A	N/A	N/A
J-97	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-98	false	2.91	0.00	N/A	N/A	N/A	N/A	N/A
J-99	false	3.90	0.00	N/A	N/A	N/A	N/A	N/A
J-100	true	4.58	1,500.00	1,504.58	44.04	J-981	20.02	2,043.87
J-101	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-102	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-103	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-104	true	0.00	1,500.00	1,500.00	60.66	J-981	21.73	3,007.35
J-105	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-106	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-107	false	11.33	0.00	N/A	N/A	N/A	N/A	N/A
J-108	true	7.78	1,500.00	1,507.78	61.93	J-981	20.87	3,404.83
J-109	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-110	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-111	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-112	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-113	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-114	true	5.84	1,500.00	1,505.84	62.48	J-981	22.95	3,774.39
J-115	true	4.86	1,500.00	1,504.86	86.25	J-981	21.30	4,706.43
J-116	true	5.84	1,500.00	1,505.84	63.66	J-981	20.49	4,189.44
J-117	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-118	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-119	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-120	true	7.78	1,500.00	1,507.78	62.96	J-981	21.52	4,277.38
J-121	true	7.78	1,500.00	1,507.78	61.86	J-981	20.01	3,923.40
J-122	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-123	true	13.62	1,500.00	1,513.62	50.08	J-981	20.65	2,504.89
J-124	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-125	true	15.57	1,500.00	1,515.57	35.94	J-126	21.09	1,848.52
J-126	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-127	true	0.00	1,500.00	1,500.00	69.81	J-981	21.69	5,000.00
J-128	true	1.93	1,500.00	1,501.93	52.01	J-981	20.00	2,563.71
J-131	false	2.94	0.00	N/A	N/A	N/A	N/A	N/A
J-132	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-133	false	13.62	0.00	N/A	N/A	N/A	N/A	N/A
J-134	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-135	false	29.31	0.00	N/A	N/A	N/A	N/A	N/A
J-136	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-137	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-138	false	11.67	1,500.00	N/A	N/A	N/A	N/A	N/A
J-139	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-140	true	0.15	1,500.00	1,500.15	79.62	J-981	40.82	3,211.84
J-141	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-142	true	7.78	1,500.00	1,507.78	83.89	J-981	40.41	3,713.70
J-143	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-144	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-145	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-146	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-147	false	4.48	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-148	true	10.58	1,500.00	1,510.58	61.36	J-981	31.45	3,846.39
J-149	true	29.20	1,500.00	1,529.20	59.96	J-981	38.95	3,458.67
J-150	false	9.73	1,500.00	N/A	N/A	N/A	N/A	N/A
J-151	true	12.65	1,500.00	1,512.65	62.54	J-981	22.14	4,208.95
J-152	true	13.62	1,500.00	1,513.62	61.86	J-981	28.57	4,065.58
J-153	true	4.86	1,500.00	1,504.86	62.26	J-981	23.96	4,219.04
J-154	true	13.62	1,500.00	1,513.62	76.78	J-981	22.16	3,310.72
J-155	true	16.54	1,500.00	1,516.54	76.23	J-981	20.13	3,093.83
J-156	true	0.00	1,500.00	1,500.00	72.28	J-981	33.67	2,785.97
J-157	false	3.02	0.00	N/A	N/A	N/A	N/A	N/A
J-158	true	25.09	1,500.00	1,525.09	68.62	J-981	42.91	2,688.65
J-159	true	20.43	1,500.00	1,520.43	63.21	J-981	20.00	2,396.86
J-160	true	1.12	1,500.00	1,501.12	83.91	J-981	20.00	4,515.19
J-161	true	13.62	1,500.00	1,513.62	58.35	J-981	20.24	2,271.54
J-162	false	0.97	0.00	N/A	N/A	N/A	N/A	N/A
J-163	true	7.05	1,500.00	1,507.05	83.85	J-981	24.20	4,428.85
J-164	true	15.57	1,500.00	1,515.57	81.30	J-981	20.00	3,759.59
J-165	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-166	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-167	true	6.69	1,500.00	1,506.69	81.66	J-981	20.00	3,680.48
J-168	true	1.37	1,500.00	1,501.37	82.53	J-981	20.00	3,797.25
J-169	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-170	false	6.51	0.00	N/A	N/A	N/A	N/A	N/A
J-171	false	13.97	0.00	N/A	N/A	N/A	N/A	N/A
J-172	true	6.81	1,500.00	1,506.81	84.51	J-981	20.00	4,299.27
J-173	false	2.24	0.00	N/A	N/A	N/A	N/A	N/A
J-174	true	1.95	1,500.00	1,501.95	72.73	J-981	33.19	2,865.00
J-175	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-176	false	4.70	0.00	N/A	N/A	N/A	N/A	N/A
J-177	false	23.86	0.00	N/A	N/A	N/A	N/A	N/A
J-178	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-179	false	36.70	0.00	N/A	N/A	N/A	N/A	N/A
J-180	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-181	false	7.77	0.00	N/A	N/A	N/A	N/A	N/A
J-182	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-183	false	10.69	0.00	N/A	N/A	N/A	N/A	N/A
J-184	true	3.89	1,500.00	1,503.89	98.67	J-981	20.00	3,683.44
J-185	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-186	true	7.78	1,500.00	1,507.78	61.56	J-981	43.79	1,501.00
J-187	true	0.00	1,500.00	1,500.00	99.31	J-981	43.66	3,218.39
J-188	false	10.69	0.00	N/A	N/A	N/A	N/A	N/A
J-189	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-190	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-191	true	3.88	1,500.00	1,503.88	94.77	J-981	20.00	4,969.16
J-192	false	2.22	0.00	N/A	N/A	N/A	N/A	N/A
J-193	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-194	true	4.86	1,500.00	1,504.86	93.51	J-981	20.00	4,791.01
J-195	false	49.67	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-196	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-197	true	30.83	1,500.00	1,530.83	90.15	J-981	20.00	4,835.98
J-198	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-199	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-200	false	4.69	0.00	N/A	N/A	N/A	N/A	N/A
J-201	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-202	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-203	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-204	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-205	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-206	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-207	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-208	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-209	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-210	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-211	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-212	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-213	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-214	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-215	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-216	true	8.76	1,500.00	1,508.76	85.00	J-981	20.02	3,841.46
J-217	false	8.96	0.00	N/A	N/A	N/A	N/A	N/A
J-218	true	1.74	1,500.00	1,501.74	91.23	J-981	36.12	5,000.00
J-219	false	24.87	0.00	N/A	N/A	N/A	N/A	N/A
J-220	true	0.00	1,500.00	1,500.00	90.45	J-981	37.34	5,000.00
J-221	true	0.00	1,500.00	1,500.00	87.90	J-981	34.79	5,000.00
J-222	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-223	false	0.49	0.00	N/A	N/A	N/A	N/A	N/A
J-224	true	1.81	1,500.00	1,501.81	86.98	J-981	39.16	4,670.41
J-225	true	5.06	1,500.00	1,505.06	87.40	J-981	20.00	4,843.51
J-226	true	9.73	1,500.00	1,509.73	78.22	J-981	40.20	3,239.75
J-227	true	17.51	1,500.00	1,517.51	79.00	J-981	20.01	3,430.26
J-228	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-229	true	7.78	1,500.00	1,507.78	72.68	J-981	20.00	2,981.76
J-230	true	10.70	1,500.00	1,510.70	71.65	J-981	20.00	2,924.53
J-231	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-232	true	16.56	1,500.00	1,516.56	74.05	J-981	20.00	2,995.76
J-233	true	7.69	1,500.00	1,507.69	73.84	J-981	20.00	2,958.13
J-234	false	12.75	0.00	N/A	N/A	N/A	N/A	N/A
J-235	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-236	false	69.44	0.00	N/A	N/A	N/A	N/A	N/A
J-237	false	0.64	0.00	N/A	N/A	N/A	N/A	N/A
J-238	true	0.91	1,500.00	1,500.91	83.99	J-981	20.00	3,962.87
J-239	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-240	false	26.03	0.00	N/A	N/A	N/A	N/A	N/A
J-241	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-242	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-243	true	6.81	1,500.00	1,506.81	80.07	J-981	20.00	3,677.02

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-244	true	11.67	1,500.00	1,511.67	80.89	J-981	20.00	3,616.29
J-245	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-246	true	9.73	1,500.00	1,509.73	81.23	J-981	20.00	3,673.28
J-247	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-248	true	8.76	1,500.00	1,508.76	79.89	J-981	20.00	3,627.63
J-249	true	5.84	1,500.00	1,505.84	78.94	J-981	20.01	3,666.91
J-250	false	3.21	0.00	N/A	N/A	N/A	N/A	N/A
J-251	true	7.78	1,500.00	1,507.78	77.21	J-981	20.00	3,480.44
J-252	false	1.29	0.00	N/A	N/A	N/A	N/A	N/A
J-253	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-254	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-255	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-256	false	0.25	0.00	N/A	N/A	N/A	N/A	N/A
J-257	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-258	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-259	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-260	true	2.92	1,500.00	1,502.92	55.98	J-981	20.43	3,241.88
J-261	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-262	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-263	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-264	true	9.73	1,500.00	1,509.73	54.90	J-981	20.43	3,058.64
J-265	false	5.85	0.00	N/A	N/A	N/A	N/A	N/A
J-266	true	16.54	1,500.00	1,516.54	53.27	J-981	20.01	2,884.38
J-267	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-268	true	14.59	1,500.00	1,514.59	58.41	J-981	21.22	3,446.36
J-269	true	8.76	1,500.00	1,508.76	58.08	J-981	20.41	3,456.72
J-270	true	11.67	1,500.00	1,511.67	57.65	J-981	20.00	3,192.30
J-271	true	2.46	1,500.00	1,502.46	55.65	J-981	20.02	3,027.58
J-272	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-273	true	8.76	1,500.00	1,508.76	54.32	J-981	20.00	2,993.31
J-274	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-275	true	10.70	1,500.00	1,510.70	55.35	J-981	20.43	3,175.91
J-276	true	14.59	1,500.00	1,514.59	53.38	J-981	20.00	2,948.89
J-277	false	10.08	0.00	N/A	N/A	N/A	N/A	N/A
J-278	true	19.47	1,500.00	1,519.47	53.34	J-981	24.20	3,165.28
J-279	false	4.46	0.00	N/A	N/A	N/A	N/A	N/A
J-280	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-281	false	6.25	0.00	N/A	N/A	N/A	N/A	N/A
J-282	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-283	true	4.24	1,500.00	1,504.24	59.20	J-981	32.94	2,321.91
J-284	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-285	true	0.00	1,500.00	1,500.00	61.74	J-981	31.91	2,385.06
J-286	false	3.36	0.00	N/A	N/A	N/A	N/A	N/A
J-287	true	10.70	1,500.00	1,510.70	77.46	J-981	20.00	2,927.13
J-288	true	15.57	1,500.00	1,515.57	76.76	J-981	20.03	2,926.52
J-289	true	6.81	1,500.00	1,506.81	75.64	J-981	20.02	2,926.75
J-290	true	4.86	1,500.00	1,504.86	69.49	J-981	20.03	2,780.54
J-291	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-292	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-293	false	5.50	0.00	N/A	N/A	N/A	N/A	N/A
J-294	false	8.03	0.00	N/A	N/A	N/A	N/A	N/A
J-295	true	3.21	1,500.00	1,503.21	85.80	J-981	20.00	4,278.96
J-296	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-297	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-298	true	0.00	1,500.00	1,500.00	69.76	J-981	20.02	2,965.20
J-299	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-300	false	0.97	0.00	N/A	N/A	N/A	N/A	N/A
J-301	false	9.73	0.00	N/A	N/A	N/A	N/A	N/A
J-302	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-303	true	0.00	1,500.00	1,500.00	70.98	J-981	20.00	2,965.86
J-304	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-305	true	14.59	1,500.00	1,514.59	71.81	J-981	20.02	2,965.25
J-306	true	15.57	1,500.00	1,515.57	73.52	J-981	20.00	2,965.85
J-307	true	10.70	1,500.00	1,510.70	75.66	J-981	20.00	2,965.84
J-308	true	10.70	1,500.00	1,510.70	72.36	J-981	20.00	2,965.87
J-309	true	16.54	1,500.00	1,516.54	78.42	J-981	20.00	2,965.85
J-310	true	25.29	1,500.00	1,525.29	78.09	J-981	20.02	2,965.26
J-311	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-312	false	274.77	0.00	N/A	N/A	N/A	N/A	N/A
J-313	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-314	true	0.00	1,500.00	1,500.00	69.60	J-981	20.02	2,965.12
J-315	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-316	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-317	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-318	true	14.59	1,500.00	1,514.59	80.37	J-981	20.00	4,820.16
J-319	false	17.92	0.00	N/A	N/A	N/A	N/A	N/A
J-320	false	7.84	0.00	N/A	N/A	N/A	N/A	N/A
J-321	true	18.48	1,500.00	1,518.48	86.41	J-981	20.00	2,762.39
J-322	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-323	true	7.84	1,500.00	1,507.84	64.15	J-981	20.00	2,607.90
J-325	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-326	true	0.00	1,500.00	1,500.00	83.05	J-981	20.00	3,699.13
J-327	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-328	true	4.86	1,500.00	1,504.86	53.55	J-981	32.85	2,117.26
J-329	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-330	true	6.81	1,500.00	1,506.81	75.37	J-981	20.98	3,580.67
J-331	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-332	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-333	false	1.03	0.00	N/A	N/A	N/A	N/A	N/A
J-334	true	10.70	1,500.00	1,510.70	77.39	J-981	20.00	3,439.41
J-335	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-336	true	7.78	1,500.00	1,507.78	77.31	J-981	20.00	3,432.08
J-337	true	7.78	1,500.00	1,507.78	76.97	J-981	20.00	3,392.61
J-338	true	5.84	1,500.00	1,505.84	77.03	J-981	20.00	3,433.02
J-339	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-340	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-341	true	6.81	1,500.00	1,506.81	74.00	J-981	20.00	3,175.06
J-342	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-343	true	6.81	1,500.00	1,506.81	72.14	J-981	20.00	3,017.14
J-344	true	9.73	1,500.00	1,509.73	66.05	J-981	20.01	2,734.84
J-345	false	11.25	0.00	N/A	N/A	N/A	N/A	N/A
J-346	true	6.43	1,500.00	1,506.43	76.56	J-981	20.04	2,918.12
J-347	true	4.86	1,500.00	1,504.86	72.59	J-981	20.00	2,738.33
J-348	false	13.44	0.00	N/A	N/A	N/A	N/A	N/A
J-349	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-350	true	7.78	1,500.00	1,507.78	72.56	J-981	20.04	2,835.63
J-351	false	8.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-352	false	11.20	1,500.00	N/A	N/A	N/A	N/A	N/A
J-353	true	3.89	1,500.00	1,503.89	67.47	J-981	29.40	1,501.00
J-354	true	12.66	1,500.00	1,512.66	60.57	J-981	20.00	2,965.85
J-355	false	6.81	1,500.00	N/A	N/A	N/A	N/A	N/A
J-356	false	5.84	1,500.00	N/A	N/A	N/A	N/A	N/A
J-357	true	11.67	1,500.00	1,511.67	57.56	J-981	20.02	2,965.16
J-358	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-359	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-360	true	0.00	1,500.00	1,500.00	41.25	J-981	28.19	2,594.76
J-361	true	0.00	1,500.00	1,500.00	96.73	J-981	38.22	5,000.00
J-364	false	5.81	1,500.00	N/A	N/A	N/A	N/A	N/A
J-365	false	0.96	1,500.00	N/A	N/A	N/A	N/A	N/A
J-366	false	3.02	1,500.00	N/A	N/A	N/A	N/A	N/A
J-367	false	9.87	1,500.00	N/A	N/A	N/A	N/A	N/A
J-368	false	7.16	1,500.00	N/A	N/A	N/A	N/A	N/A
J-369	false	1.16	1,500.00	N/A	N/A	N/A	N/A	N/A
J-370	true	0.00	1,500.00	1,500.00	70.03	J-981	26.46	3,172.07
J-371	false	19.01	1,500.00	N/A	N/A	N/A	N/A	N/A
J-372	true	9.53	1,500.00	1,509.53	90.88	J-981	34.54	5,000.00
J-373	false	2.20	1,500.00	N/A	N/A	N/A	N/A	N/A
J-374	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-375	false	0.73	1,500.00	N/A	N/A	N/A	N/A	N/A
J-376	false	15.08	1,500.00	N/A	N/A	N/A	N/A	N/A
J-377	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-378	false	12.40	1,500.00	N/A	N/A	N/A	N/A	N/A
J-379	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-380	false	13.19	1,500.00	N/A	N/A	N/A	N/A	N/A
J-381	true	1.62	1,500.00	1,501.62	68.02	J-981	41.33	3,398.75
J-382	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-383	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-384	true	5.63	1,500.00	1,505.63	93.62	J-981	38.38	5,000.00
J-385	true	0.94	1,500.00	1,500.94	91.48	J-981	33.94	5,000.00
J-386	true	17.77	1,500.00	1,517.77	91.09	J-981	36.84	5,000.00
J-387	false	1.74	1,500.00	N/A	N/A	N/A	N/A	N/A
J-388	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-389	true	0.00	1,500.00	1,500.00	93.73	J-981	38.04	5,000.00
J-390	false	0.22	1,500.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-391	true	0.00	1,500.00	1,500.00	68.10	J-981	41.80	2,480.80
J-392	true	7.77	1,500.00	1,507.77	92.56	J-981	33.62	5,000.00
J-393	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-394	true	0.00	1,500.00	1,500.00	92.83	J-981	38.09	5,000.00
J-395	true	1.07	1,500.00	1,501.07	92.08	J-981	38.07	5,000.00
J-396	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-397	false	0.34	1,500.00	N/A	N/A	N/A	N/A	N/A
J-398	true	0.00	1,500.00	1,500.00	95.17	J-981	37.91	5,000.00
J-399	true	18.48	1,500.00	1,518.48	93.28	J-981	37.47	5,000.00
J-400	true	13.43	1,500.00	1,513.43	91.89	J-981	37.21	5,000.00
J-401	true	0.00	1,500.00	1,500.00	91.00	J-981	36.13	5,000.00
J-402	true	2.47	1,500.00	1,502.47	93.74	J-981	37.65	5,000.00
J-403	true	0.00	1,500.00	1,500.00	93.92	J-981	37.69	5,000.00
J-404	true	0.42	1,500.00	1,500.42	91.03	J-981	37.74	5,000.00
J-405	false	3.66	1,500.00	N/A	N/A	N/A	N/A	N/A
J-406	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-407	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-408	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-409	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-410	false	10.70	1,500.00	N/A	N/A	N/A	N/A	N/A
J-411	true	7.65	1,500.00	1,507.65	64.42	J-981	20.00	4,983.15
J-412	true	12.65	1,500.00	1,512.65	72.46	J-981	22.95	5,000.00
J-413	true	4.86	1,500.00	1,504.86	74.03	J-981	24.47	5,000.00
J-414	true	3.88	1,500.00	1,503.88	49.90	J-981	20.00	2,965.85
J-415	true	8.75	1,500.00	1,508.75	48.82	J-981	20.02	2,962.74
J-416	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-417	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-418	true	10.70	1,500.00	1,510.70	74.25	J-981	20.00	2,841.45
J-419	true	7.78	1,500.00	1,507.78	74.03	J-981	20.00	2,837.23
J-420	false	12.65	1,500.00	N/A	N/A	N/A	N/A	N/A
J-421	true	15.57	1,500.00	1,515.57	65.05	J-981	20.03	2,619.74
J-422	true	0.00	1,500.00	1,500.00	66.02	J-981	20.44	2,659.95
J-423	false	4.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-424	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-425	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-426	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-427	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-428	false	0.58	1,500.00	N/A	N/A	N/A	N/A	N/A
J-429	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-430	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-431	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-432	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-433	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-434	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-435	false	1.95	1,500.00	N/A	N/A	N/A	N/A	N/A
J-436	true	3.89	1,500.00	1,503.89	61.64	J-981	20.01	2,531.14
J-437	true	1.95	1,500.00	1,501.95	58.10	J-981	28.27	2,358.57
J-438	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-439	true	1.95	1,500.00	1,501.95	35.56	J-981	38.11	1,732.37
J-440	true	0.82	1,500.00	1,500.82	44.85	J-981	27.63	1,931.67
J-441	false	11.15	0.00	N/A	N/A	N/A	N/A	N/A
J-442	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-443	true	7.55	2,500.00	2,507.55	80.16	J-981	32.00	5,000.00
J-444	true	0.72	1,500.00	1,500.72	92.05	J-981	36.88	5,000.00
J-445	false	0.11	0.00	N/A	N/A	N/A	N/A	N/A
J-446	true	8.72	1,500.00	1,508.72	91.68	J-981	37.20	5,000.00
J-447	true	0.00	1,500.00	1,500.00	91.20	J-981	35.60	5,000.00
J-448	true	0.00	1,500.00	1,500.00	87.44	J-981	20.22	4,326.26
J-449	true	1.25	1,500.00	1,501.25	86.26	J-981	20.65	4,071.01
J-450	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-451	true	0.00	2,500.00	2,500.00	83.21	J-981	35.24	5,000.00
J-452	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-453	true	0.12	1,500.00	1,500.12	91.02	J-981	35.17	5,000.00
J-454	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-455	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-456	true	1.84	1,500.00	1,501.84	90.57	J-981	36.34	5,000.00
J-457	true	0.00	1,500.00	1,500.00	90.64	J-981	37.65	5,000.00
J-458	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-459	true	0.24	1,500.00	1,500.24	87.31	J-981	30.31	4,445.74
J-460	true	0.01	2,500.00	2,500.01	74.26	J-981	20.00	4,482.83
J-461	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-462	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-463	true	0.00	1,500.00	1,500.00	80.22	J-981	40.20	3,361.28
J-464	true	0.55	1,500.00	1,500.55	81.86	J-981	22.85	3,563.65
J-465	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-466	true	0.00	1,500.00	1,500.00	84.03	J-981	20.00	3,872.41
J-467	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-468	true	0.03	1,500.00	1,500.03	76.81	J-981	39.53	3,079.30
J-469	true	0.07	2,500.00	2,500.07	57.71	J-981	20.00	3,521.44
J-470	true	0.01	1,500.00	1,500.02	78.29	J-981	33.10	3,206.76
J-471	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-472	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-473	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-474	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-475	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-476	true	0.03	1,500.00	1,500.03	82.66	J-981	40.20	3,486.92
J-477	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-478	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-479	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-480	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-481	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-482	true	0.00	1,500.00	1,500.00	92.13	J-981	26.20	5,000.00
J-483	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-484	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-485	true	0.00	1,500.00	1,500.00	90.32	J-981	20.00	4,857.75
J-486	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-487	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-488	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-489	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-490	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-491	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-492	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-493	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-494	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-495	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-496	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-497	false	31.36	0.00	N/A	N/A	N/A	N/A	N/A
J-498	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-499	true	0.00	1,500.00	1,500.00	74.94	J-981	21.37	2,832.95
J-500	true	9.73	1,500.00	1,509.73	76.28	J-981	20.00	2,851.69
J-501	true	11.55	1,500.00	1,511.55	77.13	J-981	20.43	2,738.56
J-502	true	15.58	1,500.00	1,515.58	74.96	J-981	27.35	2,642.58
J-503	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-504	true	0.00	1,500.00	1,500.00	78.96	J-981	43.05	5,000.00
J-505	false	0.01	0.00	N/A	N/A	N/A	N/A	N/A
J-506	true	0.00	1,500.00	1,500.00	80.41	J-981	28.13	5,000.00
J-507	false	6.83	0.00	N/A	N/A	N/A	N/A	N/A
J-508	true	11.67	1,500.00	1,511.67	75.16	J-981	20.00	4,904.63
J-509	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-510	true	7.78	1,500.00	1,507.78	65.78	J-981	41.33	3,166.55
J-511	true	12.65	1,500.00	1,512.65	74.86	J-981	25.00	5,000.00
J-512	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-513	false	7.79	0.00	N/A	N/A	N/A	N/A	N/A
J-514	true	5.84	1,500.00	1,505.84	72.12	J-981	27.52	5,000.00
J-515	true	7.78	1,500.00	1,507.78	76.32	J-981	26.27	5,000.00
J-516	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-517	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-518	true	2.92	1,500.00	1,502.92	71.16	J-981	20.42	5,000.00
J-519	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-520	true	5.84	1,500.00	1,505.84	70.89	J-981	26.03	5,000.00
J-521	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-522	true	6.81	1,500.00	1,506.81	63.61	J-981	20.00	2,680.64
J-523	true	2.25	1,500.00	1,502.25	54.44	J-981	20.00	2,680.59
J-524	false	16.61	0.00	N/A	N/A	N/A	N/A	N/A
J-525	true	2.92	1,500.00	1,502.92	73.22	J-981	20.00	2,846.10
J-527	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-528	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-529	false	12.63	0.00	N/A	N/A	N/A	N/A	N/A
J-530	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-531	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-532	true	7.78	1,500.00	1,507.78	77.15	J-981	20.22	3,745.06
J-533	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-534	true	7.78	1,500.00	1,507.78	74.86	J-981	20.22	3,430.23
J-535	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-536	true	4.86	1,500.00	1,504.86	76.61	J-981	20.65	3,599.91
J-537	false	28.00	0.00	N/A	N/A	N/A	N/A	N/A
J-538	true	2.92	1,500.00	1,502.92	78.04	J-981	20.00	3,801.79
J-539	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-540	true	5.84	1,500.00	1,505.84	80.22	J-981	20.00	4,235.94
J-541	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-542	true	13.62	1,500.00	1,513.62	82.56	J-981	21.12	4,917.81
J-543	true	6.29	1,500.00	1,506.29	91.54	J-981	34.28	5,000.00
J-544	true	9.30	1,500.00	1,509.30	91.38	J-981	35.13	5,000.00
J-546	true	7.78	1,500.00	1,507.78	88.32	J-981	40.20	4,640.55
J-547	true	3.05	1,500.00	1,503.05	90.72	J-981	37.00	5,000.00
J-548	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-549	true	8.05	1,500.00	1,508.05	88.69	J-981	26.13	5,000.00
J-550	true	0.00	1,500.00	1,500.00	88.56	J-981	26.08	4,999.15
J-551	true	0.00	1,500.00	1,500.00	88.87	J-981	25.12	5,000.00
J-552	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-553	true	24.32	1,500.00	1,524.32	89.33	J-981	25.66	5,000.00
J-554	true	19.46	1,500.00	1,519.46	89.20	J-981	24.56	4,965.12
J-555	true	10.70	1,500.00	1,510.70	88.00	J-981	20.00	4,733.35
J-556	false	11.73	0.00	N/A	N/A	N/A	N/A	N/A
J-557	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-558	false	11.26	0.00	N/A	N/A	N/A	N/A	N/A
J-559	true	15.57	1,500.00	1,515.57	88.33	J-981	20.22	4,842.57
J-560	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-561	true	7.78	1,500.00	1,507.78	90.39	J-981	28.50	5,000.00
J-562	true	0.00	1,500.00	1,500.00	90.67	J-981	34.35	5,000.00
J-563	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-564	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-565	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-566	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-567	true	3.39	1,500.00	1,503.39	92.52	J-981	36.14	5,000.00
J-568	false	13.44	0.00	N/A	N/A	N/A	N/A	N/A
J-569	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-570	false	12.32	0.00	N/A	N/A	N/A	N/A	N/A
J-571	true	22.38	1,500.00	1,522.38	69.36	J-981	20.02	2,965.13
J-572	true	12.65	1,500.00	1,512.65	74.37	J-981	20.02	2,965.14
J-573	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-574	true	9.73	1,500.00	1,509.73	74.89	J-981	20.02	2,965.15
J-575	false	7.79	0.00	N/A	N/A	N/A	N/A	N/A
J-576	true	12.65	1,500.00	1,512.65	71.20	J-981	20.01	2,965.55
J-577	true	16.54	1,500.00	1,516.54	74.50	J-981	20.02	2,965.12
J-578	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-579	true	14.59	1,500.00	1,514.59	73.98	J-981	20.02	2,965.12
J-580	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-581	false	0.97	0.00	N/A	N/A	N/A	N/A	N/A
J-582	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-583	true	3.89	1,500.00	1,503.89	74.29	J-981	20.02	2,965.12
J-584	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-585	true	0.00	1,500.00	1,500.00	67.57	J-981	20.00	2,965.85
J-586	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-587	true	7.78	1,500.00	1,507.78	52.28	J-981	27.37	3,450.61
J-588	true	0.00	1,500.00	1,500.00	78.30	J-981	20.00	4,014.74
J-589	false	0.26	0.00	N/A	N/A	N/A	N/A	N/A
J-590	true	0.00	1,500.00	1,500.00	70.99	J-981	26.52	3,146.01
J-591	false	0.36	0.00	N/A	N/A	N/A	N/A	N/A
J-592	true	0.55	1,500.00	1,500.55	68.35	J-981	28.02	2,968.39
J-593	false	77.59	0.00	N/A	N/A	N/A	N/A	N/A
J-594	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-595	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-596	true	0.00	1,500.00	1,500.00	79.39	J-981	20.00	3,895.72
J-597	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-598	true	0.00	1,500.00	1,500.00	79.01	J-981	20.00	3,851.59
J-599	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-600	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-601	false	5.64	0.00	N/A	N/A	N/A	N/A	N/A
J-602	true	9.84	1,500.00	1,509.84	68.56	J-981	25.78	3,115.77
J-603	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-604	true	0.00	1,500.00	1,500.00	61.70	J-981	30.06	2,560.41
J-605	true	2.87	1,500.00	1,502.87	77.83	J-981	20.00	3,772.06
J-606	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-607	true	2.01	1,500.00	1,502.01	79.14	J-981	20.00	3,618.17
J-608	true	0.00	1,500.00	1,500.00	74.23	J-981	20.00	3,618.18
J-609	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-610	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-611	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-612	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-613	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-614	false	15.68	0.00	N/A	N/A	N/A	N/A	N/A
J-615	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-616	false	15.68	0.00	N/A	N/A	N/A	N/A	N/A
J-617	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-618	false	7.84	0.00	N/A	N/A	N/A	N/A	N/A
J-619	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-620	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-621	true	0.11	1,500.00	1,500.11	91.80	J-981	31.33	5,000.00
J-622	true	0.00	1,500.00	1,500.00	90.51	J-981	20.13	5,000.00
J-623	false	8.96	0.00	N/A	N/A	N/A	N/A	N/A
J-624	true	0.00	1,500.00	1,500.00	91.45	J-981	30.90	5,000.00
J-625	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-628	false	7.84	0.00	N/A	N/A	N/A	N/A	N/A
J-636	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-637	true	13.62	1,500.00	1,513.62	80.38	J-981	20.01	3,710.41
J-638	false	15.68	0.00	N/A	N/A	N/A	N/A	N/A
J-639	true	27.74	1,500.00	1,527.74	69.09	J-981	43.36	2,628.51
J-640	false	39.20	0.00	N/A	N/A	N/A	N/A	N/A
J-650	false	22.38	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-651	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-653	false	16.54	0.00	N/A	N/A	N/A	N/A	N/A
J-654	false	21.40	0.00	N/A	N/A	N/A	N/A	N/A
J-655	false	18.48	0.00	N/A	N/A	N/A	N/A	N/A
J-656	false	23.68	0.00	N/A	N/A	N/A	N/A	N/A
J-657	false	16.54	0.00	N/A	N/A	N/A	N/A	N/A
J-658	false	0.30	0.00	N/A	N/A	N/A	N/A	N/A
J-659	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-660	false	0.62	0.00	N/A	N/A	N/A	N/A	N/A
J-661	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-750	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-751	false	4.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-752	false	20.81	1,500.00	N/A	N/A	N/A	N/A	N/A
J-813	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-814	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-822	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-823	true	0.00	1,500.00	1,500.00	42.72	J-138	41.82	1,501.00
J-824	true	0.00	1,500.00	1,500.00	38.48	J-150	38.87	1,501.00
J-825	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-826	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-827	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-828	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-829	true	0.00	2,500.00	2,500.00	68.35	J-981	20.00	4,000.72
J-830	true	0.00	2,500.00	2,500.00	68.03	J-981	20.00	3,998.69
J-831	false	109.76	0.00	N/A	N/A	N/A	N/A	N/A
J-832	true	0.00	2,500.00	2,500.00	68.12	J-981	20.00	3,997.28
J-833	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-834	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-835	true	0.00	2,500.00	2,500.00	68.33	J-981	20.00	3,996.36
J-836	true	0.00	2,500.00	2,500.00	68.42	J-981	20.00	3,995.29
J-837	true	0.00	2,500.00	2,500.00	68.87	J-981	20.00	3,992.98
J-838	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-840	true	0.00	2,500.00	2,500.00	68.87	J-981	20.00	4,002.08
J-842	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-844	false	0.68	1,500.00	N/A	N/A	N/A	N/A	N/A
J-845	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-846	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-847	false	2.04	1,500.00	N/A	N/A	N/A	N/A	N/A
J-848	false	1.37	1,500.00	N/A	N/A	N/A	N/A	N/A
J-849	false	1.37	1,500.00	N/A	N/A	N/A	N/A	N/A
J-850	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-851	true	0.00	1,500.00	1,500.00	72.48	J-981	35.86	1,501.00
J-852	true	0.00	1,500.00	1,500.00	71.99	J-981	35.86	1,501.00
J-853	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-901	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-906	false	4.26	1,500.00	N/A	N/A	N/A	N/A	N/A
J-917	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-981	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-982	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-1	2,558.30	Zone	Demand	4.69	COMMERCIAL	4.69	2,776.90	94.58
J-2	2,558.00	Zone	Demand	10.75	COMMERCIAL	10.75	2,777.53	94.98
J-3	2,556.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.53	95.63
J-4	2,557.50	Zone	Demand	1.49	COMMERCIAL	1.49	2,778.20	95.49
J-5	2,559.00	Zone	Demand	2.76	COMMERCIAL	2.76	2,778.49	94.96
J-6	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.53	95.41
J-7	2,557.00	Zone	Demand	1.16	COMMERCIAL	1.16	2,778.53	95.84
J-8	2,557.00	Zone	Demand	103.96	IRRIGATION	103.96	2,778.56	95.86
J-9	2,555.00	Zone	Demand	6.02	COMMERCIAL	6.02	2,778.52	96.71
J-10	2,550.50	Zone	Demand	0.00	Composite	0.00	2,778.51	98.65
J-11	2,554.50	Zone	Demand	0.02	COMMERCIAL	0.02	2,778.70	97.00
J-12	2,556.70	Zone	Demand	10.70	RESIDENTIAL	10.70	2,778.68	96.04
J-13	2,557.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,778.72	95.93
J-14	2,555.70	Zone	Demand	4.87	Composite	4.87	2,778.80	96.52
J-15	2,558.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,778.72	95.50
J-16	2,552.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,778.74	98.10
J-17	2,555.30	Zone	Demand	6.81	RESIDENTIAL	6.81	2,778.83	96.71
J-18	2,554.70	Zone	Demand	1.95	RESIDENTIAL	1.95	2,778.82	96.97
J-19	2,552.00	Zone	Demand	9.44	Composite	9.44	2,778.80	98.12
J-20	2,553.00	Zone	Demand	6.09	COMMERCIAL	6.09	2,778.80	97.69
J-21	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.82	97.05
J-22	2,553.50	Zone	Demand	7.93	Composite	7.93	2,778.82	97.48
J-23	2,557.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,778.87	95.99
J-24	2,553.00	Zone	Demand	5.98	Composite	5.98	2,778.89	97.73
J-25	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.83	96.41
J-26	2,554.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.95	97.32
J-27	2,555.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,779.02	96.71
J-28	2,558.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,778.95	95.59
J-29	2,556.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,778.95	96.46
J-30	2,579.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.29	86.44
J-31	2,581.50	Zone	Demand	4.57	RESIDENTIAL	4.57	2,779.29	85.57
J-32	2,585.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,779.39	83.89
J-33	2,595.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.52	79.83
J-34	2,596.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.53	79.19
J-35	2,597.50	Zone	Demand	11.67	RESIDENTIAL	11.67	2,779.52	78.75
J-36	2,604.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.55	75.74
J-37	2,601.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.55	77.25
J-38	2,603.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.55	76.39
J-39	2,591.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.55	81.58
J-40	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.52	81.13
J-41	2,591.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.55	81.58
J-42	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.58	82.02
J-43	2,581.00	Zone	Demand	9.92	COMMERCIAL	9.92	2,779.66	85.95
J-44	2,590.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.57	82.02
J-45	2,594.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.56	80.28
J-46	2,602.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.56	76.82
J-47	2,596.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.55	79.41
J-48	2,593.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.55	80.49
J-49	2,601.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,779.55	77.25
J-50	2,603.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,779.60	76.40
J-51	2,606.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.71	75.15
J-52	2,609.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,779.70	73.85

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-53	2,605.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.79	75.62
J-54	2,604.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.80	76.06
J-55	2,607.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.73	74.51
J-56	2,608.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.73	74.08
J-57	2,610.50	Zone	Demand	21.40	RESIDENTIAL	21.40	2,779.74	73.22
J-58	2,606.00	Zone	Demand	6.80	RESIDENTIAL	6.80	2,779.75	75.17
J-59	2,618.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.76	69.77
J-60	2,615.00	Zone	Demand	2.81	Composite	2.81	2,779.76	71.28
J-61	2,604.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,779.76	75.83
J-62	2,600.00	Zone	Demand	10.73	RESIDENTIAL	10.73	2,779.68	77.74
J-63	2,597.50	Zone	Demand	10.73	RESIDENTIAL	10.73	2,779.72	78.84
J-64	2,595.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.72	79.70
J-65	2,595.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,779.57	79.64
J-66	2,604.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,779.57	75.96
J-67	2,604.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.56	75.74
J-68	2,603.00	Zone	Demand	29.19	RESIDENTIAL	29.19	2,779.64	76.42
J-69	2,585.00	Zone	Demand	23.35	RESIDENTIAL	23.35	2,779.33	84.08
J-70	2,587.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,779.32	83.21
J-71	2,600.00	Zone	Demand	19.46	RESIDENTIAL	19.46	2,779.99	77.87
J-72	2,602.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.99	76.79
J-73	2,589.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,779.96	82.40
J-74	2,617.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,782.16	71.46
J-75	2,606.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,780.41	75.24
J-76	2,611.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.82	73.04
J-77	2,617.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,780.57	70.77
J-78	2,618.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,780.44	70.28
J-79	2,616.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,780.72	71.05
J-80	2,613.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,780.76	72.37
J-81	2,607.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,780.63	74.90
J-83	2,619.50	Zone	Demand	11.67	RESIDENTIAL	11.67	2,780.88	69.82
J-84	2,624.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,781.29	67.84
J-85	2,626.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,786.63	69.50
J-86	2,623.50	Zone	Demand	12.63	RESIDENTIAL	12.63	2,786.74	70.62
J-87	2,618.00	Zone	Demand	8.75	RESIDENTIAL	8.75	2,784.81	72.17
J-88	2,618.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,784.74	72.14
J-89	2,618.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,784.75	72.14
J-90	2,618.00	Zone	Demand	6.82	RESIDENTIAL	6.82	2,784.74	72.14
J-91	2,616.50	Zone	Demand	7.79	RESIDENTIAL	7.79	2,784.44	72.66
J-92	2,619.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,782.09	70.56
J-93	2,619.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,782.16	70.37
J-94	2,618.00	Zone	Demand	3.90	RESIDENTIAL	3.90	2,782.16	71.02
J-95	2,619.50	Zone	Demand	14.59	RESIDENTIAL	14.59	2,782.14	70.37
J-96	2,621.50	Zone	Demand	3.71	Composite	3.71	2,787.17	71.68
J-97	2,615.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,782.17	72.33
J-98	2,612.50	Zone	Demand	2.91	RESIDENTIAL	2.91	2,782.17	73.41
J-99	2,611.00	Zone	Demand	3.90	RESIDENTIAL	3.90	2,782.19	74.06
J-100	2,609.50	Zone	Demand	4.58	Composite	4.58	2,782.16	74.70
J-101	2,610.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,782.16	74.49
J-102	2,615.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,782.16	72.32
J-103	2,615.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,782.16	72.32
J-104	2,607.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.25	75.61
J-105	2,603.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,782.25	77.33

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-106	2,593.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,782.17	81.63
J-107	2,612.50	Zone	Demand	11.33	Composite	11.33	2,782.29	73.46
J-108	2,612.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,782.29	73.46
J-109	2,610.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,782.28	74.54
J-110	2,610.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,782.28	74.54
J-111	2,610.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,782.28	74.32
J-112	2,614.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,782.29	72.81
J-113	2,611.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,782.29	73.89
J-114	2,617.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,782.29	71.51
J-115	2,564.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.34	92.74
J-116	2,620.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,787.08	72.29
J-117	2,621.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.08	71.86
J-118	2,579.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.74	85.55
J-119	2,623.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,790.23	72.14
J-120	2,624.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,789.95	71.58
J-121	2,627.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,794.64	72.32
J-122	2,618.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,787.41	73.08
J-123	2,624.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,787.39	70.47
J-124	2,588.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,752.36	71.11
J-125	2,623.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,787.38	71.12
J-126	2,620.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,787.38	72.20
J-127	2,605.80	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.73	75.25
J-128	2,619.00	Zone	Demand	1.93	RESIDENTIAL	1.93	2,782.16	70.59
J-131	2,553.00	Zone	Demand	2.94	COMMERCIAL	2.94	2,778.79	97.69
J-132	2,624.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.27	70.42
J-133	2,564.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,778.36	92.74
J-134	2,558.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,778.41	95.36
J-135	2,557.50	Zone	Demand	29.31	COMMERCIAL	29.31	2,778.83	95.76
J-136	2,626.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,789.75	70.63
J-137	2,553.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,778.81	97.48
J-138	2,638.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,794.64	67.77
J-139	2,554.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.80	97.05
J-140	2,554.50	Zone	Demand	0.15	COMMERCIAL	0.15	2,778.82	97.05
J-141	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.82	97.27
J-142	2,554.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.95	97.32
J-143	2,610.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.74	73.44
J-144	2,611.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.71	72.99
J-145	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.85	92.09
J-146	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.50	92.80
J-147	2,615.00	Zone	Demand	4.48	RESIDENTIAL	4.48	2,780.41	71.56
J-148	2,623.00	Zone	Demand	10.58	RESIDENTIAL	10.58	2,789.26	71.93
J-149	2,621.00	Zone	Demand	29.20	RESIDENTIAL	29.20	2,787.69	72.12
J-150	2,620.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,789.94	73.53
J-151	2,624.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,789.67	71.46
J-152	2,625.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,789.71	71.26
J-153	2,626.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,789.74	70.84
J-154	2,561.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,776.89	93.19
J-155	2,556.50	Zone	Demand	16.54	RESIDENTIAL	16.54	2,776.89	95.35
J-156	2,556.20	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.89	95.48
J-157	2,559.50	Zone	Demand	3.02	COMMERCIAL	3.02	2,776.40	93.84
J-158	2,562.00	Zone	Demand	25.09	Composite	25.09	2,776.39	92.75
J-159	2,561.00	Zone	Demand	20.43	RESIDENTIAL	20.43	2,776.02	93.03

Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-160	2,560.00	Zone	Demand	1.12	Composite	1.12	2,776.16	93.52
J-161	2,565.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,776.01	91.29
J-162	2,559.50	Zone	Demand	0.97	RESIDENTIAL	0.97	2,776.10	93.71
J-163	2,558.50	Zone	Demand	7.05	Composite	7.05	2,776.11	94.15
J-164	2,556.50	Zone	Demand	15.57	RESIDENTIAL	15.57	2,776.06	94.99
J-165	2,557.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,776.06	94.56
J-166	2,555.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.03	95.63
J-167	2,554.00	Zone	Demand	6.69	RESIDENTIAL	6.69	2,776.03	96.06
J-168	2,553.50	Zone	Demand	1.37	Composite	1.37	2,776.03	96.28
J-169	2,553.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.03	96.28
J-170	2,554.50	Zone	Demand	6.51	Composite	6.51	2,776.03	95.84
J-171	2,556.50	Zone	Demand	13.97	Composite	13.97	2,776.02	94.98
J-172	2,555.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,776.03	95.41
J-173	2,556.50	Zone	Demand	2.24	Composite	2.24	2,776.03	94.98
J-174	2,557.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,776.03	94.76
J-175	2,557.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,776.03	94.76
J-176	2,559.00	Zone	Demand	4.70	IRRIGATION	4.70	2,776.03	93.90
J-177	2,559.50	Zone	Demand	23.86	Composite	23.86	2,776.06	93.69
J-178	2,557.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,776.05	94.77
J-179	2,559.50	Zone	Demand	36.70	Composite	36.70	2,776.03	93.68
J-180	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.07	96.30
J-181	2,549.00	Zone	Demand	7.77	RESIDENTIAL	7.77	2,776.06	98.24
J-182	2,550.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,776.04	97.80
J-183	2,548.00	Zone	Demand	10.69	RESIDENTIAL	10.69	2,776.05	98.67
J-184	2,548.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,776.05	98.67
J-185	2,549.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,776.03	98.22
J-186	2,547.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,776.04	99.10
J-187	2,546.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.04	99.31
J-188	2,551.00	Zone	Demand	10.69	RESIDENTIAL	10.69	2,776.06	97.37
J-189	2,553.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,776.06	96.51
J-190	2,553.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,776.06	96.51
J-191	2,552.00	Zone	Demand	3.88	RESIDENTIAL	3.88	2,776.05	96.94
J-192	2,552.50	Zone	Demand	2.22	Composite	2.22	2,776.05	96.72
J-193	2,551.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.05	97.15
J-194	2,553.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.05	96.50
J-195	2,555.00	Zone	Demand	49.67	Composite	49.67	2,776.02	95.62
J-196	2,556.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.05	95.20
J-197	2,551.50	Zone	Demand	30.83	Composite	30.83	2,776.00	97.13
J-198	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.07	96.30
J-199	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.07	98.03
J-200	2,616.50	Zone	Demand	4.69	Composite	4.69	2,779.56	70.55
J-201	2,617.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.56	70.33
J-202	2,601.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.49	77.22
J-203	2,600.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.46	77.64
J-204	2,603.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.44	76.34
J-205	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.44	76.12
J-206	2,603.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.44	76.34
J-207	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.44	76.12
J-208	2,599.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,779.46	78.08
J-209	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.65	87.68
J-210	2,597.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.65	79.02
J-211	2,597.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.65	78.81

Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-212	2,591.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.65	81.40
J-213	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.65	81.19
J-214	2,587.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.65	83.35
J-215	2,552.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,778.82	98.13
J-216	2,553.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,778.81	97.70
J-217	2,553.50	Zone	Demand	8.96	RESIDENTIAL	8.96	2,778.81	97.48
J-218	2,554.00	Zone	Demand	1.74	COMMERCIAL	1.74	2,778.82	97.27
J-219	2,554.50	Zone	Demand	24.87	IRRIGATION	24.87	2,778.82	97.05
J-220	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.90	96.01
J-221	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.05	93.48
J-222	2,564.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.06	92.83
J-223	2,564.50	Zone	Demand	0.49	COMMERCIAL	0.49	2,778.96	92.79
J-224	2,561.50	Zone	Demand	1.81	RESIDENTIAL	1.81	2,778.89	94.06
J-225	2,562.50	Zone	Demand	5.06	COMMERCIAL	5.06	2,778.74	93.56
J-226	2,561.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,778.34	94.03
J-227	2,565.00	Zone	Demand	17.51	RESIDENTIAL	17.51	2,776.38	91.45
J-228	2,566.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,775.34	90.57
J-229	2,568.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,775.00	89.56
J-230	2,569.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,774.78	89.03
J-231	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,774.58	93.49
J-232	2,565.00	Zone	Demand	16.56	Composite	16.56	2,775.01	90.86
J-233	2,565.00	Zone	Demand	7.69	Composite	7.69	2,774.88	90.80
J-234	2,565.00	Zone	Demand	12.75	COMMERCIAL	12.75	2,784.50	94.97
J-235	2,603.00	Zone	Demand	0.00	Fixed	0.00	2,779.43	76.33
J-236	2,613.00	Zone	Demand	69.44	RESIDENTIAL	69.44	2,779.34	71.97
J-237	2,565.50	Zone	Demand	0.64	IRRIGATION	0.64	2,783.40	94.27
J-238	2,568.50	Zone	Demand	0.91	Composite	0.91	2,777.26	90.32
J-239	2,569.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,777.26	90.11
J-240	2,569.50	Zone	Demand	26.03	IRRIGATION	26.03	2,775.84	89.27
J-241	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.49	83.71
J-242	2,570.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,773.96	88.24
J-243	2,568.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,773.01	88.70
J-244	2,566.50	Zone	Demand	11.67	RESIDENTIAL	11.67	2,772.28	89.03
J-245	2,564.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,773.01	90.43
J-246	2,569.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,772.60	88.09
J-247	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,759.31	81.04
J-248	2,571.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,771.96	86.95
J-249	2,570.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,772.28	87.52
J-250	2,571.00	Zone	Demand	3.21	Composite	3.21	2,771.48	86.74
J-251	2,573.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,770.23	85.33
J-252	2,570.00	Zone	Demand	1.29	IRRIGATION	1.29	2,771.49	87.17
J-253	2,571.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.49	86.53
J-254	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,770.72	85.33
J-255	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,770.71	85.32
J-256	2,577.00	Zone	Demand	0.25	COMMERCIAL	0.25	2,769.65	83.35
J-257	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,797.30	73.25
J-258	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,801.62	70.36
J-259	2,638.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,801.88	70.90
J-260	2,635.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,801.92	72.22
J-261	2,633.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,801.92	73.08
J-262	2,634.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,801.92	72.65
J-263	2,625.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,801.92	76.54

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-264	2,634.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,801.97	72.67
J-265	2,633.00	Zone	Demand	5.85	RESIDENTIAL	5.85	2,801.97	73.11
J-266	2,635.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,802.23	72.35
J-267	2,636.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,802.23	71.92
J-268	2,632.00	Zone	Demand	14.59	RESIDENTIAL	14.59	2,802.55	73.79
J-269	2,633.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,803.59	73.81
J-270	2,630.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,803.72	75.16
J-271	2,632.50	Zone	Demand	2.46	Composite	2.46	2,803.76	74.10
J-272	2,638.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,803.76	71.71
J-273	2,634.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,803.78	73.46
J-274	2,634.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,803.78	73.24
J-275	2,635.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,803.81	73.04
J-276	2,635.70	Zone	Demand	14.59	RESIDENTIAL	14.59	2,803.84	72.75
J-277	2,636.00	Zone	Demand	10.08	RESIDENTIAL	10.08	2,803.84	72.62
J-278	2,641.00	Zone	Demand	19.47	RESIDENTIAL	19.47	2,804.03	70.53
J-279	2,638.00	Zone	Demand	4.46	Composite	4.46	2,804.30	71.95
J-280	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,804.98	71.81
J-281	2,653.00	Zone	Demand	6.25	Composite	6.25	2,820.58	72.51
J-282	2,644.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,821.18	76.66
J-283	2,640.00	Zone	Demand	4.24	Composite	4.24	2,821.18	78.39
J-284	2,638.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,821.54	79.41
J-285	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,821.54	80.28
J-286	2,635.00	Zone	Demand	3.36	RESIDENTIAL	3.36	2,821.54	80.71
J-287	2,639.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,821.94	79.15
J-288	2,637.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,821.88	79.99
J-289	2,644.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,822.08	77.05
J-290	2,647.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,822.08	75.75
J-291	2,643.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,822.08	77.48
J-292	2,654.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,822.07	72.72
J-293	2,654.00	Zone	Demand	5.50	Composite	5.50	2,822.34	72.83
J-294	2,667.00	Zone	Demand	8.03	IRRIGATION	8.03	2,837.01	73.56
J-295	2,565.50	Zone	Demand	3.21	COMMERCIAL	3.21	2,783.40	94.27
J-296	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.35	73.70
J-297	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.35	73.70
J-298	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,841.59	76.19
J-299	2,670.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,842.20	74.50
J-300	2,670.00	Zone	Demand	0.97	RESIDENTIAL	0.97	2,842.20	74.50
J-301	2,664.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,844.51	78.10
J-302	2,664.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,842.14	76.86
J-303	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,846.60	77.70
J-304	2,670.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,846.60	76.41
J-305	2,667.00	Zone	Demand	14.59	RESIDENTIAL	14.59	2,849.16	78.81
J-306	2,665.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,851.59	80.73
J-307	2,664.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,855.81	82.99
J-308	2,670.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,855.79	80.38
J-309	2,660.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,859.01	86.10
J-310	2,662.50	Zone	Demand	25.29	RESIDENTIAL	25.29	2,860.99	85.88
J-311	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,841.70	76.23
J-312	2,655.00	Zone	Demand	274.77	Composite	274.77	2,856.45	87.16
J-313	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,858.42	89.31
J-314	2,660.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,842.09	78.56
J-315	2,645.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,866.20	95.70

Title: INITIAL RUN

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Project Engineer: DMC

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Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-316	2,643.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.77	45.76
J-317	2,631.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.04	64.92
J-318	2,577.50	Zone	Demand	14.59	RESIDENTIAL	14.59	2,779.60	87.44
J-319	2,566.00	Zone	Demand	17.92	Composite	17.92	2,778.85	92.09
J-320	2,563.00	Zone	Demand	7.84	RESIDENTIAL	7.84	2,777.50	92.80
J-321	2,647.50	Zone	Demand	18.48	RESIDENTIAL	18.48	2,864.68	93.96
J-322	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.89	67.01
J-323	2,572.50	Zone	Demand	7.84	RESIDENTIAL	7.84	2,758.48	80.46
J-325	2,645.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,867.00	95.83
J-326	2,565.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.10	89.82
J-327	2,565.50	Zone	Demand	8.76	RESIDENTIAL	8.76	2,772.89	89.73
J-328	2,565.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,772.89	89.95
J-329	2,565.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,772.58	89.59
J-330	2,565.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,772.58	89.81
J-331	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.28	89.25
J-332	2,568.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,770.52	87.40
J-333	2,569.50	Zone	Demand	1.03	Composite	1.03	2,770.47	86.95
J-334	2,571.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,770.65	86.16
J-335	2,572.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,771.03	86.11
J-336	2,571.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,770.04	86.12
J-337	2,571.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,768.91	85.63
J-338	2,572.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,769.55	85.47
J-339	2,573.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,769.55	85.04
J-340	2,572.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,770.23	85.76
J-341	2,571.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,766.54	84.60
J-342	2,572.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,766.54	84.17
J-343	2,570.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,764.63	84.21
J-344	2,573.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,760.63	80.96
J-345	2,572.00	Zone	Demand	11.25	Composite	11.25	2,759.31	81.04
J-346	2,632.00	Zone	Demand	6.43	Composite	6.43	2,821.83	82.13
J-347	2,630.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,821.83	82.78
J-348	2,630.00	Zone	Demand	13.44	RESIDENTIAL	13.44	2,821.82	82.99
J-349	2,633.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,821.82	81.70
J-350	2,638.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,821.88	79.56
J-351	2,640.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,821.88	78.69
J-352	2,640.50	Zone	Demand	11.20	RESIDENTIAL	11.20	2,821.88	78.47
J-353	2,680.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,855.79	76.06
J-354	2,695.00	Zone	Demand	12.66	RESIDENTIAL	12.66	2,855.78	69.56
J-355	2,682.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,855.79	74.97
J-356	2,678.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,855.79	76.70
J-357	2,700.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,855.78	67.40
J-358	2,699.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.01	59.71
J-359	2,701.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.01	58.85
J-360	2,717.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.01	51.92
J-361	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.08	96.73
J-364	2,554.00	Zone	Demand	5.81	COMMERCIAL	5.81	2,778.30	97.05
J-365	2,554.00	Zone	Demand	0.96	COMMERCIAL	0.96	2,778.30	97.05
J-366	2,554.00	Zone	Demand	3.02	COMMERCIAL	3.02	2,778.30	97.05
J-367	2,550.00	Zone	Demand	9.87	COMMERCIAL	9.87	2,778.70	98.95
J-368	2,580.00	Zone	Demand	7.16	IRRIGATION	7.16	2,776.22	84.90
J-369	2,550.50	Zone	Demand	1.16	COMMERCIAL	1.16	2,778.46	98.63
J-370	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.22	85.55

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-371	2,554.00	Zone	Demand	19.01	COMMERCIAL	19.01	2,778.50	97.13
J-372	2,555.50	Zone	Demand	9.53	IRRIGATION	9.53	2,778.51	96.49
J-373	2,556.00	Zone	Demand	2.20	COMMERCIAL	2.20	2,778.51	96.27
J-374	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.51	96.27
J-375	2,550.00	Zone	Demand	0.73	COMMERCIAL	0.73	2,778.52	98.87
J-376	2,549.50	Zone	Demand	15.08	COMMERCIAL	15.08	2,778.52	99.08
J-377	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.52	99.08
J-378	2,550.00	Zone	Demand	12.40	COMMERCIAL	12.40	2,778.52	98.87
J-379	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.54	99.10
J-380	2,589.00	Zone	Demand	13.19	COMMERCIAL	13.19	2,779.39	82.37
J-381	2,593.50	Zone	Demand	1.62	COMMERCIAL	1.62	2,779.39	80.43
J-382	2,547.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.60	99.99
J-383	2,548.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.62	99.56
J-384	2,548.50	Zone	Demand	5.63	COMMERCIAL	5.63	2,778.62	99.56
J-385	2,557.00	Zone	Demand	0.94	COMMERCIAL	0.94	2,779.07	96.08
J-386	2,556.00	Zone	Demand	17.77	COMMERCIAL	17.77	2,778.67	96.34
J-387	2,556.00	Zone	Demand	1.74	Composite	1.74	2,778.69	96.35
J-388	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.99	95.18
J-389	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.13	97.40
J-390	2,553.50	Zone	Demand	0.22	Composite	0.22	2,779.13	97.62
J-391	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.13	96.97
J-392	2,554.00	Zone	Demand	7.77	COMMERCIAL	7.77	2,779.13	97.40
J-393	2,552.50	Zone	Demand	0.00	Composite	0.00	2,779.13	98.05
J-394	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.14	96.11
J-395	2,558.00	Zone	Demand	1.07	COMMERCIAL	1.07	2,779.10	95.66
J-396	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.02	94.76
J-397	2,560.00	Zone	Demand	0.34	Composite	0.34	2,779.02	94.76
J-398	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.24	98.32
J-399	2,554.00	Zone	Demand	18.48	RESIDENTIAL	18.48	2,779.17	97.42
J-400	2,556.50	Zone	Demand	13.43	Composite	13.43	2,779.13	96.32
J-401	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.04	94.99
J-402	2,555.50	Zone	Demand	2.47	COMMERCIAL	2.47	2,779.54	96.93
J-403	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.45	97.11
J-404	2,562.50	Zone	Demand	0.42	COMMERCIAL	0.42	2,779.89	94.06
J-405	2,567.00	Zone	Demand	3.66	COMMERCIAL	3.66	2,780.01	92.16
J-406	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.32	97.70
J-407	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.38	94.05
J-408	2,565.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.74	92.47
J-409	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.07	95.65
J-410	2,627.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,780.91	66.37
J-411	2,621.00	Zone	Demand	7.65	Composite	7.65	2,780.54	69.03
J-412	2,602.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,780.16	76.87
J-413	2,599.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,780.01	78.32
J-414	2,716.00	Zone	Demand	3.88	RESIDENTIAL	3.88	2,855.78	60.48
J-415	2,718.00	Zone	Demand	8.75	Composite	8.75	2,855.78	59.61
J-416	2,733.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,855.78	53.12
J-417	2,722.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,855.78	57.88
J-418	2,559.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,774.43	92.99
J-419	2,560.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,774.43	92.56
J-420	2,573.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,774.00	86.75
J-421	2,574.50	Zone	Demand	15.57	Composite	15.57	2,773.59	86.14
J-422	2,573.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,774.06	86.99

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-423	2,565.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,774.24	90.31
J-424	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,774.24	90.10
J-425	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.74	85.98
J-426	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.74	85.98
J-427	2,579.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.09	85.05
J-428	2,579.50	Zone	Demand	0.58	COMMERCIAL	0.58	2,776.14	85.08
J-429	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.17	86.61
J-430	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.17	86.61
J-431	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,776.18	86.39
J-432	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,776.18	86.39
J-433	2,572.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,776.19	88.13
J-434	2,572.50	Zone	Demand	0.00	Composite	0.00	2,776.19	88.13
J-435	2,578.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,776.19	85.53
J-436	2,579.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,776.19	85.31
J-437	2,578.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,776.19	85.53
J-438	2,579.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,776.19	85.10
J-439	2,580.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,776.19	84.67
J-440	2,580.00	Zone	Demand	0.82	Composite	0.82	2,776.19	84.88
J-441	2,554.00	Zone	Demand	11.15	IRRIGATION	11.15	2,778.82	97.27
J-442	2,592.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.51	80.91
J-443	2,556.00	Zone	Demand	7.55	RESIDENTIAL	7.55	2,778.69	96.35
J-444	2,554.00	Zone	Demand	0.72	COMMERCIAL	0.72	2,778.72	97.22
J-445	2,554.00	Zone	Demand	0.11	IRRIGATION	0.11	2,778.71	97.22
J-446	2,555.00	Zone	Demand	8.72	IRRIGATION	8.72	2,778.74	96.80
J-447	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.76	96.38
J-448	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.76	96.81
J-449	2,554.50	Zone	Demand	1.25	COMMERCIAL	1.25	2,778.76	97.03
J-450	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.77	96.38
J-451	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.80	96.39
J-452	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.81	96.40
J-453	2,556.50	Zone	Demand	0.12	COMMERCIAL	0.12	2,778.82	96.19
J-454	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.83	95.98
J-455	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.85	95.98
J-456	2,558.00	Zone	Demand	1.84	IRRIGATION	1.84	2,778.86	95.56
J-457	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.89	95.35
J-458	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.86	95.56
J-459	2,557.00	Zone	Demand	0.24	COMMERCIAL	0.24	2,778.82	95.97
J-460	2,556.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,778.79	96.18
J-461	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.77	96.38
J-462	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.79	96.39
J-463	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.79	95.96
J-464	2,557.00	Zone	Demand	0.55	IRRIGATION	0.55	2,778.79	95.96
J-465	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.77	96.38
J-466	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.79	95.74
J-467	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.79	95.31
J-468	2,558.00	Zone	Demand	0.03	COMMERCIAL	0.03	2,778.79	95.53
J-469	2,557.50	Zone	Demand	0.07	COMMERCIAL	0.07	2,778.79	95.74
J-470	2,558.00	Zone	Demand	0.01	COMMERCIAL	0.01	2,778.79	95.53
J-471	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.37	97.29
J-472	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.37	97.29
J-473	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.42	96.88
J-474	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.86	94.91

Title: INITIAL RUN

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WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-475	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.90	95.57
J-476	2,553.00	Zone	Demand	0.03	COMMERCIAL	0.03	2,778.76	97.68
J-477	2,553.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.75
J-478	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.42	96.88
J-479	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.53
J-480	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.53
J-481	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	96.67
J-482	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.96
J-483	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.32
J-484	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.32
J-485	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.32
J-486	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.32
J-487	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.96
J-488	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	97.96
J-489	2,561.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,774.47	92.36
J-490	2,565.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,774.14	90.27
J-491	2,565.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,774.14	90.27
J-492	2,569.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,773.92	88.66
J-493	2,570.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,773.92	88.22
J-494	2,575.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,773.59	85.71
J-495	2,639.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.81	78.88
J-496	2,628.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.80	83.63
J-497	2,628.50	Zone	Demand	31.36	RESIDENTIAL	31.36	2,821.80	83.63
J-498	2,628.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,821.80	83.85
J-499	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.80	83.85
J-500	2,625.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,821.79	84.93
J-501	2,613.50	Zone	Demand	11.55	RESIDENTIAL	11.55	2,821.79	90.12
J-502	2,612.50	Zone	Demand	15.58	IRRIGATION	15.58	2,821.79	90.55
J-503	2,616.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.79	88.82
J-504	2,587.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.60	83.11
J-505	2,587.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,779.60	83.11
J-506	2,584.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.63	84.64
J-507	2,618.00	Zone	Demand	6.83	RESIDENTIAL	6.83	2,779.76	69.99
J-508	2,592.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,779.67	81.20
J-509	2,588.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.67	82.93
J-510	2,594.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.67	80.33
J-511	2,594.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,779.73	80.14
J-512	2,595.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.73	79.92
J-513	2,612.00	Zone	Demand	7.79	RESIDENTIAL	7.79	2,779.76	72.58
J-514	2,601.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.80	77.14
J-515	2,593.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.85	80.63
J-516	2,612.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.76	72.58
J-517	2,589.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.85	82.57
J-518	2,603.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.81	76.50
J-519	2,604.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.81	76.06
J-520	2,604.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.82	75.85
J-521	2,616.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.76	70.63
J-522	2,575.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,760.01	80.04
J-523	2,578.00	Zone	Demand	2.25	Composite	2.25	2,760.01	78.75
J-524	2,574.00	Zone	Demand	16.61	IRRIGATION	16.61	2,759.55	80.28
J-525	2,559.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,774.50	93.02
J-527	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,774.06	87.42

Title: INITIAL RUN

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Haestad Methods Solution Center

Watertown, CT 06795 USA

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-528	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.58	82.02
J-529	2,546.00	Zone	Demand	12.63	RESIDENTIAL	12.63	2,776.00	99.51
J-530	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.07	96.95
J-531	2,579.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.60	86.79
J-532	2,572.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.57	89.59
J-533	2,572.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,779.57	89.81
J-534	2,572.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.56	89.58
J-535	2,572.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.56	89.80
J-536	2,571.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.55	90.23
J-537	2,569.50	Zone	Demand	28.00	RESIDENTIAL	28.00	2,779.55	90.88
J-538	2,571.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.56	90.23
J-539	2,572.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.56	89.80
J-540	2,571.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.57	90.02
J-541	2,572.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,779.57	89.59
J-542	2,572.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,779.58	89.59
J-543	2,553.00	Zone	Demand	6.29	Composite	6.29	2,778.51	97.57
J-544	2,554.00	Zone	Demand	9.30	Composite	9.30	2,778.50	97.13
J-546	2,555.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.50	96.70
J-547	2,558.00	Zone	Demand	3.05	Composite	3.05	2,778.84	95.55
J-548	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.83	95.11
J-549	2,559.50	Zone	Demand	8.05	IRRIGATION	8.05	2,778.82	94.89
J-550	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.82	94.89
J-551	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.82	94.89
J-552	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.83	94.89
J-553	2,557.50	Zone	Demand	24.32	RESIDENTIAL	24.32	2,778.82	95.75
J-554	2,557.50	Zone	Demand	19.46	RESIDENTIAL	19.46	2,778.82	95.75
J-555	2,558.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,778.82	95.32
J-556	2,559.00	Zone	Demand	11.73	Composite	11.73	2,778.82	95.10
J-557	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.83	94.68
J-558	2,561.50	Zone	Demand	11.26	Composite	11.26	2,778.82	94.03
J-559	2,559.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,778.83	95.11
J-560	2,558.50	Zone	Demand	7.78	Composite	7.78	2,778.83	95.32
J-561	2,557.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.83	95.76
J-562	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.84	95.55
J-563	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.84	95.76
J-564	2,557.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.84	95.76
J-565	2,560.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.84	94.68
J-566	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.90	95.36
J-567	2,556.00	Zone	Demand	3.39	COMMERCIAL	3.39	2,778.99	96.48
J-568	2,615.50	Zone	Demand	13.44	RESIDENTIAL	13.44	2,821.79	89.25
J-569	2,595.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.79	98.12
J-570	2,597.50	Zone	Demand	12.32	RESIDENTIAL	12.32	2,821.79	97.04
J-571	2,659.00	Zone	Demand	22.38	RESIDENTIAL	22.38	2,841.73	79.06
J-572	2,643.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,841.76	85.99
J-573	2,643.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,841.76	85.78
J-574	2,644.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,841.77	85.57
J-575	2,643.50	Zone	Demand	7.79	RESIDENTIAL	7.79	2,841.80	85.80
J-576	2,661.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,842.12	78.36
J-577	2,649.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,842.00	83.50
J-578	2,649.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,841.97	83.49
J-579	2,642.00	Zone	Demand	14.59	RESIDENTIAL	14.59	2,842.00	86.53
J-580	2,645.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,842.00	85.23

Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-581	2,643.50	Zone	Demand	0.97	RESIDENTIAL	0.97	2,842.01	85.89
J-582	2,643.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,842.01	85.89
J-583	2,648.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,842.01	83.94
J-584	2,654.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,842.05	81.14
J-585	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,842.05	82.23
J-586	2,650.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,842.05	82.87
J-587	2,652.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,809.73	68.24
J-588	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.16	83.57
J-589	2,576.50	Zone	Demand	0.26	COMMERCIAL	0.26	2,775.92	86.28
J-590	2,574.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.92	87.15
J-591	2,579.50	Zone	Demand	0.36	COMMERCIAL	0.36	2,776.41	85.19
J-592	2,578.00	Zone	Demand	0.55	Composite	0.55	2,776.41	85.84
J-593	2,579.50	Zone	Demand	77.59	IRRIGATION	77.59	2,776.05	85.04
J-594	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.09	85.49
J-595	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.61	85.50
J-596	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.50	85.45
J-597	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.50	85.23
J-598	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.06	85.48
J-599	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.06	86.12
J-600	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.06	86.12
J-601	2,577.00	Zone	Demand	5.64	COMMERCIAL	5.64	2,775.06	85.69
J-602	2,577.50	Zone	Demand	9.84	COMMERCIAL	9.84	2,775.06	85.47
J-603	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.06	86.34
J-604	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.06	85.69
J-605	2,578.00	Zone	Demand	2.87	COMMERCIAL	2.87	2,774.07	84.83
J-606	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,774.07	84.83
J-607	2,572.00	Zone	Demand	2.01	COMMERCIAL	2.01	2,771.71	86.40
J-608	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.71	84.89
J-609	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.71	84.89
J-610	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,770.42	83.68
J-611	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,770.42	83.47
J-612	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,770.22	83.38
J-613	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,770.22	83.38
J-614	2,577.50	Zone	Demand	15.68	Composite	15.68	2,770.08	83.32
J-615	2,578.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,770.08	83.10
J-616	2,580.00	Zone	Demand	15.68	Composite	15.68	2,769.15	81.84
J-617	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.98	94.74
J-618	2,562.00	Zone	Demand	7.84	Composite	7.84	2,781.17	94.82
J-619	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.17	94.82
J-620	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.51	93.46
J-621	2,566.00	Zone	Demand	0.11	COMMERCIAL	0.11	2,782.70	93.75
J-622	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.70	93.54
J-623	2,567.50	Zone	Demand	8.96	Composite	8.96	2,782.70	93.10
J-624	2,567.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.12	93.50
J-625	2,567.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.34	93.60
J-628	2,569.00	Zone	Demand	7.84	Composite	7.84	2,783.20	92.67
J-636	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.74	85.98
J-637	2,558.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,775.97	94.09
J-638	2,559.00	Zone	Demand	15.68	RESIDENTIAL	15.68	2,775.97	93.87
J-639	2,556.00	Zone	Demand	27.74	Composite	27.74	2,775.96	95.16
J-640	2,564.50	Zone	Demand	39.20	RESIDENTIAL	39.20	2,776.00	91.51
J-650	2,610.00	Zone	Demand	22.38	RESIDENTIAL	22.38	2,780.32	73.69

Title: INITIAL RUN

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Haestad Methods Solution Center

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-651	2,553.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,778.81	97.48
J-653	2,627.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,789.83	70.45
J-654	2,682.00	Zone	Demand	21.40	RESIDENTIAL	21.40	2,855.78	75.19
J-655	2,680.00	Zone	Demand	18.48	RESIDENTIAL	18.48	2,855.78	76.05
J-656	2,693.00	Zone	Demand	23.68	RESIDENTIAL	23.68	2,855.77	70.42
J-657	2,563.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,775.63	92.00
J-658	2,598.00	Zone	Demand	0.30	RESIDENTIAL	0.30	2,779.58	78.56
J-659	2,638.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.29	49.45
J-660	2,640.00	Zone	Demand	0.62	COMMERCIAL	0.62	2,752.29	48.58
J-661	2,641.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.29	48.15
J-750	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,858.42	89.31
J-751	2,571.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,764.63	83.78
J-752	2,567.00	Zone	Demand	20.81	COMMERCIAL	20.81	2,780.22	92.25
J-813	2,565.00	Zone	Demand	0.00	Fixed	0.00	2,774.87	90.80
J-814	2,560.50	Zone	Demand	0.00	Fixed	0.00	2,774.47	92.58
J-822	2,615.00	Zone	Demand	0.00	Fixed	0.00	2,779.76	71.28
J-823	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,794.64	68.64
J-824	2,621.00	Zone	Demand	0.00	Fixed	0.00	2,789.95	73.10
J-825	2,609.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,762.82	66.55
J-826	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,776.09	85.27
J-827	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,776.14	85.29
J-828	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.27	82.76
J-829	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.25	82.74
J-830	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.21	82.73
J-831	2,585.00	Zone	Demand	109.76	Fixed	109.76	2,776.21	82.73
J-832	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.20	82.72
J-833	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.20	82.72
J-834	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.19	82.72
J-835	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.20	82.72
J-836	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.20	82.72
J-837	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.20	82.72
J-838	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.20	82.72
J-840	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,776.26	82.75
J-842	2,552.50	Zone	Demand	0.00	Fixed	0.00	2,776.01	96.70
J-844	2,663.30	Zone	Demand	0.68	RESIDENTIAL	0.68	2,831.71	72.86
J-845	2,664.70	Zone	Demand	0.00	Fixed	0.00	2,833.71	73.12
J-846	2,665.90	Zone	Demand	0.00	Fixed	0.00	2,835.53	73.39
J-847	2,661.70	Zone	Demand	2.04	RESIDENTIAL	2.04	2,831.71	73.56
J-848	2,664.70	Zone	Demand	1.37	RESIDENTIAL	1.37	2,833.71	73.12
J-849	2,665.90	Zone	Demand	1.37	RESIDENTIAL	1.37	2,835.53	73.39
J-850	2,567.00	Zone	Demand	0.00	Fixed	0.00	2,783.40	93.63
J-851	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,770.42	84.98
J-852	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,770.42	84.98
J-853	2,575.00	Zone	Demand	0.00	Fixed	0.00	2,770.42	84.55
J-901	2,591.00	Zone	Demand	0.00	Fixed	0.00	2,779.56	81.58
J-906	2,553.50	Zone	Demand	4.26	COMMERCIAL	4.26	2,776.09	96.31
J-917	2,625.00	Zone	Demand	0.00	Fixed	0.00	2,782.14	67.99
J-981	2,640.00	Zone	Demand	0.00	Fixed	0.00	2,740.61	43.53
J-982	2,644.50	Zone	Demand	0.00	Fixed	0.00	2,748.63	45.05

Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-1	370.00	8.0	PVC	Open		296.67	1.89	2,777.53	2,776.90	1.71	0.63
P-2	266.00	6.0	PVC	Open		0.00	0.00	2,777.53	2,777.53	0.00	0.00
P-3	365.00	8.0	PVC	Open		307.42	1.96	2,778.20	2,777.53	1.83	0.67
P-4	357.00	8.0	PVC	Open		198.17	1.26	2,778.49	2,778.20	0.80	0.29
P-5	369.00	8.0	PVC	Open		64.37	0.41	2,778.53	2,778.49	0.10	0.04
P-6	223.00	6.0	PVC	Open		1.16	0.01	2,778.53	2,778.53	0.00	0.00
P-7	358.00	8.0	PVC	Open		65.53	0.42	2,778.56	2,778.53	0.11	0.04
P-8	530.00	8.0	PVC	Open		53.69	0.34	2,778.56	2,778.52	0.07	0.04
P-9	320.00	8.0	PVC	Open		0.00	0.00	2,778.51	2,778.51	0.00	0.00
P-10	680.00	8.0	PVC	Open		94.90	0.61	2,778.70	2,778.56	0.21	0.14
P-11	314.00	8.0	PVC	Open		128.28	0.82	2,778.68	2,778.56	0.36	0.11
P-12	520.00	8.0	PVC	Open		60.60	0.39	2,778.72	2,778.68	0.09	0.05
P-13	660.00	8.0	PVC	Open		67.55	0.43	2,778.80	2,778.72	0.11	0.07
P-14	130.00	6.0	PVC	Open		2.92	0.03	2,778.72	2,778.72	0.00	0.00
P-15	770.00	6.0	PVC	Open		-12.51	0.14	2,778.72	2,778.74	0.02	0.02
P-16	446.00	8.0	PVC	Open		78.39	0.50	2,778.74	2,778.68	0.15	0.06
P-17	380.00	8.0	PVC	Open		102.57	0.65	2,778.83	2,778.74	0.24	0.09
P-18	270.00	8.0	PVC	Open		39.19	0.25	2,778.83	2,778.82	0.04	0.01
P-19	440.00	8.0	PVC	Open		-18.86	0.12	2,778.79	2,778.80	0.01	0.01
P-20	83.00	8.0	PVC	Open		6.09	0.04	2,778.80	2,778.80	0.00	0.00
P-21	72.00	8.0	PVC	Open		-17.68	0.11	2,778.82	2,778.82	0.01	0.00
P-22	572.00	8.0	PVC	Open		-34.39	0.22	2,778.80	2,778.82	0.03	0.02
P-23	195.00	6.0	PVC	Open		47.59	0.54	2,778.87	2,778.82	0.24	0.05
P-24	826.00	6.0	PVC	Open		-12.58	0.14	2,778.87	2,778.89	0.02	0.02
P-25	368.00	8.0	PVC	Open		81.56	0.52	2,778.89	2,778.83	0.16	0.06
P-26	282.00	8.0	PVC	Open		100.12	0.64	2,778.95	2,778.89	0.23	0.06
P-27	228.00	8.0	PVC	Open		115.68	0.74	2,779.02	2,778.95	0.30	0.07
P-28	603.00	8.0	PVC	Open		68.35	0.44	2,779.02	2,778.95	0.11	0.07
P-29	340.00	6.0	PVC	Open		47.65	0.54	2,778.95	2,778.87	0.24	0.08
P-30	560.00	8.0	PVC	Open		-5.13	0.03	2,778.95	2,778.95	0.00	0.00
P-31	249.00	8.0	PVC	Open		148.56	0.95	2,778.95	2,778.83	0.47	0.12
P-32	660.00	8.0	PVC	Open		157.05	1.00	2,779.29	2,778.95	0.52	0.34
P-33	400.00	6.0	PVC	Open		4.57	0.05	2,779.29	2,779.29	0.00	0.00
P-34	171.00	8.0	PVC	Open		164.54	1.05	2,779.39	2,779.29	0.57	0.10
P-35	375.00	8.0	PVC	Open		127.98	0.82	2,779.52	2,779.39	0.36	0.13
P-36	180.00	6.0	PVC	Open		12.48	0.14	2,779.53	2,779.52	0.02	0.00
P-37	318.00	6.0	PVC	Open		11.67	0.13	2,779.53	2,779.52	0.02	0.01
P-38	310.00	6.0	PVC	Open		28.05	0.32	2,779.55	2,779.53	0.09	0.03
P-39	238.00	6.0	PVC	Open		-0.11	0.00	2,779.55	2,779.55	0.00	0.00
P-40	250.00	6.0	Asbesto	Open		-3.01	0.03	2,779.55	2,779.55	0.00	0.00
P-41	164.00	8.0	PVC	Open		-10.22	0.07	2,779.55	2,779.55	0.00	0.00
P-42	64.00	8.0	PVC	Open		84.83	0.54	2,778.82	2,778.81	0.17	0.01
P-43	80.00	8.0	PVC	Open		148.03	0.94	2,779.55	2,779.51	0.47	0.04
P-44	479.00	8.0	PVC	Open		-75.74	0.48	2,779.52	2,779.58	0.14	0.07
P-45	70.00	8.0	PVC	Open		-40.65	0.26	2,779.55	2,779.55	0.05	0.00
P-46	61.00	8.0	PVC	Open		-15.84	0.10	2,778.82	2,778.82	0.01	0.00
P-47	451.00	8.0	PVC	Open		-34.32	0.22	2,779.55	2,779.57	0.03	0.01
P-48	172.00	8.0	PVC	Open		-57.87	0.37	2,779.57	2,779.58	0.09	0.01
P-49	149.00	6.0	PVC	Open		19.66	0.22	2,779.57	2,779.56	0.05	0.01
P-50	390.00	6.0	Asbesto	Open		-11.09	0.13	2,779.55	2,779.56	0.02	0.01
P-51	250.00	6.0	Asbesto	Open		5.64	0.06	2,779.56	2,779.56	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-52	390.00	6.0	Asbestos	Open		-9.72	0.11	2,779.55	2,779.56	0.01	0.01
P-53	261.00	6.0	Asbestos	Open		17.51	0.20	2,779.56	2,779.55	0.04	0.01
P-54	211.00	6.0	Asbestos	Open		3.89	0.04	2,779.55	2,779.55	0.00	0.00
P-55	330.00	6.0	Asbestos	Open		8.76	0.10	2,779.55	2,779.55	0.01	0.00
P-56	352.00	6.0	PVC	Open		-29.37	0.33	2,779.56	2,779.60	0.10	0.04
P-57	330.00	6.0	PVC	Open		33.02	0.37	2,779.60	2,779.55	0.12	0.04
P-58	220.00	6.0	PVC	Open		71.14	0.81	2,779.71	2,779.60	0.50	0.11
P-59	444.00	6.0	PVC	Open		9.73	0.11	2,779.71	2,779.70	0.01	0.01
P-60	31.00	6.0	PVC	Open		85.73	0.97	2,779.73	2,779.71	0.71	0.02
P-61	83.00	6.0	PVC	Open		88.44	1.00	2,779.79	2,779.73	0.74	0.06
P-63	87.00	6.0	Ductile I	Open		435.36	4.94	2,612.55	2,611.00	17.79	1.55
P-64	15.00	6.0	PVC	Open		88.44	1.00	2,779.80	2,779.79	0.75	0.01
P-65	251.00	8.0	PVC	Open		123.15	0.79	2,779.80	2,779.72	0.33	0.08
P-66	334.00	6.0	PVC	Open		2.71	0.03	2,779.73	2,779.73	0.00	0.00
P-67	129.00	8.0	PVC	Open		37.20	0.24	2,779.73	2,779.73	0.04	0.00
P-68	556.00	8.0	PVC	Open		15.07	0.10	2,779.74	2,779.73	0.01	0.00
P-69	387.00	8.0	PVC	Open		38.67	0.25	2,779.75	2,779.74	0.04	0.02
P-71	131.00	8.0	PVC	Open		9.41	0.06	2,779.76	2,779.76	0.00	0.00
P-72	150.00	8.0	PVC	Open		-38.88	0.25	2,779.75	2,779.76	0.04	0.01
P-73	326.00	6.0	PVC	Open		47.58	0.54	2,779.76	2,779.68	0.24	0.08
P-74	570.00	6.0	PVC	Open		22.23	0.25	2,779.72	2,779.68	0.06	0.03
P-75	280.00	8.0	PVC	Open		35.04	0.22	2,779.73	2,779.72	0.03	0.01
P-76	402.00	8.0	PVC	Open		2.08	0.01	2,779.72	2,779.72	0.00	0.00
P-77	150.00	6.0	PVC	Open		119.39	1.35	2,779.72	2,779.52	1.30	0.20
P-78	700.00	6.0	PVC	Open		49.20	0.56	2,779.57	2,779.39	0.25	0.18
P-79	325.00	6.0	PVC	Open		59.07	0.67	2,779.68	2,779.57	0.36	0.12
P-80	360.00	6.0	PVC	Open		-3.75	0.04	2,779.57	2,779.57	0.00	0.00
P-81	158.00	4.0	PVC	Open		4.86	0.12	2,779.57	2,779.56	0.03	0.00
P-82	985.00	6.0	PVC	Open		24.18	0.27	2,779.64	2,779.57	0.07	0.07
P-83	930.00	8.0	PVC	Open		122.47	0.78	2,779.64	2,779.33	0.33	0.31
P-84	550.00	6.0	PVC	Open		8.76	0.10	2,779.33	2,779.32	0.01	0.01
P-85	410.00	8.0	PVC	Open		193.77	1.24	2,779.33	2,779.02	0.77	0.32
P-86	660.00	6.0	PVC	Open		103.40	1.17	2,779.99	2,779.33	1.00	0.66
P-87	130.00	4.0	PVC	Open		4.86	0.12	2,779.99	2,779.99	0.03	0.00
P-88	314.00	4.0	PVC	Open		9.73	0.25	2,779.99	2,779.96	0.10	0.03
P-89	1,283.00	6.0	PVC	Open		137.45	1.56	2,782.16	2,779.99	1.70	2.18
P-90	910.00	6.0	PVC	Open		147.17	1.67	2,782.16	2,780.41	1.93	1.75
P-91	383.00	8.0	PVC	Open		279.79	1.79	2,780.41	2,779.82	1.53	0.59
P-92	300.00	8.0	PVC	Open		97.15	0.62	2,779.82	2,779.76	0.21	0.06
P-93	292.00	8.0	PVC	Open		175.83	1.12	2,779.82	2,779.64	0.64	0.19
P-94	372.00	8.0	PVC	Open		139.44	0.89	2,780.57	2,780.41	0.42	0.16
P-95	150.00	2.0	PVC	Open		4.86	0.50	2,780.57	2,780.44	0.85	0.13
P-96	340.00	8.0	PVC	Open		148.19	0.95	2,780.72	2,780.57	0.47	0.16
P-97	125.00	8.0	PVC	Open		116.34	0.74	2,780.76	2,780.72	0.30	0.04
P-98	158.00	2.0	PVC	Open		4.86	0.50	2,780.76	2,780.63	0.85	0.13
P-99	360.00	8.0	PVC	Open		124.12	0.79	2,780.88	2,780.76	0.34	0.12
P-100	809.00	6.0	PVC	Open		42.55	0.48	2,780.88	2,780.72	0.20	0.16
P-101	95.00	4.0	PVC	Open		2.92	0.07	2,779.76	2,779.76	0.01	0.00
P-102	620.00	8.0	PVC	Open		178.35	1.14	2,781.29	2,780.88	0.66	0.41
P-103	150.00	6.0	PVC	Open		83.85	0.95	2,786.74	2,786.63	0.68	0.10
P-104	980.00	6.0	PVC	Open		148.63	1.69	2,786.74	2,784.81	1.96	1.92

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-105	280.00	4.0	PVC	Open		15.18	0.39	2,784.81	2,784.75	0.22	0.06
P-106	50.00	6.0	PVC	Open		124.71	1.42	2,784.81	2,784.74	1.41	0.07
P-107	233.00	4.0	PVC	Open		5.44	0.14	2,784.75	2,784.74	0.04	0.01
P-108	110.00	4.0	PVC	Open		6.82	0.17	2,784.75	2,784.74	0.05	0.01
P-109	207.00	6.0	PVC	Open		127.23	1.44	2,784.74	2,784.44	1.47	0.30
P-110	300.00	6.0	PVC	Open		302.36	3.43	2,784.44	2,782.16	7.57	2.27
P-111	470.00	6.0	PVC	Open		9.96	0.11	2,782.16	2,782.16	0.02	0.01
P-112	120.00	2.0	PVC	Open		3.89	0.40	2,782.16	2,782.09	0.57	0.07
P-113	124.00	6.0	PVC	Open		4.13	0.05	2,782.16	2,782.16	0.00	0.00
P-114	145.00	6.0	PVC	Open		-0.37	0.00	2,782.16	2,782.16	0.00	0.00
P-115	430.00	6.0	PVC	Open		14.59	0.17	2,782.16	2,782.14	0.03	0.01
P-116	316.00	8.0	PVC	Open		0.00	0.00	2,782.14	2,782.14	0.00	0.00
P-117	250.00	6.0	PVC	Open		18.87	0.21	2,782.17	2,782.16	0.05	0.01
P-118	190.00	4.0	PVC	Open		2.91	0.07	2,782.17	2,782.17	0.01	0.00
P-119	240.00	6.0	PVC	Open		24.69	0.28	2,782.19	2,782.17	0.07	0.02
P-120	621.00	6.0	PVC	Open		17.59	0.20	2,782.19	2,782.16	0.04	0.03
P-121	100.00	4.0	PVC	Open		3.89	0.10	2,782.16	2,782.16	0.02	0.00
P-122	280.00	6.0	PVC	Open		9.12	0.10	2,782.16	2,782.16	0.01	0.00
P-123	140.00	6.0	PVC	Open		3.89	0.04	2,782.16	2,782.16	0.00	0.00
P-124	530.00	6.0	PVC	Open		-1.34	0.02	2,782.16	2,782.16	0.00	0.00
P-125	270.00	6.0	PVC	Open		46.18	0.52	2,782.25	2,782.19	0.23	0.06
P-126	78.00	6.0	PVC	Open		13.62	0.15	2,782.25	2,782.25	0.03	0.00
P-127	610.00	4.0	PVC	Open		10.70	0.27	2,782.25	2,782.17	0.12	0.07
P-128	430.00	8.0	PVC	Open		59.80	0.38	2,782.29	2,782.25	0.09	0.04
P-129	250.00	8.0	PVC	Open		-2.47	0.02	2,782.29	2,782.29	0.00	0.00
P-130	480.00	6.0	PVC	Open		10.70	0.12	2,782.29	2,782.28	0.02	0.01
P-131	100.00	6.0	PVC	Open		2.92	0.03	2,782.28	2,782.28	0.00	0.00
P-132	80.00	6.0	PVC	Open		2.92	0.03	2,782.28	2,782.28	0.00	0.00
P-133	165.00	8.0	PVC	Open		16.02	0.10	2,782.29	2,782.29	0.01	0.00
P-134	270.00	6.0	PVC	Open		5.84	0.07	2,782.29	2,782.29	0.00	0.00
P-135	243.00	8.0	PVC	Open		29.63	0.19	2,782.29	2,782.29	0.03	0.01
P-136	600.00	8.0	PVC	Open		408.75	2.61	2,782.29	2,780.41	3.14	1.88
P-137	1,300.00	8.0	PVC	Open		444.23	2.84	2,787.08	2,782.29	3.68	4.79
P-138	194.00	8.0	PVC	Open		-22.20	0.14	2,787.08	2,787.08	0.02	0.00
P-139	1,200.00	4.0	PVC	Open		73.60	1.88	2,787.08	2,782.29	4.00	4.80
P-140	400.00	8.0	PVC	Open		-95.80	0.61	2,787.08	2,787.17	0.21	0.08
P-141	67.00	8.0	PVC	Open		-282.43	1.80	2,787.17	2,787.27	1.56	0.10
P-142	940.00	6.0	PVC	Open		182.92	2.08	2,787.17	2,784.44	2.91	2.73
P-143	95.00	8.0	PVC	Open		427.86	2.73	2,787.41	2,787.08	3.43	0.33
P-144	700.00	8.0	PVC	Open		465.80	2.97	2,790.23	2,787.41	4.03	2.82
P-145	260.00	8.0	PVC	Open		232.92	1.49	2,789.95	2,789.67	1.08	0.28
P-146	420.00	8.0	PVC	Open		766.23	4.89	2,794.64	2,790.23	10.51	4.42
P-147	656.00	8.0	PVC	Open		32.10	0.20	2,787.41	2,787.39	0.03	0.02
P-148	548.00	6.0	PVC	Open		11.11	0.13	2,787.39	2,787.38	0.02	0.01
P-149	1,112.00	6.0	PVC	Open		7.38	0.08	2,787.39	2,787.38	0.01	0.01
P-150	867.00	12.0	PVC	Open		1,813.97	5.15	2,758.48	2,752.36	7.06	6.12
P-151	601.00	6.0	PVC	Open		2.92	0.03	2,787.38	2,787.38	0.00	0.00
P-152	570.00	8.0	PVC	Open		722.08	4.61	2,786.63	2,781.29	9.37	5.34
P-154	5.00	6.0	Ductile I	Open		69.89	0.79	2,611.00	2,611.00	0.54	0.00
P-155	5.00	6.0	Ductile I	Open		141.69	1.61	2,611.00	2,610.99	2.00	0.01
P-156	5.00	6.0	Ductile I	Open		-0.00	0.00	2,611.00	2,611.00	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-157	20.00	6.0	Ductile I	Open		69.89	0.79	2,779.81	2,779.80	0.52	0.01
P-158	15.00	6.0	Ductile I	Open		141.69	1.61	2,779.83	2,779.80	2.02	0.03
P-159	10.00	6.0	Ductile I	Open		-0.00	0.00	2,779.80	2,779.80	0.00	0.00
P-160	170.00	8.0	PVC	Open		-68.07	0.43	2,778.34	2,778.36	0.11	0.02
P-161	575.00	8.0	PVC	Open		-59.13	0.38	2,778.36	2,778.41	0.09	0.05
P-162	797.00	6.0	PVC	Open		-22.55	0.26	2,778.36	2,778.41	0.06	0.05
P-163	505.00	6.0	PVC	Open		-93.36	1.06	2,778.41	2,778.83	0.82	0.42
P-164	420.00	8.0	PVC	Open		640.18	4.09	2,789.75	2,786.63	7.43	3.12
P-165	150.00	8.0	PVC	Open		49.64	0.32	2,789.75	2,789.74	0.07	0.01
P-166	507.00	8.0	PVC	Open		404.27	2.58	2,780.41	2,778.85	3.08	1.56
P-167	1.00	96.0	PVC	Open		107.38	0.00	2,534.00	2,534.00	0.00	0.00
P-169	48.00	8.0	PVC	Open		107.39	0.69	2,779.56	2,779.55	0.26	0.01
P-170	364.00	4.0	PVC	Open		3.89	0.10	2,778.81	2,778.80	0.02	0.01
P-171	880.00	8.0	PVC	Open		689.81	4.40	2,797.30	2,789.75	8.58	7.55
P-172	340.00	8.0	PVC	Open		-17.83	0.11	2,778.82	2,778.82	0.01	0.00
P-173	160.00	6.0	PVC	Open		0.15	0.00	2,778.82	2,778.82	0.00	0.00
P-174	460.00	8.0	PVC	Open		7.78	0.05	2,778.95	2,778.95	0.00	0.00
P-175	260.00	8.0	PVC	Open		28.94	0.18	2,779.74	2,779.73	0.02	0.01
P-176	80.00	2.0	PVC	Open		2.92	0.30	2,779.74	2,779.71	0.34	0.03
P-177	170.00	8.0	PVC	Open		42.04	0.27	2,778.83	2,778.82	0.05	0.01
P-178	420.00	6.0	PVC	Open		3.02	0.03	2,778.81	2,778.81	0.00	0.00
P-179	393.00	8.0	PVC	Open		20.74	0.13	2,778.82	2,778.81	0.01	0.01
P-180	120.00	8.0	PVC	Open		8.96	0.06	2,778.81	2,778.81	0.00	0.00
P-181	394.00	8.0	PVC	Open		3.73	0.02	2,778.82	2,778.82	0.00	0.00
P-182	225.00	8.0	PVC	Open		1.98	0.01	2,778.82	2,778.82	0.00	0.00
P-183	442.00	8.0	PVC	Open		-40.71	0.26	2,778.82	2,778.84	0.05	0.02
P-185	258.00	8.0	PVC	Open		284.89	1.82	2,789.67	2,789.26	1.58	0.41
P-186	1,300.00	6.0	PVC	Open		114.72	1.30	2,789.26	2,787.69	1.21	1.57
P-187	700.00	6.0	PVC	Open		159.59	1.81	2,789.26	2,787.69	2.25	1.57
P-188	800.00	8.0	PVC	Open		245.11	1.56	2,787.69	2,786.74	1.19	0.95
P-189	158.00	8.0	PVC	Open		300.43	1.92	2,790.23	2,789.95	1.75	0.28
P-190	700.00	8.0	PVC	Open		44.34	0.28	2,789.71	2,789.67	0.05	0.04
P-191	260.00	8.0	PVC	Open		78.23	0.50	2,789.74	2,789.71	0.14	0.04
P-192	700.00	6.0	PVC	Open		20.27	0.23	2,789.71	2,789.67	0.05	0.04
P-193	698.00	6.0	PVC	Open		33.46	0.38	2,789.83	2,789.74	0.13	0.09
P-194	448.00	8.0	PVC	Open		30.16	0.19	2,776.90	2,776.89	0.03	0.01
P-195	480.00	8.0	PVC	Open		8.97	0.06	2,776.89	2,776.89	0.00	0.00
P-196	800.00	8.0	PVC	Open		7.57	0.05	2,776.89	2,776.89	0.00	0.00
P-197	242.00	8.0	PVC	Open		0.00	0.00	2,776.89	2,776.89	0.00	0.00
P-198	371.00	8.0	PVC	Open		261.82	1.67	2,776.90	2,776.40	1.35	0.50
P-199	846.00	8.0	PVC	Open		25.09	0.16	2,776.40	2,776.39	0.02	0.02
P-200	1,095.00	8.0	PVC	Open		-73.25	0.47	2,776.02	2,776.16	0.13	0.14
P-201	221.00	8.0	PVC	Open		233.71	1.49	2,776.40	2,776.16	1.09	0.24
P-202	273.00	8.0	PVC	Open		93.89	0.60	2,776.16	2,776.10	0.20	0.06
P-203	523.00	8.0	PVC	Open		65.45	0.42	2,776.16	2,776.11	0.11	0.05
P-204	573.00	8.0	PVC	Open		-28.89	0.18	2,776.01	2,776.02	0.02	0.01
P-205	257.00	8.0	PVC	Open		4.88	0.03	2,776.11	2,776.10	0.00	0.00
P-206	616.00	8.0	PVC	Open		53.51	0.34	2,776.11	2,776.06	0.07	0.05
P-207	173.00	6.0	PVC	Open		3.89	0.04	2,776.06	2,776.06	0.00	0.00
P-208	796.00	8.0	PVC	Open		34.06	0.22	2,776.06	2,776.03	0.03	0.03
P-209	188.00	6.0	PVC	Open		4.86	0.06	2,776.03	2,776.03	0.00	0.00

Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-210	310.00	8.0	PVC	Open		22.50	0.14	2,776.03	2,776.03	0.02	0.00
P-211	158.00	6.0	PVC	Open		4.86	0.06	2,776.03	2,776.03	0.00	0.00
P-212	275.00	8.0	PVC	Open		16.27	0.10	2,776.03	2,776.03	0.01	0.00
P-213	272.00	6.0	PVC	Open		13.97	0.16	2,776.03	2,776.02	0.03	0.01
P-214	270.00	8.0	PVC	Open		-4.22	0.03	2,776.03	2,776.03	0.00	0.00
P-215	438.00	8.0	PVC	Open		8.07	0.05	2,776.03	2,776.03	0.00	0.00
P-216	49.00	6.0	PVC	Open		1.95	0.02	2,776.03	2,776.03	0.00	0.00
P-217	129.00	6.0	PVC	Open		3.89	0.04	2,776.03	2,776.03	0.00	0.00
P-218	168.00	8.0	PVC	Open		-19.10	0.12	2,776.03	2,776.03	0.01	0.00
P-219	462.00	8.0	PVC	Open		10.70	0.07	2,776.06	2,776.05	0.00	0.00
P-220	225.00	8.0	PVC	Open		97.80	0.62	2,776.10	2,776.06	0.22	0.05
P-221	276.00	8.0	PVC	Open		63.24	0.40	2,776.06	2,776.03	0.10	0.03
P-223	460.00	8.0	PVC	Open		-48.43	0.31	2,776.00	2,776.03	0.06	0.03
P-224	1,737.00	12.0	PVC	Open		-85.13	0.24	2,776.03	2,776.07	0.02	0.04
P-225	309.00	8.0	PVC	Open		57.36	0.37	2,776.08	2,776.06	0.08	0.03
P-226	502.00	8.0	PVC	Open		10.69	0.07	2,776.06	2,776.05	0.00	0.00
P-227	237.00	4.0	PVC	Open		6.81	0.17	2,776.06	2,776.04	0.05	0.01
P-228	299.00	8.0	PVC	Open		32.09	0.20	2,776.06	2,776.05	0.03	0.01
P-229	498.00	6.0	PVC	Open		7.78	0.09	2,776.05	2,776.04	0.01	0.00
P-230	317.00	4.0	PVC	Open		7.78	0.20	2,776.05	2,776.03	0.07	0.02
P-231	327.00	8.0	PVC	Open		12.63	0.08	2,776.05	2,776.04	0.01	0.00
P-232	487.00	12.0	PVC	Open		-92.73	0.26	2,776.06	2,776.07	0.03	0.01
P-233	464.00	6.0	PVC	Open		5.84	0.07	2,776.06	2,776.06	0.00	0.00
P-234	494.00	6.0	PVC	Open		5.84	0.07	2,776.06	2,776.06	0.00	0.00
P-235	332.00	12.0	PVC	Open		-70.36	0.20	2,776.05	2,776.06	0.02	0.01
P-236	458.00	8.0	PVC	Open		4.86	0.03	2,776.05	2,776.05	0.00	0.00
P-237	298.00	6.0	PVC	Open		2.22	0.03	2,776.05	2,776.05	0.00	0.00
P-238	363.00	12.0	PVC	Open		-59.40	0.17	2,776.05	2,776.05	0.01	0.00
P-239	465.00	8.0	PVC	Open		-49.67	0.32	2,776.02	2,776.05	0.06	0.03
P-240	513.00	12.0	PVC	Open		4.86	0.01	2,776.05	2,776.05	0.00	0.00
P-241	654.00	8.0	PVC	Open		-17.27	0.11	2,778.69	2,778.70	0.01	0.01
P-242	880.00	12.0	PVC	Open		99.05	0.28	2,779.66	2,779.63	0.03	0.03
P-243	980.00	12.0	PVC	Open		274.87	0.78	2,779.85	2,779.66	0.20	0.19
P-244	759.00	12.0	PVC	Open		91.65	0.26	2,779.58	2,779.56	0.03	0.02
P-245	100.00	12.0	PVC	Open		0.00	0.00	2,779.56	2,779.56	0.00	0.00
P-246	430.00	8.0	PVC	Open		86.95	0.56	2,779.56	2,779.49	0.18	0.08
P-247	712.00	8.0	PVC	Open		36.39	0.23	2,779.49	2,779.46	0.04	0.03
P-248	760.00	8.0	PVC	Open		47.65	0.30	2,779.49	2,779.44	0.06	0.05
P-249	50.00	8.0	PVC	Open		0.00	0.00	2,779.44	2,779.44	0.00	0.00
P-250	263.00	8.0	PVC	Open		25.68	0.16	2,779.44	2,779.43	0.02	0.01
P-251	50.00	8.0	PVC	Open		0.00	0.00	2,779.44	2,779.44	0.00	0.00
P-252	800.00	8.0	PVC	Open		30.55	0.19	2,779.46	2,779.44	0.03	0.02
P-253	655.00	12.0	PVC	Open		73.95	0.21	2,779.66	2,779.65	0.02	0.01
P-254	370.00	8.0	PVC	Open		73.94	0.47	2,779.65	2,779.60	0.13	0.05
P-255	1,670.00	12.0	PVC	Open		0.00	0.00	2,779.65	2,779.65	0.00	0.00
P-256	40.00	8.0	PVC	Open		0.00	0.00	2,779.65	2,779.65	0.00	0.00
P-257	650.00	12.0	PVC	Open		0.00	0.00	2,779.65	2,779.65	0.00	0.00
P-258	40.00	8.0	PVC	Open		0.00	0.00	2,779.65	2,779.65	0.00	0.00
P-259	1,020.00	12.0	PVC	Open		0.00	0.00	2,779.65	2,779.65	0.00	0.00
P-260	480.00	8.0	PVC	Open		386.35	2.47	2,778.85	2,777.50	2.82	1.35
P-261	167.00	8.0	PVC	Open		607.21	3.88	2,777.50	2,776.38	6.71	1.12

Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-262	395.00	8.0	PVC	Open		371.87	2.37	2,776.38	2,775.34	2.62	1.04
P-263	527.00	8.0	PVC	Open		176.48	1.13	2,775.34	2,775.00	0.65	0.34
P-264	477.00	8.0	PVC	Open		182.74	1.17	2,775.34	2,775.01	0.69	0.33
P-265	341.00	8.0	PVC	Open		34.83	0.22	2,775.01	2,775.00	0.03	0.01
P-266	261.00	8.0	PVC	Open		203.52	1.30	2,775.00	2,774.78	0.84	0.22
P-267	136.00	8.0	PVC	Open		276.38	1.76	2,774.78	2,774.58	1.50	0.20
P-268	604.00	8.0	PVC	Open		83.56	0.53	2,774.88	2,774.78	0.16	0.10
P-269	355.00	8.0	PVC	Open		131.36	0.84	2,775.01	2,774.88	0.37	0.13
P-270	776.00	8.0	PVC	Open		217.83	1.39	2,776.38	2,775.63	0.96	0.74
P-271	810.00	8.0	PVC	Open		-228.69	1.46	2,777.50	2,778.34	1.05	0.85
P-272	547.00	8.0	PVC	Open		9.73	0.06	2,778.34	2,778.34	0.00	0.00
P-273	618.00	8.0	PVC	Open		-175.22	1.12	2,778.34	2,778.74	0.64	0.39
P-274	332.00	8.0	PVC	Open		-180.28	1.15	2,778.74	2,778.96	0.67	0.22
P-275	700.00	8.0	PVC	Open		61.52	0.39	2,778.96	2,778.89	0.09	0.07
P-276	83.00	8.0	PVC	Open		-242.29	1.55	2,778.96	2,779.06	1.17	0.10
P-277	419.00	8.0	PVC	Open		22.51	0.14	2,779.06	2,779.05	0.02	0.01
P-278	620.00	12.0	PVC	Open		0.00	0.00	2,778.74	2,778.74	0.00	0.00
P-280	813.00	8.0	PVC	Open		69.44	0.44	2,779.43	2,779.34	0.12	0.10
P-281	287.00	12.0	PVC	Open		1,324.18	3.76	2,784.50	2,783.40	3.84	1.10
P-282	797.00	12.0	PVC	Open		1,299.51	3.69	2,780.22	2,777.26	3.70	2.95
P-283	320.00	8.0	PVC	Open		2.66	0.02	2,777.26	2,777.26	0.00	0.00
P-284	388.00	12.0	PVC	Open		1,295.94	3.68	2,777.26	2,775.84	3.68	1.43
P-285	1,528.00	12.0	PVC	Open		285.37	0.81	2,776.16	2,775.84	0.21	0.32
P-286	358.00	12.0	PVC	Open		1,555.27	4.41	2,775.84	2,773.96	5.24	1.88
P-287	419.00	8.0	PVC	Open		344.52	2.20	2,773.96	2,773.01	2.27	0.95
P-288	341.00	8.0	PVC	Open		333.82	2.13	2,773.01	2,772.28	2.14	0.73
P-289	193.00	8.0	PVC	Open		3.89	0.02	2,773.01	2,773.01	0.00	0.00
P-290	267.00	12.0	PVC	Open		1,205.89	3.42	2,773.96	2,773.10	3.21	0.86
P-291	640.00	8.0	PVC	Open		154.00	0.98	2,772.60	2,772.28	0.50	0.32
P-292	460.00	12.0	PVC	Open		778.98	2.21	2,772.60	2,771.96	1.39	0.64
P-293	302.00	8.0	PVC	Open		229.13	1.46	2,772.28	2,771.96	1.05	0.32
P-294	213.00	12.0	PVC	Open		999.35	2.83	2,771.96	2,771.48	2.24	0.48
P-295	511.00	12.0	PVC	Open		1,050.70	2.98	2,771.48	2,770.23	2.46	1.26
P-296	305.00	12.0	PVC	Open		54.55	0.15	2,771.49	2,771.48	0.01	0.00
P-297	650.00	8.0	PVC	Open		0.00	0.00	2,771.49	2,771.49	0.00	0.00
P-298	516.00	12.0	PVC	Open		804.37	2.28	2,771.49	2,770.72	1.48	0.76
P-299	19.00	12.0	PVC	Open		605.29	1.72	2,770.72	2,770.71	0.86	0.02
P-300	1,334.00	8.0	PVC	Open		199.08	1.27	2,770.72	2,769.65	0.81	1.08
P-301	241.00	8.0	PVC	Open		785.69	5.01	2,797.30	2,794.64	11.04	2.66
P-302	911.00	12.0	PVC	Open		1,475.50	4.19	2,801.62	2,797.30	4.73	4.31
P-303	156.00	8.0	PVC	Open		296.49	1.89	2,801.88	2,801.62	1.71	0.27
P-304	239.00	8.0	PVC	Open		79.61	0.51	2,801.92	2,801.88	0.15	0.04
P-305	176.00	8.0	PVC	Open		11.67	0.07	2,801.92	2,801.92	0.01	0.00
P-306	140.00	6.0	PVC	Open		4.86	0.06	2,801.92	2,801.92	0.00	0.00
P-307	283.00	8.0	PVC	Open		4.86	0.03	2,801.92	2,801.92	0.00	0.00
P-308	265.00	8.0	PVC	Open		94.20	0.60	2,801.97	2,801.92	0.20	0.05
P-309	205.00	6.0	PVC	Open		5.85	0.07	2,801.97	2,801.97	0.00	0.00
P-310	977.00	8.0	PVC	Open		109.78	0.70	2,802.23	2,801.97	0.27	0.26
P-311	142.00	6.0	PVC	Open		4.86	0.06	2,802.23	2,802.23	0.00	0.00
P-312	850.00	8.0	PVC	Open		131.18	0.84	2,802.55	2,802.23	0.37	0.32
P-313	666.00	8.0	PVC	Open		223.69	1.43	2,802.55	2,801.88	1.00	0.67

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-314	402.00	8.0	PVC	Open		369.46	2.36	2,803.59	2,802.55	2.59	1.04
P-315	547.00	8.0	PVC	Open		256.49	1.64	2,804.30	2,803.59	1.30	0.71
P-316	401.00	8.0	PVC	Open		121.73	0.78	2,803.72	2,803.59	0.33	0.13
P-317	742.00	8.0	PVC	Open		55.61	0.35	2,803.78	2,803.72	0.08	0.06
P-318	343.00	6.0	PVC	Open		6.81	0.08	2,803.78	2,803.78	0.01	0.00
P-319	273.00	8.0	PVC	Open		71.18	0.45	2,803.81	2,803.78	0.12	0.03
P-320	288.00	8.0	PVC	Open		89.02	0.57	2,803.81	2,803.76	0.18	0.05
P-321	290.00	8.0	PVC	Open		58.22	0.37	2,803.84	2,803.81	0.09	0.02
P-322	133.00	8.0	PVC	Open		10.08	0.06	2,803.84	2,803.84	0.00	0.00
P-323	270.00	8.0	PVC	Open		77.79	0.50	2,803.76	2,803.72	0.14	0.04
P-324	472.00	6.0	PVC	Open		8.76	0.10	2,803.76	2,803.76	0.01	0.01
P-325	298.00	8.0	PVC	Open		215.04	1.37	2,804.30	2,804.03	0.93	0.28
P-326	747.00	8.0	PVC	Open		112.67	0.72	2,804.03	2,803.81	0.28	0.21
P-327	1,154.00	8.0	PVC	Open		82.90	0.53	2,804.03	2,803.84	0.16	0.19
P-328	160.00	8.0	PVC	Open		475.99	3.04	2,804.98	2,804.30	4.20	0.67
P-329	1,094.00	12.0	PVC	Open		1,179.01	3.34	2,804.98	2,801.62	3.07	3.36
P-330	804.00	12.0	PVC	Open		1,655.00	4.69	2,809.73	2,804.98	5.91	4.75
P-331	474.00	8.0	PVC	Open		251.61	1.61	2,821.18	2,820.58	1.25	0.59
P-332	221.00	6.0	PVC	Open		4.24	0.05	2,821.18	2,821.18	0.00	0.00
P-333	260.00	8.0	PVC	Open		267.52	1.71	2,821.54	2,821.18	1.41	0.37
P-334	213.00	6.0	PVC	Open		0.00	0.00	2,821.54	2,821.54	0.00	0.00
P-335	138.00	8.0	PVC	Open		3.36	0.02	2,821.54	2,821.54	0.00	0.00
P-336	267.00	8.0	PVC	Open		275.75	1.76	2,821.94	2,821.54	1.49	0.40
P-337	592.00	12.0	PVC	Open		182.45	0.52	2,821.94	2,821.88	0.09	0.06
P-338	260.00	12.0	PVC	Open		468.89	1.33	2,822.08	2,821.94	0.53	0.14
P-339	281.00	8.0	PVC	Open		18.48	0.12	2,822.08	2,822.08	0.01	0.00
P-340	449.00	12.0	PVC	Open		494.19	1.40	2,822.34	2,822.08	0.59	0.26
P-341	174.00	6.0	PVC	Open		4.86	0.06	2,822.08	2,822.08	0.00	0.00
P-342	286.00	8.0	PVC	Open		8.76	0.06	2,822.08	2,822.07	0.00	0.00
P-343	402.00	12.0	PVC	Open		1,417.42	4.02	2,822.34	2,820.58	4.38	1.76
P-344	1,192.00	12.0	PVC	Open		1,917.11	5.44	2,831.71	2,822.34	7.86	9.37
P-345	504.00	12.0	PVC	Open		608.38	1.73	2,842.14	2,841.70	0.87	0.44
P-346	261.00	12.0	PVC	Open		-176.39	0.50	2,842.12	2,842.14	0.09	0.02
P-347	228.00	8.0	PVC	Open		-75.30	0.48	2,842.09	2,842.12	0.13	0.03
P-348	532.00	12.0	PVC	Open		1,930.61	5.48	2,841.59	2,837.35	7.97	4.24
P-349	172.00	12.0	PVC	Open		1,272.32	3.61	2,842.20	2,841.59	3.56	0.61
P-350	180.00	8.0	PVC	Open		0.97	0.01	2,842.20	2,842.20	0.00	0.00
P-351	641.00	12.0	PVC	Open		1,280.10	3.63	2,844.51	2,842.20	3.60	2.31
P-352	215.00	8.0	PVC	Open		784.77	5.01	2,844.51	2,842.14	11.01	2.37
P-353	228.00	12.0	PVC	Open		2,074.60	5.89	2,846.60	2,844.51	9.16	2.09
P-354	388.00	8.0	PVC	Open		7.78	0.05	2,846.60	2,846.60	0.00	0.00
P-355	278.00	12.0	PVC	Open		2,082.38	5.91	2,849.16	2,846.60	9.23	2.57
P-356	862.00	8.0	PVC	Open		385.47	2.46	2,851.59	2,849.16	2.81	2.42
P-357	384.00	12.0	PVC	Open		1,711.51	4.86	2,851.59	2,849.16	6.31	2.42
P-358	445.00	12.0	PVC	Open		2,112.54	5.99	2,855.81	2,851.59	9.49	4.22
P-359	285.00	12.0	PVC	Open		127.77	0.36	2,855.81	2,855.79	0.05	0.01
P-360	433.00	12.0	PVC	Open		-803.20	2.28	2,855.81	2,856.45	1.47	0.64
P-361	110.00	12.0	PVC	Open		658.29	1.87	2,841.70	2,841.59	1.01	0.11
P-362	701.00	12.0	PVC	Open		1,447.82	4.11	2,859.01	2,855.81	4.56	3.20
P-363	278.00	12.0	PVC	Open		1,825.23	5.18	2,860.99	2,859.01	7.14	1.99
P-364	1,033.00	8.0	PVC	Open		360.87	2.30	2,859.01	2,856.45	2.48	2.56

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-365	213.00	8.0	PVC	Open		-717.09	4.58	2,856.45	2,858.42	9.25	1.97
P-366	15.00	8.0	PVC	Open		-0.00	0.00	2,858.42	2,858.42	0.00	0.00
P-367	928.00	8.0	PVC	Open		717.09	4.58	2,867.00	2,858.42	9.25	8.58
P-370	40.00	8.0	PVC	Open		17.92	0.11	2,778.85	2,778.85	0.01	0.00
P-371	40.00	8.0	PVC	Open		7.84	0.05	2,777.50	2,777.50	0.00	0.00
P-372	360.00	12.0	PVC	Open		536.92	1.52	2,781.29	2,781.04	0.69	0.25
P-373	479.00	8.0	PVC	Open		-89.66	0.57	2,778.90	2,778.99	0.19	0.09
P-374	102.00	12.0	PVC	Open		-177.85	0.50	2,776.07	2,776.08	0.09	0.01
P-375	90.00	12.0	PVC	Open		-235.22	0.67	2,776.08	2,776.09	0.15	0.01
P-376	789.00	12.0	PVC	Open		1,466.26	4.16	2,864.68	2,860.99	4.68	3.69
P-377	1,321.00	8.0	PVC	Open		384.26	2.45	2,864.68	2,860.99	2.79	3.69
P-378	203.00	12.0	PVC	Open		1,869.00	5.30	2,866.20	2,864.68	7.48	1.52
P-379	775.00	12.0	PVC	Open		1,813.97	5.15	2,752.36	2,746.89	7.06	5.47
P-380	558.00	12.0	PVC	Open		0.00	0.00	2,821.81	2,821.81	0.00	0.00
P-381	890.00	12.0	PVC	Open		1,813.97	5.15	2,746.89	2,740.61	7.06	6.28
P-383	107.00	12.0	PVC	Open		1,869.00	5.30	2,867.00	2,866.20	7.48	0.80
P-384	154.00	8.0	PVC	Open		263.18	1.68	2,773.10	2,772.89	1.36	0.21
P-385	378.00	6.0	PVC	Open		4.86	0.06	2,772.89	2,772.89	0.00	0.00
P-386	257.00	8.0	PVC	Open		249.56	1.59	2,772.89	2,772.58	1.23	0.32
P-387	333.00	8.0	PVC	Open		6.81	0.04	2,772.58	2,772.58	0.00	0.00
P-388	270.00	8.0	PVC	Open		234.97	1.50	2,772.58	2,772.28	1.10	0.30
P-389	185.00	8.0	PVC	Open		0.00	0.00	2,772.28	2,772.28	0.00	0.00
P-390	419.00	8.0	PVC	Open		476.15	3.04	2,772.28	2,770.52	4.20	1.76
P-391	250.00	8.0	PVC	Open		88.99	0.57	2,770.52	2,770.47	0.18	0.05
P-392	535.00	8.0	PVC	Open		-124.53	0.79	2,770.47	2,770.65	0.34	0.18
P-393	113.00	8.0	PVC	Open		-424.37	2.71	2,770.65	2,771.03	3.37	0.38
P-394	377.00	8.0	PVC	Open		289.14	1.85	2,770.65	2,770.04	1.63	0.61
P-395	474.00	8.0	PVC	Open		212.49	1.36	2,770.47	2,770.04	0.91	0.43
P-396	250.00	8.0	PVC	Open		493.85	3.15	2,770.04	2,768.91	4.51	1.13
P-397	598.00	8.0	PVC	Open		376.46	2.40	2,770.52	2,768.91	2.69	1.61
P-398	270.00	12.0	PVC	Open		1,029.29	2.92	2,769.55	2,768.91	2.37	0.64
P-399	202.00	8.0	PVC	Open		3.89	0.02	2,769.55	2,769.55	0.00	0.00
P-400	280.00	12.0	PVC	Open		1,039.02	2.95	2,770.23	2,769.55	2.41	0.67
P-401	233.00	8.0	PVC	Open		3.89	0.02	2,770.23	2,770.23	0.00	0.00
P-402	310.00	12.0	PVC	Open		1,891.82	5.37	2,768.91	2,766.54	7.66	2.37
P-403	377.00	8.0	PVC	Open		4.86	0.03	2,766.54	2,766.54	0.00	0.00
P-404	252.00	12.0	PVC	Open		1,880.14	5.33	2,766.54	2,764.63	7.57	1.91
P-405	213.00	8.0	PVC	Open		4.86	0.03	2,764.63	2,764.63	0.00	0.00
P-406	535.00	12.0	PVC	Open		1,868.47	5.30	2,764.63	2,760.63	7.48	4.00
P-407	160.00	8.0	PVC	Open		457.73	2.92	2,760.63	2,760.01	3.90	0.62
P-408	308.00	12.0	PVC	Open		1,401.01	3.97	2,760.63	2,759.31	4.28	1.32
P-409	9.00	8.0	PVC	Open		0.00	0.00	2,759.31	2,759.31	0.00	0.00
P-410	265.00	8.0	PVC	Open		26.09	0.17	2,821.83	2,821.83	0.02	0.01
P-411	136.00	8.0	PVC	Open		13.44	0.09	2,821.83	2,821.82	0.01	0.00
P-412	330.00	8.0	PVC	Open		7.78	0.05	2,821.83	2,821.82	0.00	0.00
P-413	942.00	12.0	PVC	Open		139.14	0.39	2,821.88	2,821.83	0.06	0.05
P-414	216.00	8.0	PVC	Open		27.74	0.18	2,821.88	2,821.88	0.02	0.00
P-415	433.00	8.0	PVC	Open		8.76	0.06	2,821.88	2,821.88	0.00	0.00
P-416	265.00	8.0	PVC	Open		11.20	0.07	2,821.88	2,821.88	0.00	0.00
P-417	392.00	12.0	PVC	Open		73.35	0.21	2,855.79	2,855.79	0.02	0.01
P-418	493.00	12.0	PVC	Open		56.81	0.16	2,855.79	2,855.78	0.01	0.01

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-419	263.00	6.0	PVC	Open		6.81	0.08	2,855.79	2,855.79	0.01	0.00
P-420	336.00	6.0	PVC	Open		5.84	0.07	2,855.79	2,855.79	0.00	0.00
P-421	907.00	8.0	PVC	Open		21.10	0.13	2,855.79	2,855.78	0.01	0.01
P-422	377.00	12.0	PVC	Open		47.99	0.14	2,855.78	2,855.78	0.01	0.00
P-423	770.00	8.0	PVC	Open		22.62	0.14	2,855.79	2,855.78	0.02	0.01
P-424	20.00	12.0	PVC	Open		0.00	0.00	2,837.35	2,837.35	0.00	0.00
P-425	1,980.00	12.0	PVC	Open		0.00	0.00	2,837.01	2,837.01	0.00	0.00
P-426	209.00	12.0	PVC	Open		0.00	0.00	2,837.01	2,837.01	0.00	0.00
P-427	207.00	12.0	PVC	Open		0.00	0.00	2,837.01	2,837.01	0.00	0.00
P-428	251.00	12.0	PVC	Open		942.70	2.67	2,773.10	2,772.60	2.00	0.50
P-429	281.00	4.0	PVC	Open		12.63	0.32	2,776.04	2,776.00	0.16	0.04
P-430	370.00	8.0	PVC	Open		-110.75	0.71	2,778.20	2,778.30	0.27	0.10
P-431	54.00	6.0	PVC	Open		0.96	0.01	2,778.30	2,778.30	0.00	0.00
P-432	55.00	6.0	PVC	Open		3.02	0.03	2,778.30	2,778.30	0.00	0.00
P-433	506.00	8.0	PVC	Open		-120.54	0.77	2,778.30	2,778.46	0.32	0.16
P-434	155.00	12.0	PVC	Open		-63.31	0.18	2,778.52	2,778.52	0.01	0.00
P-435	467.00	8.0	PVC	Open		27.14	0.17	2,778.71	2,778.70	0.02	0.01
P-436	360.00	8.0	PVC	Open		-80.63	0.51	2,778.46	2,778.52	0.15	0.06
P-437	760.00	8.0	PVC	Open		41.07	0.26	2,778.50	2,778.46	0.05	0.03
P-438	348.00	8.0	PVC	Open		-35.78	0.23	2,778.50	2,778.51	0.04	0.01
P-439	51.00	12.0	PVC	Open		-45.31	0.13	2,778.51	2,778.51	0.01	0.00
P-440	18.00	12.0	PVC	Open		0.00	0.00	2,778.51	2,778.51	0.00	0.00
P-441	642.00	12.0	PVC	Open		-47.51	0.13	2,778.51	2,778.52	0.01	0.01
P-442	350.00	12.0	PVC	Open		15.08	0.04	2,778.52	2,778.52	0.00	0.00
P-443	336.00	12.0	PVC	Open		-156.34	0.44	2,778.52	2,778.54	0.07	0.02
P-444	829.00	12.0	PVC	Open		-156.34	0.44	2,778.54	2,778.60	0.07	0.06
P-445	120.00	8.0	PVC	Open		223.78	1.43	2,779.51	2,779.39	1.01	0.12
P-446	470.00	8.0	PVC	Open		1.62	0.01	2,779.39	2,779.39	0.00	0.00
P-447	265.00	12.0	PVC	Open		-156.34	0.44	2,778.60	2,778.62	0.07	0.02
P-448	337.00	8.0	PVC	Open		-101.80	0.65	2,778.99	2,779.07	0.23	0.08
P-449	39.00	8.0	PVC	Open		5.63	0.04	2,778.62	2,778.62	0.00	0.00
P-450	705.00	12.0	PVC	Open		-161.98	0.46	2,778.62	2,778.67	0.08	0.05
P-451	197.00	12.0	PVC	Open		-179.75	0.51	2,778.67	2,778.69	0.09	0.02
P-452	250.00	12.0	PVC	Open		0.00	0.00	2,778.52	2,778.52	0.00	0.00
P-453	546.00	8.0	PVC	Open		22.51	0.14	2,779.05	2,779.04	0.02	0.01
P-454	526.00	8.0	PVC	Open		12.14	0.08	2,778.99	2,778.99	0.01	0.00
P-455	730.00	8.0	PVC	Open		59.71	0.38	2,778.89	2,778.83	0.09	0.06
P-456	236.00	8.0	PVC	Open		-102.74	0.66	2,779.07	2,779.13	0.24	0.06
P-457	235.00	12.0	PVC	Open		7.99	0.02	2,779.13	2,779.13	0.00	0.00
P-458	311.00	12.0	PVC	Open		7.77	0.02	2,779.13	2,779.13	0.00	0.00
P-459	314.00	12.0	PVC	Open		0.00	0.00	2,779.13	2,779.13	0.00	0.00
P-460	331.00	6.0	PVC	Open		0.00	0.00	2,779.13	2,779.13	0.00	0.00
P-461	399.00	12.0	PVC	Open		-110.73	0.31	2,779.13	2,779.14	0.04	0.02
P-462	322.00	12.0	PVC	Open		214.03	0.61	2,779.14	2,779.10	0.13	0.04
P-463	711.00	12.0	PVC	Open		212.96	0.60	2,779.10	2,779.02	0.12	0.09
P-464	355.00	12.0	PVC	Open		324.77	0.92	2,779.24	2,779.14	0.27	0.10
P-465	158.00	8.0	PVC	Open		142.15	0.91	2,779.24	2,779.17	0.43	0.07
P-466	432.00	8.0	PVC	Open		-63.47	0.41	2,779.13	2,779.17	0.10	0.04
P-467	475.00	8.0	PVC	Open		-60.20	0.38	2,779.13	2,779.17	0.09	0.04
P-468	316.00	8.0	PVC	Open		-110.24	0.70	2,779.04	2,779.13	0.27	0.09
P-469	347.00	12.0	PVC	Open		379.60	1.08	2,779.45	2,779.32	0.36	0.12

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-470	178.00	12.0	PVC	Open		466.92	1.32	2,779.54	2,779.45	0.53	0.09
P-471	660.00	12.0	PVC	Open		469.39	1.33	2,779.89	2,779.54	0.53	0.35
P-472	224.00	12.0	PVC	Open		469.81	1.33	2,780.01	2,779.89	0.54	0.12
P-473	296.00	12.0	PVC	Open		-738.27	2.09	2,780.01	2,780.38	1.26	0.37
P-474	153.00	12.0	PVC	Open		466.92	1.32	2,779.32	2,779.24	0.53	0.08
P-476	304.00	8.0	PVC	Open		0.00	0.00	2,778.74	2,778.74	0.00	0.00
P-477	692.00	8.0	PVC	Open		-264.80	1.69	2,779.06	2,780.01	1.38	0.95
P-478	13.00	8.0	PVC	Open		0.34	0.00	2,779.02	2,779.02	0.00	0.00
P-479	84.00	8.0	PVC	Open		-62.96	0.40	2,778.83	2,778.84	0.10	0.01
P-480	200.00	12.0	PVC	Open		536.92	1.52	2,781.04	2,780.91	0.69	0.14
P-481	550.00	12.0	PVC	Open		526.22	1.49	2,780.91	2,780.54	0.66	0.36
P-482	703.00	8.0	PVC	Open		120.56	0.77	2,780.54	2,780.32	0.32	0.22
P-483	960.00	12.0	PVC	Open		398.01	1.13	2,780.54	2,780.16	0.39	0.38
P-484	265.00	12.0	PVC	Open		483.54	1.37	2,780.16	2,780.01	0.57	0.15
P-485	447.00	12.0	PVC	Open		23.56	0.07	2,855.78	2,855.78	0.00	0.00
P-486	160.00	12.0	PVC	Open		19.68	0.06	2,855.78	2,855.78	0.00	0.00
P-487	159.00	12.0	PVC	Open		0.00	0.00	2,855.78	2,855.78	0.00	0.00
P-488	981.00	8.0	PVC	Open		12.75	0.08	2,855.78	2,855.77	0.01	0.01
P-489	135.00	12.0	PVC	Open		0.00	0.00	2,855.78	2,855.78	0.00	0.00
P-490	338.00	8.0	PVC	Open		141.11	0.90	2,774.58	2,774.43	0.43	0.14
P-491	317.00	8.0	PVC	Open		10.93	0.07	2,774.43	2,774.43	0.00	0.00
P-492	1,010.00	8.0	PVC	Open		141.34	0.90	2,774.43	2,774.00	0.43	0.43
P-493	314.00	8.0	PVC	Open		256.18	1.64	2,774.00	2,773.59	1.30	0.41
P-494	159.00	8.0	PVC	Open		127.49	0.81	2,774.06	2,774.00	0.35	0.06
P-495	527.00	8.0	PVC	Open		127.49	0.81	2,774.24	2,774.06	0.35	0.19
P-496	134.00	12.0	PVC	Open		900.66	2.55	2,776.74	2,776.49	1.83	0.25
P-498	1.00	96.0	PVC	Open		-239.48	0.01	2,493.50	2,493.50	0.00	0.00
P-499	356.00	12.0	PVC	Open		468.33	1.33	2,776.41	2,776.22	0.53	0.19
P-500	259.00	12.0	PVC	Open		461.16	1.31	2,776.22	2,776.09	0.52	0.13
P-501	152.00	12.0	PVC	Open		351.22	1.00	2,776.14	2,776.09	0.31	0.05
P-503	30.00	8.0	PVC	Open		0.00	0.00	2,776.17	2,776.17	0.00	0.00
P-504	120.00	8.0	PVC	Open		56.71	0.36	2,776.18	2,776.17	0.08	0.01
P-505	30.00	8.0	PVC	Open		0.00	0.00	2,776.18	2,776.18	0.00	0.00
P-507	27.00	8.0	PVC	Open		0.00	0.00	2,776.19	2,776.19	0.00	0.00
P-508	197.00	8.0	PVC	Open		-12.49	0.08	2,776.19	2,776.19	0.01	0.00
P-509	785.00	8.0	PVC	Open		-10.54	0.07	2,776.19	2,776.19	0.00	0.00
P-510	222.00	8.0	PVC	Open		1.95	0.01	2,776.19	2,776.19	0.00	0.00
P-511	683.00	8.0	PVC	Open		-4.71	0.03	2,776.19	2,776.19	0.00	0.00
P-512	819.00	8.0	PVC	Open		1.95	0.01	2,776.19	2,776.19	0.00	0.00
P-513	283.00	8.0	PVC	Open		-0.82	0.01	2,776.19	2,776.19	0.00	0.00
P-514	136.00	6.0	PVC	Open		0.00	0.00	2,776.22	2,776.22	0.00	0.00
P-515	560.00	6.0	PVC	Open		0.00	0.00	2,774.24	2,774.24	0.00	0.00
P-516	19.00	8.0	PVC	Open		-282.43	1.80	2,787.27	2,787.30	1.55	0.03
P-517	0.25	96.0	Steel	Open		1,336.93	0.06	2,419.00	2,419.00	0.00	0.00
P-518	250.00	8.0	PVC	Open		24.64	0.16	2,778.82	2,778.82	0.02	0.00
P-519	673.00	8.0	PVC	Open		208.96	1.33	2,779.39	2,778.80	0.88	0.60
P-520	32.00	8.0	PVC	Open		-75.74	0.48	2,779.51	2,779.52	0.14	0.00
P-521	769.00	8.0	PVC	Open		136.55	0.87	2,778.80	2,778.49	0.40	0.31
P-522	105.00	8.0	PVC	Open		-9.72	0.06	2,778.69	2,778.69	0.00	0.00
P-523	305.00	12.0	PVC	Open		171.76	0.49	2,778.72	2,778.69	0.08	0.03
P-524	94.00	6.0	PVC	Open		27.25	0.31	2,778.72	2,778.71	0.09	0.01

Title: INITIAL RUN

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-525	232.00	12.0	PVC	Open		199.73	0.57	2,778.74	2,778.72	0.11	0.03
P-526	294.00	12.0	PVC	Open		153.51	0.44	2,778.76	2,778.74	0.07	0.02
P-527	248.00	8.0	PVC	Open		1.28	0.01	2,778.76	2,778.76	0.00	0.00
P-528	83.00	8.0	PVC	Open		1.28	0.01	2,778.76	2,778.76	0.00	0.00
P-529	115.00	12.0	PVC	Open		154.79	0.44	2,778.77	2,778.76	0.07	0.01
P-530	384.00	12.0	PVC	Open		154.79	0.44	2,778.80	2,778.77	0.07	0.03
P-531	153.00	12.0	PVC	Open		154.79	0.44	2,778.81	2,778.80	0.07	0.01
P-532	216.00	12.0	PVC	Open		154.79	0.44	2,778.82	2,778.81	0.07	0.01
P-533	169.00	12.0	PVC	Open		154.91	0.44	2,778.83	2,778.82	0.07	0.01
P-534	163.00	12.0	PVC	Open		154.91	0.44	2,778.85	2,778.83	0.07	0.01
P-535	222.00	12.0	PVC	Open		154.91	0.44	2,778.86	2,778.85	0.07	0.02
P-536	395.00	12.0	PVC	Open		156.75	0.44	2,778.89	2,778.86	0.07	0.03
P-537	322.00	8.0	PVC	Open		55.86	0.36	2,778.89	2,778.86	0.08	0.03
P-538	574.00	8.0	PVC	Open		55.86	0.36	2,778.86	2,778.82	0.08	0.05
P-539	315.00	8.0	PVC	Open		55.62	0.36	2,778.82	2,778.79	0.08	0.02
P-540	306.00	8.0	PVC	Open		54.95	0.35	2,778.79	2,778.77	0.08	0.02
P-541	359.00	8.0	PVC	Open		54.95	0.35	2,778.77	2,778.74	0.08	0.03
P-542	145.00	8.0	PVC	Open		0.67	0.00	2,778.79	2,778.79	0.00	0.00
P-543	289.00	8.0	PVC	Open		0.00	0.00	2,778.79	2,778.79	0.00	0.00
P-544	387.00	8.0	PVC	Open		0.37	0.00	2,778.79	2,778.79	0.00	0.00
P-545	57.00	12.0	PVC	Open		0.00	0.00	2,778.77	2,778.77	0.00	0.00
P-546	50.00	8.0	PVC	Open		0.66	0.00	2,778.79	2,778.79	0.00	0.00
P-547	329.00	8.0	PVC	Open		0.29	0.00	2,778.79	2,778.79	0.00	0.00
P-548	284.00	8.0	PVC	Open		0.03	0.00	2,778.79	2,778.79	0.00	0.00
P-549	284.00	8.0	PVC	Open		0.26	0.00	2,778.79	2,778.79	0.00	0.00
P-550	210.00	8.0	PVC	Open		0.17	0.00	2,778.79	2,778.79	0.00	0.00
P-551	171.00	8.0	PVC	Open		0.01	0.00	2,778.79	2,778.79	0.00	0.00
P-552	269.00	8.0	PVC	Open		87.32	0.56	2,779.37	2,779.32	0.18	0.05
P-553	161.00	8.0	PVC	Open		87.32	0.56	2,779.45	2,779.42	0.18	0.03
P-554	90.00	8.0	PVC	Open		0.00	0.00	2,778.86	2,778.86	0.00	0.00
P-555	63.00	12.0	PVC	Open		212.62	0.60	2,778.90	2,778.89	0.12	0.01
P-556	252.00	8.0	PVC	Open		0.03	0.00	2,778.76	2,778.76	0.00	0.00
P-557	256.00	12.0	PVC	Open		212.62	0.60	2,778.93	2,778.90	0.12	0.03
P-558	702.00	12.0	PVC	Open		212.62	0.60	2,779.02	2,778.93	0.12	0.09
P-559	110.00	12.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-560	275.00	8.0	PVC	Open		87.32	0.56	2,779.42	2,779.37	0.18	0.05
P-561	436.00	12.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-562	79.00	8.0	PVC	Open		0.00	0.00	2,779.37	2,779.37	0.00	0.00
P-563	442.00	12.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-564	68.00	8.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-565	42.00	12.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-566	86.00	8.0	PVC	Open		0.00	0.00	2,779.42	2,779.42	0.00	0.00
P-567	433.00	12.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-568	64.00	12.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-569	222.00	8.0	PVC	Open		3.89	0.02	2,774.47	2,774.47	0.00	0.00
P-570	307.00	8.0	PVC	Open		218.79	1.40	2,774.43	2,774.14	0.96	0.30
P-571	220.00	8.0	PVC	Open		4.86	0.03	2,774.14	2,774.14	0.00	0.00
P-572	247.00	8.0	PVC	Open		210.03	1.34	2,774.14	2,773.92	0.89	0.22
P-573	254.00	6.0	PVC	Open		5.84	0.07	2,773.92	2,773.92	0.00	0.00
P-574	400.00	8.0	PVC	Open		199.33	1.27	2,773.92	2,773.59	0.81	0.32
P-575	287.00	8.0	PVC	Open		6.81	0.04	2,773.59	2,773.59	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-576	606.00	12.0	PVC	Open		106.63	0.30	2,821.83	2,821.81	0.04	0.02
P-577	326.00	12.0	PVC	Open		106.63	0.30	2,821.81	2,821.80	0.04	0.01
P-578	16.00	8.0	PVC	Open		31.36	0.20	2,821.80	2,821.80	0.03	0.00
P-579	125.00	12.0	PVC	Open		75.27	0.21	2,821.80	2,821.80	0.02	0.00
P-580	48.00	8.0	PVC	Open		0.00	0.00	2,821.80	2,821.80	0.00	0.00
P-581	307.00	12.0	PVC	Open		48.81	0.14	2,821.80	2,821.79	0.01	0.00
P-582	1,252.00	8.0	PVC	Open		13.80	0.09	2,821.80	2,821.79	0.01	0.01
P-583	906.00	8.0	PVC	Open		13.33	0.09	2,821.79	2,821.79	0.01	0.01
P-584	151.00	8.0	PVC	Open		15.58	0.10	2,821.79	2,821.79	0.01	0.00
P-585	259.00	12.0	PVC	Open		25.76	0.07	2,821.79	2,821.79	0.00	0.00
P-586	471.00	12.0	PVC	Open		12.32	0.03	2,821.79	2,821.79	0.00	0.00
P-588	320.00	8.0	PVC	Open		23.05	0.15	2,779.76	2,779.76	0.02	0.01
P-589	481.00	8.0	PVC	Open		59.65	0.38	2,779.67	2,779.63	0.09	0.04
P-590	480.00	8.0	PVC	Open		6.81	0.04	2,779.67	2,779.67	0.00	0.00
P-591	500.00	8.0	PVC	Open		7.78	0.05	2,779.67	2,779.67	0.00	0.00
P-592	334.00	8.0	PVC	Open		85.92	0.55	2,779.73	2,779.67	0.17	0.06
P-593	250.00	6.0	PVC	Open		5.84	0.07	2,779.73	2,779.73	0.00	0.00
P-594	832.00	8.0	PVC	Open		-12.09	0.08	2,779.73	2,779.74	0.01	0.00
P-595	350.00	8.0	PVC	Open		92.31	0.59	2,779.80	2,779.73	0.20	0.07
P-596	325.00	8.0	PVC	Open		6.83	0.04	2,779.76	2,779.76	0.00	0.00
P-597	223.00	8.0	PVC	Open		5.84	0.04	2,779.85	2,779.85	0.00	0.00
P-598	460.00	8.0	PVC	Open		48.56	0.31	2,779.76	2,779.74	0.06	0.03
P-599	540.00	12.0	PVC	Open		344.47	0.98	2,780.01	2,779.85	0.30	0.16
P-600	660.00	8.0	PVC	Open		55.99	0.36	2,779.85	2,779.80	0.08	0.05
P-601	160.00	8.0	PVC	Open		42.16	0.27	2,779.81	2,779.80	0.05	0.01
P-602	120.00	6.0	PVC	Open		3.89	0.04	2,779.81	2,779.81	0.00	0.00
P-603	200.00	8.0	PVC	Open		48.97	0.31	2,779.82	2,779.81	0.06	0.01
P-604	375.00	8.0	PVC	Open		79.40	0.51	2,779.82	2,779.76	0.15	0.06
P-605	500.00	8.0	PVC	Open		134.21	0.86	2,780.01	2,779.82	0.39	0.19
P-606	466.00	8.0	PVC	Open		2.25	0.01	2,760.01	2,760.01	0.00	0.00
P-607	121.00	8.0	PVC	Open		448.67	2.86	2,760.01	2,759.55	3.75	0.45
P-608	308.00	8.0	PVC	Open		432.06	2.76	2,759.55	2,758.48	3.49	1.08
P-609	198.00	12.0	PVC	Open		1,389.76	3.94	2,759.31	2,758.48	4.22	0.83
P-610	199.00	8.0	PVC	Open		135.27	0.86	2,774.58	2,774.50	0.39	0.08
P-611	673.00	8.0	PVC	Open		132.35	0.84	2,774.50	2,774.24	0.38	0.26
P-612	91.00	8.0	PVC	Open		0.00	0.00	2,774.06	2,774.06	0.00	0.00
P-613	354.00	8.0	PVC	Open		25.08	0.16	2,779.58	2,779.58	0.02	0.01
P-614	739.00	12.0	PVC	Open		0.00	0.00	2,776.07	2,776.07	0.00	0.00
P-615	878.00	12.0	PVC	Open		0.00	0.00	2,776.07	2,776.07	0.00	0.00
P-616	642.00	12.0	PVC	Open		0.00	0.00	2,776.07	2,776.07	0.00	0.00
P-617	35.00	8.0	PVC	Open		3.21	0.02	2,783.40	2,783.40	0.00	0.00
P-618	246.00	8.0	PVC	Open		0.00	0.00	2,779.07	2,779.07	0.00	0.00
P-619	179.00	8.0	PVC	Open		39.52	0.25	2,778.83	2,778.82	0.04	0.01
P-620	215.00	6.0	PVC	Open		3.89	0.04	2,779.60	2,779.60	0.00	0.00
P-621	780.00	8.0	PVC	Open		32.35	0.21	2,779.60	2,779.57	0.03	0.02
P-622	123.00	6.0	PVC	Open		1.95	0.02	2,779.57	2,779.57	0.00	0.00
P-623	286.00	6.0	PVC	Open		22.62	0.26	2,779.57	2,779.56	0.06	0.02
P-624	160.00	6.0	PVC	Open		2.92	0.03	2,779.56	2,779.56	0.00	0.00
P-625	660.00	8.0	PVC	Open		11.92	0.08	2,779.56	2,779.55	0.01	0.00
P-626	225.00	8.0	PVC	Open		28.00	0.18	2,779.55	2,779.55	0.02	0.01
P-627	357.00	8.0	PVC	Open		20.95	0.13	2,779.56	2,779.55	0.01	0.00

Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-628	114.00	6.0	PVC	Open		2.92	0.03	2,779.56	2,779.56	0.00	0.00
P-629	395.00	8.0	PVC	Open		26.78	0.17	2,779.57	2,779.56	0.02	0.01
P-630	97.00	6.0	PVC	Open		1.95	0.02	2,779.57	2,779.57	0.00	0.00
P-631	305.00	8.0	PVC	Open		34.57	0.22	2,779.58	2,779.57	0.03	0.01
P-632	1,280.00	8.0	PVC	Open		23.11	0.15	2,779.60	2,779.58	0.02	0.02
P-633	380.00	8.0	PVC	Open		1.95	0.01	2,779.46	2,779.46	0.00	0.00
P-634	316.00	8.0	PVC	Open		47.67	0.30	2,778.52	2,778.51	0.06	0.02
P-635	230.00	8.0	PVC	Open		27.42	0.17	2,778.51	2,778.50	0.02	0.01
P-636	60.00	8.0	PVC	Open		24.30	0.16	2,778.50	2,778.50	0.02	0.00
P-637	602.00	8.0	PVC	Open		6.18	0.04	2,778.50	2,778.50	0.00	0.00
P-638	650.00	8.0	PVC	Open		13.96	0.09	2,778.51	2,778.50	0.01	0.00
P-639	346.00	8.0	PVC	Open		-89.66	0.57	2,778.84	2,778.90	0.19	0.06
P-640	269.00	8.0	PVC	Open		45.90	0.29	2,778.84	2,778.83	0.06	0.01
P-641	215.00	8.0	PVC	Open		26.32	0.17	2,778.83	2,778.82	0.02	0.00
P-642	245.00	8.0	PVC	Open		4.60	0.03	2,778.82	2,778.82	0.00	0.00
P-643	325.00	8.0	PVC	Open		-9.14	0.06	2,778.82	2,778.82	0.00	0.00
P-644	190.00	8.0	PVC	Open		-28.36	0.18	2,778.82	2,778.83	0.02	0.00
P-645	503.00	8.0	PVC	Open		19.57	0.12	2,778.83	2,778.82	0.01	0.01
P-646	268.00	8.0	PVC	Open		8.93	0.06	2,778.82	2,778.82	0.00	0.00
P-647	349.00	8.0	PVC	Open		3.21	0.02	2,778.82	2,778.82	0.00	0.00
P-648	172.00	8.0	PVC	Open		11.73	0.07	2,778.82	2,778.82	0.01	0.00
P-649	299.00	8.0	PVC	Open		19.22	0.12	2,778.82	2,778.82	0.01	0.00
P-650	355.00	8.0	PVC	Open		13.74	0.09	2,778.82	2,778.82	0.01	0.00
P-651	265.00	8.0	PVC	Open		13.67	0.09	2,778.82	2,778.82	0.01	0.00
P-652	260.00	8.0	PVC	Open		7.25	0.05	2,778.83	2,778.83	0.00	0.00
P-653	432.00	8.0	PVC	Open		11.26	0.07	2,778.83	2,778.82	0.01	0.00
P-654	153.00	8.0	PVC	Open		-4.02	0.03	2,778.83	2,778.83	0.00	0.00
P-655	154.00	8.0	PVC	Open		35.61	0.23	2,778.83	2,778.83	0.04	0.01
P-656	96.00	8.0	PVC	Open		70.76	0.45	2,778.84	2,778.83	0.12	0.01
P-657	191.00	8.0	PVC	Open		9.05	0.06	2,778.84	2,778.84	0.00	0.00
P-658	46.00	8.0	PVC	Open		-70.74	0.45	2,778.84	2,778.84	0.12	0.01
P-659	352.00	8.0	PVC	Open		79.79	0.51	2,778.90	2,778.84	0.15	0.05
P-660	566.00	8.0	PVC	Open		61.71	0.39	2,778.90	2,778.84	0.09	0.05
P-661	219.00	8.0	PVC	Open		141.50	0.90	2,778.99	2,778.90	0.43	0.09
P-662	175.00	8.0	PVC	Open		3.89	0.02	2,778.84	2,778.84	0.00	0.00
P-663	197.00	8.0	PVC	Open		7.78	0.05	2,778.83	2,778.83	0.00	0.00
P-664	259.00	8.0	PVC	Open		27.36	0.17	2,778.83	2,778.83	0.02	0.01
P-665	637.00	8.0	PVC	Open		-88.45	0.56	2,842.00	2,842.12	0.18	0.12
P-666	120.00	8.0	PVC	Open		109.27	0.70	2,842.00	2,841.97	0.27	0.03
P-667	1,504.00	8.0	PVC	Open		4.07	0.03	2,842.00	2,842.00	0.00	0.00
P-668	167.00	6.0	PVC	Open		4.86	0.06	2,842.00	2,842.00	0.00	0.00
P-669	251.00	8.0	PVC	Open		23.52	0.15	2,842.01	2,842.00	0.02	0.00
P-670	104.00	6.0	PVC	Open		3.89	0.04	2,842.01	2,842.01	0.00	0.00
P-671	231.00	8.0	PVC	Open		28.39	0.18	2,842.01	2,842.01	0.02	0.01
P-672	341.00	8.0	PVC	Open		33.29	0.21	2,842.01	2,842.00	0.03	0.01
P-673	337.00	8.0	PVC	Open		65.57	0.42	2,842.05	2,842.01	0.11	0.04
P-674	285.00	8.0	PVC	Open		5.84	0.04	2,842.05	2,842.05	0.00	0.00
P-675	199.00	6.0	PVC	Open		5.84	0.07	2,842.05	2,842.05	0.00	0.00
P-676	283.00	8.0	PVC	Open		75.30	0.48	2,842.09	2,842.05	0.14	0.04
P-677	397.00	8.0	PVC	Open		49.91	0.32	2,841.73	2,841.70	0.06	0.03
P-678	865.00	8.0	PVC	Open		35.33	0.23	2,841.76	2,841.73	0.03	0.03

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-679	123.00	8.0	PVC	Open		0.00	0.00	2,841.76	2,841.76	0.00	0.00
P-680	231.00	8.0	PVC	Open		47.98	0.31	2,841.77	2,841.76	0.06	0.01
P-681	142.00	8.0	PVC	Open		94.66	0.60	2,841.80	2,841.77	0.20	0.03
P-682	1,166.00	8.0	PVC	Open		36.96	0.24	2,841.77	2,841.73	0.04	0.04
P-683	818.00	8.0	PVC	Open		0.00	0.00	2,821.54	2,821.54	0.00	0.00
P-684	325.00	12.0	PVC	Open		1,662.78	4.72	2,811.66	2,809.73	5.96	1.94
P-685	51.00	8.0	PVC	Open		13.44	0.09	2,821.79	2,821.79	0.01	0.00
P-686	53.00	8.0	PVC	Open		12.32	0.08	2,821.79	2,821.79	0.00	0.00
P-687	22.00	6.0	PVC	Open		431.42	4.90	2,776.49	2,776.16	15.04	0.33
P-688	146.00	12.0	PVC	Open		469.24	1.33	2,776.49	2,776.41	0.54	0.08
P-689	70.00	12.0	PVC	Open		461.16	1.31	2,776.09	2,776.05	0.52	0.04
P-691	524.00	8.0	PVC	Open		146.05	0.93	2,776.16	2,775.92	0.45	0.24
P-692	113.00	6.0	PVC	Open		0.00	0.00	2,775.92	2,775.92	0.00	0.00
P-693	166.00	6.0	PVC	Open		0.55	0.01	2,776.41	2,776.41	0.00	0.00
P-694	689.00	8.0	PVC	Open		145.79	0.93	2,775.92	2,775.61	0.45	0.31
P-695	356.00	12.0	PVC	Open		734.78	2.08	2,776.05	2,775.61	1.25	0.44
P-696	63.00	12.0	PVC	Open		880.58	2.50	2,775.61	2,775.50	1.76	0.11
P-697	126.00	6.0	PVC	Open		0.00	0.00	2,775.50	2,775.50	0.00	0.00
P-698	248.00	12.0	PVC	Open		880.57	2.50	2,775.50	2,775.06	1.76	0.44
P-699	173.00	8.0	PVC	Open		15.48	0.10	2,775.06	2,775.06	0.01	0.00
P-700	11.00	8.0	PVC	Open		0.00	0.00	2,775.06	2,775.06	0.00	0.00
P-701	280.00	8.0	PVC	Open		15.48	0.10	2,775.06	2,775.06	0.01	0.00
P-702	156.00	8.0	PVC	Open		9.84	0.06	2,775.06	2,775.06	0.00	0.00
P-703	299.00	8.0	PVC	Open		0.00	0.00	2,775.06	2,775.06	0.00	0.00
P-704	279.00	8.0	PVC	Open		0.00	0.00	2,775.06	2,775.06	0.00	0.00
P-705	582.00	12.0	PVC	Open		865.09	2.45	2,775.06	2,774.07	1.70	0.99
P-706	10.00	6.0	PVC	Open		0.00	0.00	2,774.07	2,774.07	0.00	0.00
P-707	1,401.00	12.0	PVC	Open		862.22	2.45	2,774.07	2,771.71	1.69	2.36
P-708	201.00	8.0	PVC	Open		0.00	0.00	2,771.71	2,771.71	0.00	0.00
P-709	14.00	8.0	PVC	Open		0.00	0.00	2,771.71	2,771.71	0.00	0.00
P-710	132.00	12.0	PVC	Open		860.21	2.44	2,771.71	2,771.49	1.68	0.22
P-711	335.00	12.0	PVC	Open		605.29	1.72	2,770.71	2,770.42	0.86	0.29
P-712	323.00	12.0	PVC	Open		0.00	0.00	2,770.42	2,770.42	0.00	0.00
P-713	228.00	12.0	PVC	Open		605.29	1.72	2,770.42	2,770.22	0.86	0.20
P-714	8.00	12.0	PVC	Open		0.00	0.00	2,770.22	2,770.22	0.00	0.00
P-715	163.00	12.0	PVC	Open		605.29	1.72	2,770.22	2,770.08	0.86	0.14
P-716	160.00	8.0	PVC	Open		0.00	0.00	2,770.08	2,770.08	0.00	0.00
P-718	620.00	8.0	PVC	Open		198.82	1.27	2,769.65	2,769.15	0.81	0.50
P-719	471.00	12.0	PVC	Open		-738.27	2.09	2,780.38	2,780.98	1.26	0.59
P-720	153.00	12.0	PVC	Open		-738.27	2.09	2,780.98	2,781.17	1.26	0.19
P-721	14.00	12.0	PVC	Open		0.00	0.00	2,781.17	2,781.17	0.00	0.00
P-723	141.00	12.0	PVC	Open		-746.12	2.12	2,782.51	2,782.70	1.28	0.18
P-724	320.00	12.0	PVC	Open		-755.19	2.14	2,782.70	2,783.12	1.31	0.42
P-725	502.00	12.0	PVC	Open		8.96	0.03	2,782.70	2,782.70	0.00	0.00
P-726	214.00	12.0	PVC	Open		8.96	0.03	2,782.70	2,782.70	0.00	0.00
P-727	372.00	8.0	PVC	Open		57.04	0.36	2,776.00	2,775.97	0.08	0.03
P-728	156.00	8.0	PVC	Open		15.68	0.10	2,775.97	2,775.97	0.01	0.00
P-729	708.00	8.0	PVC	Open		27.74	0.18	2,775.97	2,775.96	0.02	0.02
P-730	797.00	8.0	PVC	Open		-23.93	0.15	2,776.01	2,776.02	0.02	0.01
P-731	160.00	8.0	PVC	Open		-39.20	0.25	2,776.00	2,776.01	0.04	0.01
P-732	48.00	12.0	PVC	Open		0.00	0.00	2,776.74	2,776.74	0.00	0.00

Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-733	425.00	8.0	PVC	Open		94.92	0.61	2,778.79	2,778.70	0.21	0.09
P-735	62.00	12.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-736	65.00	12.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-737	33.00	8.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-738	136.00	8.0	PVC	Open		-132.74	0.85	2,778.99	2,779.04	0.38	0.05
P-739	392.00	12.0	PVC	Open		124.98	0.35	2,779.60	2,779.58	0.05	0.02
P-740	14.00	8.0	PVC	Open		33.72	0.22	2,779.60	2,779.60	0.03	0.00
P-741	414.00	12.0	PVC	Open		158.70	0.45	2,779.63	2,779.60	0.07	0.03
P-742	275.00	8.0	PVC	Open		-8.63	0.06	2,779.58	2,779.58	0.00	0.00
P-743	120.00	8.0	PVC	Open		78.99	0.50	2,778.81	2,778.79	0.15	0.02
P-744	43.00	12.0	PVC	Open		1,930.61	5.48	2,837.35	2,837.01	7.97	0.34
P-745	171.00	12.0	PVC	Open		-755.19	2.14	2,783.12	2,783.34	1.31	0.22
P-747	1,566.00	12.0	PVC	Open		1,374.71	3.90	2,783.20	2,776.74	4.13	6.46
P-749	50.00	96.0	PVC	Open		1,022.82	0.05	2,422.00	2,422.00	0.00	0.00
P-751	37.00	8.0	PVC	Open		0.00	0.00	2,776.74	2,776.74	0.00	0.00
P-752	42.00	8.0	PVC	Open		0.00	0.00	2,776.74	2,776.74	0.00	0.00
P-753	697.00	8.0	PVC	Open		98.18	0.63	2,780.32	2,780.16	0.22	0.15
P-754	420.00	6.0	PVC	Open		9.62	0.11	2,778.82	2,778.81	0.01	0.01
P-755	452.00	6.0	PVC	Open		50.00	0.57	2,789.95	2,789.83	0.26	0.12
P-756	895.00	8.0	PVC	Open		0.30	0.00	2,855.78	2,855.78	0.00	0.00
P-757	777.00	8.0	PVC	Open		4.14	0.03	2,855.78	2,855.78	0.00	0.00
P-758	967.00	8.0	PVC	Open		10.93	0.07	2,855.78	2,855.77	0.00	0.00
P-759	920.00	8.0	PVC	Open		201.29	1.28	2,775.63	2,774.87	0.83	0.76
P-760	2,830.00	12.0	PVC	Open		91.95	0.26	2,779.66	2,779.58	0.03	0.08
P-762	30.00	8.0	PVC	Open		0.00	0.00	2,752.29	2,752.29	0.00	0.00
P-763	833.00	12.0	PVC	Open		1,320.32	3.75	2,783.40	2,780.22	3.82	3.18
P-764	330.00	8.0	PVC	Open		772.12	4.93	2,752.29	2,748.77	10.67	3.52
P-765	140.00	6.0	Steel	Open		435.36	4.94	2,543.00	2,541.14	13.29	1.86
P-766	2.00	12.0	PVC	Open		1,662.78	4.72	2,820.58	2,820.57	5.98	0.01
P-767	356.00	8.0	PVC	Open		772.75	4.93	2,756.10	2,752.29	10.69	3.81
P-768	239.00	12.0	PVC	Open		0.00	0.00	2,746.89	2,746.89	0.00	0.00
P-769	2.00	12.0	PVC	Open		0.00	0.00	2,784.50	2,784.50	0.00	0.00
P-844	254.00	12.0	PVC	Open		1,919.84	5.45	2,833.71	2,831.71	7.88	2.00
P-845	230.00	12.0	PVC	Open		1,921.21	5.45	2,835.53	2,833.71	7.89	1.81
P-846	188.00	12.0	PVC	Open		1,922.57	5.45	2,837.01	2,835.53	7.90	1.49
P-847	383.00	8.0	PVC	Open		2.04	0.01	2,831.71	2,831.71	0.00	0.00
P-848	176.00	8.0	PVC	Open		1.37	0.01	2,833.71	2,833.71	0.00	0.00
P-849	168.00	8.0	PVC	Open		1.37	0.01	2,835.53	2,835.53	0.00	0.00
P-900	587.00	12.0	PVC	Open		2,586.10	7.34	2,875.26	2,867.00	14.08	8.26
P-901	2.00	8.0	Steel	Open		107.39	0.69	2,779.56	2,779.56	0.24	0.00
P-904	143.00	12.0	PVC	Open		1,336.93	3.79	2,785.06	2,784.50	3.91	0.56
P-906	60.00	12.0	PVC	Open		-239.48	0.68	2,776.09	2,776.10	0.15	0.01
P-907	1,798.00	8.0	PVC	Open		1,022.82	6.53	2,816.34	2,783.20	18.43	33.14
P-950	171.00	8.0	PVC	Open		43.76	0.28	2,779.44	2,779.43	0.05	0.01
P-954	23.00	64.0	PVC	Open		-282.43	0.03	2,574.50	2,574.50	0.00	0.00
P-958	76.00	8.0	PVC	Open		-40.10	0.26	2,774.87	2,774.88	0.04	0.00
P-959	345.00	8.0	PVC	Open		241.39	1.54	2,774.87	2,774.47	1.16	0.40
P-960	37.00	8.0	PVC	Open		237.50	1.52	2,774.47	2,774.43	1.12	0.04
P-964	1,139.00	12.0	PVC	Open		589.60	1.67	2,770.08	2,769.15	0.82	0.94
P-965	21.00	12.0	PVC	Open		0.00	0.00	2,775.84	2,775.84	0.00	0.00
P-968	1,673.00	8.0	PVC	Open		0.62	0.00	2,752.29	2,752.29	0.00	0.00

Scenario: 2010
Fire Flow Analysis
Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-971	601.00	6.0	PVC	Open		6.59	0.07	2,779.76	2,779.75	0.01	0.00
P-972	79.00	6.0	PVC	Open		2.81	0.03	2,779.76	2,779.76	0.00	0.00
P-973	180.00	8.0	PVC	Open		9.41	0.06	2,779.76	2,779.76	0.00	0.00
P-974	904.00	8.0	PVC	Open		11.67	0.07	2,794.64	2,794.64	0.01	0.00
P-975	179.00	6.0	PVC	Open		11.67	0.13	2,794.64	2,794.64	0.02	0.00
P-976	344.00	6.0	PVC	Open		9.73	0.11	2,789.95	2,789.95	0.01	0.00
P-977	178.00	6.0	PVC	Open		9.73	0.11	2,789.95	2,789.94	0.02	0.00
P-978	629.00	8.0	PVC	Open		772.75	4.93	2,762.82	2,756.10	10.69	6.72
P-979	592.00	8.0	PVC	Open		772.75	4.93	2,769.15	2,762.82	10.69	6.33
P-980	752.00	8.0	PVC	Open		772.12	4.93	2,748.63	2,740.61	10.67	8.03
P-981	7.00	8.0	PVC	Open		2,586.10	16.51	2,740.61	2,739.81	113.80	0.80
P-982	100.00	12.0	PVC	Open		772.12	2.19	2,748.77	2,748.63	1.37	0.14
P-984	126.00	12.0	PVC	Open		351.21	1.00	2,776.09	2,776.05	0.31	0.04
P-985	103.00	6.0	PVC	Open		0.00	0.00	2,776.09	2,776.09	0.00	0.00
P-986	207.00	8.0	PVC	Open		0.58	0.00	2,776.14	2,776.14	0.00	0.00
P-987	32.00	8.0	PVC	Open		0.00	0.00	2,809.73	2,809.73	0.00	0.00
P-988	415.00	8.0	PVC	Open		56.71	0.36	2,776.17	2,776.14	0.08	0.03
P-989	710.00	8.0	PVC	Open		433.13	2.76	2,773.59	2,771.10	3.51	2.49
P-990	846.00	12.0	PVC	Open		-474.05	1.34	2,776.27	2,776.74	0.54	0.46
P-991	19.00	8.0	PVC	Open		433.13	2.76	2,771.10	2,771.03	3.51	0.07
P-992	269.00	12.0	PVC	Open		-191.29	0.54	2,776.25	2,776.27	0.10	0.03
P-993	340.00	12.0	PVC	Open		-191.29	0.54	2,776.21	2,776.25	0.10	0.03
P-994	67.00	12.0	PVC	Open		-191.29	0.54	2,776.21	2,776.21	0.10	0.01
P-995	230.00	12.0	PVC	Open		-81.53	0.23	2,776.20	2,776.21	0.02	0.01
P-996	172.00	12.0	PVC	Open		-81.53	0.23	2,776.20	2,776.20	0.02	0.00
P-997	147.00	8.0	PVC	Open		56.72	0.36	2,776.19	2,776.18	0.08	0.01
P-998	54.00	8.0	PVC	Open		-12.49	0.08	2,776.19	2,776.19	0.00	0.00
P-999	190.00	12.0	PVC	Open		-69.21	0.20	2,776.19	2,776.20	0.02	0.00
P-1000	80.00	12.0	PVC	Open		12.32	0.03	2,776.20	2,776.20	0.00	0.00
P-1001	141.00	12.0	PVC	Open		12.32	0.03	2,776.20	2,776.20	0.00	0.00
P-1002	262.00	12.0	PVC	Open		12.32	0.03	2,776.20	2,776.20	0.00	0.00
P-1003	11.00	12.0	PVC	Open		12.32	0.03	2,776.20	2,776.20	0.02	0.00
P-1005	258.00	12.0	PVC	Open		295.08	0.84	2,776.20	2,776.14	0.23	0.06
P-1006	84.00	12.0	PVC	Open		282.76	0.80	2,776.27	2,776.26	0.21	0.02
P-1007	290.00	12.0	PVC	Open		282.76	0.80	2,776.26	2,776.20	0.21	0.06
P-1008	716.00	8.0	PVC	Open		102.45	0.65	2,841.97	2,841.80	0.24	0.17
P-1014	443.00	8.0	PVC	Open		39.44	0.25	2,776.03	2,776.01	0.04	0.02
P-1015	162.00	8.0	PVC	Open		39.44	0.25	2,776.01	2,776.00	0.04	0.01
P-1025	64.00	12.0	PVC	Open		1,114.92	3.16	2,783.58	2,783.40	2.76	0.18
P-1026	50.00	96.0	PVC	Open		-1,114.92	0.05	2,422.00	2,422.00	0.00	0.00
P-1027	46.00	12.0	PVC	Open		-755.19	2.14	2,783.34	2,783.40	1.31	0.06
P-1029	716.00	12.0	PVC	Open		0.00	0.00	2,770.42	2,770.42	0.00	0.00
P-1030	229.00	12.0	PVC	Open		0.00	0.00	2,770.42	2,770.42	0.00	0.00
P-1031	211.00	12.0	PVC	Open		0.00	0.00	2,770.42	2,770.42	0.00	0.00
P-1032	536.00	8.0	PVC	Open		-33.71	0.22	2,779.58	2,779.60	0.03	0.02
P-1034	1,051.00	12.0	PVC	Open		-746.12	2.12	2,781.17	2,782.51	1.28	1.35
P-1035	20.00	12.0	PVC	Open		359.73	1.02	2,783.40	2,783.39	0.33	0.01
P-1036	1,271.00	14.0	PVC	Open		359.73	0.75	2,783.39	2,783.20	0.15	0.19

**Scenario: 2010
Fire Flow Analysis
Pump Report**

Label	Discharge (gpm)	Control Status	Elevation (ft)	Intake Pump Grade (ft)	Pump Head (ft)	Discharge Pump Grade (ft)	Calculated Water Power (Hp)
PMP-1	107.39	On	2,534.00	2,534.00	245.56	2,779.56	6.66
PMP-2	435.36	On	2,543.00	2,541.14	71.41	2,612.55	7.85
PMP-2.1	69.89	On	2,610.00	2,611.00	168.81	2,779.81	2.98
PMP-2.2	141.69	On	2,610.00	2,610.99	168.84	2,779.83	6.04
PMP-2.3	0.00	Off	2,610.00	2,611.00	0.00	2,779.80	0.00
PMP-3	282.43	On	2,624.50	2,574.50	212.80	2,787.30	15.17
PMP-4	1,336.93	On	2,399.00	2,419.00	366.06	2,785.06	123.56
PMP-6	239.48	On	2,473.50	2,493.50	282.60	2,776.10	17.09
PMP-7	1,022.82	On	2,372.00	2,422.00	394.34	2,816.34	101.83
PMP-8	1,114.92	On	2,567.00	2,422.00	361.58	2,783.58	101.78
PMP-Boost	2,586.10	On	2,640.00	2,739.81	135.45	2,875.26	88.44

Title: INITIAL RUN

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Project Engineer: DMC
WaterCAD v7.0 [07.00.049.00]
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Scenario: 2010
Fire Flow Analysis
Tank Report

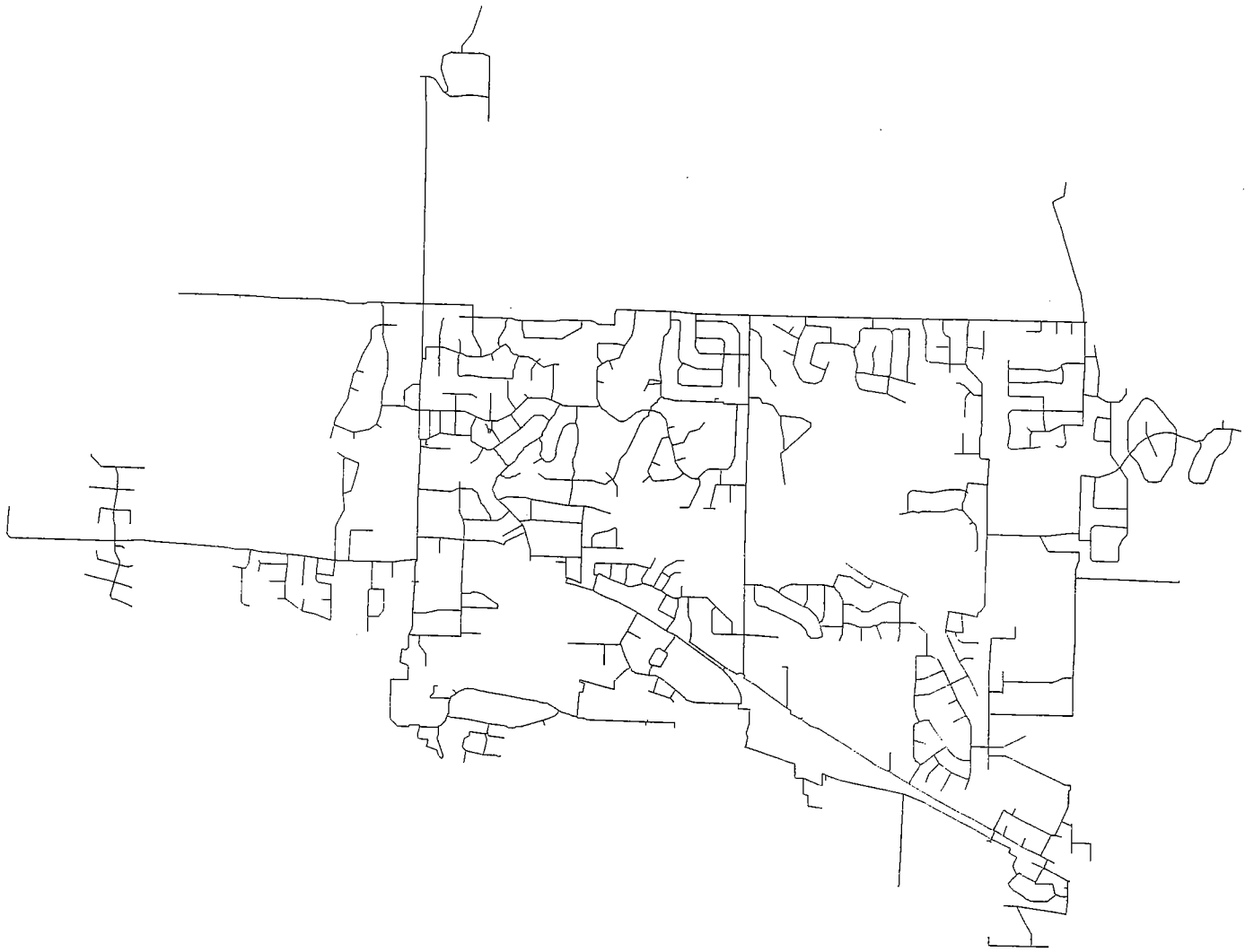
Label	Base Elevation (ft)	Minimum Elevation (ft)	Initial HGL (ft)	Maximum Elevation (ft)	Inactive Volume (gal)	Tank Diameter (ft)	Inflow (gpm)	Current Status	Calculated Hydraulic Grade (ft)	Calculated Percent Full (%)
T-1	2,610.00	2,610.50	2,611.00	2,618.00	0.00	N/A	223.78	Filling	2,611.00	6.7

Scenario: 2010
Fire Flow Analysis
Valve Report

Label	Elevation (ft)	Diameter (in)	Control Status	Discharge (gpm)	From HGL (ft)	To HGL (ft)	Headloss (ft)	Calculated Pressure Setting (psi)
FCV-2-Hwy 55	2,602.00	12.0	Closed	0.00	2,821.81	2,746.89	0.00	
FCV-5 Southhampton	2,652.00	8.0	Closed	0.00	2,809.73	2,821.54	0.00	
FCV-6 GREAT SKY Wy	2,569.50	12.0	Inactive	-0.00	2,775.84	2,775.84	0.00	
TCV-3-Horse Shoe Bend	2,620.00	8.0	Throttling	772.75	2,756.10	2,756.10	0.00	
PSV-1 Floating Feather	2,653.00	12.0	Throttling	1,662.78	2,820.57	2,811.66	8.91	72.50
TCV-4-State at Well 4	2,565.00	12.0	Closed	0.00	2,778.74	2,784.50	0.00	
PSV-Gladestone	2,572.00	6.0	Inactive	433.13	2,771.10	2,771.10	0.00	62.83
PSV-2	2,567.00	10.0	Inactive	359.73	2,783.39	2,783.39	0.00	65.00

2010 Scenario Well #4 Off

Scenario: 2010 WELL 4 OFF



Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-1	false	4.69	0.00	N/A	N/A	N/A	N/A	N/A
J-2	false	10.75	0.00	N/A	N/A	N/A	N/A	N/A
J-3	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-4	true	1.49	1,500.00	1,501.49	86.35	J-416	20.00	4,130.17
J-5	true	2.76	1,500.00	1,502.76	85.43	J-416	20.00	3,965.52
J-6	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-7	false	1.16	0.00	N/A	N/A	N/A	N/A	N/A
J-8	true	103.96	1,500.00	1,603.96	86.31	J-416	20.00	3,894.08
J-9	false	6.02	0.00	N/A	N/A	N/A	N/A	N/A
J-10	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-11	true	0.02	1,500.00	1,500.02	85.39	J-416	20.00	3,855.55
J-12	true	10.70	1,500.00	1,510.70	85.90	J-416	20.00	3,874.21
J-13	true	16.54	1,500.00	1,516.54	84.90	J-416	20.00	3,868.75
J-14	true	4.87	1,500.00	1,504.87	86.32	J-416	20.00	3,853.77
J-15	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-16	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-17	true	6.81	1,500.00	1,506.81	86.73	J-416	20.00	3,832.49
J-18	true	1.95	1,500.00	1,501.95	86.77	J-416	20.01	3,831.16
J-19	false	9.44	0.00	N/A	N/A	N/A	N/A	N/A
J-20	true	6.09	1,500.00	1,506.09	84.31	J-416	20.00	3,830.28
J-21	true	0.00	1,500.00	1,500.00	86.00	J-416	21.98	3,714.13
J-22	true	7.93	1,500.00	1,507.93	86.40	J-416	20.00	3,828.78
J-23	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-24	true	5.98	1,500.00	1,505.98	86.22	J-416	20.00	3,801.98
J-25	true	0.00	1,500.00	1,500.00	84.77	J-416	20.00	3,815.87
J-26	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-27	false	9.73	0.00	N/A	N/A	N/A	N/A	N/A
J-28	true	15.57	1,500.00	1,515.57	84.37	J-416	20.00	3,802.64
J-29	true	13.62	1,500.00	1,513.62	86.13	J-416	20.01	3,814.94
J-30	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-31	false	4.57	0.00	N/A	N/A	N/A	N/A	N/A
J-32	true	12.65	1,500.00	1,512.65	72.72	J-416	20.00	3,790.10
J-33	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-34	true	3.89	1,500.00	1,503.89	64.70	J-416	20.00	3,405.94
J-35	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-36	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-37	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-38	true	3.89	1,500.00	1,503.89	65.76	J-416	39.99	4,999.18
J-39	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-40	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-41	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-42	true	0.00	1,500.00	1,500.00	71.92	J-416	20.00	3,708.05
J-43	true	9.92	1,500.00	1,509.92	75.33	J-416	20.00	3,646.47
J-44	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-45	true	2.92	1,500.00	1,502.92	68.70	J-416	20.00	3,776.28
J-46	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-47	true	4.86	1,500.00	1,504.86	54.27	J-416	20.00	2,454.64
J-48	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-49	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-50	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-51	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-52	true	9.73	1,500.00	1,509.73	29.08	J-416	N/A	N/A
J-53	false	0.00	0.00	N/A	N/A	N/A	39.99	1,668.38
J-54	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-55	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-56	true	6.81	1,500.00	1,506.81	63.64	J-416	N/A	N/A
J-57	true	21.40	1,500.00	1,521.40	61.90	J-416	20.00	3,702.00
J-58	false	6.80	0.00	N/A	N/A	N/A	20.00	3,660.82
J-59	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-60	true	2.81	1,500.00	1,502.81	49.78	J-416	36.25	2,501.08
J-61	true	10.70	1,500.00	1,510.70	64.81	J-416	20.01	3,660.97
J-62	false	10.73	0.00	N/A	N/A	N/A	N/A	N/A
J-63	true	10.73	1,500.00	1,510.73	68.50	J-416	20.00	3,760.67
J-64	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-65	true	13.62	1,500.00	1,513.62	63.97	J-416	23.43	3,301.77
J-66	true	15.57	1,500.00	1,515.57	52.94	J-416	20.02	2,511.59
J-67	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-68	true	29.19	1,500.00	1,529.19	64.45	J-416	20.00	3,651.73
J-69	true	23.35	1,500.00	1,523.35	71.79	J-416	20.00	3,717.06
J-70	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-71	true	19.46	1,500.00	1,519.46	48.88	J-416	20.00	2,230.10
J-72	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-73	false	9.73	0.00	N/A	N/A	N/A	N/A	N/A
J-74	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-75	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-76	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-77	true	3.89	1,500.00	1,503.89	56.54	J-416	20.00	3,291.79
J-78	false	4.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-79	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-80	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-81	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-83	true	11.67	1,500.00	1,511.67	55.23	J-416	23.89	3,235.41
J-84	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-85	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-86	true	12.63	1,500.00	1,512.63	51.66	J-416	20.01	2,901.89
J-87	false	8.75	0.00	N/A	N/A	N/A	N/A	N/A
J-88	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-89	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-90	false	6.82	0.00	N/A	N/A	N/A	N/A	N/A
J-91	true	7.79	1,500.00	1,507.79	52.58	J-416	22.78	2,780.02
J-92	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-93	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-94	true	3.90	1,500.00	1,503.90	40.87	J-917	20.00	2,002.53
J-95	false	14.59	0.00	N/A	N/A	N/A	N/A	N/A
J-96	false	3.71	0.00	N/A	N/A	N/A	N/A	N/A
J-97	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Bentley Systems, Inc.

Haestad Methods Solution Center

Watertown, CT 06795 USA

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-98	false	2.91	0.00	N/A	N/A	N/A	N/A	N/A
J-99	false	3.90	0.00	N/A	N/A	N/A	N/A	N/A
J-100	true	4.58	1,500.00	1,504.58	35.92	J-101	20.00	1,843.09
J-101	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-102	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-103	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-104	true	0.00	1,500.00	1,500.00	52.40	J-416	21.73	2,571.04
J-105	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-106	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-107	false	11.33	0.00	N/A	N/A	N/A	N/A	N/A
J-108	true	7.78	1,500.00	1,507.78	53.61	J-416	20.88	2,791.59
J-109	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-110	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-111	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-112	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-113	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-114	true	5.84	1,500.00	1,505.84	54.11	J-416	22.32	2,990.90
J-115	true	4.86	1,500.00	1,504.86	79.28	J-416	27.57	3,263.08
J-116	true	5.84	1,500.00	1,505.84	54.87	J-416	20.00	3,007.46
J-117	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-118	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-119	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-120	true	7.78	1,500.00	1,507.78	52.37	J-416	20.00	2,729.89
J-121	true	7.78	1,500.00	1,507.78	49.67	J-416	20.00	2,502.83
J-122	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-123	true	13.62	1,500.00	1,513.62	41.11	J-416	20.65	2,129.40
J-124	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-125	true	15.57	1,500.00	1,515.57	26.97	J-126	21.09	1,645.92
J-126	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-127	true	0.00	1,500.00	1,500.00	64.86	J-416	20.00	3,832.67
J-128	true	1.93	1,500.00	1,501.93	43.99	J-416	20.02	2,229.91
J-131	false	2.94	0.00	N/A	N/A	N/A	N/A	N/A
J-132	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-133	false	13.62	0.00	N/A	N/A	N/A	N/A	N/A
J-134	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-135	false	29.31	0.00	N/A	N/A	N/A	N/A	N/A
J-136	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-137	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-138	false	11.67	1,500.00	N/A	N/A	N/A	N/A	N/A
J-139	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-140	true	0.15	1,500.00	1,500.15	73.73	J-416	33.95	2,904.08
J-141	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-142	true	7.78	1,500.00	1,507.78	77.81	J-416	28.36	3,267.63
J-143	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-144	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-145	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-146	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-147	false	4.48	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Bentley Systems, Inc.

Haestad Methods Solution Center

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-148	true	10.58	1,500.00	1,510.58	51.14	J-416	20.00	2,780.03
J-149	true	29.20	1,500.00	1,529.20	50.06	J-416	24.28	2,667.05
J-150	false	9.73	1,500.00	N/A	N/A	N/A	N/A	N/A
J-151	true	12.65	1,500.00	1,512.65	52.08	J-416	20.00	2,745.57
J-152	true	13.62	1,500.00	1,513.62	51.27	J-416	20.00	2,734.40
J-153	true	4.86	1,500.00	1,504.86	51.58	J-416	20.00	2,734.75
J-154	true	13.62	1,500.00	1,513.62	74.91	J-416	22.16	3,144.33
J-155	true	16.54	1,500.00	1,516.54	74.36	J-416	20.13	2,958.45
J-156	true	0.00	1,500.00	1,500.00	70.41	J-416	32.68	2,682.15
J-157	false	3.02	0.00	N/A	N/A	N/A	N/A	N/A
J-158	true	25.09	1,500.00	1,525.09	67.59	J-416	39.99	2,607.88
J-159	true	20.43	1,500.00	1,520.43	62.57	J-416	20.00	2,331.70
J-160	true	1.12	1,500.00	1,501.12	83.27	J-416	20.00	4,251.67
J-161	true	13.62	1,500.00	1,513.62	57.71	J-416	20.24	2,212.74
J-162	false	0.97	0.00	N/A	N/A	N/A	N/A	N/A
J-163	true	7.05	1,500.00	1,507.05	83.31	J-416	24.08	4,205.40
J-164	true	15.57	1,500.00	1,515.57	80.82	J-416	20.00	3,628.33
J-165	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-166	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-167	true	6.69	1,500.00	1,506.69	81.21	J-416	20.00	3,562.17
J-168	true	1.37	1,500.00	1,501.37	82.08	J-416	20.00	3,670.80
J-169	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-170	false	6.51	0.00	N/A	N/A	N/A	N/A	N/A
J-171	false	13.97	0.00	N/A	N/A	N/A	N/A	N/A
J-172	true	6.81	1,500.00	1,506.81	84.09	J-416	20.00	4,126.46
J-173	false	2.24	0.00	N/A	N/A	N/A	N/A	N/A
J-174	true	1.95	1,500.00	1,501.95	72.32	J-416	32.58	2,798.22
J-175	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-176	false	4.70	0.00	N/A	N/A	N/A	N/A	N/A
J-177	false	23.86	0.00	N/A	N/A	N/A	N/A	N/A
J-178	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-179	false	36.70	0.00	N/A	N/A	N/A	N/A	N/A
J-180	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-181	false	7.77	0.00	N/A	N/A	N/A	N/A	N/A
J-182	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-183	false	10.69	0.00	N/A	N/A	N/A	N/A	N/A
J-184	true	3.89	1,500.00	1,503.89	99.05	J-416	20.00	3,650.11
J-185	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-186	true	7.78	1,500.00	1,507.78	61.95	J-416	39.99	1,501.00
J-187	true	0.00	1,500.00	1,500.00	98.84	J-416	39.99	3,216.84
J-188	false	10.69	0.00	N/A	N/A	N/A	N/A	N/A
J-189	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-190	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-191	true	3.88	1,500.00	1,503.88	95.13	J-416	20.00	4,866.31
J-192	false	2.22	0.00	N/A	N/A	N/A	N/A	N/A
J-193	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-194	true	4.86	1,500.00	1,504.86	93.87	J-416	20.00	4,696.29
J-195	false	49.67	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-196	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-197	true	30.83	1,500.00	1,530.83	90.14	J-416	20.00	4,669.93
J-198	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-199	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-200	false	4.69	0.00	N/A	N/A	N/A	N/A	N/A
J-201	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-202	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-203	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-204	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-205	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-206	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-207	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-208	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-209	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-210	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-211	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-212	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-213	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-214	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-215	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-216	true	8.76	1,500.00	1,508.76	79.05	J-416	20.03	3,363.53
J-217	false	8.96	0.00	N/A	N/A	N/A	N/A	N/A
J-218	true	1.74	1,500.00	1,501.74	85.34	J-416	20.08	3,825.56
J-219	false	24.87	0.00	N/A	N/A	N/A	N/A	N/A
J-220	true	0.00	1,500.00	1,500.00	84.65	J-416	20.05	3,681.57
J-221	true	0.00	1,500.00	1,500.00	82.09	J-416	24.74	3,351.74
J-222	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-223	false	0.49	0.00	N/A	N/A	N/A	N/A	N/A
J-224	true	1.81	1,500.00	1,501.81	81.10	J-416	27.59	3,199.97
J-225	true	5.06	1,500.00	1,505.06	81.18	J-416	27.75	3,220.49
J-226	true	9.73	1,500.00	1,509.73	71.24	J-416	32.92	2,896.43
J-227	true	17.51	1,500.00	1,517.51	71.04	J-416	20.00	2,969.60
J-228	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-229	true	7.78	1,500.00	1,507.78	64.72	J-416	20.00	2,652.50
J-230	true	10.70	1,500.00	1,510.70	63.68	J-416	20.00	2,607.38
J-231	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-232	true	16.56	1,500.00	1,516.56	66.09	J-416	20.00	2,663.64
J-233	true	7.69	1,500.00	1,507.69	65.87	J-416	20.00	2,634.02
J-234	false	12.75	0.00	N/A	N/A	N/A	N/A	N/A
J-235	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-236	false	69.44	0.00	N/A	N/A	N/A	N/A	N/A
J-237	false	0.64	0.00	N/A	N/A	N/A	N/A	N/A
J-238	true	0.91	1,500.00	1,500.91	70.57	J-982	20.00	2,236.60
J-239	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-240	false	26.03	0.00	N/A	N/A	N/A	N/A	N/A
J-241	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-242	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-243	true	6.81	1,500.00	1,506.81	69.55	J-982	20.00	2,212.01

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-244	true	11.67	1,500.00	1,511.67	70.89	J-982	20.00	2,203.61
J-245	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-246	true	9.73	1,500.00	1,509.73	70.82	J-982	20.00	2,212.67
J-247	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-248	true	8.76	1,500.00	1,508.76	69.87	J-982	20.00	2,205.83
J-249	true	5.84	1,500.00	1,505.84	68.55	J-982	20.00	2,211.37
J-250	false	3.21	0.00	N/A	N/A	N/A	N/A	N/A
J-251	true	7.78	1,500.00	1,507.78	68.28	J-982	20.00	2,179.61
J-252	false	1.29	0.00	N/A	N/A	N/A	N/A	N/A
J-253	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-254	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-255	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-256	false	0.25	0.00	N/A	N/A	N/A	N/A	N/A
J-257	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-258	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-259	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-260	true	2.92	1,500.00	1,502.92	40.89	J-587	N/A	N/A
J-261	false	1.95	0.00	N/A	N/A	N/A	20.43	2,229.32
J-262	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-263	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-264	true	9.73	1,500.00	1,509.73	39.82	J-587	20.43	2,156.51
J-265	false	5.85	0.00	N/A	N/A	N/A	N/A	N/A
J-266	true	16.54	1,500.00	1,516.54	38.15	J-587	20.00	2,070.41
J-267	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-268	true	14.59	1,500.00	1,514.59	43.25	J-587	20.00	2,249.76
J-269	true	8.76	1,500.00	1,508.76	42.81	J-587	20.00	2,229.71
J-270	true	11.67	1,500.00	1,511.67	42.33	J-587	20.00	2,168.22
J-271	true	2.46	1,500.00	1,502.46	40.32	J-587	20.00	2,101.38
J-272	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-273	true	8.76	1,500.00	1,508.76	38.99	J-587	20.01	2,106.80
J-274	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-275	true	10.70	1,500.00	1,510.70	40.02	J-587	20.00	2,166.84
J-276	true	14.59	1,500.00	1,514.59	38.04	J-587	20.01	2,078.97
J-277	false	10.08	0.00	N/A	N/A	N/A	N/A	N/A
J-278	true	19.47	1,500.00	1,519.47	37.99	J-587	22.41	2,137.01
J-279	false	4.46	0.00	N/A	N/A	N/A	N/A	N/A
J-280	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-281	false	6.25	0.00	N/A	N/A	N/A	N/A	N/A
J-282	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-283	true	4.24	1,500.00	1,504.24	45.75	J-981	20.00	1,968.56
J-284	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-285	true	0.00	1,500.00	1,500.00	48.39	J-981	20.00	1,968.55
J-286	false	3.36	0.00	N/A	N/A	N/A	N/A	N/A
J-287	true	10.70	1,500.00	1,510.70	64.21	J-981	20.00	1,968.55
J-288	true	15.57	1,500.00	1,515.57	63.51	J-981	20.01	1,968.32
J-289	true	6.81	1,500.00	1,506.81	62.41	J-981	20.01	1,968.29
J-290	true	4.86	1,500.00	1,504.86	56.26	J-981	20.00	1,968.56
J-291	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-292	false	8.76	0.00	N/A	N/A	N/A		
J-293	false	5.50	0.00	N/A	N/A	N/A	N/A	N/A
J-294	false	8.03	0.00	N/A	N/A	N/A	N/A	N/A
J-295	true	3.21	1,500.00	1,503.21	67.71	J-982	N/A	N/A
J-296	false	0.00	0.00	N/A	N/A	N/A	20.01	2,236.22
J-297	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-298	true	0.00	1,500.00	1,500.00	60.98	J-981	N/A	N/A
J-299	false	6.81	0.00	N/A	N/A	N/A	20.00	1,968.57
J-300	false	0.97	0.00	N/A	N/A	N/A	N/A	N/A
J-301	false	9.73	0.00	N/A	N/A	N/A	N/A	N/A
J-302	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-303	true	0.00	1,500.00	1,500.00	62.18	J-981	N/A	N/A
J-304	false	7.78	0.00	N/A	N/A	N/A	20.00	1,968.56
J-305	true	14.59	1,500.00	1,514.59	63.12	J-981	N/A	N/A
J-306	true	15.57	1,500.00	1,515.57	64.89	J-981	20.00	1,968.57
J-307	true	10.70	1,500.00	1,510.70	66.88	J-981	20.00	1,968.57
J-308	true	10.70	1,500.00	1,510.70	63.58	J-981	20.00	1,968.56
J-309	true	16.54	1,500.00	1,516.54	69.59	J-981	20.00	1,968.57
J-310	true	25.29	1,500.00	1,525.29	69.09	J-981	20.02	1,967.85
J-311	false	0.00	0.00	N/A	N/A	N/A	20.02	1,967.78
J-312	false	274.77	0.00	N/A	N/A	N/A	N/A	N/A
J-313	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-314	true	0.00	1,500.00	1,500.00	60.79	J-981	N/A	N/A
J-315	false	0.00	0.00	N/A	N/A	N/A	20.00	1,968.57
J-316	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-317	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-318	true	14.59	1,500.00	1,514.59	74.22	J-416	N/A	N/A
J-319	false	17.92	0.00	N/A	N/A	N/A	20.00	3,674.40
J-320	false	7.84	0.00	N/A	N/A	N/A	N/A	N/A
J-321	true	18.48	1,500.00	1,518.48	76.88	J-981	N/A	N/A
J-322	false	0.00	0.00	N/A	N/A	N/A	20.02	1,807.93
J-323	true	7.84	1,500.00	1,507.84	61.85	J-981	N/A	N/A
J-325	false	0.00	0.00	N/A	N/A	N/A	20.00	1,984.97
J-326	true	0.00	1,500.00	1,500.00	72.41	J-982	N/A	N/A
J-327	false	8.76	0.00	N/A	N/A	N/A	20.00	2,216.01
J-328	true	4.86	1,500.00	1,504.86	42.93	J-982	N/A	N/A
J-329	false	7.78	0.00	N/A	N/A	N/A	29.14	1,872.01
J-330	true	6.81	1,500.00	1,506.81	64.85	J-982	N/A	N/A
J-331	false	0.00	0.00	N/A	N/A	N/A	20.00	2,213.04
J-332	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-333	false	1.03	0.00	N/A	N/A	N/A	N/A	N/A
J-334	true	10.70	1,500.00	1,510.70	68.94	J-982	N/A	N/A
J-335	false	8.76	0.00	N/A	N/A	N/A	20.01	2,172.81
J-336	true	7.78	1,500.00	1,507.78	68.80	J-982	N/A	N/A
J-337	true	7.78	1,500.00	1,507.78	68.69	J-982	20.00	2,171.18
J-338	true	5.84	1,500.00	1,505.84	68.46	J-982	20.00	2,162.68
J-339	false	3.89	0.00	N/A	N/A	N/A	20.00	2,170.58
J-340	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-341	true	6.81	1,500.00	1,506.81	67.13	J-982	20.00	2,126.46
J-342	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-343	true	6.81	1,500.00	1,506.81	66.38	J-982	20.00	2,091.79
J-344	true	9.73	1,500.00	1,509.73	62.57	J-981	20.01	2,020.37
J-345	false	11.25	0.00	N/A	N/A	N/A	N/A	N/A
J-346	true	6.43	1,500.00	1,506.43	63.31	J-981	20.00	1,968.56
J-347	true	4.86	1,500.00	1,504.86	59.34	J-981	20.00	1,968.57
J-348	false	13.44	0.00	N/A	N/A	N/A	N/A	N/A
J-349	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-350	true	7.78	1,500.00	1,507.78	59.31	J-981	20.00	1,968.56
J-351	false	8.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-352	false	11.20	1,500.00	N/A	N/A	N/A	N/A	N/A
J-353	true	3.89	1,500.00	1,503.89	58.69	J-981	32.41	1,501.00
J-354	true	12.66	1,500.00	1,512.66	51.79	J-981	20.00	1,968.57
J-355	false	6.81	1,500.00	N/A	N/A	N/A	N/A	N/A
J-356	false	5.84	1,500.00	N/A	N/A	N/A	N/A	N/A
J-357	true	11.67	1,500.00	1,511.67	48.78	J-981	20.00	1,968.56
J-358	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-359	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-360	true	0.00	1,500.00	1,500.00	31.96	J-981	20.00	1,968.54
J-361	true	0.00	1,500.00	1,500.00	97.12	J-416	33.63	5,000.00
J-364	false	5.81	1,500.00	N/A	N/A	N/A	N/A	N/A
J-365	false	0.96	1,500.00	N/A	N/A	N/A	N/A	N/A
J-366	false	3.02	1,500.00	N/A	N/A	N/A	N/A	N/A
J-367	false	9.87	1,500.00	N/A	N/A	N/A	N/A	N/A
J-368	false	7.16	1,500.00	N/A	N/A	N/A	N/A	N/A
J-369	false	1.16	1,500.00	N/A	N/A	N/A	N/A	N/A
J-370	true	0.00	1,500.00	1,500.00	59.15	J-982	20.00	2,378.96
J-371	false	19.01	1,500.00	N/A	N/A	N/A	N/A	N/A
J-372	true	9.53	1,500.00	1,509.53	85.66	J-416	20.01	3,915.70
J-373	false	2.20	1,500.00	N/A	N/A	N/A	N/A	N/A
J-374	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-375	false	0.73	1,500.00	N/A	N/A	N/A	N/A	N/A
J-376	false	15.08	1,500.00	N/A	N/A	N/A	N/A	N/A
J-377	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-378	false	12.40	1,500.00	N/A	N/A	N/A	N/A	N/A
J-379	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-380	false	13.19	1,500.00	N/A	N/A	N/A	N/A	N/A
J-381	true	1.62	1,500.00	1,501.62	62.06	J-416	32.66	2,976.33
J-382	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-383	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-384	true	5.63	1,500.00	1,505.63	88.26	J-416	23.13	3,714.56
J-385	true	0.94	1,500.00	1,500.94	85.83	J-416	23.53	3,440.64
J-386	true	17.77	1,500.00	1,517.77	85.68	J-416	25.29	3,544.67
J-387	false	1.74	1,500.00	N/A	N/A	N/A	N/A	N/A
J-388	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-389	true	0.00	1,500.00	1,500.00	88.08	J-416	21.57	3,546.67
J-390	false	0.22	1,500.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-391	true	0.00	1,500.00	1,500.00	62.45	J-416	39.90	2,304.27
J-392	true	7.77	1,500.00	1,507.77	86.92	J-416	21.57	3,546.34
J-393	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-394	true	0.00	1,500.00	1,500.00	87.21	J-416	21.47	3,547.75
J-395	true	1.07	1,500.00	1,501.07	86.47	J-416	27.51	3,203.46
J-396	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-397	false	0.34	1,500.00	N/A	N/A	N/A	N/A	N/A
J-398	true	0.00	1,500.00	1,500.00	89.52	J-416	21.38	3,519.58
J-399	true	18.48	1,500.00	1,518.48	87.59	J-416	20.03	3,555.18
J-400	true	13.43	1,500.00	1,513.43	86.19	J-416	20.02	3,560.38
J-401	true	0.00	1,500.00	1,500.00	85.24	J-416	20.01	3,584.33
J-402	true	2.47	1,500.00	1,502.47	88.04	J-416	27.17	3,120.78
J-403	true	0.00	1,500.00	1,500.00	88.24	J-416	27.19	3,131.62
J-404	true	0.42	1,500.00	1,500.42	85.19	J-416	26.93	3,086.47
J-405	false	3.66	1,500.00	N/A	N/A	N/A	N/A	N/A
J-406	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-407	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-408	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-409	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-410	false	10.70	1,500.00	N/A	N/A	N/A	N/A	N/A
J-411	true	7.65	1,500.00	1,507.65	57.56	J-416	20.00	3,474.77
J-412	true	12.65	1,500.00	1,512.65	65.84	J-416	20.00	3,536.47
J-413	true	4.86	1,500.00	1,504.86	67.53	J-416	20.00	3,566.05
J-414	true	3.88	1,500.00	1,503.88	41.13	J-981	20.00	1,968.56
J-415	true	8.75	1,500.00	1,508.75	40.04	J-981	20.00	1,968.55
J-416	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-417	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-418	true	10.70	1,500.00	1,510.70	66.28	J-416	20.00	2,541.43
J-419	true	7.78	1,500.00	1,507.78	66.07	J-416	20.00	2,538.08
J-420	false	12.65	1,500.00	N/A	N/A	N/A	N/A	N/A
J-421	true	15.57	1,500.00	1,515.57	57.08	J-416	20.00	2,369.72
J-422	true	0.00	1,500.00	1,500.00	58.06	J-416	20.43	2,404.74
J-423	false	4.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-424	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-425	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-426	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-427	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-428	false	0.58	1,500.00	N/A	N/A	N/A	N/A	N/A
J-429	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-430	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-431	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-432	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-433	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-434	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-435	false	1.95	1,500.00	N/A	N/A	N/A	N/A	N/A
J-436	true	3.89	1,500.00	1,503.89	50.81	J-982	N/A	N/A
J-437	true	1.95	1,500.00	1,501.95	47.27	J-982	20.01	2,155.18
J-438	false	1.95	0.00	N/A	N/A	N/A	25.99	2,039.69
							N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-439	true	1.95	1,500.00	1,501.95	24.74	J-982	35.17	1,560.34
J-440	true	0.82	1,500.00	1,500.82	34.02	J-982	25.97	1,711.36
J-441	false	11.15	0.00	N/A	N/A	N/A	N/A	N/A
J-442	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-443	true	7.55	2,500.00	2,507.55	69.43	J-982	24.51	3,585.57
J-444	true	0.72	1,500.00	1,500.72	86.60	J-416	27.67	3,365.70
J-445	false	0.11	0.00	N/A	N/A	N/A	N/A	N/A
J-446	true	8.72	1,500.00	1,508.72	86.22	J-416	27.02	3,400.51
J-447	true	0.00	1,500.00	1,500.00	85.72	J-416	25.16	3,516.27
J-448	true	0.00	1,500.00	1,500.00	81.96	J-416	24.63	3,550.94
J-449	true	1.25	1,500.00	1,501.25	80.78	J-416	20.66	3,560.77
J-450	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-451	true	0.00	2,500.00	2,500.00	72.26	J-982	26.09	3,440.10
J-452	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-453	true	0.12	1,500.00	1,500.12	85.50	J-416	26.50	3,403.80
J-454	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-455	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-456	true	1.84	1,500.00	1,501.84	85.04	J-416	27.25	3,344.45
J-457	true	0.00	1,500.00	1,500.00	85.09	J-416	27.58	3,308.77
J-458	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-459	true	0.24	1,500.00	1,500.24	81.78	J-416	27.08	3,362.25
J-460	true	0.01	2,500.00	2,500.01	63.27	J-982	26.59	3,399.73
J-461	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-462	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-463	true	0.00	1,500.00	1,500.00	74.70	J-416	32.05	3,017.94
J-464	true	0.55	1,500.00	1,500.55	76.35	J-416	22.17	3,165.79
J-465	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-466	true	0.00	1,500.00	1,500.00	78.51	J-416	20.02	3,397.63
J-467	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-468	true	0.03	1,500.00	1,500.03	71.30	J-416	34.99	2,794.78
J-469	true	0.07	2,500.00	2,500.07	46.71	J-982	20.03	3,131.72
J-470	true	0.01	1,500.00	1,500.02	72.77	J-416	30.75	2,896.86
J-471	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-472	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-473	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-474	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-475	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-476	true	0.03	1,500.00	1,500.03	77.18	J-416	30.94	3,117.52
J-477	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-478	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-479	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-480	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-481	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-482	true	0.00	1,500.00	1,500.00	86.56	J-416	26.56	3,359.47
J-483	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-484	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-485	true	0.00	1,500.00	1,500.00	84.75	J-416	24.47	3,494.85
J-486	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-487	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-488	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-489	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-490	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-491	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-492	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-493	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-494	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-495	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-496	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-497	false	31.36	0.00	N/A	N/A	N/A	N/A	N/A
J-498	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-499	true	0.00	1,500.00	1,500.00	61.69	J-981	20.00	1,968.57
J-500	true	9.73	1,500.00	1,509.73	63.03	J-981	20.00	1,968.57
J-501	true	11.55	1,500.00	1,511.55	63.88	J-981	20.00	1,968.56
J-502	true	15.58	1,500.00	1,515.58	61.71	J-981	20.00	1,968.55
J-503	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-504	true	0.00	1,500.00	1,500.00	72.86	J-416	20.00	3,691.15
J-505	false	0.01	0.00	N/A	N/A	N/A	N/A	N/A
J-506	true	0.00	1,500.00	1,500.00	74.27	J-416	20.01	3,673.80
J-507	false	6.83	0.00	N/A	N/A	N/A	N/A	N/A
J-508	true	11.67	1,500.00	1,511.67	68.94	J-416	20.00	3,645.59
J-509	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-510	true	7.78	1,500.00	1,507.78	59.56	J-416	33.67	2,789.68
J-511	true	12.65	1,500.00	1,512.65	68.64	J-416	20.00	3,643.60
J-512	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-513	false	7.79	0.00	N/A	N/A	N/A	N/A	N/A
J-514	true	5.84	1,500.00	1,505.84	65.85	J-416	20.00	3,626.53
J-515	true	7.78	1,500.00	1,507.78	69.96	J-416	20.00	3,602.40
J-516	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-517	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-518	true	2.92	1,500.00	1,502.92	64.89	J-416	20.01	3,624.98
J-519	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-520	true	5.84	1,500.00	1,505.84	64.61	J-416	20.01	3,622.94
J-521	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-522	true	6.81	1,500.00	1,506.81	60.61	J-981	20.00	2,006.66
J-523	true	2.25	1,500.00	1,502.25	51.44	J-981	20.00	2,006.65
J-524	false	16.61	0.00	N/A	N/A	N/A	N/A	N/A
J-525	true	2.92	1,500.00	1,502.92	65.25	J-416	20.00	2,546.09
J-527	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-528	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-529	false	12.63	0.00	N/A	N/A	N/A	N/A	N/A
J-530	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-531	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-532	true	7.78	1,500.00	1,507.78	71.02	J-416	20.24	3,248.30
J-533	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-534	true	7.78	1,500.00	1,507.78	68.73	J-416	20.22	3,025.36
J-535	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-536	true	4.86	1,500.00	1,504.86	70.48	J-416	20.67	3,148.82
J-537	false	28.00	0.00	N/A	N/A	N/A	N/A	N/A
J-538	true	2.92	1,500.00	1,502.92	71.92	J-416	20.00	3,289.37
J-539	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-540	true	5.84	1,500.00	1,505.84	74.10	J-416	20.00	3,591.91
J-541	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-542	true	13.62	1,500.00	1,513.62	76.44	J-416	20.01	3,685.93
J-543	true	6.29	1,500.00	1,506.29	86.32	J-416	20.00	3,938.18
J-544	true	9.30	1,500.00	1,509.30	86.17	J-416	20.00	3,946.22
J-546	true	7.78	1,500.00	1,507.78	83.11	J-416	20.00	3,942.80
J-547	true	3.05	1,500.00	1,503.05	84.91	J-416	21.98	3,681.51
J-548	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-549	true	8.05	1,500.00	1,508.05	82.86	J-416	20.00	3,688.92
J-550	true	0.00	1,500.00	1,500.00	82.74	J-416	20.05	3,679.49
J-551	true	0.00	1,500.00	1,500.00	83.04	J-416	20.04	3,667.38
J-552	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-553	true	24.32	1,500.00	1,524.32	83.50	J-416	20.01	3,687.90
J-554	true	19.46	1,500.00	1,519.46	83.38	J-416	20.06	3,680.47
J-555	true	10.70	1,500.00	1,510.70	82.18	J-416	20.04	3,674.77
J-556	false	11.73	0.00	N/A	N/A	N/A	N/A	N/A
J-557	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-558	false	11.26	0.00	N/A	N/A	N/A	N/A	N/A
J-559	true	15.57	1,500.00	1,515.57	82.51	J-416	20.00	3,641.01
J-560	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-561	true	7.78	1,500.00	1,507.78	84.57	J-416	20.03	3,638.42
J-562	true	0.00	1,500.00	1,500.00	84.86	J-416	20.01	3,627.69
J-563	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-564	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-565	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-566	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-567	true	3.39	1,500.00	1,503.39	86.74	J-416	20.01	3,603.80
J-568	false	13.44	0.00	N/A	N/A	N/A	N/A	N/A
J-569	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-570	false	12.32	0.00	N/A	N/A	N/A	N/A	N/A
J-571	true	22.38	1,500.00	1,522.38	60.56	J-981	20.00	1,968.57
J-572	true	12.65	1,500.00	1,512.65	65.58	J-981	20.00	1,968.56
J-573	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-574	true	9.73	1,500.00	1,509.73	66.10	J-981	20.00	1,968.56
J-575	false	7.79	0.00	N/A	N/A	N/A	N/A	N/A
J-576	true	12.65	1,500.00	1,512.65	62.39	J-981	20.00	1,968.56
J-577	true	16.54	1,500.00	1,516.54	65.71	J-981	20.00	1,968.55
J-578	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-579	true	14.59	1,500.00	1,514.59	65.19	J-981	20.00	1,968.56
J-580	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-581	false	0.97	0.00	N/A	N/A	N/A	N/A	N/A
J-582	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-583	true	3.89	1,500.00	1,503.89	65.50	J-981	20.00	1,968.57
J-584	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-585	true	0.00	1,500.00	1,500.00	58.77	J-981	20.00	1,968.57
J-586	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-587	true	7.78	1,500.00	1,507.78	35.60	J-416	27.18	2,113.31
J-588	true	0.00	1,500.00	1,500.00	66.63	J-982	20.02	2,329.58
J-589	false	0.26	0.00	N/A	N/A	N/A	N/A	N/A
J-590	true	0.00	1,500.00	1,500.00	59.76	J-982	20.01	2,347.75
J-591	false	0.36	0.00	N/A	N/A	N/A	N/A	N/A
J-592	true	0.55	1,500.00	1,500.55	57.37	J-982	20.00	2,388.11
J-593	false	77.59	0.00	N/A	N/A	N/A	N/A	N/A
J-594	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-595	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-596	true	0.00	1,500.00	1,500.00	68.80	J-982	20.00	2,333.56
J-597	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-598	true	0.00	1,500.00	1,500.00	68.61	J-982	20.01	2,309.43
J-599	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-600	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-601	false	5.64	0.00	N/A	N/A	N/A	N/A	N/A
J-602	true	9.84	1,500.00	1,509.84	58.16	J-982	20.00	2,309.74
J-603	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-604	true	0.00	1,500.00	1,500.00	51.29	J-982	24.41	2,169.61
J-605	true	2.87	1,500.00	1,502.87	67.75	J-982	20.00	2,270.34
J-606	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-607	true	2.01	1,500.00	1,502.01	69.41	J-982	20.00	2,206.31
J-608	true	0.00	1,500.00	1,500.00	64.50	J-982	20.00	2,206.32
J-609	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-610	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-611	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-612	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-613	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-614	false	15.68	0.00	N/A	N/A	N/A	N/A	N/A
J-615	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-616	false	15.68	0.00	N/A	N/A	N/A	N/A	N/A
J-617	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-618	false	7.84	0.00	N/A	N/A	N/A	N/A	N/A
J-619	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-620	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-621	true	0.11	1,500.00	1,500.11	84.98	J-416	31.82	2,782.07
J-622	true	0.00	1,500.00	1,500.00	83.69	J-416	31.82	2,782.41
J-623	false	8.96	0.00	N/A	N/A	N/A	N/A	N/A
J-624	true	0.00	1,500.00	1,500.00	84.87	J-416	32.13	2,768.38
J-625	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-628	false	7.84	0.00	N/A	N/A	N/A	N/A	N/A
J-636	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-637	true	13.62	1,500.00	1,513.62	80.37	J-416	20.02	3,647.18
J-638	false	15.68	0.00	N/A	N/A	N/A	N/A	N/A
J-639	true	27.74	1,500.00	1,527.74	69.08	J-416	39.99	2,606.26
J-640	false	39.20	0.00	N/A	N/A	N/A	N/A	N/A
J-650	false	22.38	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-651	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-653	false	16.54	0.00	N/A	N/A	N/A	N/A	N/A
J-654	false	21.40	0.00	N/A	N/A	N/A	N/A	N/A
J-655	false	18.48	0.00	N/A	N/A	N/A	N/A	N/A
J-656	false	23.68	0.00	N/A	N/A	N/A	N/A	N/A
J-657	false	16.54	0.00	N/A	N/A	N/A	N/A	N/A
J-658	false	0.30	0.00	N/A	N/A	N/A	N/A	N/A
J-659	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-660	false	0.62	0.00	N/A	N/A	N/A	N/A	N/A
J-661	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-750	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-751	false	4.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-752	false	20.81	1,500.00	N/A	N/A	N/A	N/A	N/A
J-813	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-814	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-822	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-823	true	0.00	1,500.00	1,500.00	30.52	J-138	29.61	1,501.00
J-824	true	0.00	1,500.00	1,500.00	27.89	J-150	28.27	1,501.00
J-825	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-826	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-827	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-828	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-829	false	0.00	2,500.00	2,500.00	39.38	J-982	20.00	2,384.22
J-830	false	0.00	2,500.00	2,500.00	39.06	J-982	20.00	2,383.83
J-831	false	109.76	0.00	N/A	N/A	N/A	N/A	N/A
J-832	false	0.00	2,500.00	2,500.00	39.15	J-982	20.00	2,383.21
J-833	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-834	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-835	false	0.00	2,500.00	2,500.00	39.36	J-982	20.00	2,382.53
J-836	false	0.00	2,500.00	2,500.00	39.46	J-982	20.00	2,382.29
J-837	false	0.00	2,500.00	2,500.00	39.91	J-982	20.00	2,381.73
J-838	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-840	false	0.00	2,500.00	2,500.00	39.90	J-982	20.00	2,384.64
J-842	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-844	false	0.68	1,500.00	N/A	N/A	N/A	N/A	N/A
J-845	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-846	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-847	false	2.04	1,500.00	N/A	N/A	N/A	N/A	N/A
J-848	false	1.37	1,500.00	N/A	N/A	N/A	N/A	N/A
J-849	false	1.37	1,500.00	N/A	N/A	N/A	N/A	N/A
J-850	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-851	true	0.00	1,500.00	1,500.00	63.92	J-982	34.30	1,501.00
J-852	true	0.00	1,500.00	1,500.00	63.44	J-982	34.30	1,501.00
J-853	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-901	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-906	false	4.26	1,500.00	N/A	N/A	N/A	N/A	N/A
J-917	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-981	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-982	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010 WELL 4 OFF
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-1	2,558.30	Zone	Demand	4.69	COMMERCIAL	4.69	2,777.05	94.64
J-2	2,558.00	Zone	Demand	10.75	COMMERCIAL	10.75	2,777.41	94.93
J-3	2,556.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.41	95.58
J-4	2,557.50	Zone	Demand	1.49	COMMERCIAL	1.49	2,777.80	95.31
J-5	2,559.00	Zone	Demand	2.76	COMMERCIAL	2.76	2,777.89	94.70
J-6	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.91	95.14
J-7	2,557.00	Zone	Demand	1.16	COMMERCIAL	1.16	2,777.90	95.58
J-8	2,557.00	Zone	Demand	103.96	IRRIGATION	103.96	2,777.92	95.58
J-9	2,555.00	Zone	Demand	6.02	COMMERCIAL	6.02	2,778.02	96.49
J-10	2,550.50	Zone	Demand	0.00	Composite	0.00	2,778.27	98.54
J-11	2,554.50	Zone	Demand	0.02	COMMERCIAL	0.02	2,777.94	96.67
J-12	2,556.70	Zone	Demand	10.70	RESIDENTIAL	10.70	2,777.93	95.72
J-13	2,557.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,777.93	95.59
J-14	2,555.70	Zone	Demand	4.87	Composite	4.87	2,777.96	96.16
J-15	2,558.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.93	95.16
J-16	2,552.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,777.93	97.75
J-17	2,555.30	Zone	Demand	6.81	RESIDENTIAL	6.81	2,777.94	96.33
J-18	2,554.70	Zone	Demand	1.95	RESIDENTIAL	1.95	2,777.95	96.59
J-19	2,552.00	Zone	Demand	9.44	Composite	9.44	2,778.02	97.79
J-20	2,553.00	Zone	Demand	6.09	COMMERCIAL	6.09	2,778.02	97.36
J-21	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.32	96.84
J-22	2,553.50	Zone	Demand	7.93	Composite	7.93	2,778.15	97.19
J-23	2,557.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,777.94	95.59
J-24	2,553.00	Zone	Demand	5.98	Composite	5.98	2,777.97	97.34
J-25	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.06	96.07
J-26	2,554.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.93	96.89
J-27	2,555.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,777.91	96.23
J-28	2,558.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,777.93	95.15
J-29	2,556.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,777.94	96.02
J-30	2,579.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.99	85.88
J-31	2,581.50	Zone	Demand	4.57	RESIDENTIAL	4.57	2,777.99	85.01
J-32	2,585.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,778.01	83.29
J-33	2,595.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.11	79.22
J-34	2,596.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.11	78.58
J-35	2,597.50	Zone	Demand	11.67	RESIDENTIAL	11.67	2,778.11	78.14
J-36	2,604.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.15	75.13
J-37	2,601.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,778.16	76.65
J-38	2,603.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.20	75.80
J-39	2,591.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.28	81.03
J-40	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.17	80.55
J-41	2,591.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.22	81.00
J-42	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.99	81.33
J-43	2,581.00	Zone	Demand	9.92	COMMERCIAL	9.92	2,777.84	85.16
J-44	2,590.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.09	81.38
J-45	2,594.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,778.14	79.67
J-46	2,602.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.15	76.21
J-47	2,596.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.14	78.80
J-48	2,593.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.14	79.88
J-49	2,601.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,778.13	76.64
J-50	2,603.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,778.18	75.79
J-51	2,606.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.26	74.53
J-52	2,609.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,778.26	73.23

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-53	2,605.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.48	75.06
J-54	2,604.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.52	75.51
J-55	2,607.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.02	73.78
J-56	2,608.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,777.95	73.31
J-57	2,610.50	Zone	Demand	21.40	RESIDENTIAL	21.40	2,777.86	72.41
J-58	2,606.00	Zone	Demand	6.80	RESIDENTIAL	6.80	2,777.87	74.36
J-59	2,618.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.85	68.94
J-60	2,615.00	Zone	Demand	2.81	Composite	2.81	2,777.85	70.46
J-61	2,604.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,777.87	75.01
J-62	2,600.00	Zone	Demand	10.73	RESIDENTIAL	10.73	2,777.90	76.97
J-63	2,597.50	Zone	Demand	10.73	RESIDENTIAL	10.73	2,778.06	78.12
J-64	2,595.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,778.23	79.06
J-65	2,595.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,777.90	78.92
J-66	2,604.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,777.86	75.22
J-67	2,604.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.85	75.00
J-68	2,603.00	Zone	Demand	29.19	RESIDENTIAL	29.19	2,777.84	75.64
J-69	2,585.00	Zone	Demand	23.35	RESIDENTIAL	23.35	2,777.84	83.43
J-70	2,587.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,777.84	82.57
J-71	2,600.00	Zone	Demand	19.46	RESIDENTIAL	19.46	2,777.74	76.90
J-72	2,602.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.73	75.81
J-73	2,589.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,777.71	81.43
J-74	2,617.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.73	69.54
J-75	2,606.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,777.81	74.12
J-76	2,611.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,777.84	72.18
J-77	2,617.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.81	69.57
J-78	2,618.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.68	69.09
J-79	2,616.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,777.81	69.79
J-80	2,613.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.81	71.09
J-81	2,607.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.67	73.63
J-83	2,619.50	Zone	Demand	11.67	RESIDENTIAL	11.67	2,777.81	68.49
J-84	2,624.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,777.82	66.33
J-85	2,626.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,777.82	65.69
J-86	2,623.50	Zone	Demand	12.63	RESIDENTIAL	12.63	2,777.80	66.76
J-87	2,618.00	Zone	Demand	8.75	RESIDENTIAL	8.75	2,777.77	69.13
J-88	2,618.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.77	69.13
J-89	2,618.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.76	69.12
J-90	2,618.00	Zone	Demand	6.82	RESIDENTIAL	6.82	2,777.76	69.12
J-91	2,616.50	Zone	Demand	7.79	RESIDENTIAL	7.79	2,777.77	69.77
J-92	2,619.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.51	68.58
J-93	2,619.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.55	68.38
J-94	2,618.00	Zone	Demand	3.90	RESIDENTIAL	3.90	2,777.53	69.02
J-95	2,619.50	Zone	Demand	14.59	RESIDENTIAL	14.59	2,777.52	68.37
J-96	2,621.50	Zone	Demand	3.71	Composite	3.71	2,778.00	67.71
J-97	2,615.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.53	70.32
J-98	2,612.50	Zone	Demand	2.91	RESIDENTIAL	2.91	2,777.52	71.40
J-99	2,611.00	Zone	Demand	3.90	RESIDENTIAL	3.90	2,777.53	72.05
J-100	2,609.50	Zone	Demand	4.58	Composite	4.58	2,777.53	72.70
J-101	2,610.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.52	72.48
J-102	2,615.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.53	70.32
J-103	2,615.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.53	70.32
J-104	2,607.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.53	73.56
J-105	2,603.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.52	75.29

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-106	2,593.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,777.45	79.59
J-107	2,612.50	Zone	Demand	11.33	Composite	11.33	2,777.53	71.40
J-108	2,612.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.53	71.40
J-109	2,610.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.52	72.48
J-110	2,610.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.52	72.48
J-111	2,610.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.52	72.26
J-112	2,614.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.53	70.75
J-113	2,611.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.53	71.83
J-114	2,617.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.54	69.46
J-115	2,564.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.87	92.97
J-116	2,620.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.82	68.28
J-117	2,621.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.87	67.87
J-118	2,579.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.06	87.42
J-119	2,623.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.85	66.78
J-120	2,624.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.84	66.34
J-121	2,627.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.94	65.09
J-122	2,618.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.82	68.93
J-123	2,624.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,777.80	66.33
J-124	2,588.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,771.12	79.23
J-125	2,623.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,777.79	66.97
J-126	2,620.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.79	68.05
J-127	2,605.80	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.28	74.62
J-128	2,619.00	Zone	Demand	1.93	RESIDENTIAL	1.93	2,777.58	68.61
J-131	2,553.00	Zone	Demand	2.94	COMMERCIAL	2.94	2,777.96	97.33
J-132	2,624.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.04	66.43
J-133	2,564.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,778.90	92.98
J-134	2,558.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,778.97	95.60
J-135	2,557.50	Zone	Demand	29.31	COMMERCIAL	29.31	2,779.49	96.05
J-136	2,626.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.84	65.48
J-137	2,553.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,777.95	97.11
J-138	2,638.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,777.93	60.54
J-139	2,554.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.94	96.67
J-140	2,554.50	Zone	Demand	0.15	COMMERCIAL	0.15	2,778.18	96.77
J-141	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.18	96.99
J-142	2,554.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.93	96.88
J-143	2,610.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,777.91	72.65
J-144	2,611.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.89	72.20
J-145	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.47	91.49
J-146	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.46	92.78
J-147	2,615.00	Zone	Demand	4.48	RESIDENTIAL	4.48	2,777.50	70.31
J-148	2,623.00	Zone	Demand	10.58	RESIDENTIAL	10.58	2,777.82	66.98
J-149	2,621.00	Zone	Demand	29.20	RESIDENTIAL	29.20	2,777.80	67.84
J-150	2,620.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,777.83	68.29
J-151	2,624.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,777.83	66.34
J-152	2,625.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,777.83	66.12
J-153	2,626.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.84	65.69
J-154	2,561.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,777.04	93.26
J-155	2,556.50	Zone	Demand	16.54	RESIDENTIAL	16.54	2,777.04	95.42
J-156	2,556.20	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.04	95.55
J-157	2,559.50	Zone	Demand	3.02	COMMERCIAL	3.02	2,776.79	94.01
J-158	2,562.00	Zone	Demand	25.09	Composite	25.09	2,776.78	92.92
J-159	2,561.00	Zone	Demand	20.43	RESIDENTIAL	20.43	2,776.54	93.25

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-160	2,560.00	Zone	Demand	1.12	Composite			
J-161	2,565.00	Zone	Demand	13.62	RESIDENTIAL	1.12	2,776.68	93.75
J-162	2,559.50	Zone	Demand	0.97	RESIDENTIAL	13.62	2,776.52	91.52
J-163	2,558.50	Zone	Demand	7.05	Composite	0.97	2,776.66	93.96
J-164	2,556.50	Zone	Demand	15.57	RESIDENTIAL	7.05	2,776.66	94.39
J-165	2,557.50	Zone	Demand	3.89	RESIDENTIAL	15.57	2,776.64	95.25
J-166	2,555.00	Zone	Demand	4.86	RESIDENTIAL	3.89	2,776.64	94.81
J-167	2,554.00	Zone	Demand	6.69	RESIDENTIAL	4.86	2,776.64	95.89
J-168	2,553.50	Zone	Demand	1.37	Composite	6.69	2,776.64	96.33
J-169	2,553.50	Zone	Demand	4.86	RESIDENTIAL	1.37	2,776.64	96.54
J-170	2,554.50	Zone	Demand	6.51	Composite	4.86	2,776.64	96.54
J-171	2,556.50	Zone	Demand	13.97	Composite	6.51	2,776.64	96.11
J-172	2,555.50	Zone	Demand	6.81	RESIDENTIAL	13.97	2,776.63	95.24
J-173	2,556.50	Zone	Demand	2.24	Composite	6.81	2,776.64	95.68
J-174	2,557.00	Zone	Demand	1.95	RESIDENTIAL	2.24	2,776.64	95.25
J-175	2,557.00	Zone	Demand	3.89	RESIDENTIAL	1.95	2,776.64	95.03
J-176	2,559.00	Zone	Demand	4.70	IRRIGATION	3.89	2,776.64	95.03
J-177	2,559.50	Zone	Demand	23.86	Composite	4.70	2,776.65	94.17
J-178	2,557.00	Zone	Demand	10.70	RESIDENTIAL	23.86	2,776.65	93.95
J-179	2,559.50	Zone	Demand	36.70	Composite	10.70	2,776.65	95.03
J-180	2,553.50	Zone	Demand	0.00	RESIDENTIAL	36.70	2,776.83	94.03
J-181	2,549.00	Zone	Demand	7.77	RESIDENTIAL	0.00	2,776.96	96.68
J-182	2,550.00	Zone	Demand	6.81	RESIDENTIAL	7.77	2,776.96	98.63
J-183	2,548.00	Zone	Demand	10.69	RESIDENTIAL	6.81	2,776.94	98.19
J-184	2,548.00	Zone	Demand	3.89	RESIDENTIAL	10.69	2,776.95	99.06
J-185	2,549.00	Zone	Demand	7.78	RESIDENTIAL	3.89	2,776.95	99.05
J-186	2,547.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,776.93	98.61
J-187	2,546.50	Zone	Demand	0.00	RESIDENTIAL	7.78	2,776.94	99.48
J-188	2,551.00	Zone	Demand	10.69	RESIDENTIAL	0.00	2,776.94	99.70
J-189	2,553.00	Zone	Demand	5.84	RESIDENTIAL	10.69	2,776.95	97.76
J-190	2,553.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,776.95	96.89
J-191	2,552.00	Zone	Demand	3.88	RESIDENTIAL	5.84	2,776.95	96.89
J-192	2,552.50	Zone	Demand	2.22	Composite	3.88	2,776.94	97.32
J-193	2,551.50	Zone	Demand	4.86	RESIDENTIAL	2.22	2,776.94	97.11
J-194	2,553.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.94	97.54
J-195	2,555.00	Zone	Demand	49.67	Composite	4.86	2,776.94	96.89
J-196	2,556.00	Zone	Demand	4.86	RESIDENTIAL	49.67	2,776.91	96.01
J-197	2,551.50	Zone	Demand	30.83	Composite	4.86	2,776.94	95.59
J-198	2,553.50	Zone	Demand	0.00	RESIDENTIAL	30.83	2,776.67	97.42
J-199	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.96	96.68
J-200	2,616.50	Zone	Demand	4.69	Composite	0.00	2,776.96	98.41
J-201	2,617.00	Zone	Demand	0.00	RESIDENTIAL	4.69	2,777.74	69.76
J-202	2,601.00	Zone	Demand	2.92	RESIDENTIAL	0.00	2,777.74	69.54
J-203	2,600.00	Zone	Demand	3.89	RESIDENTIAL	2.92	2,777.67	76.43
J-204	2,603.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.64	76.86
J-205	2,603.50	Zone	Demand	0.00	RESIDENTIAL	3.89	2,777.62	75.55
J-206	2,603.00	Zone	Demand	4.86	RESIDENTIAL	0.00	2,777.62	75.33
J-207	2,603.50	Zone	Demand	0.00	RESIDENTIAL	4.86	2,777.62	75.55
J-208	2,599.00	Zone	Demand	1.95	RESIDENTIAL	0.00	2,777.62	75.33
J-209	2,577.00	Zone	Demand	0.00	RESIDENTIAL	1.95	2,777.64	77.29
J-210	2,597.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.84	86.89
J-211	2,597.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.84	78.24
				0.00	RESIDENTIAL	0.00	2,777.84	78.02

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-212	2,591.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.84	80.62
J-213	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.84	80.40
J-214	2,587.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.84	82.57
J-215	2,552.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,778.05	97.80
J-216	2,553.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,778.04	97.37
J-217	2,553.50	Zone	Demand	8.96	RESIDENTIAL	8.96	2,778.04	97.15
J-218	2,554.00	Zone	Demand	1.74	COMMERCIAL	1.74	2,778.25	97.02
J-219	2,554.50	Zone	Demand	24.87	IRRIGATION	24.87	2,778.40	96.87
J-220	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.40	96.22
J-221	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.08	93.92
J-222	2,564.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.13	93.29
J-223	2,564.50	Zone	Demand	0.49	COMMERCIAL	0.49	2,779.93	93.21
J-224	2,561.50	Zone	Demand	1.81	RESIDENTIAL	1.81	2,779.71	94.41
J-225	2,562.50	Zone	Demand	5.06	COMMERCIAL	5.06	2,779.55	93.91
J-226	2,561.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,778.87	94.26
J-227	2,565.00	Zone	Demand	17.51	RESIDENTIAL	17.51	2,777.12	91.77
J-228	2,566.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,776.82	91.21
J-229	2,568.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,776.73	90.31
J-230	2,569.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,776.67	89.85
J-231	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.63	94.37
J-232	2,565.00	Zone	Demand	16.56	Composite	16.56	2,776.73	91.61
J-233	2,565.00	Zone	Demand	7.69	Composite	7.69	2,776.70	91.59
J-234	2,565.00	Zone	Demand	12.75	COMMERCIAL	12.75	2,777.57	91.97
J-235	2,603.00	Zone	Demand	0.00	Fixed	0.00	2,777.61	75.55
J-236	2,613.00	Zone	Demand	69.44	RESIDENTIAL	69.44	2,777.52	71.18
J-237	2,565.50	Zone	Demand	0.64	IRRIGATION	0.64	2,777.57	91.75
J-238	2,568.50	Zone	Demand	0.91	Composite	0.91	2,777.58	90.46
J-239	2,569.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,777.58	90.24
J-240	2,569.50	Zone	Demand	26.03	IRRIGATION	26.03	2,777.58	90.03
J-241	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.64	85.51
J-242	2,570.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.17	89.63
J-243	2,568.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,776.89	90.38
J-244	2,566.50	Zone	Demand	11.67	RESIDENTIAL	11.67	2,776.69	90.94
J-245	2,564.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,776.89	92.11
J-246	2,569.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,776.88	89.94
J-247	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.99	86.96
J-248	2,571.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,776.79	89.03
J-249	2,570.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,776.83	89.49
J-250	2,571.00	Zone	Demand	3.21	Composite	3.21	2,776.72	89.00
J-251	2,573.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,776.23	87.93
J-252	2,570.00	Zone	Demand	1.29	IRRIGATION	1.29	2,776.78	89.46
J-253	2,571.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.78	88.82
J-254	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.55	87.85
J-255	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.54	87.85
J-256	2,577.00	Zone	Demand	0.25	COMMERCIAL	0.25	2,776.21	86.19
J-257	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.01	64.90
J-258	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.11	60.19
J-259	2,638.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,778.11	60.62
J-260	2,635.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,778.10	61.91
J-261	2,633.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,778.10	62.78
J-262	2,634.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.10	62.35
J-263	2,625.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.10	66.24

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-264	2,634.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,778.10	62.35
J-265	2,633.00	Zone	Demand	5.85	RESIDENTIAL	5.85	2,778.10	62.78
J-266	2,635.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,778.10	61.91
J-267	2,636.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.10	61.48
J-268	2,632.00	Zone	Demand	14.59	RESIDENTIAL	14.59	2,778.11	63.22
J-269	2,633.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,778.13	62.79
J-270	2,630.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,778.13	64.09
J-271	2,632.50	Zone	Demand	2.46	Composite	2.46	2,778.13	63.01
J-272	2,638.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,778.12	60.62
J-273	2,634.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,778.13	62.36
J-274	2,634.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,778.13	62.14
J-275	2,635.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,778.13	61.93
J-276	2,635.70	Zone	Demand	14.59	RESIDENTIAL	14.59	2,778.13	61.62
J-277	2,636.00	Zone	Demand	10.08	RESIDENTIAL	10.08	2,778.13	61.49
J-278	2,641.00	Zone	Demand	19.47	RESIDENTIAL	19.47	2,778.15	59.34
J-279	2,638.00	Zone	Demand	4.46	Composite	4.46	2,778.20	60.66
J-280	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.27	60.26
J-281	2,653.00	Zone	Demand	6.25	Composite	6.25	2,820.57	72.50
J-282	2,644.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,820.58	76.40
J-283	2,640.00	Zone	Demand	4.24	Composite	4.24	2,820.58	78.13
J-284	2,638.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,820.59	79.00
J-285	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,820.59	79.86
J-286	2,635.00	Zone	Demand	3.36	RESIDENTIAL	3.36	2,820.59	80.29
J-287	2,639.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,820.60	78.57
J-288	2,637.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,820.54	79.41
J-289	2,644.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,820.64	76.42
J-290	2,647.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,820.63	75.12
J-291	2,643.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,820.63	76.85
J-292	2,654.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,820.63	72.09
J-293	2,654.00	Zone	Demand	5.50	Composite	5.50	2,820.72	72.13
J-294	2,667.00	Zone	Demand	8.03	IRRIGATION	8.03	2,822.55	67.30
J-295	2,565.50	Zone	Demand	3.21	COMMERCIAL	3.21	2,777.57	91.75
J-296	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.59	67.32
J-297	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.59	67.32
J-298	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.13	68.20
J-299	2,670.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,823.22	66.29
J-300	2,670.00	Zone	Demand	0.97	RESIDENTIAL	0.97	2,823.22	66.29
J-301	2,664.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,823.59	69.05
J-302	2,664.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.20	68.66
J-303	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.93	67.90
J-304	2,670.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,823.93	66.60
J-305	2,667.00	Zone	Demand	14.59	RESIDENTIAL	14.59	2,824.35	68.08
J-306	2,665.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,824.76	69.12
J-307	2,664.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,825.47	69.86
J-308	2,670.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,825.46	67.26
J-309	2,660.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,826.28	71.94
J-310	2,662.50	Zone	Demand	25.29	RESIDENTIAL	25.29	2,826.80	71.09
J-311	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.14	68.20
J-312	2,655.00	Zone	Demand	274.77	Composite	274.77	2,825.56	73.79
J-313	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,826.09	75.32
J-314	2,660.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.18	70.38
J-315	2,645.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,828.21	79.27

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-316	2,643.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,770.29	55.07
J-317	2,631.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.82	63.52
J-318	2,577.50	Zone	Demand	14.59	RESIDENTIAL	14.59	2,777.84	86.68
J-319	2,566.00	Zone	Demand	17.92	Composite	17.92	2,777.47	91.49
J-320	2,563.00	Zone	Demand	7.84	RESIDENTIAL	7.84	2,777.46	92.78
J-321	2,647.50	Zone	Demand	18.48	RESIDENTIAL	18.48	2,827.80	78.01
J-322	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,769.66	76.86
J-323	2,572.50	Zone	Demand	7.84	RESIDENTIAL	7.84	2,772.76	86.64
J-325	2,645.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,828.43	79.15
J-326	2,565.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.99	91.50
J-327	2,565.50	Zone	Demand	8.76	RESIDENTIAL	8.76	2,776.94	91.48
J-328	2,565.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.94	91.70
J-329	2,565.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,776.88	91.45
J-330	2,565.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,776.88	91.67
J-331	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.83	91.22
J-332	2,568.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,776.09	89.82
J-333	2,569.50	Zone	Demand	1.03	Composite	1.03	2,776.05	89.36
J-334	2,571.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,776.05	88.50
J-335	2,572.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,776.10	88.30
J-336	2,571.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,775.94	88.67
J-337	2,571.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,775.72	88.57
J-338	2,572.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,775.96	88.25
J-339	2,573.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,775.96	87.81
J-340	2,572.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,776.23	88.36
J-341	2,571.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,775.04	88.28
J-342	2,572.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,775.04	87.84
J-343	2,570.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,774.49	88.47
J-344	2,573.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,773.36	86.47
J-345	2,572.00	Zone	Demand	11.25	Composite	11.25	2,772.99	86.96
J-346	2,632.00	Zone	Demand	6.43	Composite	6.43	2,820.49	81.55
J-347	2,630.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,820.48	82.20
J-348	2,630.00	Zone	Demand	13.44	RESIDENTIAL	13.44	2,820.48	82.41
J-349	2,633.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,820.48	81.11
J-350	2,638.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,820.54	78.98
J-351	2,640.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,820.54	78.11
J-352	2,640.50	Zone	Demand	11.20	RESIDENTIAL	11.20	2,820.54	77.89
J-353	2,680.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,825.45	62.93
J-354	2,695.00	Zone	Demand	12.66	RESIDENTIAL	12.66	2,825.45	56.44
J-355	2,682.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,825.45	61.85
J-356	2,678.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,825.45	63.58
J-357	2,700.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,825.44	54.27
J-358	2,699.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.55	53.45
J-359	2,701.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.55	52.59
J-360	2,717.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.55	45.66
J-361	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.98	97.12
J-364	2,554.00	Zone	Demand	5.81	COMMERCIAL	5.81	2,777.94	96.89
J-365	2,554.00	Zone	Demand	0.96	COMMERCIAL	0.96	2,777.94	96.89
J-366	2,554.00	Zone	Demand	3.02	COMMERCIAL	3.02	2,777.93	96.89
J-367	2,550.00	Zone	Demand	9.87	COMMERCIAL	9.87	2,778.96	99.06
J-368	2,580.00	Zone	Demand	7.16	IRRIGATION	7.16	2,780.38	86.70
J-369	2,550.50	Zone	Demand	1.16	COMMERCIAL	1.16	2,778.14	98.49
J-370	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.38	87.35

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-371	2,554.00	Zone	Demand	19.01	COMMERCIAL	19.01	2,778.14	96.98
J-372	2,555.50	Zone	Demand	9.53	IRRIGATION	9.53	2,778.27	96.38
J-373	2,556.00	Zone	Demand	2.20	COMMERCIAL	2.20	2,778.27	96.16
J-374	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.27	96.16
J-375	2,550.00	Zone	Demand	0.73	COMMERCIAL	0.73	2,778.31	98.78
J-376	2,549.50	Zone	Demand	15.08	COMMERCIAL	15.08	2,778.30	98.99
J-377	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.30	98.99
J-378	2,550.00	Zone	Demand	12.40	COMMERCIAL	12.40	2,778.32	98.78
J-379	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.40	99.04
J-380	2,589.00	Zone	Demand	13.19	COMMERCIAL	13.19	2,778.14	81.83
J-381	2,593.50	Zone	Demand	1.62	COMMERCIAL	1.62	2,778.14	79.88
J-382	2,547.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.62	99.99
J-383	2,548.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.69	99.59
J-384	2,548.50	Zone	Demand	5.63	COMMERCIAL	5.63	2,778.69	99.59
J-385	2,557.00	Zone	Demand	0.94	COMMERCIAL	0.94	2,780.03	96.50
J-386	2,556.00	Zone	Demand	17.77	COMMERCIAL	17.77	2,778.88	96.43
J-387	2,556.00	Zone	Demand	1.74	Composite	1.74	2,778.93	96.45
J-388	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.82	95.54
J-389	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.19	97.86
J-390	2,553.50	Zone	Demand	0.22	Composite	0.22	2,780.19	98.08
J-391	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.19	97.43
J-392	2,554.00	Zone	Demand	7.77	COMMERCIAL	7.77	2,780.19	97.86
J-393	2,552.50	Zone	Demand	0.00	Composite	0.00	2,780.19	98.51
J-394	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.22	96.58
J-395	2,558.00	Zone	Demand	1.07	COMMERCIAL	1.07	2,780.11	96.10
J-396	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.86	95.12
J-397	2,560.00	Zone	Demand	0.34	Composite	0.34	2,779.86	95.12
J-398	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.49	98.86
J-399	2,554.00	Zone	Demand	18.48	RESIDENTIAL	18.48	2,780.34	97.93
J-400	2,556.50	Zone	Demand	13.43	Composite	13.43	2,780.24	96.80
J-401	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.01	95.40
J-402	2,555.50	Zone	Demand	2.47	COMMERCIAL	2.47	2,781.28	97.68
J-403	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.03	97.79
J-404	2,562.50	Zone	Demand	0.42	COMMERCIAL	0.42	2,782.20	95.06
J-405	2,567.00	Zone	Demand	3.66	COMMERCIAL	3.66	2,782.52	93.24
J-406	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.70	98.30
J-407	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.48	95.39
J-408	2,565.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.55	92.83
J-409	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.03	96.06
J-410	2,627.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,777.82	65.03
J-411	2,621.00	Zone	Demand	7.65	Composite	7.65	2,777.82	67.85
J-412	2,602.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,777.82	75.85
J-413	2,599.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.83	77.37
J-414	2,716.00	Zone	Demand	3.88	RESIDENTIAL	3.88	2,825.44	47.35
J-415	2,718.00	Zone	Demand	8.75	Composite	8.75	2,825.44	46.48
J-416	2,733.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,825.44	39.99
J-417	2,722.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,825.44	44.75
J-418	2,559.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,776.60	93.93
J-419	2,560.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,776.60	93.49
J-420	2,573.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,776.51	87.83
J-421	2,574.50	Zone	Demand	15.57	Composite	15.57	2,776.44	87.37
J-422	2,573.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.52	88.05

Title: INITIAL RUN

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Bentley Systems, Inc.

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-423	2,565.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.56	91.31
J-424	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.56	91.10
J-425	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.06	87.86
J-426	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.06	87.86
J-427	2,579.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.26	86.86
J-428	2,579.50	Zone	Demand	0.58	COMMERCIAL	0.58	2,780.33	86.89
J-429	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.38	88.42
J-430	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.38	88.42
J-431	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,780.39	88.21
J-432	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,780.39	88.21
J-433	2,572.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,780.40	89.95
J-434	2,572.50	Zone	Demand	0.00	Composite	0.00	2,780.40	89.95
J-435	2,578.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,780.40	87.35
J-436	2,579.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,780.40	87.14
J-437	2,578.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,780.40	87.35
J-438	2,579.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,780.40	86.92
J-439	2,580.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,780.40	86.49
J-440	2,580.00	Zone	Demand	0.82	Composite	0.82	2,780.40	86.70
J-441	2,554.00	Zone	Demand	11.15	IRRIGATION	11.15	2,778.14	96.97
J-442	2,592.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.18	80.33
J-443	2,556.00	Zone	Demand	7.55	RESIDENTIAL	7.55	2,778.94	96.45
J-444	2,554.00	Zone	Demand	0.72	COMMERCIAL	0.72	2,779.01	97.35
J-445	2,554.00	Zone	Demand	0.11	IRRIGATION	0.11	2,778.99	97.34
J-446	2,555.00	Zone	Demand	8.72	IRRIGATION	8.72	2,779.09	96.95
J-447	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.15	96.54
J-448	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.15	96.98
J-449	2,554.50	Zone	Demand	1.25	COMMERCIAL	1.25	2,779.15	97.19
J-450	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.17	96.55
J-451	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.24	96.59
J-452	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.27	96.60
J-453	2,556.50	Zone	Demand	0.12	COMMERCIAL	0.12	2,779.32	96.40
J-454	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.35	96.20
J-455	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.38	96.21
J-456	2,558.00	Zone	Demand	1.84	IRRIGATION	1.84	2,779.42	95.80
J-457	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.50	95.62
J-458	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.43	95.80
J-459	2,557.00	Zone	Demand	0.24	COMMERCIAL	0.24	2,779.30	96.18
J-460	2,556.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,779.23	96.37
J-461	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.17	96.55
J-462	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.23	96.58
J-463	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.23	96.15
J-464	2,557.00	Zone	Demand	0.55	IRRIGATION	0.55	2,779.23	96.15
J-465	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.17	96.55
J-466	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.23	95.93
J-467	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.23	95.50
J-468	2,558.00	Zone	Demand	0.03	COMMERCIAL	0.03	2,779.23	95.72
J-469	2,557.50	Zone	Demand	0.07	COMMERCIAL	0.07	2,779.23	95.93
J-470	2,558.00	Zone	Demand	0.01	COMMERCIAL	0.01	2,779.23	95.72
J-471	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.83	97.92
J-472	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.83	97.92
J-473	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.96	97.54
J-474	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.43	95.15

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-475	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.52	95.84
J-476	2,553.00	Zone	Demand	0.03	COMMERCIAL	0.03	2,779.15	97.84
J-477	2,553.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	98.05
J-478	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.96	97.54
J-479	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	97.83
J-480	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	97.83
J-481	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	96.96
J-482	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	98.26
J-483	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	97.61
J-484	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	97.61
J-485	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	97.61
J-486	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	97.61
J-487	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	98.26
J-488	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	98.26
J-489	2,561.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,776.61	93.28
J-490	2,565.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,776.54	91.30
J-491	2,565.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.53	91.30
J-492	2,569.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.49	89.77
J-493	2,570.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,776.49	89.34
J-494	2,575.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,776.44	86.94
J-495	2,639.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.47	78.30
J-496	2,628.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.46	83.05
J-497	2,628.50	Zone	Demand	31.36	RESIDENTIAL	31.36	2,820.46	83.05
J-498	2,628.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,820.45	83.27
J-499	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.45	83.27
J-500	2,625.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,820.45	84.35
J-501	2,613.50	Zone	Demand	11.55	RESIDENTIAL	11.55	2,820.45	89.54
J-502	2,612.50	Zone	Demand	15.58	IRRIGATION	15.58	2,820.44	89.97
J-503	2,616.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.45	88.24
J-504	2,587.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.94	82.40
J-505	2,587.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,777.94	82.40
J-506	2,584.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.90	83.89
J-507	2,618.00	Zone	Demand	6.83	RESIDENTIAL	6.83	2,777.85	69.16
J-508	2,592.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,777.86	80.41
J-509	2,588.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,777.86	82.14
J-510	2,594.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.86	79.55
J-511	2,594.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,777.85	79.33
J-512	2,595.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.85	79.11
J-513	2,612.00	Zone	Demand	7.79	RESIDENTIAL	7.79	2,777.85	71.75
J-514	2,601.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.84	76.29
J-515	2,593.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.83	79.75
J-516	2,612.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.85	71.75
J-517	2,589.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.83	81.70
J-518	2,603.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.84	75.64
J-519	2,604.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.84	75.21
J-520	2,604.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.84	75.00
J-521	2,616.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.85	69.81
J-522	2,575.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,773.18	85.74
J-523	2,578.00	Zone	Demand	2.25	Composite	2.25	2,773.18	84.44
J-524	2,574.00	Zone	Demand	16.61	IRRIGATION	16.61	2,773.05	86.12
J-525	2,559.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,776.61	93.93
J-527	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.52	88.49

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-528	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.94	81.31
J-529	2,546.00	Zone	Demand	12.63	RESIDENTIAL	12.63	2,776.90	99.90
J-530	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.96	97.33
J-531	2,579.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.84	86.03
J-532	2,572.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.83	88.84
J-533	2,572.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,777.83	89.05
J-534	2,572.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.82	88.83
J-535	2,572.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.82	89.05
J-536	2,571.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.82	89.48
J-537	2,569.50	Zone	Demand	28.00	RESIDENTIAL	28.00	2,777.82	90.13
J-538	2,571.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.84	89.49
J-539	2,572.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.84	89.06
J-540	2,571.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.85	89.28
J-541	2,572.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,777.85	88.85
J-542	2,572.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,777.87	88.85
J-543	2,553.00	Zone	Demand	6.29	Composite	6.29	2,778.09	97.39
J-544	2,554.00	Zone	Demand	9.30	Composite	9.30	2,778.12	96.97
J-546	2,555.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.10	96.53
J-547	2,558.00	Zone	Demand	3.05	Composite	3.05	2,779.10	95.66
J-548	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.15	95.25
J-549	2,559.50	Zone	Demand	8.05	IRRIGATION	8.05	2,779.16	95.04
J-550	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.18	95.05
J-551	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.24	95.07
J-552	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.33	95.11
J-553	2,557.50	Zone	Demand	24.32	RESIDENTIAL	24.32	2,779.16	95.90
J-554	2,557.50	Zone	Demand	19.46	RESIDENTIAL	19.46	2,779.18	95.91
J-555	2,558.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,779.20	95.49
J-556	2,559.00	Zone	Demand	11.73	Composite	11.73	2,779.20	95.27
J-557	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.34	94.90
J-558	2,561.50	Zone	Demand	11.26	Composite	11.26	2,779.34	94.25
J-559	2,559.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,779.35	95.34
J-560	2,558.50	Zone	Demand	7.78	Composite	7.78	2,779.35	95.55
J-561	2,557.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.38	96.00
J-562	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.46	95.82
J-563	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.50	96.05
J-564	2,557.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.50	96.05
J-565	2,560.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.50	94.97
J-566	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.61	95.66
J-567	2,556.00	Zone	Demand	3.39	COMMERCIAL	3.39	2,779.83	96.84
J-568	2,615.50	Zone	Demand	13.44	RESIDENTIAL	13.44	2,820.45	88.67
J-569	2,595.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.45	97.54
J-570	2,597.50	Zone	Demand	12.32	RESIDENTIAL	12.32	2,820.45	96.46
J-571	2,659.00	Zone	Demand	22.38	RESIDENTIAL	22.38	2,823.13	71.01
J-572	2,643.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,823.13	77.93
J-573	2,643.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.13	77.72
J-574	2,644.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,823.13	77.50
J-575	2,643.50	Zone	Demand	7.79	RESIDENTIAL	7.79	2,823.13	77.72
J-576	2,661.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,823.19	70.17
J-577	2,649.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,823.15	75.35
J-578	2,649.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,823.15	75.35
J-579	2,642.00	Zone	Demand	14.59	RESIDENTIAL	14.59	2,823.15	78.38
J-580	2,645.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,823.15	77.08

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-581	2,643.50	Zone	Demand	0.97	RESIDENTIAL	0.97	2,823.15	77.73
J-582	2,643.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,823.15	77.73
J-583	2,648.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,823.16	75.78
J-584	2,654.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,823.17	72.97
J-585	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.16	74.05
J-586	2,650.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,823.16	74.70
J-587	2,652.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.57	54.76
J-588	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.69	85.10
J-589	2,576.50	Zone	Demand	0.26	COMMERCIAL	0.26	2,779.71	87.92
J-590	2,574.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.71	88.78
J-591	2,579.50	Zone	Demand	0.36	COMMERCIAL	0.36	2,780.56	86.99
J-592	2,578.00	Zone	Demand	0.55	Composite	0.55	2,780.56	87.64
J-593	2,579.50	Zone	Demand	77.59	IRRIGATION	77.59	2,780.22	86.84
J-594	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.27	87.30
J-595	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.73	87.28
J-596	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.65	87.24
J-597	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.65	87.03
J-598	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.34	87.33
J-599	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.34	87.97
J-600	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.34	87.97
J-601	2,577.00	Zone	Demand	5.64	COMMERCIAL	5.64	2,779.33	87.54
J-602	2,577.50	Zone	Demand	9.84	COMMERCIAL	9.84	2,779.33	87.32
J-603	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.33	88.19
J-604	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.33	87.54
J-605	2,578.00	Zone	Demand	2.87	COMMERCIAL	2.87	2,778.63	86.80
J-606	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.63	86.80
J-607	2,572.00	Zone	Demand	2.01	COMMERCIAL	2.01	2,776.94	88.67
J-608	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.94	87.15
J-609	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.94	87.15
J-610	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.45	86.29
J-611	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.45	86.08
J-612	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.39	86.05
J-613	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.39	86.05
J-614	2,577.50	Zone	Demand	15.68	Composite	15.68	2,776.34	86.03
J-615	2,578.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,776.34	85.81
J-616	2,580.00	Zone	Demand	15.68	Composite	15.68	2,776.06	84.83
J-617	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,785.02	96.49
J-618	2,562.00	Zone	Demand	7.84	Composite	7.84	2,785.52	96.71
J-619	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,785.52	96.71
J-620	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,788.99	96.26
J-621	2,566.00	Zone	Demand	0.11	COMMERCIAL	0.11	2,789.45	96.68
J-622	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,789.45	96.46
J-623	2,567.50	Zone	Demand	8.96	Composite	8.96	2,789.45	96.03
J-624	2,567.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,790.52	96.71
J-625	2,567.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.10	96.96
J-628	2,569.00	Zone	Demand	7.84	Composite	7.84	2,791.09	96.09
J-636	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.06	87.86
J-637	2,558.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,776.64	94.38
J-638	2,559.00	Zone	Demand	15.68	RESIDENTIAL	15.68	2,776.64	94.16
J-639	2,556.00	Zone	Demand	27.74	Composite	27.74	2,776.63	95.46
J-640	2,564.50	Zone	Demand	39.20	RESIDENTIAL	39.20	2,776.52	91.73
J-650	2,610.00	Zone	Demand	22.38	RESIDENTIAL	22.38	2,777.82	72.61

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-651	2,553.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,778.04	97.15
J-653	2,627.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,777.83	65.26
J-654	2,682.00	Zone	Demand	21.40	RESIDENTIAL	21.40	2,825.45	62.06
J-655	2,680.00	Zone	Demand	18.48	RESIDENTIAL	18.48	2,825.45	62.93
J-656	2,693.00	Zone	Demand	23.68	RESIDENTIAL	23.68	2,825.44	57.30
J-657	2,563.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,776.90	92.54
J-658	2,598.00	Zone	Demand	0.30	RESIDENTIAL	0.30	2,777.76	77.77
J-659	2,638.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.28	57.67
J-660	2,640.00	Zone	Demand	0.62	COMMERCIAL	0.62	2,771.28	56.80
J-661	2,641.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.28	56.37
J-750	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,826.09	75.32
J-751	2,571.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,774.49	88.04
J-752	2,567.00	Zone	Demand	20.81	COMMERCIAL	20.81	2,777.57	91.11
J-813	2,565.00	Zone	Demand	0.00	Fixed	0.00	2,776.70	91.59
J-814	2,560.50	Zone	Demand	0.00	Fixed	0.00	2,776.61	93.50
J-822	2,615.00	Zone	Demand	0.00	Fixed	0.00	2,777.85	70.46
J-823	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,777.93	61.41
J-824	2,621.00	Zone	Demand	0.00	Fixed	0.00	2,777.83	67.85
J-825	2,609.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,774.27	71.50
J-826	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,780.27	87.08
J-827	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,780.33	87.11
J-828	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.50	84.58
J-829	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.47	84.57
J-830	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.43	84.55
J-831	2,585.00	Zone	Demand	109.76	Fixed	109.76	2,780.42	84.55
J-832	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.41	84.55
J-833	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.41	84.54
J-834	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.40	84.54
J-835	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.41	84.54
J-836	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.41	84.54
J-837	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.41	84.54
J-838	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.41	84.54
J-840	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,780.48	84.58
J-842	2,552.50	Zone	Demand	0.00	Fixed	0.00	2,776.67	96.99
J-844	2,663.30	Zone	Demand	0.68	RESIDENTIAL	0.68	2,821.88	68.61
J-845	2,664.70	Zone	Demand	0.00	Fixed	0.00	2,822.13	68.11
J-846	2,665.90	Zone	Demand	0.00	Fixed	0.00	2,822.36	67.69
J-847	2,661.70	Zone	Demand	2.04	RESIDENTIAL	2.04	2,821.88	69.30
J-848	2,664.70	Zone	Demand	1.37	RESIDENTIAL	1.37	2,822.13	68.11
J-849	2,665.90	Zone	Demand	1.37	RESIDENTIAL	1.37	2,822.36	67.69
J-850	2,567.00	Zone	Demand	0.00	Fixed	0.00	2,791.25	97.02
J-851	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,776.45	87.59
J-852	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,776.45	87.59
J-853	2,575.00	Zone	Demand	0.00	Fixed	0.00	2,776.45	87.16
J-901	2,591.00	Zone	Demand	0.00	Fixed	0.00	2,778.46	81.11
J-906	2,553.50	Zone	Demand	4.26	COMMERCIAL	4.26	2,777.00	96.70
J-917	2,625.00	Zone	Demand	0.00	Fixed	0.00	2,777.52	65.99
J-981	2,640.00	Zone	Demand	0.00	Fixed	0.00	2,767.98	55.37
J-982	2,644.50	Zone	Demand	0.00	Fixed	0.00	2,770.25	54.41

Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-1	370.00	8.0	PVC	Open		219.66	1.40	2,777.41	2,777.05	0.97	0.36
P-2	266.00	6.0	PVC	Open		0.00	0.00	2,777.41	2,777.41	0.00	0.00
P-3	365.00	8.0	PVC	Open		230.41	1.47	2,777.80	2,777.41	1.06	0.39
P-4	357.00	8.0	PVC	Open		103.07	0.66	2,777.89	2,777.80	0.24	0.09
P-5	369.00	8.0	PVC	Open		42.48	0.27	2,777.91	2,777.89	0.05	0.02
P-6	223.00	6.0	PVC	Open		1.16	0.01	2,777.91	2,777.90	0.00	0.00
P-7	358.00	8.0	PVC	Open		43.64	0.28	2,777.92	2,777.91	0.05	0.02
P-8	530.00	8.0	PVC	Open		-90.22	0.58	2,777.92	2,778.02	0.19	0.10
P-9	320.00	8.0	PVC	Open		0.00	0.00	2,778.27	2,778.27	0.00	0.00
P-10	680.00	8.0	PVC	Open		32.40	0.21	2,777.94	2,777.92	0.03	0.02
P-11	314.00	8.0	PVC	Open		24.97	0.16	2,777.93	2,777.92	0.02	0.01
P-12	520.00	8.0	PVC	Open		17.95	0.11	2,777.93	2,777.93	0.01	0.01
P-13	660.00	8.0	PVC	Open		39.81	0.25	2,777.96	2,777.93	0.04	0.03
P-14	130.00	6.0	PVC	Open		2.92	0.03	2,777.93	2,777.93	0.00	0.00
P-15	770.00	6.0	PVC	Open		2.40	0.03	2,777.93	2,777.93	0.00	0.00
P-16	446.00	8.0	PVC	Open		17.72	0.11	2,777.93	2,777.93	0.01	0.00
P-17	380.00	8.0	PVC	Open		26.99	0.17	2,777.94	2,777.93	0.02	0.01
P-18	270.00	8.0	PVC	Open		-24.49	0.16	2,777.94	2,777.95	0.02	0.00
P-19	440.00	8.0	PVC	Open		-80.85	0.52	2,777.96	2,778.02	0.15	0.07
P-20	83.00	8.0	PVC	Open		6.09	0.04	2,778.02	2,778.02	0.00	0.00
P-21	72.00	8.0	PVC	Open		-141.68	0.90	2,778.15	2,778.18	0.43	0.03
P-22	572.00	8.0	PVC	Open		-96.37	0.62	2,778.02	2,778.15	0.21	0.12
P-23	195.00	6.0	PVC	Open		-13.22	0.15	2,777.94	2,777.95	0.03	0.00
P-24	826.00	6.0	PVC	Open		-16.87	0.19	2,777.94	2,777.97	0.04	0.03
P-25	368.00	8.0	PVC	Open		-100.55	0.64	2,777.97	2,778.06	0.23	0.08
P-26	282.00	8.0	PVC	Open		-77.70	0.50	2,777.93	2,777.97	0.14	0.04
P-27	228.00	8.0	PVC	Open		-62.14	0.40	2,777.91	2,777.93	0.10	0.02
P-28	603.00	8.0	PVC	Open		-31.50	0.20	2,777.91	2,777.93	0.03	0.02
P-29	340.00	6.0	PVC	Open		-17.44	0.20	2,777.93	2,777.94	0.04	0.01
P-30	560.00	8.0	PVC	Open		29.63	0.19	2,777.94	2,777.93	0.03	0.01
P-31	249.00	8.0	PVC	Open		9.32	0.06	2,777.94	2,777.94	0.00	0.00
P-32	660.00	8.0	PVC	Open		52.56	0.34	2,777.99	2,777.94	0.07	0.05
P-33	400.00	6.0	PVC	Open		4.57	0.05	2,777.99	2,777.99	0.00	0.00
P-34	171.00	8.0	PVC	Open		60.05	0.38	2,778.01	2,777.99	0.09	0.02
P-35	375.00	8.0	PVC	Open		109.34	0.70	2,778.11	2,778.01	0.27	0.10
P-36	180.00	6.0	PVC	Open		18.80	0.21	2,778.11	2,778.11	0.05	0.01
P-37	318.00	6.0	PVC	Open		11.67	0.13	2,778.11	2,778.11	0.02	0.01
P-38	310.00	6.0	PVC	Open		34.36	0.39	2,778.15	2,778.11	0.13	0.04
P-39	238.00	6.0	PVC	Open		14.20	0.16	2,778.16	2,778.15	0.03	0.01
P-40	250.00	6.0	Asbest	Open		37.49	0.43	2,778.20	2,778.16	0.15	0.04
P-41	164.00	8.0	PVC	Open		80.50	0.51	2,778.22	2,778.20	0.15	0.03
P-42	64.00	8.0	PVC	Open		-39.65	0.25	2,777.95	2,777.95	0.05	0.00
P-43	80.00	8.0	PVC	Open		253.21	1.62	2,778.28	2,778.18	1.27	0.10
P-44	479.00	8.0	PVC	Open		130.38	0.83	2,778.17	2,777.99	0.37	0.18
P-45	70.00	8.0	PVC	Open		199.85	1.28	2,778.28	2,778.22	0.81	0.06
P-46	61.00	8.0	PVC	Open		-259.93	1.66	2,778.32	2,778.40	1.33	0.08
P-47	451.00	8.0	PVC	Open		115.46	0.74	2,778.22	2,778.09	0.30	0.13
P-48	172.00	8.0	PVC	Open		166.69	1.06	2,778.09	2,777.99	0.58	0.10
P-49	149.00	6.0	PVC	Open		-55.12	0.63	2,778.09	2,778.14	0.31	0.05
P-50	390.00	6.0	Asbest	Open		39.12	0.44	2,778.20	2,778.14	0.16	0.06
P-51	250.00	6.0	Asbest	Open		-18.92	0.21	2,778.14	2,778.15	0.04	0.01

Title: INITIAL RUN

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Haestad Methods Solution Center

Watertown, CT 06795 USA

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-52	390.00	6.0	Asbest	Open		16.49	0.19				
P-53	261.00	6.0	Asbest	Open		17.51	0.20	2,778.16	2,778.15	0.04	0.01
P-54	211.00	6.0	Asbest	Open		3.89	0.04	2,778.15	2,778.14	0.04	0.01
P-55	330.00	6.0	Asbest	Open		8.76	0.10	2,778.14	2,778.14	0.00	0.00
P-56	352.00	6.0	PVC	Open		-27.73	0.31	2,778.14	2,778.13	0.01	0.00
P-57	330.00	6.0	PVC	Open		25.03	0.28	2,778.15	2,778.18	0.09	0.03
P-58	220.00	6.0	PVC	Open		61.52	0.70	2,778.18	2,778.15	0.08	0.03
P-59	444.00	6.0	PVC	Open		9.73	0.11	2,778.26	2,778.18	0.38	0.08
P-60	31.00	6.0	PVC	Open		76.11	0.86	2,778.26	2,778.26	0.01	0.01
P-61	83.00	6.0	PVC	Open		166.51	1.89	2,778.28	2,778.26	0.57	0.02
P-63	87.00	6.0	Ductile	Open		435.36	4.94	2,778.48	2,778.28	2.43	0.20
P-64	15.00	6.0	PVC	Open		166.51	1.89	2,612.55	2,611.00	17.79	1.55
P-65	251.00	8.0	PVC	Open		240.31	1.53	2,778.52	2,778.48	2.43	0.04
P-66	334.00	6.0	PVC	Open		90.40	1.03	2,778.52	2,778.23	1.15	0.29
P-67	129.00	8.0	PVC	Open		-163.32	1.04	2,778.28	2,778.02	0.78	0.26
P-68	556.00	8.0	PVC	Open		-81.07	0.52	2,777.95	2,778.02	0.56	0.07
P-69	387.00	8.0	PVC	Open		-65.72	0.42	2,777.86	2,777.95	0.16	0.09
P-71	131.00	8.0	PVC	Open		-14.61	0.09	2,777.87	2,777.91	0.11	0.04
P-72	150.00	8.0	PVC	Open		41.49	0.26	2,777.85	2,777.85	0.01	0.00
P-73	326.00	6.0	PVC	Open		-31.67	0.36	2,777.87	2,777.87	0.05	0.01
P-74	570.00	6.0	PVC	Open		51.52	0.58	2,777.87	2,777.90	0.12	0.04
P-75	280.00	8.0	PVC	Open		-77.79	0.50	2,778.06	2,777.90	0.28	0.16
P-76	402.00	8.0	PVC	Open		-140.04	0.89	2,778.02	2,778.06	0.14	0.04
P-77	150.00	6.0	PVC	Open		94.43	1.07	2,778.06	2,778.23	0.42	0.17
P-78	700.00	6.0	PVC	Open		-36.65	0.42	2,778.23	2,778.11	0.84	0.13
P-79	325.00	6.0	PVC	Open		9.12	0.10	2,777.90	2,778.01	0.15	0.10
P-80	360.00	6.0	PVC	Open		32.15	0.36	2,777.90	2,777.90	0.01	0.00
P-81	158.00	4.0	PVC	Open		4.86	0.12	2,777.90	2,777.86	0.12	0.04
P-82	985.00	6.0	PVC	Open		-11.72	0.13	2,777.86	2,777.85	0.03	0.00
P-83	930.00	8.0	PVC	Open		-13.50	0.09	2,777.84	2,777.86	0.02	0.02
P-84	550.00	6.0	PVC	Open		8.76	0.10	2,777.84	2,777.84	0.01	0.01
P-85	410.00	8.0	PVC	Open		-83.91	0.54	2,777.84	2,777.84	0.01	0.01
P-86	660.00	6.0	PVC	Open		-38.30	0.43	2,777.84	2,777.91	0.16	0.07
P-87	130.00	4.0	PVC	Open		4.86	0.12	2,777.74	2,777.84	0.16	0.11
P-88	314.00	4.0	PVC	Open		9.73	0.25	2,777.74	2,777.73	0.03	0.00
P-89	1,283.00	6.0	PVC	Open		-4.25	0.05	2,777.74	2,777.71	0.10	0.03
P-90	910.00	6.0	PVC	Open		-26.71	0.30	2,777.73	2,777.74	0.00	0.00
P-91	383.00	8.0	PVC	Open		-51.68	0.33	2,777.73	2,777.81	0.09	0.08
P-92	300.00	8.0	PVC	Open		-62.45	0.40	2,777.81	2,777.84	0.07	0.03
P-93	292.00	8.0	PVC	Open		3.96	0.03	2,777.84	2,777.87	0.10	0.03
P-94	372.00	8.0	PVC	Open		-18.17	0.12	2,777.84	2,777.84	0.00	0.00
P-95	150.00	2.0	PVC	Open		4.86	0.50	2,777.81	2,777.81	0.01	0.00
P-96	340.00	8.0	PVC	Open		-9.41	0.06	2,777.81	2,777.68	0.85	0.13
P-97	125.00	8.0	PVC	Open		-0.30	0.00	2,777.81	2,777.81	0.00	0.00
P-98	158.00	2.0	PVC	Open		4.86	0.50	2,777.81	2,777.81	0.00	0.00
P-99	360.00	8.0	PVC	Open		7.49	0.05	2,777.81	2,777.67	0.85	0.13
P-100	809.00	6.0	PVC	Open		1.59	0.02	2,777.81	2,777.81	0.00	0.00
P-101	95.00	4.0	PVC	Open		2.92	0.07	2,777.81	2,777.81	0.00	0.00
P-102	620.00	8.0	PVC	Open		20.75	0.13	2,777.85	2,777.85	0.01	0.00
P-103	150.00	6.0	PVC	Open		-32.62	0.37	2,777.82	2,777.81	0.01	0.01
P-104	980.00	6.0	PVC	Open		14.91	0.17	2,777.80	2,777.82	0.12	0.02
								2,777.80	2,777.77	0.03	0.03

Title: INITIAL RUN

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Bentley Systems, Inc.

Haestad Methods Solution Center

Watertown, CT 06795 USA

+1-203-755-1666

Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-105	280.00	4.0	PVC	Open		4.67	0.12	2,777.77	2,777.76	0.03	0.01
P-106	50.00	6.0	PVC	Open		1.49	0.02	2,777.77	2,777.77	0.00	0.00
P-107	233.00	4.0	PVC	Open		-5.07	0.13	2,777.76	2,777.77	0.03	0.01
P-108	110.00	4.0	PVC	Open		6.82	0.17	2,777.76	2,777.76	0.06	0.01
P-109	207.00	6.0	PVC	Open		-6.50	0.07	2,777.77	2,777.77	0.01	0.00
P-110	300.00	6.0	PVC	Open		33.54	0.38	2,777.77	2,777.73	0.13	0.04
P-111	470.00	6.0	PVC	Open		56.71	0.64	2,777.73	2,777.58	0.33	0.16
P-112	120.00	2.0	PVC	Open		3.89	0.40	2,777.58	2,777.51	0.57	0.07
P-113	124.00	6.0	PVC	Open		50.88	0.58	2,777.58	2,777.55	0.27	0.03
P-114	145.00	6.0	PVC	Open		29.49	0.33	2,777.55	2,777.53	0.10	0.01
P-115	430.00	6.0	PVC	Open		14.59	0.17	2,777.53	2,777.52	0.03	0.01
P-116	316.00	8.0	PVC	Open		0.00	0.00	2,777.52	2,777.52	0.00	0.00
P-117	250.00	6.0	PVC	Open		-10.99	0.12	2,777.53	2,777.53	0.02	0.00
P-118	190.00	4.0	PVC	Open		2.91	0.07	2,777.53	2,777.52	0.01	0.00
P-119	240.00	6.0	PVC	Open		-5.17	0.06	2,777.53	2,777.53	0.00	0.00
P-120	621.00	6.0	PVC	Open		0.70	0.01	2,777.53	2,777.53	0.00	0.00
P-121	100.00	4.0	PVC	Open		3.89	0.10	2,777.53	2,777.52	0.02	0.00
P-122	280.00	6.0	PVC	Open		-7.78	0.09	2,777.53	2,777.53	0.01	0.00
P-123	140.00	6.0	PVC	Open		3.89	0.04	2,777.53	2,777.53	0.00	0.00
P-124	530.00	6.0	PVC	Open		15.56	0.18	2,777.55	2,777.53	0.03	0.02
P-125	270.00	6.0	PVC	Open		-0.57	0.01	2,777.53	2,777.53	0.00	0.00
P-126	78.00	6.0	PVC	Open		13.62	0.15	2,777.53	2,777.52	0.03	0.00
P-127	610.00	4.0	PVC	Open		10.70	0.27	2,777.52	2,777.45	0.12	0.07
P-128	430.00	8.0	PVC	Open		13.05	0.08	2,777.53	2,777.53	0.01	0.00
P-129	250.00	8.0	PVC	Open		6.88	0.04	2,777.53	2,777.53	0.00	0.00
P-130	480.00	6.0	PVC	Open		10.70	0.12	2,777.53	2,777.52	0.02	0.01
P-131	100.00	6.0	PVC	Open		2.92	0.03	2,777.52	2,777.52	0.00	0.00
P-132	80.00	6.0	PVC	Open		2.92	0.03	2,777.52	2,777.52	0.00	0.00
P-133	165.00	8.0	PVC	Open		25.37	0.16	2,777.53	2,777.53	0.02	0.00
P-134	270.00	6.0	PVC	Open		5.84	0.07	2,777.53	2,777.53	0.00	0.00
P-135	243.00	8.0	PVC	Open		38.99	0.25	2,777.54	2,777.53	0.04	0.01
P-136	600.00	8.0	PVC	Open		52.70	0.34	2,777.54	2,777.50	0.07	0.04
P-137	1,300.00	8.0	PVC	Open		97.52	0.62	2,777.82	2,777.54	0.22	0.28
P-138	194.00	8.0	PVC	Open		-104.05	0.66	2,777.82	2,777.87	0.24	0.05
P-139	1,200.00	4.0	PVC	Open		17.49	0.45	2,777.87	2,777.53	0.29	0.34
P-140	400.00	8.0	PVC	Open		-121.54	0.78	2,777.87	2,778.00	0.32	0.13
P-141	67.00	8.0	PVC	Open		-173.07	1.10	2,778.00	2,778.04	0.62	0.04
P-142	940.00	6.0	PVC	Open		47.82	0.54	2,778.00	2,777.77	0.24	0.23
P-143	95.00	8.0	PVC	Open		-0.69	0.00	2,777.82	2,777.82	0.00	0.00
P-144	700.00	8.0	PVC	Open		37.25	0.24	2,777.85	2,777.82	0.04	0.03
P-145	260.00	8.0	PVC	Open		32.08	0.20	2,777.84	2,777.83	0.03	0.01
P-146	420.00	8.0	PVC	Open		95.63	0.61	2,777.94	2,777.85	0.21	0.09
P-147	656.00	8.0	PVC	Open		32.10	0.20	2,777.82	2,777.80	0.03	0.02
P-148	548.00	6.0	PVC	Open		11.11	0.13	2,777.80	2,777.79	0.02	0.01
P-149	1,112.00	6.0	PVC	Open		7.38	0.08	2,777.80	2,777.79	0.01	0.01
P-150	867.00	12.0	PVC	Open		915.05	2.60	2,772.76	2,771.12	1.89	1.64
P-151	601.00	6.0	PVC	Open		2.92	0.03	2,777.79	2,777.79	0.00	0.00
P-152	570.00	8.0	PVC	Open		13.64	0.09	2,777.82	2,777.82	0.01	0.00
P-154	5.00	6.0	Ductile	Open		136.11	1.54	2,611.00	2,610.99	1.86	0.01
P-155	5.00	6.0	Ductile	Open		270.71	3.07	2,611.00	2,610.96	7.03	0.04
P-156	5.00	6.0	Ductile	Open		-0.00	0.00	2,611.00	2,611.00	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-157	20.00	6.0	Ductile	Open		136.11	1.54				
P-158	15.00	6.0	Ductile	Open		270.71	3.07	2,778.56	2,778.52	1.87	0.04
P-159	10.00	6.0	Ductile	Open		-0.00	0.00	2,778.63	2,778.52	7.03	0.11
P-160	170.00	8.0	PVC	Open		-81.01	0.52	2,778.52	2,778.52	0.00	0.00
P-161	575.00	8.0	PVC	Open		-68.46	0.44	2,778.87	2,778.90	0.16	0.03
P-162	797.00	6.0	PVC	Open		-26.18	0.30	2,778.90	2,778.97	0.11	0.07
P-163	505.00	6.0	PVC	Open		-106.31	1.21	2,778.90	2,778.97	0.08	0.07
P-164	420.00	8.0	PVC	Open		48.20	0.31	2,779.49	2,779.49	1.05	0.53
P-165	150.00	8.0	PVC	Open		41.49	0.26	2,777.84	2,777.82	0.06	0.03
P-166	507.00	8.0	PVC	Open		48.22	0.31	2,777.84	2,777.84	0.05	0.01
P-167	1.00	96.0	PVC	Open		453.06	0.02	2,777.50	2,777.47	0.06	0.03
P-169	48.00	8.0	PVC	Open		453.06	2.89	2,534.00	2,534.00	0.00	0.00
P-170	364.00	4.0	PVC	Open		3.89	0.10	2,778.46	2,778.28	3.82	0.18
P-171	880.00	8.0	PVC	Open		89.69	0.57	2,777.95	2,777.94	0.02	0.01
P-172	340.00	8.0	PVC	Open		-141.83	0.91	2,778.01	2,777.84	0.19	0.16
P-173	160.00	6.0	PVC	Open		0.15	0.00	2,778.18	2,778.32	0.43	0.15
P-174	460.00	8.0	PVC	Open		7.78	0.05	2,778.18	2,778.18	0.00	0.00
P-175	260.00	8.0	PVC	Open		-75.45	0.48	2,777.93	2,777.93	0.00	0.00
P-176	80.00	2.0	PVC	Open		2.92	0.30	2,777.91	2,777.95	0.14	0.04
P-177	170.00	8.0	PVC	Open		42.04	0.27	2,777.91	2,777.89	0.34	0.03
P-178	420.00	6.0	PVC	Open		3.02	0.03	2,778.06	2,778.05	0.05	0.01
P-179	393.00	8.0	PVC	Open		20.74	0.13	2,778.04	2,778.04	0.00	0.00
P-180	120.00	8.0	PVC	Open		8.96	0.06	2,778.05	2,778.04	0.01	0.01
P-181	394.00	8.0	PVC	Open		-116.36	0.74	2,778.04	2,778.04	0.00	0.00
P-182	225.00	8.0	PVC	Open		-118.10	0.75	2,778.14	2,778.25	0.30	0.12
P-183	442.00	8.0	PVC	Open		-284.80	1.82	2,778.25	2,778.32	0.31	0.07
P-185	258.00	8.0	PVC	Open		34.69	0.22	2,778.40	2,779.10	1.58	0.70
P-186	1,300.00	6.0	PVC	Open		9.92	0.11	2,777.83	2,777.82	0.03	0.01
P-187	700.00	6.0	PVC	Open		14.19	0.16	2,777.82	2,777.80	0.02	0.02
P-188	800.00	8.0	PVC	Open		-5.08	0.03	2,777.82	2,777.80	0.03	0.02
P-189	158.00	8.0	PVC	Open		58.38	0.37	2,777.80	2,777.80	0.00	0.00
P-190	700.00	8.0	PVC	Open		9.82	0.06	2,777.85	2,777.84	0.09	0.01
P-191	260.00	8.0	PVC	Open		28.88	0.18	2,777.83	2,777.83	0.00	0.00
P-192	700.00	6.0	PVC	Open		5.44	0.06	2,777.84	2,777.83	0.02	0.01
P-193	698.00	6.0	PVC	Open		-7.74	0.09	2,777.83	2,777.83	0.00	0.00
P-194	448.00	8.0	PVC	Open		30.16	0.19	2,777.83	2,777.84	0.01	0.01
P-195	480.00	8.0	PVC	Open		8.97	0.06	2,777.05	2,777.04	0.03	0.01
P-196	800.00	8.0	PVC	Open		7.57	0.05	2,777.04	2,777.04	0.00	0.00
P-197	242.00	8.0	PVC	Open		0.00	0.00	2,777.04	2,777.04	0.00	0.00
P-198	371.00	8.0	PVC	Open		184.82	1.18	2,777.04	2,777.04	0.00	0.00
P-199	846.00	8.0	PVC	Open		25.09	0.16	2,776.79	2,776.79	0.70	0.26
P-200	1,095.00	8.0	PVC	Open		-73.25	0.47	2,776.79	2,776.78	0.02	0.02
P-201	221.00	8.0	PVC	Open		156.71	1.00	2,776.54	2,776.68	0.13	0.14
P-202	273.00	8.0	PVC	Open		48.47	0.31	2,776.79	2,776.68	0.52	0.11
P-203	523.00	8.0	PVC	Open		33.86	0.22	2,776.68	2,776.66	0.06	0.02
P-204	573.00	8.0	PVC	Open		-28.89	0.18	2,776.68	2,776.66	0.03	0.02
P-205	257.00	8.0	PVC	Open		-5.69	0.04	2,776.52	2,776.54	0.02	0.01
P-206	616.00	8.0	PVC	Open		32.50	0.21	2,776.66	2,776.66	0.00	0.00
P-207	173.00	6.0	PVC	Open		3.89	0.04	2,776.66	2,776.64	0.03	0.02
P-208	796.00	8.0	PVC	Open		13.04	0.08	2,776.64	2,776.64	0.00	0.00
P-209	188.00	6.0	PVC	Open		4.86	0.06	2,776.64	2,776.64	0.01	0.00

Title: INITIAL RUN

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Haestad Methods Solution Center

Watertown, CT 06795 USA

+1-203-755-1666

Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-210	310.00	8.0	PVC	Open		1.49	0.01	2,776.64	2,776.64	0.00	0.00
P-211	158.00	6.0	PVC	Open		4.86	0.06	2,776.64	2,776.64	0.00	0.00
P-212	275.00	8.0	PVC	Open		-4.75	0.03	2,776.64	2,776.64	0.00	0.00
P-213	272.00	6.0	PVC	Open		13.97	0.16	2,776.64	2,776.63	0.03	0.01
P-214	270.00	8.0	PVC	Open		-25.23	0.16	2,776.64	2,776.64	0.02	0.01
P-215	438.00	8.0	PVC	Open		8.07	0.05	2,776.64	2,776.64	0.00	0.00
P-216	49.00	6.0	PVC	Open		1.95	0.02	2,776.64	2,776.64	0.00	0.00
P-217	129.00	6.0	PVC	Open		3.89	0.04	2,776.64	2,776.64	0.00	0.00
P-218	168.00	8.0	PVC	Open		-40.11	0.26	2,776.64	2,776.65	0.04	0.01
P-219	462.00	8.0	PVC	Open		10.70	0.07	2,776.65	2,776.65	0.00	0.00
P-220	225.00	8.0	PVC	Open		41.80	0.27	2,776.66	2,776.65	0.05	0.01
P-221	276.00	8.0	PVC	Open		7.25	0.05	2,776.65	2,776.65	0.00	0.00
P-223	460.00	8.0	PVC	Open		-125.43	0.80	2,776.67	2,776.83	0.34	0.16
P-224	1,737.00	12.0	PVC	Open		-162.13	0.46	2,776.83	2,776.96	0.08	0.13
P-225	309.00	8.0	PVC	Open		57.36	0.37	2,776.98	2,776.96	0.08	0.03
P-226	502.00	8.0	PVC	Open		10.69	0.07	2,776.96	2,776.95	0.00	0.00
P-227	237.00	4.0	PVC	Open		6.81	0.17	2,776.96	2,776.94	0.05	0.01
P-228	299.00	8.0	PVC	Open		32.09	0.20	2,776.96	2,776.95	0.03	0.01
P-229	498.00	6.0	PVC	Open		7.78	0.09	2,776.95	2,776.94	0.01	0.00
P-230	317.00	4.0	PVC	Open		7.78	0.20	2,776.95	2,776.93	0.07	0.02
P-231	327.00	8.0	PVC	Open		12.63	0.08	2,776.95	2,776.94	0.01	0.00
P-232	487.00	12.0	PVC	Open		-92.73	0.26	2,776.95	2,776.96	0.03	0.01
P-233	464.00	6.0	PVC	Open		5.84	0.07	2,776.95	2,776.95	0.00	0.00
P-234	494.00	6.0	PVC	Open		5.84	0.07	2,776.95	2,776.95	0.00	0.00
P-235	332.00	12.0	PVC	Open		-70.36	0.20	2,776.94	2,776.95	0.02	0.01
P-236	458.00	8.0	PVC	Open		4.86	0.03	2,776.94	2,776.94	0.00	0.00
P-237	298.00	6.0	PVC	Open		2.22	0.03	2,776.94	2,776.94	0.00	0.00
P-238	363.00	12.0	PVC	Open		-59.40	0.17	2,776.94	2,776.94	0.01	0.00
P-239	465.00	8.0	PVC	Open		-49.67	0.32	2,776.91	2,776.94	0.06	0.03
P-240	513.00	12.0	PVC	Open		4.86	0.01	2,776.94	2,776.94	0.00	0.00
P-241	654.00	8.0	PVC	Open		-37.18	0.24	2,778.94	2,778.96	0.04	0.02
P-242	880.00	12.0	PVC	Open		-149.47	0.42	2,777.84	2,777.90	0.06	0.06
P-243	980.00	12.0	PVC	Open		-41.11	0.12	2,777.83	2,777.84	0.01	0.01
P-244	759.00	12.0	PVC	Open		91.65	0.26	2,777.76	2,777.74	0.03	0.02
P-245	100.00	12.0	PVC	Open		0.00	0.00	2,777.74	2,777.74	0.00	0.00
P-246	430.00	8.0	PVC	Open		86.95	0.56	2,777.74	2,777.67	0.18	0.08
P-247	712.00	8.0	PVC	Open		36.39	0.23	2,777.67	2,777.64	0.04	0.03
P-248	760.00	8.0	PVC	Open		47.65	0.30	2,777.67	2,777.62	0.06	0.05
P-249	50.00	8.0	PVC	Open		0.00	0.00	2,777.62	2,777.62	0.00	0.00
P-250	263.00	8.0	PVC	Open		25.68	0.16	2,777.62	2,777.61	0.02	0.01
P-251	50.00	8.0	PVC	Open		0.00	0.00	2,777.62	2,777.62	0.00	0.00
P-252	800.00	8.0	PVC	Open		30.55	0.19	2,777.64	2,777.62	0.03	0.02
P-253	655.00	12.0	PVC	Open		6.49	0.02	2,777.84	2,777.84	0.00	0.00
P-254	370.00	8.0	PVC	Open		6.49	0.04	2,777.84	2,777.84	0.00	0.00
P-255	1,670.00	12.0	PVC	Open		0.00	0.00	2,777.84	2,777.84	0.00	0.00
P-256	40.00	8.0	PVC	Open		0.00	0.00	2,777.84	2,777.84	0.00	0.00
P-257	650.00	12.0	PVC	Open		0.00	0.00	2,777.84	2,777.84	0.00	0.00
P-258	40.00	8.0	PVC	Open		0.00	0.00	2,777.84	2,777.84	0.00	0.00
P-259	1,020.00	12.0	PVC	Open		0.00	0.00	2,777.84	2,777.84	0.00	0.00
P-260	480.00	8.0	PVC	Open		30.30	0.19	2,777.47	2,777.46	0.03	0.01
P-261	167.00	8.0	PVC	Open		322.91	2.06	2,777.46	2,777.12	2.01	0.34

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-262	395.00	8.0	PVC	Open		191.64	1.22	2,777.12	2,776.82	0.75	0.30
P-263	527.00	8.0	PVC	Open		87.75	0.56	2,776.82	2,776.73	0.18	0.09
P-264	477.00	8.0	PVC	Open		91.23	0.58	2,776.82	2,776.73	0.19	0.09
P-265	341.00	8.0	PVC	Open		15.03	0.10	2,776.73	2,776.73	0.01	0.00
P-266	261.00	8.0	PVC	Open		95.00	0.61	2,776.73	2,776.67	0.21	0.05
P-267	136.00	8.0	PVC	Open		123.14	0.79	2,776.67	2,776.63	0.33	0.05
P-268	604.00	8.0	PVC	Open		38.84	0.25	2,776.70	2,776.67	0.04	0.02
P-269	355.00	8.0	PVC	Open		59.65	0.38	2,776.73	2,776.70	0.09	0.03
P-270	776.00	8.0	PVC	Open		113.76	0.73	2,777.12	2,776.90	0.29	0.22
P-271	810.00	8.0	PVC	Open		-300.45	1.92	2,777.46	2,778.87	1.75	1.42
P-272	547.00	8.0	PVC	Open		9.73	0.06	2,778.87	2,778.87	0.00	0.00
P-273	618.00	8.0	PVC	Open		-234.03	1.49	2,778.87	2,779.55	1.09	0.68
P-274	332.00	8.0	PVC	Open		-239.09	1.53	2,779.55	2,779.93	1.14	0.38
P-275	700.00	8.0	PVC	Open		117.95	0.75	2,779.93	2,779.71	0.31	0.21
P-276	83.00	8.0	PVC	Open		-357.53	2.28	2,779.93	2,780.13	2.44	0.20
P-277	419.00	8.0	PVC	Open		71.98	0.46	2,780.13	2,780.08	0.13	0.05
P-278	620.00	12.0	PVC	Open		0.00	0.00	2,779.55	2,779.55	0.00	0.00
P-280	813.00	8.0	PVC	Open		69.44	0.44	2,777.61	2,777.52	0.12	0.10
P-281	287.00	12.0	PVC	Open		-12.75	0.04	2,777.57	2,777.57	0.00	0.00
P-282	797.00	12.0	PVC	Open		-37.42	0.11	2,777.57	2,777.58	0.01	0.00
P-283	320.00	8.0	PVC	Open		2.66	0.02	2,777.58	2,777.58	0.00	0.00
P-284	388.00	12.0	PVC	Open		-40.99	0.12	2,777.58	2,777.58	0.01	0.00
P-285	1,528.00	12.0	PVC	Open		775.66	2.20	2,779.69	2,777.58	1.38	2.11
P-286	358.00	12.0	PVC	Open		708.64	2.01	2,777.58	2,777.17	1.16	0.42
P-287	419.00	8.0	PVC	Open		177.36	1.13	2,777.17	2,776.89	0.65	0.27
P-288	341.00	8.0	PVC	Open		166.66	1.06	2,776.89	2,776.69	0.58	0.20
P-289	193.00	8.0	PVC	Open		3.89	0.02	2,776.89	2,776.89	0.00	0.00
P-290	267.00	12.0	PVC	Open		526.42	1.49	2,777.17	2,776.99	0.66	0.18
P-291	640.00	8.0	PVC	Open		115.67	0.74	2,776.88	2,776.69	0.30	0.19
P-292	460.00	12.0	PVC	Open		285.18	0.81	2,776.88	2,776.79	0.21	0.10
P-293	302.00	8.0	PVC	Open		81.79	0.52	2,776.83	2,776.79	0.16	0.05
P-294	213.00	12.0	PVC	Open		358.21	1.02	2,776.79	2,776.72	0.32	0.07
P-295	511.00	12.0	PVC	Open		641.57	1.82	2,776.72	2,776.23	0.96	0.49
P-296	305.00	12.0	PVC	Open		286.56	0.81	2,776.78	2,776.72	0.21	0.07
P-297	650.00	8.0	PVC	Open		0.00	0.00	2,776.78	2,776.78	0.00	0.00
P-298	516.00	12.0	PVC	Open		432.57	1.23	2,776.78	2,776.55	0.46	0.24
P-299	19.00	12.0	PVC	Open		327.14	0.93	2,776.55	2,776.54	0.27	0.01
P-300	1,334.00	8.0	PVC	Open		105.43	0.67	2,776.55	2,776.21	0.25	0.33
P-301	241.00	8.0	PVC	Open		115.09	0.73	2,778.01	2,777.94	0.29	0.07
P-302	911.00	12.0	PVC	Open		204.78	0.58	2,778.11	2,778.01	0.12	0.11
P-303	156.00	8.0	PVC	Open		-28.51	0.18	2,778.11	2,778.11	0.03	0.00
P-304	239.00	8.0	PVC	Open		-31.05	0.20	2,778.10	2,778.11	0.03	0.01
P-305	176.00	8.0	PVC	Open		11.67	0.07	2,778.10	2,778.10	0.01	0.00
P-306	140.00	6.0	PVC	Open		4.86	0.06	2,778.10	2,778.10	0.00	0.00
P-307	283.00	8.0	PVC	Open		4.86	0.03	2,778.10	2,778.10	0.00	0.00
P-308	265.00	8.0	PVC	Open		-16.46	0.11	2,778.10	2,778.10	0.01	0.00
P-309	205.00	6.0	PVC	Open		5.85	0.07	2,778.10	2,778.10	0.00	0.00
P-310	977.00	8.0	PVC	Open		-0.88	0.01	2,778.10	2,778.10	0.00	0.00
P-311	142.00	6.0	PVC	Open		4.86	0.06	2,778.10	2,778.10	0.00	0.00
P-312	850.00	8.0	PVC	Open		20.52	0.13	2,778.11	2,778.10	0.01	0.01
P-313	666.00	8.0	PVC	Open		9.35	0.06	2,778.11	2,778.11	0.00	0.00

Title: INITIAL RUN

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Bentley Systems, Inc.

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-314	402.00	8.0	PVC	Open		44.46	0.28				
P-315	547.00	8.0	PVC	Open		68.93	0.44	2,778.13	2,778.11	0.05	0.02
P-316	401.00	8.0	PVC	Open		-15.71	0.10	2,778.20	2,778.13	0.12	0.06
P-317	742.00	8.0	PVC	Open		-3.20	0.02	2,778.13	2,778.13	0.01	0.00
P-318	343.00	6.0	PVC	Open		6.81	0.08	2,778.13	2,778.13	0.00	0.00
P-319	273.00	8.0	PVC	Open		12.36	0.08	2,778.13	2,778.13	0.01	0.00
P-320	288.00	8.0	PVC	Open		10.39	0.07	2,778.13	2,778.13	0.01	0.00
P-321	290.00	8.0	PVC	Open		0.80	0.01	2,778.13	2,778.13	0.00	0.00
P-322	133.00	8.0	PVC	Open		10.08	0.06	2,778.13	2,778.13	0.00	0.00
P-323	270.00	8.0	PVC	Open		-0.83	0.01	2,778.13	2,778.13	0.00	0.00
P-324	472.00	6.0	PVC	Open		8.76	0.10	2,778.13	2,778.13	0.00	0.00
P-325	298.00	8.0	PVC	Open		77.60	0.50	2,778.13	2,778.12	0.01	0.01
P-326	747.00	8.0	PVC	Open		32.66	0.21	2,778.20	2,778.15	0.14	0.04
P-327	1,154.00	8.0	PVC	Open		25.47	0.16	2,778.15	2,778.13	0.03	0.02
P-328	160.00	8.0	PVC	Open		150.99	0.96	2,778.15	2,778.13	0.02	0.02
P-329	1,094.00	12.0	PVC	Open		233.30	0.66	2,778.27	2,778.20	0.48	0.08
P-330	804.00	12.0	PVC	Open		384.29	1.09	2,778.27	2,778.11	0.15	0.16
P-331	474.00	8.0	PVC	Open		17.88	0.11	2,778.57	2,778.27	0.37	0.30
P-332	221.00	6.0	PVC	Open		4.24	0.05	2,820.58	2,820.57	0.01	0.01
P-333	260.00	8.0	PVC	Open		33.80	0.22	2,820.58	2,820.58	0.00	0.00
P-334	213.00	6.0	PVC	Open		0.00	0.00	2,820.59	2,820.58	0.03	0.01
P-335	138.00	8.0	PVC	Open		3.36	0.02	2,820.59	2,820.59	0.00	0.00
P-336	267.00	8.0	PVC	Open		42.02	0.27	2,820.59	2,820.59	0.00	0.00
P-337	592.00	12.0	PVC	Open		182.44	0.52	2,820.60	2,820.59	0.05	0.01
P-338	260.00	12.0	PVC	Open		235.17	0.67	2,820.60	2,820.54	0.09	0.06
P-339	281.00	8.0	PVC	Open		18.48	0.12	2,820.64	2,820.60	0.15	0.04
P-340	449.00	12.0	PVC	Open		260.46	0.74	2,820.64	2,820.63	0.01	0.00
P-341	174.00	6.0	PVC	Open		4.86	0.06	2,820.72	2,820.64	0.18	0.08
P-342	286.00	8.0	PVC	Open		8.76	0.06	2,820.63	2,820.63	0.00	0.00
P-343	402.00	12.0	PVC	Open		380.44	1.08	2,820.63	2,820.63	0.00	0.00
P-344	1,192.00	12.0	PVC	Open		646.40	1.83	2,820.72	2,820.57	0.36	0.15
P-345	504.00	12.0	PVC	Open		206.23	0.59	2,821.88	2,820.72	0.98	1.16
P-346	261.00	12.0	PVC	Open		-101.28	0.29	2,823.20	2,823.14	0.12	0.06
P-347	228.00	8.0	PVC	Open		-42.17	0.27	2,823.19	2,823.20	0.03	0.01
P-348	532.00	12.0	PVC	Open		659.90	1.87	2,823.18	2,823.19	0.05	0.01
P-349	172.00	12.0	PVC	Open		478.86	1.36	2,823.13	2,822.59	1.02	0.54
P-350	180.00	8.0	PVC	Open		0.97	0.01	2,823.22	2,823.13	0.56	0.10
P-351	641.00	12.0	PVC	Open		486.65	1.38	2,823.22	2,823.22	0.00	0.00
P-352	215.00	8.0	PVC	Open		307.51	1.96	2,823.59	2,823.22	0.57	0.37
P-353	228.00	12.0	PVC	Open		803.89	2.28	2,823.59	2,823.20	1.83	0.39
P-354	388.00	8.0	PVC	Open		7.78	0.05	2,823.93	2,823.59	1.48	0.34
P-355	278.00	12.0	PVC	Open		811.67	2.30	2,823.93	2,823.93	0.00	0.00
P-356	862.00	8.0	PVC	Open		149.49	0.95	2,824.35	2,823.93	1.50	0.42
P-357	384.00	12.0	PVC	Open		676.77	1.92	2,824.76	2,824.35	0.47	0.41
P-358	445.00	12.0	PVC	Open		841.83	2.39	2,824.76	2,824.35	1.06	0.41
P-359	285.00	12.0	PVC	Open		127.77	0.36	2,825.47	2,824.76	1.61	0.72
P-360	433.00	12.0	PVC	Open		-273.73	0.78	2,825.47	2,825.46	0.05	0.01
P-361	110.00	12.0	PVC	Open		181.03	0.51	2,825.47	2,825.56	0.20	0.08
P-362	701.00	12.0	PVC	Open		706.57	2.00	2,823.14	2,823.13	0.09	0.01
P-363	278.00	12.0	PVC	Open		907.73	2.58	2,826.28	2,825.47	1.16	0.81
P-364	1,033.00	8.0	PVC	Open		184.62	1.18	2,826.80	2,826.28	1.86	0.52
								2,826.28	2,825.56	0.70	0.73

Title: INITIAL RUN

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Bentley Systems, Inc.

Haestad Methods Solution Center

Watertown, CT 06795 USA

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-365	213.00	8.0	PVC	Open		-363.88	2.32	2,825.56	2,826.09	2.52	0.54
P-366	15.00	8.0	PVC	Open		0.00	0.00	2,826.09	2,826.09	0.00	0.00
P-367	928.00	8.0	PVC	Open		363.88	2.32	2,828.43	2,826.09	2.52	2.34
P-370	40.00	8.0	PVC	Open		17.92	0.11	2,777.47	2,777.47	0.01	0.00
P-371	40.00	8.0	PVC	Open		7.84	0.05	2,777.46	2,777.46	0.01	0.00
P-372	360.00	12.0	PVC	Open		-13.92	0.04	2,777.82	2,777.82	0.00	0.00
P-373	479.00	8.0	PVC	Open		-206.25	1.32	2,779.40	2,779.82	0.86	0.41
P-374	102.00	12.0	PVC	Open		-254.86	0.72	2,776.96	2,776.98	0.17	0.02
P-375	90.00	12.0	PVC	Open		-312.22	0.89	2,776.98	2,777.00	0.25	0.02
P-376	789.00	12.0	PVC	Open		740.98	2.10	2,827.80	2,826.80	1.26	1.00
P-377	1,321.00	8.0	PVC	Open		192.04	1.23	2,827.80	2,826.80	0.76	1.00
P-378	203.00	12.0	PVC	Open		951.50	2.70	2,828.21	2,827.80	2.04	0.41
P-379	775.00	12.0	PVC	Open		915.05	2.60	2,771.12	2,769.66	1.89	1.46
P-380	558.00	12.0	PVC	Open		0.00	0.00	2,820.47	2,820.47	0.00	0.00
P-381	890.00	12.0	PVC	Open		915.06	2.60	2,769.66	2,767.98	1.89	1.68
P-383	107.00	12.0	PVC	Open		951.50	2.70	2,828.43	2,828.21	2.04	0.22
P-384	154.00	8.0	PVC	Open		115.84	0.74	2,776.99	2,776.94	0.30	0.05
P-385	378.00	6.0	PVC	Open		4.86	0.06	2,776.94	2,776.94	0.00	0.00
P-386	257.00	8.0	PVC	Open		102.22	0.65	2,776.94	2,776.88	0.24	0.06
P-387	333.00	8.0	PVC	Open		6.81	0.04	2,776.88	2,776.88	0.00	0.00
P-388	270.00	8.0	PVC	Open		87.63	0.56	2,776.88	2,776.83	0.18	0.05
P-389	185.00	8.0	PVC	Open		0.00	0.00	2,776.83	2,776.83	0.00	0.00
P-390	419.00	8.0	PVC	Open		270.66	1.73	2,776.69	2,776.09	1.44	0.60
P-391	250.00	8.0	PVC	Open		87.27	0.56	2,776.09	2,776.05	0.18	0.04
P-392	535.00	8.0	PVC	Open		-13.85	0.09	2,776.05	2,776.05	0.01	0.00
P-393	113.00	8.0	PVC	Open		-140.07	0.89	2,776.05	2,776.10	0.42	0.05
P-394	377.00	8.0	PVC	Open		115.52	0.74	2,776.05	2,775.94	0.30	0.11
P-395	474.00	8.0	PVC	Open		100.09	0.64	2,776.05	2,775.94	0.23	0.11
P-396	250.00	8.0	PVC	Open		207.83	1.33	2,775.94	2,775.72	0.88	0.22
P-397	598.00	8.0	PVC	Open		172.68	1.10	2,776.09	2,775.72	0.62	0.37
P-398	270.00	12.0	PVC	Open		620.16	1.76	2,775.96	2,775.72	0.90	0.24
P-399	202.00	8.0	PVC	Open		3.89	0.02	2,775.96	2,775.96	0.00	0.00
P-400	280.00	12.0	PVC	Open		629.89	1.79	2,776.23	2,775.96	0.93	0.26
P-401	233.00	8.0	PVC	Open		3.89	0.02	2,776.23	2,776.23	0.00	0.00
P-402	310.00	12.0	PVC	Open		992.90	2.82	2,775.72	2,775.04	2.21	0.68
P-403	377.00	8.0	PVC	Open		4.86	0.03	2,775.04	2,775.04	0.00	0.00
P-404	252.00	12.0	PVC	Open		981.22	2.78	2,775.04	2,774.49	2.16	0.54
P-405	213.00	8.0	PVC	Open		4.86	0.03	2,774.49	2,774.49	0.00	0.00
P-406	535.00	12.0	PVC	Open		969.55	2.75	2,774.49	2,773.36	2.11	1.13
P-407	160.00	8.0	PVC	Open		240.10	1.53	2,773.36	2,773.18	1.15	0.18
P-408	308.00	12.0	PVC	Open		719.72	2.04	2,773.36	2,772.99	1.20	0.37
P-409	9.00	8.0	PVC	Open		0.00	0.00	2,772.99	2,772.99	0.00	0.00
P-410	265.00	8.0	PVC	Open		26.09	0.17	2,820.49	2,820.48	0.02	0.01
P-411	136.00	8.0	PVC	Open		13.44	0.09	2,820.48	2,820.48	0.01	0.00
P-412	330.00	8.0	PVC	Open		7.78	0.05	2,820.48	2,820.48	0.00	0.00
P-413	942.00	12.0	PVC	Open		139.14	0.39	2,820.54	2,820.49	0.06	0.05
P-414	216.00	8.0	PVC	Open		27.74	0.18	2,820.54	2,820.54	0.02	0.00
P-415	433.00	8.0	PVC	Open		8.76	0.06	2,820.54	2,820.54	0.00	0.00
P-416	265.00	8.0	PVC	Open		11.20	0.07	2,820.54	2,820.54	0.01	0.00
P-417	392.00	12.0	PVC	Open		73.35	0.21	2,825.46	2,825.45	0.02	0.01
P-418	493.00	12.0	PVC	Open		56.81	0.16	2,825.45	2,825.45	0.01	0.01

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-419	263.00	6.0	PVC	Open		6.81	0.08	2,825.45	2,825.45	0.01	0.00
P-420	336.00	6.0	PVC	Open		5.84	0.07	2,825.45	2,825.45	0.01	0.00
P-421	907.00	8.0	PVC	Open		21.10	0.13	2,825.46	2,825.45	0.01	0.01
P-422	377.00	12.0	PVC	Open		47.99	0.14	2,825.45	2,825.44	0.01	0.00
P-423	770.00	8.0	PVC	Open		22.62	0.14	2,825.46	2,825.45	0.02	0.01
P-424	20.00	12.0	PVC	Open		0.00	0.00	2,822.59	2,822.59	0.00	0.00
P-425	1,980.00	12.0	PVC	Open		0.00	0.00	2,822.55	2,822.55	0.00	0.00
P-426	209.00	12.0	PVC	Open		0.00	0.00	2,822.55	2,822.55	0.00	0.00
P-427	207.00	12.0	PVC	Open		0.00	0.00	2,822.55	2,822.55	0.00	0.00
P-428	251.00	12.0	PVC	Open		410.58	1.16	2,776.99	2,776.88	0.42	0.10
P-429	281.00	4.0	PVC	Open		12.63	0.32	2,776.94	2,776.90	0.16	0.04
P-430	370.00	8.0	PVC	Open		-128.84	0.82	2,777.80	2,777.94	0.36	0.13
P-431	54.00	6.0	PVC	Open		0.96	0.01	2,777.94	2,777.94	0.00	0.00
P-432	55.00	6.0	PVC	Open		3.02	0.03	2,777.94	2,777.93	0.00	0.00
P-433	506.00	8.0	PVC	Open		-138.63	0.88	2,777.94	2,778.14	0.41	0.21
P-434	155.00	12.0	PVC	Open		-155.82	0.44	2,778.31	2,778.32	0.07	0.01
P-435	467.00	8.0	PVC	Open		47.05	0.30	2,778.99	2,778.96	0.06	0.03
P-436	360.00	8.0	PVC	Open		-150.13	0.96	2,778.14	2,778.32	0.48	0.17
P-437	760.00	8.0	PVC	Open		-10.34	0.07	2,778.14	2,778.14	0.00	0.00
P-438	348.00	8.0	PVC	Open		-128.29	0.82	2,778.14	2,778.27	0.36	0.12
P-439	51.00	12.0	PVC	Open		-137.82	0.39	2,778.27	2,778.27	0.06	0.00
P-440	18.00	12.0	PVC	Open		0.00	0.00	2,778.27	2,778.27	0.00	0.00
P-441	642.00	12.0	PVC	Open		-140.01	0.40	2,778.27	2,778.31	0.06	0.04
P-442	350.00	12.0	PVC	Open		15.08	0.04	2,778.31	2,778.30	0.00	0.00
P-443	336.00	12.0	PVC	Open		-318.35	0.90	2,778.32	2,778.40	0.26	0.09
P-444	829.00	12.0	PVC	Open		-318.35	0.90	2,778.40	2,778.62	0.26	0.22
P-445	120.00	8.0	PVC	Open		122.83	0.78	2,778.18	2,778.14	0.33	0.04
P-446	470.00	8.0	PVC	Open		1.62	0.01	2,778.14	2,778.14	0.00	0.00
P-447	265.00	12.0	PVC	Open		-318.35	0.90	2,778.62	2,778.69	0.26	0.07
P-448	337.00	8.0	PVC	Open		-176.39	1.13	2,779.82	2,780.03	0.64	0.22
P-449	39.00	8.0	PVC	Open		5.63	0.04	2,778.69	2,778.69	0.01	0.00
P-450	705.00	12.0	PVC	Open		-323.98	0.92	2,778.69	2,778.88	0.27	0.19
P-451	197.00	12.0	PVC	Open		-341.76	0.97	2,778.88	2,778.93	0.30	0.06
P-452	250.00	12.0	PVC	Open		0.00	0.00	2,778.30	2,778.30	0.00	0.00
P-453	546.00	8.0	PVC	Open		71.98	0.46	2,780.08	2,780.01	0.12	0.07
P-454	526.00	8.0	PVC	Open		-29.86	0.19	2,779.82	2,779.83	0.03	0.01
P-455	730.00	8.0	PVC	Open		116.14	0.74	2,779.71	2,779.49	0.30	0.22
P-456	236.00	8.0	PVC	Open		-177.33	1.13	2,780.03	2,780.19	0.65	0.15
P-457	235.00	12.0	PVC	Open		7.99	0.02	2,780.19	2,780.19	0.00	0.00
P-458	311.00	12.0	PVC	Open		7.77	0.02	2,780.19	2,780.19	0.00	0.00
P-459	314.00	12.0	PVC	Open		0.00	0.00	2,780.19	2,780.19	0.00	0.00
P-460	331.00	6.0	PVC	Open		0.00	0.00	2,780.19	2,780.19	0.00	0.00
P-461	399.00	12.0	PVC	Open		-185.31	0.53	2,780.19	2,780.22	0.10	0.04
P-462	322.00	12.0	PVC	Open		376.05	1.07	2,780.22	2,780.11	0.35	0.11
P-463	711.00	12.0	PVC	Open		374.98	1.06	2,780.11	2,779.86	0.35	0.25
P-464	355.00	12.0	PVC	Open		561.36	1.59	2,780.49	2,780.22	0.75	0.27
P-465	158.00	8.0	PVC	Open		218.70	1.40	2,780.49	2,780.34	0.96	0.15
P-466	432.00	8.0	PVC	Open		-102.71	0.66	2,780.24	2,780.34	0.24	0.10
P-467	475.00	8.0	PVC	Open		-97.51	0.62	2,780.24	2,780.34	0.22	0.10
P-468	316.00	8.0	PVC	Open		-186.78	1.19	2,780.01	2,780.24	0.72	0.23
P-469	347.00	12.0	PVC	Open		632.77	1.80	2,781.03	2,780.70	0.94	0.33

Title: INITIAL RUN

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-470	178.00	12.0	PVC	Open		780.07	2.21				
P-471	660.00	12.0	PVC	Open		782.54	2.22	2,781.28	2,781.03	1.39	0.25
P-472	224.00	12.0	PVC	Open		782.96	2.22	2,782.20	2,781.28	1.40	0.93
P-473	296.00	12.0	PVC	Open		-1,216.13	3.45	2,782.52	2,782.20	1.40	0.31
P-474	153.00	12.0	PVC	Open		780.06	2.21	2,782.52	2,783.48	3.26	0.96
P-476	304.00	8.0	PVC	Open		0.00	0.00	2,780.70	2,780.49	1.39	0.21
P-477	692.00	8.0	PVC	Open		-429.51	2.74	2,779.55	2,779.55	0.00	0.00
P-478	13.00	8.0	PVC	Open		0.34	0.00	2,780.13	2,782.52	3.45	2.39
P-479	84.00	8.0	PVC	Open		-19.48	0.12	2,779.86	2,779.86	0.00	0.00
P-480	200.00	12.0	PVC	Open		-13.92	0.04	2,779.49	2,779.50	0.01	0.00
P-481	550.00	12.0	PVC	Open		-24.62	0.07	2,777.82	2,777.82	0.00	0.00
P-482	703.00	8.0	PVC	Open		6.10	0.04	2,777.82	2,777.82	0.00	0.00
P-483	960.00	12.0	PVC	Open		-38.37	0.11	2,777.82	2,777.82	0.00	0.00
P-484	265.00	12.0	PVC	Open		-67.30	0.19	2,777.82	2,777.82	0.01	0.01
P-485	447.00	12.0	PVC	Open		23.57	0.07	2,777.82	2,777.83	0.02	0.00
P-486	160.00	12.0	PVC	Open		19.69	0.06	2,825.44	2,825.44	0.00	0.00
P-487	159.00	12.0	PVC	Open		0.00	0.00	2,825.44	2,825.44	0.00	0.00
P-488	981.00	8.0	PVC	Open		12.75	0.08	2,825.44	2,825.44	0.00	0.00
P-489	135.00	12.0	PVC	Open		0.00	0.00	2,825.44	2,825.44	0.01	0.01
P-490	338.00	8.0	PVC	Open		63.50	0.41	2,825.44	2,825.44	0.00	0.00
P-491	317.00	8.0	PVC	Open		5.49	0.04	2,776.63	2,776.60	0.10	0.03
P-492	1,010.00	8.0	PVC	Open		58.29	0.37	2,776.60	2,776.60	0.00	0.00
P-493	314.00	8.0	PVC	Open		97.49	0.62	2,776.60	2,776.51	0.09	0.09
P-494	159.00	8.0	PVC	Open		51.85	0.33	2,776.51	2,776.44	0.22	0.07
P-495	527.00	8.0	PVC	Open		51.85	0.33	2,776.52	2,776.51	0.07	0.01
P-496	134.00	12.0	PVC	Open		1,199.10	3.40	2,776.56	2,776.52	0.07	0.04
P-498	1.00	96.0	PVC	Open		-316.48	0.01	2,781.06	2,780.64	3.17	0.43
P-499	356.00	12.0	PVC	Open		456.78	1.30	2,493.50	2,493.50	0.00	0.00
P-500	259.00	12.0	PVC	Open		449.61	1.28	2,780.56	2,780.38	0.51	0.18
P-501	152.00	12.0	PVC	Open		403.28	1.14	2,780.38	2,780.26	0.49	0.13
P-503	30.00	8.0	PVC	Open		0.00	0.00	2,780.33	2,780.27	0.40	0.06
P-504	120.00	8.0	PVC	Open		65.68	0.42	2,780.38	2,780.38	0.00	0.00
P-505	30.00	8.0	PVC	Open		0.00	0.00	2,780.39	2,780.38	0.11	0.01
P-507	27.00	8.0	PVC	Open		0.00	0.00	2,780.39	2,780.39	0.00	0.00
P-508	197.00	8.0	PVC	Open		-12.49	0.08	2,780.40	2,780.40	0.00	0.00
P-509	785.00	8.0	PVC	Open		-10.54	0.07	2,780.40	2,780.40	0.01	0.00
P-510	222.00	8.0	PVC	Open		1.95	0.01	2,780.40	2,780.40	0.00	0.00
P-511	683.00	8.0	PVC	Open		-4.71	0.03	2,780.40	2,780.40	0.00	0.00
P-512	819.00	8.0	PVC	Open		1.95	0.01	2,780.40	2,780.40	0.00	0.00
P-513	283.00	8.0	PVC	Open		-0.82	0.01	2,780.40	2,780.40	0.00	0.00
P-514	136.00	6.0	PVC	Open		0.00	0.00	2,780.40	2,780.40	0.00	0.00
P-515	560.00	6.0	PVC	Open		0.00	0.00	2,780.38	2,780.38	0.00	0.00
P-516	19.00	8.0	PVC	Open		-173.07	1.10	2,776.56	2,776.56	0.00	0.00
P-517	0.25	96.0	Steel	Open		-0.00	0.00	2,778.04	2,778.05	0.62	0.01
P-518	250.00	8.0	PVC	Open		-37.38	0.24	2,419.00	2,419.00	0.00	0.00
P-519	673.00	8.0	PVC	Open		108.02	0.69	2,778.14	2,778.15	0.04	0.01
P-520	32.00	8.0	PVC	Open		130.38	0.83	2,778.14	2,777.96	0.26	0.18
P-521	769.00	8.0	PVC	Open		63.34	0.40	2,778.18	2,778.17	0.37	0.01
P-522	105.00	8.0	PVC	Open		-29.63	0.19	2,777.96	2,777.89	0.10	0.08
P-523	305.00	12.0	PVC	Open		313.86	0.89	2,778.93	2,778.94	0.03	0.00
P-524	94.00	6.0	PVC	Open		47.16	0.54	2,779.01	2,778.93	0.25	0.08
								2,779.01	2,778.99	0.24	0.02

Title: INITIAL RUN

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Bentley Systems, Inc.

Haestad Methods Solution Center

Watertown, CT 06795 USA

+1-203-755-1666

Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-525	232.00	12.0	PVC	Open		361.74	1.03	2,779.09	2,779.01	0.33	0.08
P-526	294.00	12.0	PVC	Open		272.36	0.77	2,779.15	2,779.09	0.19	0.06
P-527	248.00	8.0	PVC	Open		1.28	0.01	2,779.15	2,779.15	0.00	0.00
P-528	83.00	8.0	PVC	Open		1.28	0.01	2,779.15	2,779.15	0.00	0.00
P-529	115.00	12.0	PVC	Open		273.64	0.78	2,779.17	2,779.15	0.20	0.02
P-530	384.00	12.0	PVC	Open		273.65	0.78	2,779.24	2,779.17	0.20	0.08
P-531	153.00	12.0	PVC	Open		273.65	0.78	2,779.27	2,779.24	0.20	0.03
P-532	216.00	12.0	PVC	Open		273.65	0.78	2,779.32	2,779.27	0.20	0.04
P-533	169.00	12.0	PVC	Open		273.77	0.78	2,779.35	2,779.32	0.20	0.03
P-534	163.00	12.0	PVC	Open		273.77	0.78	2,779.38	2,779.35	0.20	0.03
P-535	222.00	12.0	PVC	Open		273.77	0.78	2,779.42	2,779.38	0.20	0.04
P-536	395.00	12.0	PVC	Open		275.61	0.78	2,779.50	2,779.42	0.20	0.08
P-537	322.00	8.0	PVC	Open		99.02	0.63	2,779.50	2,779.43	0.22	0.07
P-538	574.00	8.0	PVC	Open		99.02	0.63	2,779.43	2,779.30	0.22	0.13
P-539	315.00	8.0	PVC	Open		98.77	0.63	2,779.30	2,779.23	0.22	0.07
P-540	306.00	8.0	PVC	Open		98.10	0.63	2,779.23	2,779.17	0.22	0.07
P-541	359.00	8.0	PVC	Open		98.10	0.63	2,779.17	2,779.09	0.22	0.08
P-542	145.00	8.0	PVC	Open		0.67	0.00	2,779.23	2,779.23	0.00	0.00
P-543	289.00	8.0	PVC	Open		0.00	0.00	2,779.23	2,779.23	0.00	0.00
P-544	387.00	8.0	PVC	Open		0.42	0.00	2,779.23	2,779.23	0.00	0.00
P-545	57.00	12.0	PVC	Open		0.00	0.00	2,779.17	2,779.17	0.00	0.00
P-546	50.00	8.0	PVC	Open		0.66	0.00	2,779.23	2,779.23	0.00	0.00
P-547	329.00	8.0	PVC	Open		0.24	0.00	2,779.23	2,779.23	0.00	0.00
P-548	284.00	8.0	PVC	Open		0.03	0.00	2,779.23	2,779.23	0.00	0.00
P-549	284.00	8.0	PVC	Open		0.21	0.00	2,779.23	2,779.23	0.00	0.00
P-550	210.00	8.0	PVC	Open		0.12	0.00	2,779.23	2,779.23	0.00	0.00
P-551	171.00	8.0	PVC	Open		0.01	0.00	2,779.23	2,779.23	0.00	0.00
P-552	269.00	8.0	PVC	Open		147.29	0.94	2,780.83	2,780.70	0.46	0.12
P-553	161.00	8.0	PVC	Open		147.30	0.94	2,781.03	2,780.96	0.46	0.07
P-554	90.00	8.0	PVC	Open		0.00	0.00	2,779.43	2,779.43	0.00	0.00
P-555	63.00	12.0	PVC	Open		374.63	1.06	2,779.52	2,779.50	0.35	0.02
P-556	252.00	8.0	PVC	Open		0.03	0.00	2,779.15	2,779.15	0.00	0.00
P-557	256.00	12.0	PVC	Open		374.63	1.06	2,779.61	2,779.52	0.35	0.09
P-558	702.00	12.0	PVC	Open		374.64	1.06	2,779.86	2,779.61	0.35	0.25
P-559	110.00	12.0	PVC	Open		0.01	0.00	2,779.61	2,779.61	0.00	0.00
P-560	275.00	8.0	PVC	Open		147.29	0.94	2,780.96	2,780.83	0.46	0.13
P-561	436.00	12.0	PVC	Open		0.01	0.00	2,779.61	2,779.61	0.00	0.00
P-562	79.00	8.0	PVC	Open		0.00	0.00	2,780.83	2,780.83	0.00	0.00
P-563	442.00	12.0	PVC	Open		0.01	0.00	2,779.61	2,779.61	0.00	0.00
P-564	68.00	8.0	PVC	Open		0.00	0.00	2,779.61	2,779.61	0.00	0.00
P-565	42.00	12.0	PVC	Open		0.01	0.00	2,779.61	2,779.61	0.00	0.00
P-566	86.00	8.0	PVC	Open		0.00	0.00	2,780.96	2,780.96	0.00	0.00
P-567	433.00	12.0	PVC	Open		0.00	0.00	2,779.61	2,779.61	0.00	0.00
P-568	64.00	12.0	PVC	Open		0.00	0.00	2,779.61	2,779.61	0.00	0.00
P-569	222.00	8.0	PVC	Open		3.89	0.02	2,776.61	2,776.61	0.00	0.00
P-570	307.00	8.0	PVC	Open		93.18	0.59	2,776.60	2,776.54	0.20	0.06
P-571	220.00	8.0	PVC	Open		4.86	0.03	2,776.54	2,776.53	0.00	0.00
P-572	247.00	8.0	PVC	Open		84.42	0.54	2,776.54	2,776.49	0.17	0.04
P-573	254.00	6.0	PVC	Open		5.84	0.07	2,776.49	2,776.49	0.00	0.00
P-574	400.00	8.0	PVC	Open		73.72	0.47	2,776.49	2,776.44	0.13	0.05
P-575	287.00	8.0	PVC	Open		6.81	0.04	2,776.44	2,776.44	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-576	606.00	12.0	PVC	Open		106.62	0.30	2,820.49	2,820.47	0.04	0.02
P-577	326.00	12.0	PVC	Open		106.62	0.30	2,820.47	2,820.46	0.04	0.01
P-578	16.00	8.0	PVC	Open		31.36	0.20	2,820.46	2,820.46	0.02	0.00
P-579	125.00	12.0	PVC	Open		75.26	0.21	2,820.46	2,820.45	0.02	0.00
P-580	48.00	8.0	PVC	Open		0.00	0.00	2,820.45	2,820.45	0.00	0.00
P-581	307.00	12.0	PVC	Open		48.81	0.14	2,820.45	2,820.45	0.01	0.00
P-582	1,252.00	8.0	PVC	Open		13.80	0.09	2,820.45	2,820.45	0.01	0.01
P-583	906.00	8.0	PVC	Open		13.33	0.09	2,820.45	2,820.45	0.01	0.01
P-584	151.00	8.0	PVC	Open		15.58	0.10	2,820.45	2,820.44	0.01	0.00
P-585	259.00	12.0	PVC	Open		25.76	0.07	2,820.45	2,820.45	0.00	0.00
P-586	471.00	12.0	PVC	Open		12.32	0.03	2,820.45	2,820.45	0.00	0.00
P-588	320.00	8.0	PVC	Open		-0.97	0.01	2,777.85	2,777.85	0.00	0.00
P-589	481.00	8.0	PVC	Open		-55.05	0.35	2,777.86	2,777.90	0.08	0.04
P-590	480.00	8.0	PVC	Open		6.81	0.04	2,777.86	2,777.86	0.00	0.00
P-591	500.00	8.0	PVC	Open		7.78	0.05	2,777.86	2,777.86	0.00	0.00
P-592	334.00	8.0	PVC	Open		-28.79	0.18	2,777.85	2,777.86	0.02	0.01
P-593	250.00	6.0	PVC	Open		5.84	0.07	2,777.85	2,777.85	0.00	0.00
P-594	832.00	8.0	PVC	Open		-23.49	0.15	2,777.85	2,777.86	0.02	0.01
P-595	350.00	8.0	PVC	Open		-33.79	0.22	2,777.84	2,777.85	0.03	0.01
P-596	325.00	8.0	PVC	Open		6.83	0.04	2,777.85	2,777.85	0.00	0.00
P-597	223.00	8.0	PVC	Open		5.84	0.04	2,777.83	2,777.83	0.00	0.00
P-598	460.00	8.0	PVC	Open		-36.17	0.23	2,777.85	2,777.86	0.04	0.02
P-599	540.00	12.0	PVC	Open		-45.53	0.13	2,777.83	2,777.83	0.01	0.00
P-600	660.00	8.0	PVC	Open		-18.03	0.12	2,777.83	2,777.84	0.01	0.01
P-601	160.00	8.0	PVC	Open		-9.92	0.06	2,777.84	2,777.84	0.00	0.00
P-602	120.00	6.0	PVC	Open		3.89	0.04	2,777.84	2,777.84	0.00	0.00
P-603	200.00	8.0	PVC	Open		-3.11	0.02	2,777.84	2,777.84	0.00	0.00
P-604	375.00	8.0	PVC	Open		-29.36	0.19	2,777.84	2,777.85	0.03	0.01
P-605	500.00	8.0	PVC	Open		-26.63	0.17	2,777.83	2,777.84	0.02	0.01
P-606	466.00	8.0	PVC	Open		2.25	0.01	2,773.18	2,773.18	0.00	0.00
P-607	121.00	8.0	PVC	Open		231.04	1.47	2,773.18	2,773.05	1.07	0.13
P-608	308.00	8.0	PVC	Open		214.43	1.37	2,773.05	2,772.76	0.93	0.29
P-609	198.00	12.0	PVC	Open		708.47	2.01	2,772.99	2,772.76	1.16	0.23
P-610	199.00	8.0	PVC	Open		59.63	0.38	2,776.63	2,776.61	0.09	0.02
P-611	673.00	8.0	PVC	Open		56.72	0.36	2,776.61	2,776.56	0.08	0.05
P-612	91.00	8.0	PVC	Open		0.00	0.00	2,776.52	2,776.52	0.00	0.00
P-613	354.00	8.0	PVC	Open		92.53	0.59	2,777.94	2,777.87	0.20	0.07
P-614	739.00	12.0	PVC	Open		0.00	0.00	2,776.96	2,776.96	0.00	0.00
P-615	878.00	12.0	PVC	Open		0.00	0.00	2,776.96	2,776.96	0.00	0.00
P-616	642.00	12.0	PVC	Open		0.00	0.00	2,776.96	2,776.96	0.00	0.00
P-617	35.00	8.0	PVC	Open		3.21	0.02	2,777.57	2,777.57	0.00	0.00
P-618	246.00	8.0	PVC	Open		0.00	0.00	2,780.03	2,780.03	0.00	0.00
P-619	179.00	8.0	PVC	Open		-142.59	0.91	2,778.06	2,778.14	0.44	0.08
P-620	215.00	6.0	PVC	Open		3.89	0.04	2,777.84	2,777.84	0.00	0.00
P-621	780.00	8.0	PVC	Open		18.83	0.12	2,777.84	2,777.83	0.01	0.01
P-622	123.00	6.0	PVC	Open		1.95	0.02	2,777.83	2,777.83	0.00	0.00
P-623	286.00	6.0	PVC	Open		9.10	0.10	2,777.83	2,777.82	0.01	0.00
P-624	160.00	6.0	PVC	Open		2.92	0.03	2,777.82	2,777.82	0.00	0.00
P-625	660.00	8.0	PVC	Open		-1.60	0.01	2,777.82	2,777.82	0.00	0.00
P-626	225.00	8.0	PVC	Open		28.00	0.18	2,777.82	2,777.82	0.02	0.01
P-627	357.00	8.0	PVC	Open		34.47	0.22	2,777.84	2,777.82	0.03	0.01

Title: INITIAL RUN

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01/19/07 01:13:05 AM Bentley Systems, Inc.

Haestad Methods Solution Center

Watertown, CT 06795 USA

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-628	114.00	6.0	PVC	Open		2.92	0.03	2,777.84	2,777.84	0.00	0.00
P-629	395.00	8.0	PVC	Open		40.30	0.26	2,777.85	2,777.84	0.04	0.02
P-630	97.00	6.0	PVC	Open		1.95	0.02	2,777.85	2,777.85	0.00	0.00
P-631	305.00	8.0	PVC	Open		48.09	0.31	2,777.87	2,777.85	0.06	0.02
P-632	1,280.00	8.0	PVC	Open		-30.82	0.20	2,777.84	2,777.87	0.03	0.04
P-633	380.00	8.0	PVC	Open		1.95	0.01	2,777.64	2,777.64	0.00	0.00
P-634	316.00	8.0	PVC	Open		-96.25	0.61	2,778.02	2,778.09	0.21	0.07
P-635	230.00	8.0	PVC	Open		-76.79	0.49	2,778.09	2,778.12	0.14	0.03
P-636	60.00	8.0	PVC	Open		-119.62	0.76	2,778.12	2,778.14	0.31	0.02
P-637	602.00	8.0	PVC	Open		-33.53	0.21	2,778.10	2,778.12	0.03	0.02
P-638	650.00	8.0	PVC	Open		-25.75	0.16	2,778.09	2,778.10	0.02	0.01
P-639	346.00	8.0	PVC	Open		-206.25	1.32	2,779.10	2,779.40	0.86	0.30
P-640	269.00	8.0	PVC	Open		-81.61	0.52	2,779.10	2,779.15	0.16	0.04
P-641	215.00	8.0	PVC	Open		-50.52	0.32	2,779.15	2,779.16	0.07	0.01
P-642	245.00	8.0	PVC	Open		-62.34	0.40	2,779.16	2,779.18	0.10	0.02
P-643	325.00	8.0	PVC	Open		-84.14	0.54	2,779.18	2,779.24	0.17	0.05
P-644	190.00	8.0	PVC	Open		-155.86	0.99	2,779.24	2,779.33	0.51	0.10
P-645	503.00	8.0	PVC	Open		-31.09	0.20	2,779.15	2,779.16	0.03	0.01
P-646	268.00	8.0	PVC	Open		-51.64	0.33	2,779.16	2,779.18	0.07	0.02
P-647	349.00	8.0	PVC	Open		-49.29	0.31	2,779.18	2,779.20	0.06	0.02
P-648	172.00	8.0	PVC	Open		11.73	0.07	2,779.20	2,779.20	0.00	0.00
P-649	299.00	8.0	PVC	Open		71.72	0.46	2,779.24	2,779.20	0.12	0.04
P-650	355.00	8.0	PVC	Open		21.81	0.14	2,779.18	2,779.18	0.02	0.01
P-651	265.00	8.0	PVC	Open		3.77	0.02	2,779.16	2,779.16	0.00	0.00
P-652	260.00	8.0	PVC	Open		-35.59	0.23	2,779.33	2,779.34	0.04	0.01
P-653	432.00	8.0	PVC	Open		11.26	0.07	2,779.34	2,779.34	0.01	0.00
P-654	153.00	8.0	PVC	Open		-46.86	0.30	2,779.34	2,779.35	0.06	0.01
P-655	154.00	8.0	PVC	Open		120.27	0.77	2,779.38	2,779.33	0.32	0.05
P-656	96.00	8.0	PVC	Open		198.26	1.27	2,779.46	2,779.38	0.80	0.08
P-657	191.00	8.0	PVC	Open		91.19	0.58	2,779.50	2,779.46	0.19	0.04
P-658	46.00	8.0	PVC	Open		-27.26	0.17	2,779.50	2,779.50	0.02	0.00
P-659	352.00	8.0	PVC	Open		118.44	0.76	2,779.61	2,779.50	0.31	0.11
P-660	566.00	8.0	PVC	Open		107.07	0.68	2,779.61	2,779.46	0.26	0.15
P-661	219.00	8.0	PVC	Open		225.52	1.44	2,779.83	2,779.61	1.02	0.22
P-662	175.00	8.0	PVC	Open		3.89	0.02	2,779.50	2,779.50	0.00	0.00
P-663	197.00	8.0	PVC	Open		7.78	0.05	2,779.35	2,779.35	0.00	0.00
P-664	259.00	8.0	PVC	Open		70.21	0.45	2,779.38	2,779.35	0.12	0.03
P-665	637.00	8.0	PVC	Open		-46.46	0.30	2,823.15	2,823.19	0.06	0.04
P-666	120.00	8.0	PVC	Open		34.16	0.22	2,823.15	2,823.15	0.03	0.00
P-667	1,504.00	8.0	PVC	Open		-6.98	0.04	2,823.15	2,823.15	0.00	0.00
P-668	167.00	6.0	PVC	Open		4.86	0.06	2,823.15	2,823.15	0.00	0.00
P-669	251.00	8.0	PVC	Open		12.48	0.08	2,823.15	2,823.15	0.01	0.00
P-670	104.00	6.0	PVC	Open		3.89	0.04	2,823.15	2,823.15	0.00	0.00
P-671	231.00	8.0	PVC	Open		17.34	0.11	2,823.16	2,823.15	0.01	0.00
P-672	341.00	8.0	PVC	Open		11.21	0.07	2,823.16	2,823.15	0.01	0.00
P-673	337.00	8.0	PVC	Open		32.44	0.21	2,823.17	2,823.16	0.03	0.01
P-674	285.00	8.0	PVC	Open		5.84	0.04	2,823.17	2,823.16	0.00	0.00
P-675	199.00	6.0	PVC	Open		5.84	0.07	2,823.16	2,823.16	0.00	0.00
P-676	283.00	8.0	PVC	Open		42.17	0.27	2,823.18	2,823.17	0.05	0.01
P-677	397.00	8.0	PVC	Open		-25.20	0.16	2,823.13	2,823.14	0.02	0.01
P-678	865.00	8.0	PVC	Open		-3.77	0.02	2,823.13	2,823.13	0.00	0.00

Title: INITIAL RUN

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01/19/07 01:13:05 AM Bentley Systems, Inc.

Haestad Methods Solution Center

Watertown, CT 06795 USA

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-679	123.00	8.0	PVC	Open		0.00	0.00	2,823.13	2,823.13	0.00	0.00
P-680	231.00	8.0	PVC	Open		8.87	0.06	2,823.13	2,823.13	0.00	0.00
P-681	142.00	8.0	PVC	Open		19.56	0.12	2,823.13	2,823.13	0.01	0.00
P-682	1,166.00	8.0	PVC	Open		0.95	0.01	2,823.13	2,823.13	0.00	0.00
P-683	818.00	8.0	PVC	Open		0.00	0.00	2,820.59	2,820.59	0.00	0.00
P-684	325.00	12.0	PVC	Open		392.07	1.11	2,778.69	2,778.57	0.38	0.12
P-685	51.00	8.0	PVC	Open		13.44	0.09	2,820.45	2,820.45	0.00	0.00
P-686	53.00	8.0	PVC	Open		12.32	0.08	2,820.45	2,820.45	0.00	0.00
P-687	22.00	6.0	PVC	Open		741.41	8.41	2,780.64	2,779.69	43.14	0.95
P-688	146.00	12.0	PVC	Open		457.69	1.30	2,780.64	2,780.56	0.51	0.07
P-689	70.00	12.0	PVC	Open		449.61	1.28	2,780.26	2,780.22	0.49	0.03
P-691	524.00	8.0	PVC	Open		-34.25	0.22	2,779.69	2,779.71	0.03	0.02
P-692	113.00	6.0	PVC	Open		0.00	0.00	2,779.71	2,779.71	0.00	0.00
P-693	166.00	6.0	PVC	Open		0.55	0.01	2,780.56	2,780.56	0.00	0.00
P-694	689.00	8.0	PVC	Open		-34.51	0.22	2,779.71	2,779.73	0.03	0.02
P-695	356.00	12.0	PVC	Open		775.29	2.20	2,780.22	2,779.73	1.38	0.49
P-696	63.00	12.0	PVC	Open		740.79	2.10	2,779.73	2,779.65	1.27	0.08
P-697	126.00	6.0	PVC	Open		0.00	0.00	2,779.65	2,779.65	0.00	0.00
P-698	248.00	12.0	PVC	Open		740.79	2.10	2,779.65	2,779.34	1.26	0.31
P-699	173.00	8.0	PVC	Open		15.48	0.10	2,779.34	2,779.34	0.01	0.00
P-700	11.00	8.0	PVC	Open		0.00	0.00	2,779.34	2,779.34	0.00	0.00
P-701	280.00	8.0	PVC	Open		15.48	0.10	2,779.34	2,779.33	0.01	0.00
P-702	156.00	8.0	PVC	Open		9.84	0.06	2,779.33	2,779.33	0.00	0.00
P-703	299.00	8.0	PVC	Open		0.00	0.00	2,779.33	2,779.33	0.00	0.00
P-704	279.00	8.0	PVC	Open		0.00	0.00	2,779.33	2,779.33	0.00	0.00
P-705	582.00	12.0	PVC	Open		725.31	2.06	2,779.34	2,778.63	1.21	0.71
P-706	10.00	6.0	PVC	Open		0.00	0.00	2,778.63	2,778.63	0.00	0.00
P-707	1,401.00	12.0	PVC	Open		722.44	2.05	2,778.63	2,776.94	1.21	1.69
P-708	201.00	8.0	PVC	Open		0.00	0.00	2,776.94	2,776.94	0.00	0.00
P-709	14.00	8.0	PVC	Open		0.00	0.00	2,776.94	2,776.94	0.00	0.00
P-710	132.00	12.0	PVC	Open		720.42	2.04	2,776.94	2,776.78	1.20	0.16
P-711	335.00	12.0	PVC	Open		327.14	0.93	2,776.54	2,776.45	0.27	0.09
P-712	323.00	12.0	PVC	Open		0.00	0.00	2,776.45	2,776.45	0.00	0.00
P-713	228.00	12.0	PVC	Open		327.14	0.93	2,776.45	2,776.39	0.27	0.06
P-714	8.00	12.0	PVC	Open		0.00	0.00	2,776.39	2,776.39	0.00	0.00
P-715	163.00	12.0	PVC	Open		327.14	0.93	2,776.39	2,776.34	0.27	0.04
P-716	160.00	8.0	PVC	Open		0.00	0.00	2,776.34	2,776.34	0.00	0.00
P-718	620.00	8.0	PVC	Open		105.18	0.67	2,776.21	2,776.06	0.25	0.15
P-719	471.00	12.0	PVC	Open		-1,216.13	3.45	2,783.48	2,785.02	3.26	1.54
P-720	153.00	12.0	PVC	Open		-1,216.13	3.45	2,785.02	2,785.52	3.26	0.50
P-721	14.00	12.0	PVC	Open		0.00	0.00	2,785.52	2,785.52	0.00	0.00
P-723	141.00	12.0	PVC	Open		-1,223.97	3.47	2,788.99	2,789.45	3.30	0.47
P-724	320.00	12.0	PVC	Open		-1,233.05	3.50	2,789.45	2,790.52	3.35	1.07
P-725	502.00	12.0	PVC	Open		8.96	0.03	2,789.45	2,789.45	0.00	0.00
P-726	214.00	12.0	PVC	Open		8.96	0.03	2,789.45	2,789.45	0.00	0.00
P-727	372.00	8.0	PVC	Open		57.04	0.36	2,776.67	2,776.64	0.08	0.03
P-728	156.00	8.0	PVC	Open		15.68	0.10	2,776.64	2,776.64	0.01	0.00
P-729	708.00	8.0	PVC	Open		27.74	0.18	2,776.64	2,776.63	0.02	0.02
P-730	797.00	8.0	PVC	Open		-23.93	0.15	2,776.52	2,776.54	0.02	0.01
P-731	160.00	8.0	PVC	Open		-39.20	0.25	2,776.52	2,776.52	0.04	0.01
P-732	48.00	12.0	PVC	Open		0.00	0.00	2,781.06	2,781.06	0.00	0.00

Title: INITIAL RUN

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Bentley Systems, Inc.

Haestad Methods Solution Center

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-733	425.00	8.0	PVC	Open		32.42	0.21	2,777.96	2,777.94	0.03	0.01
P-735	62.00	12.0	PVC	Open		0.01	0.00	2,779.61	2,779.61	0.00	0.00
P-736	65.00	12.0	PVC	Open		0.01	0.00	2,779.61	2,779.61	0.00	0.00
P-737	33.00	8.0	PVC	Open		0.00	0.00	2,779.61	2,779.61	0.00	0.00
P-738	136.00	8.0	PVC	Open		-258.76	1.65	2,779.83	2,780.01	1.32	0.18
P-739	392.00	12.0	PVC	Open		-210.42	0.60	2,777.94	2,777.99	0.12	0.05
P-740	14.00	8.0	PVC	Open		5.90	0.04	2,777.94	2,777.94	0.00	0.00
P-741	414.00	12.0	PVC	Open		-204.52	0.58	2,777.90	2,777.94	0.11	0.05
P-742	275.00	8.0	PVC	Open		86.65	0.55	2,777.99	2,777.94	0.17	0.05
P-743	120.00	8.0	PVC	Open		-45.48	0.29	2,777.95	2,777.96	0.05	0.01
P-744	43.00	12.0	PVC	Open		659.89	1.87	2,822.59	2,822.55	1.01	0.04
P-745	171.00	12.0	PVC	Open		-1,233.05	3.50	2,790.52	2,791.10	3.35	0.57
P-747	1,566.00	12.0	PVC	Open		1,725.21	4.89	2,791.09	2,781.06	6.40	10.03
P-749	50.00	96.0	PVC	Open		1,416.35	0.06	2,422.00	2,422.00	0.00	0.00
P-751	37.00	8.0	PVC	Open		0.00	0.00	2,781.06	2,781.06	0.00	0.00
P-752	42.00	8.0	PVC	Open		0.00	0.00	2,781.06	2,781.06	0.00	0.00
P-753	697.00	8.0	PVC	Open		-16.28	0.10	2,777.82	2,777.82	0.01	0.01
P-754	420.00	6.0	PVC	Open		9.62	0.11	2,778.05	2,778.04	0.01	0.01
P-755	452.00	6.0	PVC	Open		8.79	0.10	2,777.84	2,777.83	0.01	0.01
P-756	895.00	8.0	PVC	Open		0.30	0.00	2,825.45	2,825.45	0.00	0.00
P-757	777.00	8.0	PVC	Open		4.14	0.03	2,825.45	2,825.45	0.00	0.00
P-758	967.00	8.0	PVC	Open		10.93	0.07	2,825.44	2,825.44	0.00	0.00
P-759	920.00	8.0	PVC	Open		97.22	0.62	2,776.90	2,776.70	0.22	0.20
P-760	2,830.00	12.0	PVC	Open		91.95	0.26	2,777.84	2,777.76	0.03	0.08
P-762	30.00	8.0	PVC	Open		0.00	0.00	2,771.28	2,771.28	0.00	0.00
P-763	833.00	12.0	PVC	Open		-16.61	0.05	2,777.57	2,777.57	0.00	0.00
P-764	330.00	8.0	PVC	Open		400.33	2.56	2,771.28	2,770.29	3.02	1.00
P-765	140.00	6.0	Steel	Open		435.36	4.94	2,543.00	2,541.14	13.29	1.86
P-766	2.00	12.0	PVC	Open		392.07	1.11	2,820.57	2,820.57	0.37	0.00
P-767	356.00	8.0	PVC	Open		400.95	2.56	2,772.36	2,771.28	3.03	1.08
P-768	239.00	12.0	PVC	Open		0.00	0.00	2,769.66	2,769.66	0.00	0.00
P-769	2.00	12.0	PVC	Open		0.00	0.00	2,777.57	2,777.57	0.00	0.00
P-844	254.00	12.0	PVC	Open		649.12	1.84	2,822.13	2,821.88	0.98	0.25
P-845	230.00	12.0	PVC	Open		650.49	1.85	2,822.36	2,822.13	0.99	0.23
P-846	188.00	12.0	PVC	Open		651.86	1.85	2,822.55	2,822.36	0.99	0.19
P-847	383.00	8.0	PVC	Open		2.04	0.01	2,821.88	2,821.88	0.00	0.00
P-848	176.00	8.0	PVC	Open		1.37	0.01	2,822.13	2,822.13	0.00	0.00
P-849	168.00	8.0	PVC	Open		1.37	0.01	2,822.36	2,822.36	0.00	0.00
P-900	587.00	12.0	PVC	Open		1,315.39	3.73	2,830.66	2,828.43	3.79	2.23
P-901	2.00	8.0	Steel	Open		453.06	2.89	2,778.47	2,778.46	3.42	0.01
P-904	143.00	12.0	PVC	Open		-0.00	0.00	2,777.57	2,777.57	0.00	0.00
P-906	60.00	12.0	PVC	Open		-316.48	0.90	2,777.00	2,777.02	0.26	0.02
P-907	1,798.00	8.0	PVC	Open		1,416.35	9.04	2,853.69	2,791.09	34.81	62.60
P-950	171.00	8.0	PVC	Open		43.76	0.28	2,777.62	2,777.61	0.05	0.01
P-954	23.00	64.0	PVC	Open		-173.07	0.02	2,574.50	2,574.50	0.00	0.00
P-958	76.00	8.0	PVC	Open		-13.12	0.08	2,776.70	2,776.70	0.01	0.00
P-959	345.00	8.0	PVC	Open		110.34	0.70	2,776.70	2,776.61	0.27	0.09
P-960	37.00	8.0	PVC	Open		106.45	0.68	2,776.61	2,776.60	0.26	0.01
P-964	1,139.00	12.0	PVC	Open		311.46	0.88	2,776.34	2,776.06	0.25	0.28
P-965	21.00	12.0	PVC	Open		0.00	0.00	2,777.58	2,777.58	0.00	0.00
P-968	1,673.00	8.0	PVC	Open		0.62	0.00	2,771.28	2,771.28	0.00	0.00

Title: INITIAL RUN

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Bentley Systems, Inc.

Haestad Methods Solution Center

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Project Engineer: DMC

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Scenario: 2010 WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Diameter (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-971	601.00	6.0	PVC	Open		-17.43	0.20	2,777.85	2,777.87	0.04	0.02
P-972	79.00	6.0	PVC	Open		2.81	0.03	2,777.85	2,777.85	0.00	0.00
P-973	180.00	8.0	PVC	Open		-14.61	0.09	2,777.85	2,777.85	0.01	0.00
P-974	904.00	8.0	PVC	Open		11.67	0.07	2,777.94	2,777.93	0.01	0.00
P-975	179.00	6.0	PVC	Open		11.67	0.13	2,777.93	2,777.93	0.02	0.00
P-976	344.00	6.0	PVC	Open		9.73	0.11	2,777.84	2,777.83	0.01	0.00
P-977	178.00	6.0	PVC	Open		9.73	0.11	2,777.83	2,777.83	0.02	0.00
P-978	629.00	8.0	PVC	Open		400.95	2.56	2,774.27	2,772.36	3.03	1.90
P-979	592.00	8.0	PVC	Open		400.95	2.56	2,776.06	2,774.27	3.03	1.79
P-980	752.00	8.0	PVC	Open		400.33	2.56	2,770.25	2,767.98	3.02	2.27
P-981	7.00	8.0	PVC	Open		1,315.39	8.40	2,767.98	2,767.77	30.13	0.21
P-982	100.00	12.0	PVC	Open		400.33	1.14	2,770.29	2,770.25	0.40	0.04
P-984	126.00	12.0	PVC	Open		403.27	1.14	2,780.27	2,780.22	0.40	0.05
P-985	103.00	6.0	PVC	Open		0.00	0.00	2,780.27	2,780.27	0.00	0.00
P-986	207.00	8.0	PVC	Open		0.58	0.00	2,780.33	2,780.33	0.00	0.00
P-987	32.00	8.0	PVC	Open		0.00	0.00	2,778.57	2,778.57	0.00	0.00
P-988	415.00	8.0	PVC	Open		65.68	0.42	2,780.38	2,780.33	0.11	0.04
P-989	710.00	8.0	PVC	Open		148.83	0.95	2,776.44	2,776.11	0.47	0.33
P-990	846.00	12.0	PVC	Open		-526.10	1.49	2,780.50	2,781.06	0.66	0.56
P-991	19.00	8.0	PVC	Open		148.83	0.95	2,776.11	2,776.10	0.46	0.01
P-992	269.00	12.0	PVC	Open		-210.23	0.60	2,780.47	2,780.50	0.12	0.03
P-993	340.00	12.0	PVC	Open		-210.23	0.60	2,780.43	2,780.47	0.12	0.04
P-994	67.00	12.0	PVC	Open		-210.23	0.60	2,780.42	2,780.43	0.12	0.01
P-995	230.00	12.0	PVC	Open		-100.47	0.29	2,780.41	2,780.42	0.03	0.01
P-996	172.00	12.0	PVC	Open		-100.47	0.29	2,780.41	2,780.41	0.03	0.01
P-997	147.00	8.0	PVC	Open		65.69	0.42	2,780.40	2,780.39	0.11	0.02
P-998	54.00	8.0	PVC	Open		-12.49	0.08	2,780.40	2,780.40	0.00	0.00
P-999	190.00	12.0	PVC	Open		-78.18	0.22	2,780.40	2,780.41	0.02	0.00
P-1000	80.00	12.0	PVC	Open		22.29	0.06	2,780.41	2,780.41	0.00	0.00
P-1001	141.00	12.0	PVC	Open		22.29	0.06	2,780.41	2,780.41	0.00	0.00
P-1002	262.00	12.0	PVC	Open		22.29	0.06	2,780.41	2,780.41	0.00	0.00
P-1003	11.00	12.0	PVC	Open		22.29	0.06	2,780.41	2,780.41	0.00	0.00
P-1005	258.00	12.0	PVC	Open		338.17	0.96	2,780.41	2,780.33	0.29	0.07
P-1006	84.00	12.0	PVC	Open		315.88	0.90	2,780.50	2,780.48	0.26	0.02
P-1007	290.00	12.0	PVC	Open		315.88	0.90	2,780.48	2,780.41	0.26	0.07
P-1008	716.00	8.0	PVC	Open		27.34	0.17	2,823.15	2,823.13	0.02	0.02
P-1014	443.00	8.0	PVC	Open		-37.56	0.24	2,776.65	2,776.67	0.04	0.02
P-1015	162.00	8.0	PVC	Open		-37.56	0.24	2,776.67	2,776.67	0.04	0.01
P-1025	64.00	12.0	PVC	Open		1,549.75	4.40	2,791.58	2,791.25	5.20	0.33
P-1026	50.00	96.0	PVC	Open		-1,549.75	0.07	2,422.00	2,422.00	0.00	0.00
P-1027	46.00	12.0	PVC	Open		-1,233.05	3.50	2,791.10	2,791.25	3.35	0.15
P-1029	716.00	12.0	PVC	Open		0.00	0.00	2,776.45	2,776.45	0.00	0.00
P-1030	229.00	12.0	PVC	Open		0.00	0.00	2,776.45	2,776.45	0.00	0.00
P-1031	211.00	12.0	PVC	Open		0.00	0.00	2,776.45	2,776.45	0.00	0.00
P-1032	536.00	8.0	PVC	Open		-5.88	0.04	2,777.94	2,777.94	0.00	0.00
P-1034	1,051.00	12.0	PVC	Open		-1,223.97	3.47	2,785.52	2,788.99	3.30	3.47
P-1035	20.00	12.0	PVC	Open		316.70	0.90	2,791.25	2,791.24	0.26	0.01
P-1036	1,271.00	14.0	PVC	Open		316.70	0.66	2,791.24	2,791.09	0.12	0.15

Scenario: 2010 WELL 4 OFF

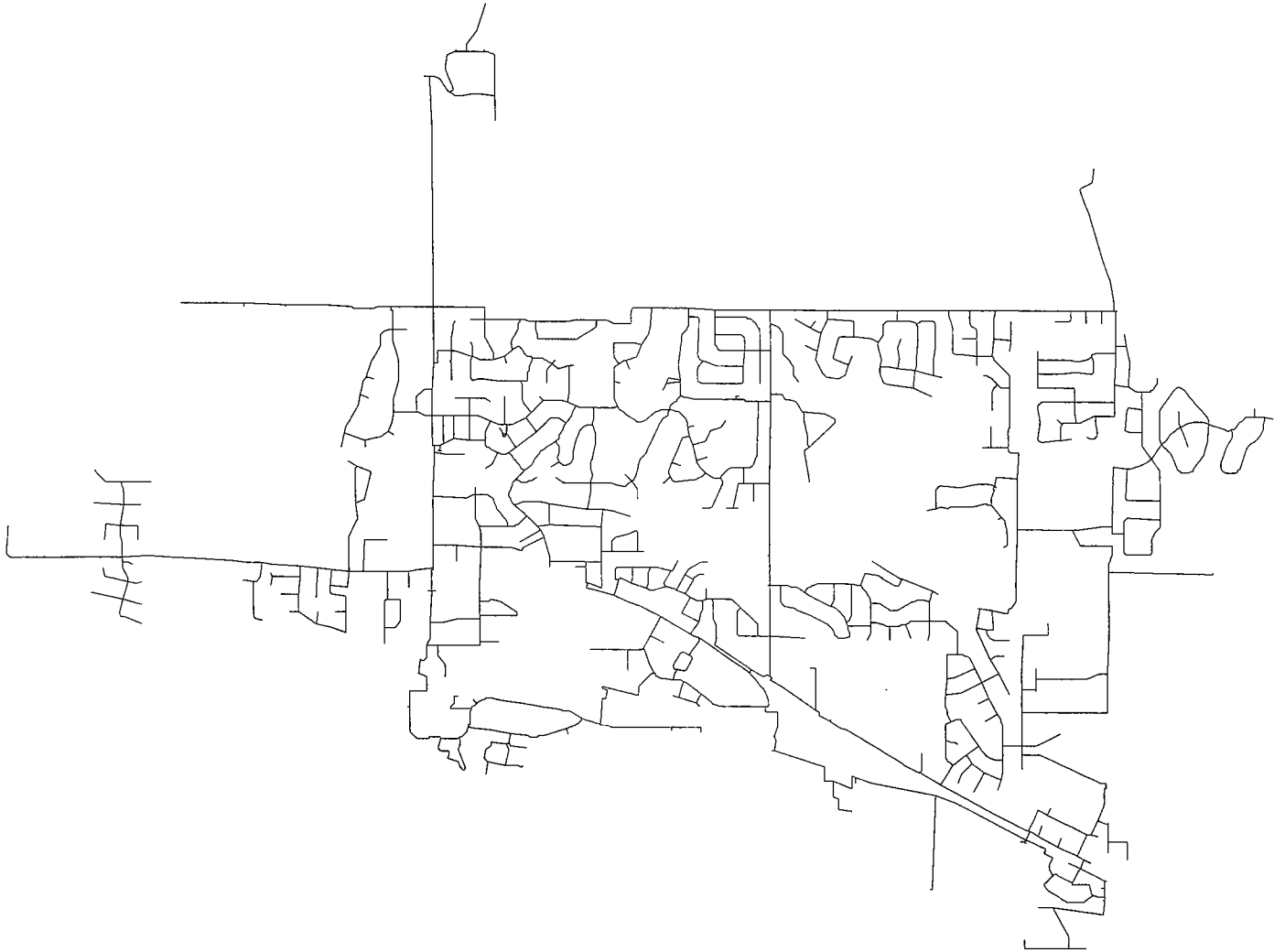
Fire Flow Analysis

Pump Report

Label	Discharge (gpm)	Control Status	Elevation (ft)	Intake Pump Grade (ft)	Pump Head (ft)	Discharge Pump Grade (ft)	Calculated Water Power (Hp)
PMP-1	453.06	On	2,534.00	2,534.00	244.47	2,778.47	27.96
PMP-2	435.36	On	2,543.00	2,541.14	71.41	2,612.55	7.85
PMP-2.1	136.11	On	2,610.00	2,610.99	167.57	2,778.56	5.76
PMP-2.2	270.71	On	2,610.00	2,610.96	167.66	2,778.63	11.46
PMP-2.3	0.00	Off	2,610.00	2,611.00	0.00	2,778.52	0.00
PMP-3	173.07	On	2,624.50	2,574.50	203.55	2,778.05	8.89
PMP-4	0.00	Off	2,399.00	2,419.00	0.00	2,777.57	0.00
PMP-6	316.48	On	2,473.50	2,493.50	283.52	2,777.02	22.65
PMP-7	1,416.35	Fixed Speed Override	2,372.00	2,422.00	431.69	2,853.69	154.37
PMP-8	1,549.75	On	2,567.00	2,422.00	369.58	2,791.58	144.61
PMP-Booster	1,315.39	On	2,640.00	2,767.77	62.89	2,830.66	20.89

2010 Scenario Well #6 Off

Scenario: 2010 WELL 6 OFF



Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-1	false	4.69	0.00	N/A	N/A	N/A	N/A	N/A
J-2	false	10.75	0.00	N/A	N/A	N/A	N/A	N/A
J-3	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-4	true	1.49	1,500.00	1,501.49	83.80	J-981	20.00	3,658.70
J-5	true	2.76	1,500.00	1,502.76	86.02	J-981	20.00	3,990.27
J-6	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-7	false	1.16	0.00	N/A	N/A	N/A	N/A	N/A
J-8	true	103.96	1,500.00	1,603.96	89.01	J-981	20.00	4,067.00
J-9	false	6.02	0.00	N/A	N/A	N/A	N/A	N/A
J-10	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-11	true	0.02	1,500.00	1,500.02	88.94	J-981	20.00	4,064.24
J-12	true	10.70	1,500.00	1,510.70	88.97	J-981	20.01	4,061.75
J-13	true	16.54	1,500.00	1,516.54	87.86	J-981	20.00	4,060.01
J-14	true	4.87	1,500.00	1,504.87	89.21	J-981	20.01	4,054.65
J-15	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-16	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-17	true	6.81	1,500.00	1,506.81	90.60	J-981	20.00	4,059.57
J-18	true	1.95	1,500.00	1,501.95	90.71	J-981	20.00	4,061.62
J-19	false	9.44	0.00	N/A	N/A	N/A	N/A	N/A
J-20	true	6.09	1,500.00	1,506.09	88.58	J-981	24.41	3,920.49
J-21	true	0.00	1,500.00	1,500.00	90.83	J-981	20.00	4,084.82
J-22	true	7.93	1,500.00	1,507.93	91.05	J-981	20.01	4,078.13
J-23	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-24	true	5.98	1,500.00	1,505.98	90.73	J-981	20.01	4,060.07
J-25	true	0.00	1,500.00	1,500.00	89.37	J-981	20.00	4,071.13
J-26	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-27	false	9.73	0.00	N/A	N/A	N/A	N/A	N/A
J-28	true	15.57	1,500.00	1,515.57	88.72	J-981	20.01	4,055.17
J-29	true	13.62	1,500.00	1,513.62	90.28	J-981	20.00	4,056.82
J-30	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-31	false	4.57	0.00	N/A	N/A	N/A	N/A	N/A
J-32	true	12.65	1,500.00	1,512.65	76.88	J-981	20.00	4,052.00
J-33	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-34	true	3.89	1,500.00	1,503.89	68.66	J-981	20.00	3,467.88
J-35	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-36	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-37	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-38	true	3.89	1,500.00	1,503.89	69.95	J-981	45.44	5,000.00
J-39	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-40	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-41	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-42	true	0.00	1,500.00	1,500.00	76.34	J-981	45.12	5,000.00
J-43	true	9.92	1,500.00	1,509.92	79.96	J-981	20.00	3,930.63
J-44	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-45	true	2.92	1,500.00	1,502.92	72.86	J-981	22.44	3,960.56
J-46	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-47	true	4.86	1,500.00	1,504.86	58.32	J-981	20.02	2,594.44
J-48	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-49	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-50	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-51	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-52	true	9.73	1,500.00	1,509.73	32.61	J-981	44.40	1,715.84
J-53	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-54	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-55	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-56	true	6.81	1,500.00	1,506.81	67.98	J-981	20.00	4,013.08
J-57	true	21.40	1,500.00	1,521.40	66.47	J-981	22.85	3,875.76
J-58	false	6.80	0.00	N/A	N/A	N/A	N/A	N/A
J-59	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-60	true	2.81	1,500.00	1,502.81	54.38	J-981	38.60	2,677.34
J-61	true	10.70	1,500.00	1,510.70	69.50	J-981	20.01	3,994.31
J-62	false	10.73	0.00	N/A	N/A	N/A	N/A	N/A
J-63	true	10.73	1,500.00	1,510.73	72.46	J-981	20.00	4,056.96
J-64	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-65	true	13.62	1,500.00	1,513.62	68.37	J-981	23.90	3,389.42
J-66	true	15.57	1,500.00	1,515.57	57.48	J-981	20.01	2,667.08
J-67	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-68	true	29.19	1,500.00	1,529.19	69.39	J-981	24.65	3,848.41
J-69	true	23.35	1,500.00	1,523.35	76.75	J-981	20.00	3,915.69
J-70	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-71	true	19.46	1,500.00	1,519.46	54.61	J-981	20.00	2,371.78
J-72	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-73	false	9.73	0.00	N/A	N/A	N/A	N/A	N/A
J-74	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-75	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-76	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-77	true	3.89	1,500.00	1,503.89	61.91	J-981	20.00	3,443.79
J-78	false	4.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-79	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-80	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-81	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-83	true	11.67	1,500.00	1,511.67	60.78	J-981	25.53	3,412.46
J-84	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-85	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-86	true	12.63	1,500.00	1,512.63	60.48	J-981	26.93	3,332.81
J-87	false	8.75	0.00	N/A	N/A	N/A	N/A	N/A
J-88	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-89	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-90	false	6.82	0.00	N/A	N/A	N/A	N/A	N/A
J-91	true	7.79	1,500.00	1,507.79	60.43	J-981	23.95	3,080.01
J-92	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-93	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-94	true	3.90	1,500.00	1,503.90	49.09	J-981	20.00	2,179.17
J-95	false	14.59	0.00	N/A	N/A	N/A	N/A	N/A
J-96	false	3.71	0.00	N/A	N/A	N/A	N/A	N/A
J-97	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-98	false	2.91	0.00	N/A	N/A	N/A	N/A	N/A
J-99	false	3.90	0.00	N/A	N/A	N/A	N/A	N/A
J-100	true	4.58	1,500.00	1,504.58	44.16	J-101	20.00	1,989.62
J-101	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-102	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-103	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-104	true	0.00	1,500.00	1,500.00	60.65	J-981	21.73	2,815.89
J-105	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-106	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-107	false	11.33	0.00	N/A	N/A	N/A	N/A	N/A
J-108	true	7.78	1,500.00	1,507.78	61.80	J-981	20.87	3,047.41
J-109	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-110	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-111	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-112	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-113	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-114	true	5.84	1,500.00	1,505.84	62.22	J-981	22.52	3,241.18
J-115	true	4.86	1,500.00	1,504.86	86.21	J-981	20.00	3,779.00
J-116	true	5.84	1,500.00	1,505.84	63.80	J-981	20.00	3,495.71
J-117	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-118	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-119	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-120	true	7.78	1,500.00	1,507.78	62.56	J-981	21.15	3,549.63
J-121	true	7.78	1,500.00	1,507.78	61.47	J-981	20.01	3,328.35
J-122	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-123	true	13.62	1,500.00	1,513.62	50.18	J-981	20.67	2,396.45
J-124	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-125	true	15.57	1,500.00	1,515.57	36.04	J-126	21.08	1,817.19
J-126	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-127	true	0.00	1,500.00	1,500.00	68.32	J-981	20.00	3,969.12
J-128	true	1.93	1,500.00	1,501.93	52.01	J-981	20.02	2,450.71
J-131	false	2.94	0.00	N/A	N/A	N/A	N/A	N/A
J-132	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-133	false	13.62	0.00	N/A	N/A	N/A	N/A	N/A
J-134	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-135	false	29.31	0.00	N/A	N/A	N/A	N/A	N/A
J-136	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-137	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-138	false	11.67	1,500.00	N/A	N/A	N/A	N/A	N/A
J-139	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-140	true	0.15	1,500.00	1,500.15	78.42	J-981	41.34	2,968.84
J-141	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-142	true	7.78	1,500.00	1,507.78	82.36	J-981	40.33	3,300.10
J-143	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-144	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-145	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-146	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-147	false	4.48	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Haestad Methods Solution Center

Watertown, CT 06795 USA

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-148	true	10.58	1,500.00	1,510.58	60.78	J-981	28.58	3,307.36
J-149	true	29.20	1,500.00	1,529.20	59.24	J-981	34.94	3,091.41
J-150	false	9.73	1,500.00	N/A	N/A	N/A	N/A	N/A
J-151	true	12.65	1,500.00	1,512.65	62.02	J-981	21.63	3,509.39
J-152	true	13.62	1,500.00	1,513.62	61.27	J-981	26.04	3,429.75
J-153	true	4.86	1,500.00	1,504.86	61.60	J-981	22.88	3,511.02
J-154	true	13.62	1,500.00	1,513.62	51.52	J-981	22.18	2,096.42
J-155	true	16.54	1,500.00	1,516.54	50.96	J-981	20.17	2,049.94
J-156	true	0.00	1,500.00	1,500.00	47.01	J-981	26.67	1,945.23
J-157	false	3.02	0.00	N/A	N/A	N/A	N/A	N/A
J-158	true	25.09	1,500.00	1,525.09	33.40	J-981	36.95	1,696.18
J-159	true	20.43	1,500.00	1,520.43	21.91	J-161	20.00	1,502.26
J-160	true	1.12	1,500.00	1,501.12	42.61	J-161	20.00	1,859.36
J-161	false	13.62	1,500.00	1,513.62	17.05	J-640	20.21	1,463.49
J-162	false	0.97	0.00	N/A	N/A	N/A	N/A	N/A
J-163	true	7.05	1,500.00	1,507.05	40.27	J-179	20.00	1,827.46
J-164	true	15.57	1,500.00	1,515.57	36.09	J-165	20.00	1,740.87
J-165	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-166	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-167	true	6.69	1,500.00	1,506.69	34.91	J-166	20.00	1,715.25
J-168	true	1.37	1,500.00	1,501.37	35.06	J-171	20.00	1,723.64
J-169	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-170	false	6.51	0.00	N/A	N/A	N/A	N/A	N/A
J-171	false	13.97	0.00	N/A	N/A	N/A	N/A	N/A
J-172	true	6.81	1,500.00	1,506.81	35.18	J-179	20.00	1,718.98
J-173	false	2.24	0.00	N/A	N/A	N/A	N/A	N/A
J-174	true	1.95	1,500.00	1,501.95	23.40	J-175	23.88	1,543.69
J-175	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-176	false	4.70	0.00	N/A	N/A	N/A	N/A	N/A
J-177	false	23.86	0.00	N/A	N/A	N/A	N/A	N/A
J-178	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-179	false	36.70	0.00	N/A	N/A	N/A	N/A	N/A
J-180	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-181	false	7.77	0.00	N/A	N/A	N/A	N/A	N/A
J-182	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-183	false	10.69	0.00	N/A	N/A	N/A	N/A	N/A
J-184	false	3.89	1,500.00	1,503.89	-0.52	J-185	20.00	1,294.98
J-185	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-186	false	7.78	1,500.00	1,507.78	-37.63	J-185	39.09	1,084.44
J-187	false	0.00	1,500.00	1,500.00	-5.48	J-185	22.93	1,264.36
J-188	false	10.69	0.00	N/A	N/A	N/A	N/A	N/A
J-189	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-190	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-191	false	3.88	1,500.00	1,503.88	6.92	J-196	20.00	1,339.59
J-192	false	2.22	0.00	N/A	N/A	N/A	N/A	N/A
J-193	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-194	false	4.86	1,500.00	1,504.86	5.66	J-196	20.00	1,332.10
J-195	false	49.67	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-196	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-197	false	30.83	1,500.00	1,530.83	23.30	J-179	20.00	1,495.99
J-198	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-199	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-200	false	4.69	0.00	N/A	N/A	N/A	N/A	N/A
J-201	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-202	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-203	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-204	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-205	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-206	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-207	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-208	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-209	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-210	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-211	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-212	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-213	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-214	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-215	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-216	true	8.76	1,500.00	1,508.76	83.66	J-981	20.00	3,367.76
J-217	false	8.96	0.00	N/A	N/A	N/A	N/A	N/A
J-218	true	1.74	1,500.00	1,501.74	90.09	J-981	20.00	4,081.25
J-219	false	24.87	0.00	N/A	N/A	N/A	N/A	N/A
J-220	true	0.00	1,500.00	1,500.00	90.04	J-981	20.00	4,111.65
J-221	true	0.00	1,500.00	1,500.00	88.00	J-981	22.43	4,033.65
J-222	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-223	false	0.49	0.00	N/A	N/A	N/A	N/A	N/A
J-224	true	1.81	1,500.00	1,501.81	87.19	J-981	27.08	3,848.41
J-225	true	5.06	1,500.00	1,505.06	87.88	J-981	20.00	3,932.89
J-226	true	9.73	1,500.00	1,509.73	78.17	J-981	41.34	2,987.16
J-227	true	17.51	1,500.00	1,517.51	78.40	J-981	20.00	3,091.93
J-228	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-229	true	7.78	1,500.00	1,507.78	72.08	J-981	20.00	2,794.50
J-230	true	10.70	1,500.00	1,510.70	71.04	J-981	20.00	2,750.03
J-231	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-232	true	16.56	1,500.00	1,516.56	73.44	J-981	20.00	2,805.32
J-233	true	7.69	1,500.00	1,507.69	73.23	J-981	20.00	2,776.28
J-234	false	12.75	0.00	N/A	N/A	N/A	N/A	N/A
J-235	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-236	false	69.44	0.00	N/A	N/A	N/A	N/A	N/A
J-237	false	0.64	0.00	N/A	N/A	N/A	N/A	N/A
J-238	true	0.91	1,500.00	1,500.91	85.09	J-981	20.00	3,513.71
J-239	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-240	false	26.03	0.00	N/A	N/A	N/A	N/A	N/A
J-241	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-242	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-243	true	6.81	1,500.00	1,506.81	81.20	J-981	20.01	3,255.67

Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-244	true	11.67	1,500.00	1,511.67	82.05	J-981	20.01	3,203.97
J-245	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-246	true	9.73	1,500.00	1,509.73	82.33	J-981	20.00	3,257.16
J-247	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-248	true	8.76	1,500.00	1,508.76	80.98	J-981	20.00	3,220.59
J-249	true	5.84	1,500.00	1,505.84	80.03	J-981	20.00	3,251.49
J-250	false	3.21	0.00	N/A	N/A	N/A	N/A	N/A
J-251	true	7.78	1,500.00	1,507.78	78.35	J-981	20.00	3,093.82
J-252	false	1.29	0.00	N/A	N/A	N/A	N/A	N/A
J-253	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-254	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-255	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-256	false	0.25	0.00	N/A	N/A	N/A	N/A	N/A
J-257	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-258	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-259	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-260	true	2.92	1,500.00	1,502.92	55.48	J-981	20.44	2,963.37
J-261	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-262	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-263	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-264	true	9.73	1,500.00	1,509.73	54.41	J-981	20.43	2,847.78
J-265	false	5.85	0.00	N/A	N/A	N/A	N/A	N/A
J-266	true	16.54	1,500.00	1,516.54	52.78	J-981	20.00	2,732.71
J-267	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-268	true	14.59	1,500.00	1,514.59	57.92	J-981	20.66	3,096.19
J-269	true	8.76	1,500.00	1,508.76	57.59	J-981	20.00	3,099.81
J-270	true	11.67	1,500.00	1,511.67	57.15	J-981	20.00	2,926.74
J-271	true	2.46	1,500.00	1,502.46	55.16	J-981	20.00	2,822.84
J-272	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-273	true	8.76	1,500.00	1,508.76	53.83	J-981	20.00	2,804.90
J-274	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-275	true	10.70	1,500.00	1,510.70	54.86	J-981	20.18	2,921.16
J-276	true	14.59	1,500.00	1,514.59	52.89	J-981	20.02	2,774.22
J-277	false	10.08	0.00	N/A	N/A	N/A	N/A	N/A
J-278	true	19.47	1,500.00	1,519.47	52.85	J-981	23.88	2,905.53
J-279	false	4.46	0.00	N/A	N/A	N/A	N/A	N/A
J-280	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-281	false	6.25	0.00	N/A	N/A	N/A	N/A	N/A
J-282	false	11.67	0.00	N/A	N/A	N/A	N/A	N/A
J-283	true	4.24	1,500.00	1,504.24	59.20	J-981	31.01	2,316.89
J-284	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-285	true	0.00	1,500.00	1,500.00	61.74	J-981	29.81	2,357.30
J-286	false	3.36	0.00	N/A	N/A	N/A	N/A	N/A
J-287	true	10.70	1,500.00	1,510.70	77.46	J-981	20.00	2,766.51
J-288	true	15.57	1,500.00	1,515.57	76.76	J-981	20.00	2,766.51
J-289	true	6.81	1,500.00	1,506.81	75.64	J-981	20.00	2,766.51
J-290	true	4.86	1,500.00	1,504.86	69.49	J-981	20.00	2,711.21
J-291	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-292	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-293	false	5.50	0.00	N/A	N/A	N/A	N/A	N/A
J-294	false	8.03	0.00	N/A	N/A	N/A	N/A	N/A
J-295	true	3.21	1,500.00	1,503.21	87.00	J-981	20.00	3,783.57
J-296	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-297	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-298	true	0.00	1,500.00	1,500.00	69.76	J-981	20.01	2,766.17
J-299	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-300	false	0.97	0.00	N/A	N/A	N/A	N/A	N/A
J-301	false	9.73	0.00	N/A	N/A	N/A	N/A	N/A
J-302	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-303	true	0.00	1,500.00	1,500.00	71.02	J-981	20.00	2,766.57
J-304	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-305	true	14.59	1,500.00	1,514.59	72.14	J-981	20.02	2,765.86
J-306	true	15.57	1,500.00	1,515.57	73.88	J-981	20.00	2,766.56
J-307	true	10.70	1,500.00	1,510.70	76.00	J-981	20.00	2,766.46
J-308	true	10.70	1,500.00	1,510.70	72.70	J-981	20.00	2,766.55
J-309	true	16.54	1,500.00	1,516.54	78.79	J-981	20.01	2,766.21
J-310	true	25.29	1,500.00	1,525.29	78.48	J-981	20.03	2,766.40
J-311	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-312	false	274.77	0.00	N/A	N/A	N/A	N/A	N/A
J-313	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-314	true	0.00	1,500.00	1,500.00	69.60	J-981	20.01	2,766.13
J-315	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-316	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-317	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-318	true	14.59	1,500.00	1,514.59	78.75	J-981	20.00	3,923.40
J-319	false	17.92	0.00	N/A	N/A	N/A	N/A	N/A
J-320	false	7.84	0.00	N/A	N/A	N/A	N/A	N/A
J-321	true	18.48	1,500.00	1,518.48	86.85	J-981	20.00	2,418.25
J-322	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-323	true	7.84	1,500.00	1,507.84	65.33	J-981	20.00	2,424.54
J-325	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-326	true	0.00	1,500.00	1,500.00	84.13	J-981	20.00	3,280.16
J-327	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-328	true	4.86	1,500.00	1,504.86	54.63	J-981	32.33	2,107.81
J-329	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-330	true	6.81	1,500.00	1,506.81	76.45	J-981	20.00	3,263.98
J-331	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-332	false	10.70	0.00	N/A	N/A	N/A	N/A	N/A
J-333	false	1.03	0.00	N/A	N/A	N/A	N/A	N/A
J-334	true	10.70	1,500.00	1,510.70	78.53	J-981	20.00	3,055.66
J-335	false	8.76	0.00	N/A	N/A	N/A	N/A	N/A
J-336	true	7.78	1,500.00	1,507.78	78.49	J-981	20.00	3,049.39
J-337	true	7.78	1,500.00	1,507.78	78.17	J-981	20.00	3,017.30
J-338	true	5.84	1,500.00	1,505.84	78.20	J-981	20.00	3,052.43
J-339	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-340	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-341	true	6.81	1,500.00	1,506.81	75.20	J-981	20.00	2,835.64
J-342	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-343	true	6.81	1,500.00	1,506.81	73.34	J-981	20.00	2,696.46
J-344	true	9.73	1,500.00	1,509.73	67.25	J-981	20.00	2,510.84
J-345	false	11.25	0.00	N/A	N/A	N/A	N/A	N/A
J-346	true	6.43	1,500.00	1,506.43	76.56	J-981	20.00	2,766.51
J-347	true	4.86	1,500.00	1,504.86	72.59	J-981	20.00	2,678.50
J-348	false	13.44	0.00	N/A	N/A	N/A	N/A	N/A
J-349	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-350	true	7.78	1,500.00	1,507.78	72.56	J-981	20.00	2,763.31
J-351	false	8.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-352	false	11.20	1,500.00	N/A	N/A	N/A	N/A	N/A
J-353	true	3.89	1,500.00	1,503.89	67.81	J-981	30.07	1,501.00
J-354	true	12.66	1,500.00	1,512.66	60.91	J-981	20.01	2,766.37
J-355	false	6.81	1,500.00	N/A	N/A	N/A	N/A	N/A
J-356	false	5.84	1,500.00	N/A	N/A	N/A	N/A	N/A
J-357	true	11.67	1,500.00	1,511.67	57.90	J-981	20.01	2,766.18
J-358	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-359	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-360	true	0.00	1,500.00	1,500.00	41.25	J-981	26.11	2,526.78
J-361	false	0.00	1,500.00	1,500.00	8.39	J-196	20.00	1,357.51
J-364	false	5.81	1,500.00	N/A	N/A	N/A	N/A	N/A
J-365	false	0.96	1,500.00	N/A	N/A	N/A	N/A	N/A
J-366	false	3.02	1,500.00	N/A	N/A	N/A	N/A	N/A
J-367	false	9.87	1,500.00	N/A	N/A	N/A	N/A	N/A
J-368	false	7.16	1,500.00	N/A	N/A	N/A	N/A	N/A
J-369	false	1.16	1,500.00	N/A	N/A	N/A	N/A	N/A
J-370	true	0.00	1,500.00	1,500.00	70.83	J-981	23.95	3,040.34
J-371	false	19.01	1,500.00	N/A	N/A	N/A	N/A	N/A
J-372	true	9.53	1,500.00	1,509.53	88.03	J-981	20.09	4,047.07
J-373	false	2.20	1,500.00	N/A	N/A	N/A	N/A	N/A
J-374	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-375	false	0.73	1,500.00	N/A	N/A	N/A	N/A	N/A
J-376	false	15.08	1,500.00	N/A	N/A	N/A	N/A	N/A
J-377	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-378	false	12.40	1,500.00	N/A	N/A	N/A	N/A	N/A
J-379	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-380	false	13.19	1,500.00	N/A	N/A	N/A	N/A	N/A
J-381	true	1.62	1,500.00	1,501.62	66.13	J-981	41.34	3,076.68
J-382	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-383	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-384	true	5.63	1,500.00	1,505.63	91.39	J-981	20.17	4,086.43
J-385	true	0.94	1,500.00	1,500.94	91.08	J-981	20.00	4,126.90
J-386	true	17.77	1,500.00	1,517.77	89.10	J-981	20.00	4,095.48
J-387	false	1.74	1,500.00	N/A	N/A	N/A	N/A	N/A
J-388	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-389	true	0.00	1,500.00	1,500.00	93.26	J-981	20.01	4,129.17
J-390	false	0.22	1,500.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC
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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-391	true	0.00	1,500.00	1,500.00	67.63	J-981	41.34	2,370.48
J-392	true	7.77	1,500.00	1,507.77	92.10	J-981	20.00	4,129.42
J-393	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-394	true	0.00	1,500.00	1,500.00	92.34	J-981	20.01	4,130.08
J-395	true	1.07	1,500.00	1,501.07	91.40	J-981	20.01	4,124.63
J-396	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-397	false	0.34	1,500.00	N/A	N/A	N/A	N/A	N/A
J-398	true	0.00	1,500.00	1,500.00	94.84	J-981	20.00	4,136.64
J-399	true	18.48	1,500.00	1,518.48	93.01	J-981	20.00	4,133.52
J-400	true	13.43	1,500.00	1,513.43	91.66	J-981	20.00	4,132.49
J-401	true	0.00	1,500.00	1,500.00	90.91	J-981	20.00	4,128.66
J-402	true	2.47	1,500.00	1,502.47	93.63	J-981	20.00	4,144.82
J-403	true	0.00	1,500.00	1,500.00	93.74	J-981	20.00	4,142.76
J-404	true	0.42	1,500.00	1,500.42	91.17	J-981	20.00	4,158.34
J-405	false	3.66	1,500.00	N/A	N/A	N/A	N/A	N/A
J-406	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-407	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-408	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-409	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-410	false	10.70	1,500.00	N/A	N/A	N/A	N/A	N/A
J-411	true	7.65	1,500.00	1,507.65	62.95	J-981	20.00	3,781.48
J-412	true	12.65	1,500.00	1,512.65	70.94	J-981	20.00	3,843.93
J-413	true	4.86	1,500.00	1,504.86	72.49	J-981	20.00	3,872.43
J-414	true	3.88	1,500.00	1,503.88	50.24	J-981	20.00	2,766.40
J-415	true	8.75	1,500.00	1,508.75	49.16	J-981	20.00	2,766.45
J-416	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-417	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-418	true	10.70	1,500.00	1,510.70	73.64	J-981	20.00	2,683.84
J-419	true	7.78	1,500.00	1,507.78	73.43	J-981	20.00	2,680.42
J-420	false	12.65	1,500.00	N/A	N/A	N/A	N/A	N/A
J-421	true	15.57	1,500.00	1,515.57	64.44	J-981	20.00	2,504.02
J-422	true	0.00	1,500.00	1,500.00	65.42	J-981	20.43	2,539.42
J-423	false	4.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-424	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-425	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-426	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-427	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-428	false	0.58	1,500.00	N/A	N/A	N/A	N/A	N/A
J-429	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-430	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-431	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-432	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-433	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-434	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-435	false	1.95	1,500.00	N/A	N/A	N/A	N/A	N/A
J-436	true	3.89	1,500.00	1,503.89	62.44	J-981	20.00	2,467.43
J-437	true	1.95	1,500.00	1,501.95	58.90	J-981	28.00	2,323.35
J-438	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-439	true	1.95	1,500.00	1,501.95	36.36	J-981	38.08	1,732.47
J-440	true	0.82	1,500.00	1,500.82	45.65	J-981	27.58	1,923.10
J-441	false	11.15	0.00	N/A	N/A	N/A	N/A	N/A
J-442	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-443	true	7.55	2,500.00	2,507.55	72.07	J-981	23.66	3,972.61
J-444	true	0.72	1,500.00	1,500.72	90.20	J-981	20.00	4,097.66
J-445	false	0.11	0.00	N/A	N/A	N/A	N/A	N/A
J-446	true	8.72	1,500.00	1,508.72	89.90	J-981	20.00	4,098.93
J-447	true	0.00	1,500.00	1,500.00	89.49	J-981	20.00	4,100.06
J-448	true	0.00	1,500.00	1,500.00	85.73	J-981	20.23	3,593.77
J-449	true	1.25	1,500.00	1,501.25	84.55	J-981	20.66	3,452.03
J-450	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-451	true	0.00	2,500.00	2,500.00	75.37	J-981	20.00	4,101.88
J-452	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-453	true	0.12	1,500.00	1,500.12	89.47	J-981	20.00	4,103.14
J-454	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-455	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-456	true	1.84	1,500.00	1,501.84	89.11	J-981	20.00	4,104.50
J-457	true	0.00	1,500.00	1,500.00	89.25	J-981	20.00	4,106.13
J-458	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-459	true	0.24	1,500.00	1,500.24	85.81	J-981	26.77	3,663.65
J-460	true	0.01	2,500.00	2,500.01	66.45	J-981	20.00	3,677.17
J-461	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-462	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-463	true	0.00	1,500.00	1,500.00	78.67	J-981	38.77	3,026.34
J-464	true	0.55	1,500.00	1,500.55	80.32	J-981	22.15	3,149.93
J-465	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-466	true	0.00	1,500.00	1,500.00	82.48	J-981	20.00	3,334.56
J-467	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-468	true	0.03	1,500.00	1,500.03	75.26	J-981	36.50	2,830.80
J-469	true	0.07	2,500.00	2,500.07	49.89	J-981	20.00	3,122.39
J-470	true	0.01	1,500.00	1,500.02	76.74	J-981	30.93	2,921.70
J-471	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-472	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-473	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-474	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-475	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-476	true	0.03	1,500.00	1,500.03	80.95	J-981	37.16	3,104.35
J-477	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-478	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-479	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-480	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-481	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-482	true	0.00	1,500.00	1,500.00	90.85	J-981	20.00	4,056.86
J-483	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-484	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-485	true	0.00	1,500.00	1,500.00	89.04	J-981	20.01	3,903.76
J-486	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-487	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-488	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-489	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-490	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-491	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-492	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-493	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-494	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-495	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-496	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-497	false	31.36	0.00	N/A	N/A	N/A	N/A	N/A
J-498	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-499	true	0.00	1,500.00	1,500.00	74.94	J-981	20.10	2,763.08
J-500	true	9.73	1,500.00	1,509.73	76.28	J-981	20.00	2,766.57
J-501	true	11.55	1,500.00	1,511.55	77.13	J-981	20.44	2,682.65
J-502	true	15.58	1,500.00	1,515.58	74.96	J-981	24.45	2,595.88
J-503	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-504	true	0.00	1,500.00	1,500.00	77.34	J-981	45.06	5,000.00
J-505	false	0.01	0.00	N/A	N/A	N/A	N/A	N/A
J-506	true	0.00	1,500.00	1,500.00	78.80	J-981	45.00	5,000.00
J-507	false	6.83	0.00	N/A	N/A	N/A	N/A	N/A
J-508	true	11.67	1,500.00	1,511.67	73.58	J-981	20.00	3,912.08
J-509	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-510	true	7.78	1,500.00	1,507.78	64.20	J-981	41.34	2,945.69
J-511	true	12.65	1,500.00	1,512.65	73.29	J-981	20.00	3,944.03
J-512	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-513	false	7.79	0.00	N/A	N/A	N/A	N/A	N/A
J-514	true	5.84	1,500.00	1,505.84	70.55	J-981	20.00	3,931.12
J-515	true	7.78	1,500.00	1,507.78	74.76	J-981	20.00	3,907.21
J-516	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-517	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-518	true	2.92	1,500.00	1,502.92	69.60	J-981	20.00	3,922.16
J-519	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-520	true	5.84	1,500.00	1,505.84	69.33	J-981	20.00	3,930.47
J-521	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-522	true	6.81	1,500.00	1,506.81	64.80	J-981	20.01	2,472.56
J-523	true	2.25	1,500.00	1,502.25	55.63	J-981	20.01	2,472.36
J-524	false	16.61	0.00	N/A	N/A	N/A	N/A	N/A
J-525	true	2.92	1,500.00	1,502.92	72.61	J-981	20.00	2,688.64
J-527	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-528	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-529	false	12.63	0.00	N/A	N/A	N/A	N/A	N/A
J-530	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-531	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-532	true	7.78	1,500.00	1,507.78	75.53	J-981	20.22	3,339.59
J-533	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-534	true	7.78	1,500.00	1,507.78	73.24	J-981	20.22	3,141.76
J-535	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-536	true	4.86	1,500.00	1,504.86	74.99	J-981	20.65	3,251.89
J-537	false	28.00	0.00	N/A	N/A	N/A	N/A	N/A
J-538	true	2.92	1,500.00	1,502.92	76.42	J-981	20.00	3,373.86
J-539	false	2.92	0.00	N/A	N/A	N/A	N/A	N/A
J-540	true	5.84	1,500.00	1,505.84	78.60	J-981	20.00	3,623.37
J-541	false	1.95	0.00	N/A	N/A	N/A	N/A	N/A
J-542	true	13.62	1,500.00	1,513.62	80.94	J-981	20.00	3,976.06
J-543	true	6.29	1,500.00	1,506.29	88.63	J-981	21.40	4,014.74
J-544	true	9.30	1,500.00	1,509.30	88.47	J-981	20.62	4,044.49
J-546	true	7.78	1,500.00	1,507.78	85.41	J-981	31.27	3,684.12
J-547	true	3.05	1,500.00	1,503.05	90.24	J-981	20.00	4,103.68
J-548	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-549	true	8.05	1,500.00	1,508.05	88.36	J-981	22.56	4,023.69
J-550	true	0.00	1,500.00	1,500.00	88.27	J-981	23.15	4,004.42
J-551	true	0.00	1,500.00	1,500.00	88.61	J-981	21.60	4,046.69
J-552	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-553	true	24.32	1,500.00	1,524.32	89.00	J-981	22.92	4,011.41
J-554	true	19.46	1,500.00	1,519.46	88.90	J-981	22.80	3,992.95
J-555	true	10.70	1,500.00	1,510.70	87.72	J-981	20.00	3,870.04
J-556	false	11.73	0.00	N/A	N/A	N/A	N/A	N/A
J-557	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-558	false	11.26	0.00	N/A	N/A	N/A	N/A	N/A
J-559	true	15.57	1,500.00	1,515.57	88.17	J-981	20.23	3,933.46
J-560	false	7.78	0.00	N/A	N/A	N/A	N/A	N/A
J-561	true	7.78	1,500.00	1,507.78	90.24	J-981	20.00	4,118.39
J-562	true	0.00	1,500.00	1,500.00	90.57	J-981	20.01	4,119.33
J-563	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-564	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-565	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-566	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-567	true	3.39	1,500.00	1,503.39	92.38	J-981	20.00	4,125.00
J-568	false	13.44	0.00	N/A	N/A	N/A	N/A	N/A
J-569	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-570	false	12.32	0.00	N/A	N/A	N/A	N/A	N/A
J-571	true	22.38	1,500.00	1,522.38	69.36	J-981	20.00	2,766.57
J-572	true	12.65	1,500.00	1,512.65	74.37	J-981	20.02	2,765.80
J-573	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-574	true	9.73	1,500.00	1,509.73	74.89	J-981	20.01	2,766.13
J-575	false	7.79	0.00	N/A	N/A	N/A	N/A	N/A
J-576	true	12.65	1,500.00	1,512.65	71.20	J-981	20.00	2,766.57
J-577	true	16.54	1,500.00	1,516.54	74.50	J-981	20.00	2,766.57
J-578	false	6.81	0.00	N/A	N/A	N/A	N/A	N/A
J-579	true	14.59	1,500.00	1,514.59	73.98	J-981	20.00	2,766.58
J-580	false	4.86	0.00	N/A	N/A	N/A	N/A	N/A
J-581	false	0.97	0.00	N/A	N/A	N/A	N/A	N/A
J-582	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A
J-583	true	3.89	1,500.00	1,503.89	74.29	J-981	20.00	2,766.57
J-584	false	3.89	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-585	true	0.00	1,500.00	1,500.00	67.57	J-981	20.01	2,766.25
J-586	false	5.84	0.00	N/A	N/A	N/A	N/A	N/A
J-587	true	7.78	1,500.00	1,507.78	51.79	J-981	26.40	3,074.94
J-588	true	0.00	1,500.00	1,500.00	79.19	J-981	20.00	3,536.40
J-589	false	0.26	0.00	N/A	N/A	N/A	N/A	N/A
J-590	true	0.00	1,500.00	1,500.00	71.85	J-981	23.99	3,019.26
J-591	false	0.36	0.00	N/A	N/A	N/A	N/A	N/A
J-592	true	0.55	1,500.00	1,500.55	69.15	J-981	25.34	2,844.21
J-593	false	77.59	0.00	N/A	N/A	N/A	N/A	N/A
J-594	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-595	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-596	true	0.00	1,500.00	1,500.00	80.24	J-981	20.00	3,435.42
J-597	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-598	true	0.00	1,500.00	1,500.00	79.89	J-981	20.00	3,398.51
J-599	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-600	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-601	false	5.64	0.00	N/A	N/A	N/A	N/A	N/A
J-602	true	9.84	1,500.00	1,509.84	69.43	J-981	23.35	2,988.98
J-603	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-604	true	0.00	1,500.00	1,500.00	62.57	J-981	27.92	2,496.14
J-605	true	2.87	1,500.00	1,502.87	78.77	J-981	20.00	3,332.71
J-606	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-607	true	2.01	1,500.00	1,502.01	80.20	J-981	20.00	3,211.93
J-608	true	0.00	1,500.00	1,500.00	75.30	J-981	20.00	3,211.93
J-609	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-610	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-611	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-612	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-613	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-614	false	15.68	0.00	N/A	N/A	N/A	N/A	N/A
J-615	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-616	false	15.68	0.00	N/A	N/A	N/A	N/A	N/A
J-617	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-618	false	7.84	0.00	N/A	N/A	N/A	N/A	N/A
J-619	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-620	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-621	true	0.11	1,500.00	1,500.11	91.39	J-981	20.00	4,265.39
J-622	true	0.00	1,500.00	1,500.00	90.10	J-981	20.00	4,129.78
J-623	false	8.96	0.00	N/A	N/A	N/A	N/A	N/A
J-624	true	0.00	1,500.00	1,500.00	91.04	J-981	20.00	4,281.19
J-625	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-628	false	7.84	0.00	N/A	N/A	N/A	N/A	N/A
J-636	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-637	false	13.62	1,500.00	1,513.62	13.53	J-638	20.02	1,420.18
J-638	false	15.68	0.00	N/A	N/A	N/A	N/A	N/A
J-639	false	27.74	1,500.00	1,527.74	2.24	J-638	28.36	1,316.25
J-640	false	39.20	0.00	N/A	N/A	N/A	N/A	N/A
J-650	false	22.38	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-651	false	12.65	0.00	N/A	N/A	N/A	N/A	N/A
J-653	false	16.54	0.00	N/A	N/A	N/A	N/A	N/A
J-654	false	21.40	0.00	N/A	N/A	N/A	N/A	N/A
J-655	false	18.48	0.00	N/A	N/A	N/A	N/A	N/A
J-656	false	23.68	0.00	N/A	N/A	N/A	N/A	N/A
J-657	false	16.54	0.00	N/A	N/A	N/A	N/A	N/A
J-658	false	0.30	0.00	N/A	N/A	N/A	N/A	N/A
J-659	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-660	false	0.62	0.00	N/A	N/A	N/A	N/A	N/A
J-661	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-750	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-751	false	4.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-752	false	20.81	1,500.00	N/A	N/A	N/A	N/A	N/A
J-813	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-814	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-822	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-823	true	0.00	1,500.00	1,500.00	42.33	J-138	41.43	1,501.00
J-824	true	0.00	1,500.00	1,500.00	38.08	J-150	38.47	1,501.00
J-825	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-826	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-827	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-828	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-829	true	0.00	2,500.00	2,500.00	64.94	J-981	20.00	3,521.57
J-830	true	0.00	2,500.00	2,500.00	64.62	J-981	20.00	3,520.55
J-831	false	109.76	0.00	N/A	N/A	N/A	N/A	N/A
J-832	true	0.00	2,500.00	2,500.00	64.71	J-981	20.00	3,519.74
J-833	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-834	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-835	true	0.00	2,500.00	2,500.00	64.93	J-981	20.00	3,518.67
J-836	true	0.00	2,500.00	2,500.00	65.02	J-981	20.00	3,518.29
J-837	true	0.00	2,500.00	2,500.00	65.47	J-981	20.00	3,517.04
J-838	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-840	true	0.00	2,500.00	2,500.00	65.46	J-981	20.00	3,522.25
J-842	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-844	false	0.68	1,500.00	N/A	N/A	N/A	N/A	N/A
J-845	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-846	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-847	false	2.04	1,500.00	N/A	N/A	N/A	N/A	N/A
J-848	false	1.37	1,500.00	N/A	N/A	N/A	N/A	N/A
J-849	false	1.37	1,500.00	N/A	N/A	N/A	N/A	N/A
J-850	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-851	true	0.00	1,500.00	1,500.00	73.56	J-981	36.91	1,501.00
J-852	true	0.00	1,500.00	1,500.00	73.07	J-981	36.91	1,501.00
J-853	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-901	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-906	false	4.26	1,500.00	N/A	N/A	N/A	N/A	N/A
J-917	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-981	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010 WELL 6 OFF
Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-982	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-1	2,558.30	Zone	Demand	4.69	COMMERCIAL	4.69	2,773.20	92.98
J-2	2,558.00	Zone	Demand	10.75	COMMERCIAL	10.75	2,775.16	93.95
J-3	2,556.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.16	94.60
J-4	2,557.50	Zone	Demand	1.49	COMMERCIAL	1.49	2,777.16	95.04
J-5	2,559.00	Zone	Demand	2.76	COMMERCIAL	2.76	2,777.86	94.69
J-6	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.04	95.20
J-7	2,557.00	Zone	Demand	1.16	COMMERCIAL	1.16	2,778.04	95.63
J-8	2,557.00	Zone	Demand	103.96	IRRIGATION	103.96	2,778.21	95.71
J-9	2,555.00	Zone	Demand	6.02	COMMERCIAL	6.02	2,778.20	96.57
J-10	2,550.50	Zone	Demand	0.00	Composite	0.00	2,778.29	98.55
J-11	2,554.50	Zone	Demand	0.02	COMMERCIAL	0.02	2,778.48	96.91
J-12	2,556.70	Zone	Demand	10.70	RESIDENTIAL	10.70	2,778.33	95.89
J-13	2,557.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,778.34	95.76
J-14	2,555.70	Zone	Demand	4.87	Composite	4.87	2,778.35	96.33
J-15	2,558.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,778.34	95.33
J-16	2,552.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,778.45	97.97
J-17	2,555.30	Zone	Demand	6.81	RESIDENTIAL	6.81	2,778.65	96.63
J-18	2,554.70	Zone	Demand	1.95	RESIDENTIAL	1.95	2,778.66	96.90
J-19	2,552.00	Zone	Demand	9.44	Composite	9.44	2,778.75	98.11
J-20	2,553.00	Zone	Demand	6.09	COMMERCIAL	6.09	2,778.75	97.67
J-21	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.04	97.15
J-22	2,553.50	Zone	Demand	7.93	Composite	7.93	2,778.93	97.53
J-23	2,557.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,778.75	95.94
J-24	2,553.00	Zone	Demand	5.98	Composite	5.98	2,778.92	97.74
J-25	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.92	96.45
J-26	2,554.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.92	97.31
J-27	2,555.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,778.94	96.67
J-28	2,558.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,778.80	95.53
J-29	2,556.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,778.76	96.38
J-30	2,579.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,778.93	86.28
J-31	2,581.50	Zone	Demand	4.57	RESIDENTIAL	4.57	2,778.93	85.42
J-32	2,585.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,778.98	83.71
J-33	2,595.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.04	79.62
J-34	2,596.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.03	78.97
J-35	2,597.50	Zone	Demand	11.67	RESIDENTIAL	11.67	2,779.03	78.54
J-36	2,604.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.03	75.51
J-37	2,601.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.02	77.02
J-38	2,603.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.01	76.15
J-39	2,591.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.00	81.34
J-40	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.98	80.90
J-41	2,591.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.01	81.34
J-42	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.06	81.80
J-43	2,581.00	Zone	Demand	9.92	COMMERCIAL	9.92	2,779.15	85.73
J-44	2,590.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.04	81.79
J-45	2,594.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.03	80.05
J-46	2,602.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.03	76.59
J-47	2,596.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.02	79.18
J-48	2,593.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.02	80.26
J-49	2,601.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,779.01	77.02
J-50	2,603.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,779.06	76.17
J-51	2,606.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.15	74.92
J-52	2,609.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,779.15	73.61

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-53	2,605.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.20	75.37
J-54	2,604.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.20	75.80
J-55	2,607.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.20	74.29
J-56	2,608.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.22	73.86
J-57	2,610.50	Zone	Demand	21.40	RESIDENTIAL	21.40	2,779.24	73.00
J-58	2,606.00	Zone	Demand	6.80	RESIDENTIAL	6.80	2,779.28	74.97
J-59	2,618.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.28	69.56
J-60	2,615.00	Zone	Demand	2.81	Composite	2.81	2,779.28	71.08
J-61	2,604.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,779.30	75.63
J-62	2,600.00	Zone	Demand	10.73	RESIDENTIAL	10.73	2,779.19	77.53
J-63	2,597.50	Zone	Demand	10.73	RESIDENTIAL	10.73	2,779.19	78.61
J-64	2,595.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.17	79.47
J-65	2,595.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,779.13	79.45
J-66	2,604.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,779.15	75.78
J-67	2,604.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.14	75.56
J-68	2,603.00	Zone	Demand	29.19	RESIDENTIAL	29.19	2,779.30	76.28
J-69	2,585.00	Zone	Demand	23.35	RESIDENTIAL	23.35	2,779.16	84.00
J-70	2,587.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,779.15	83.14
J-71	2,600.00	Zone	Demand	19.46	RESIDENTIAL	19.46	2,779.94	77.85
J-72	2,602.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.93	76.77
J-73	2,589.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,779.90	82.38
J-74	2,617.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,782.40	71.56
J-75	2,606.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,780.10	75.11
J-76	2,611.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.44	72.87
J-77	2,617.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,780.25	70.63
J-78	2,618.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,780.12	70.14
J-79	2,616.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,780.40	70.91
J-80	2,613.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,780.43	72.22
J-81	2,607.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,780.30	74.76
J-83	2,619.50	Zone	Demand	11.67	RESIDENTIAL	11.67	2,780.55	69.68
J-84	2,624.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,780.94	67.68
J-85	2,626.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,786.59	69.48
J-86	2,623.50	Zone	Demand	12.63	RESIDENTIAL	12.63	2,786.71	70.61
J-87	2,618.00	Zone	Demand	8.75	RESIDENTIAL	8.75	2,784.96	72.23
J-88	2,618.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,784.89	72.21
J-89	2,618.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,784.90	72.21
J-90	2,618.00	Zone	Demand	6.82	RESIDENTIAL	6.82	2,784.89	72.21
J-91	2,616.50	Zone	Demand	7.79	RESIDENTIAL	7.79	2,784.62	72.74
J-92	2,619.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,782.37	70.68
J-93	2,619.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,782.46	70.50
J-94	2,618.00	Zone	Demand	3.90	RESIDENTIAL	3.90	2,782.47	71.16
J-95	2,619.50	Zone	Demand	14.59	RESIDENTIAL	14.59	2,782.45	70.50
J-96	2,621.50	Zone	Demand	3.71	Composite	3.71	2,787.44	71.80
J-97	2,615.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,782.51	72.47
J-98	2,612.50	Zone	Demand	2.91	RESIDENTIAL	2.91	2,782.51	73.56
J-99	2,611.00	Zone	Demand	3.90	RESIDENTIAL	3.90	2,782.57	74.23
J-100	2,609.50	Zone	Demand	4.58	Composite	4.58	2,782.49	74.85
J-101	2,610.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,782.49	74.63
J-102	2,615.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,782.48	72.46
J-103	2,615.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,782.48	72.46
J-104	2,607.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.74	75.82
J-105	2,603.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,782.74	77.55

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-106	2,593.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,782.67	81.84
J-107	2,612.50	Zone	Demand	11.33	Composite	11.33	2,782.84	73.70
J-108	2,612.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,782.84	73.70
J-109	2,610.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,782.84	74.78
J-110	2,610.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,782.84	74.78
J-111	2,610.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,782.84	74.56
J-112	2,614.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,782.86	73.06
J-113	2,611.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,782.86	74.14
J-114	2,617.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,782.88	71.77
J-115	2,564.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.69	93.32
J-116	2,620.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,787.36	72.41
J-117	2,621.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.36	71.98
J-118	2,579.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.12	87.88
J-119	2,623.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,790.33	72.18
J-120	2,624.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,790.03	71.62
J-121	2,627.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,794.73	72.35
J-122	2,618.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,787.67	73.19
J-123	2,624.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,787.65	70.59
J-124	2,588.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,757.30	73.25
J-125	2,623.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,787.64	71.23
J-126	2,620.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,787.64	72.31
J-127	2,605.80	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.17	75.01
J-128	2,619.00	Zone	Demand	1.93	RESIDENTIAL	1.93	2,782.44	70.71
J-131	2,553.00	Zone	Demand	2.94	COMMERCIAL	2.94	2,778.65	97.63
J-132	2,624.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.55	70.54
J-133	2,564.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,779.70	93.32
J-134	2,558.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,779.71	95.92
J-135	2,557.50	Zone	Demand	29.31	COMMERCIAL	29.31	2,779.84	96.20
J-136	2,626.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,789.80	70.65
J-137	2,553.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,778.65	97.41
J-138	2,638.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,794.72	67.81
J-139	2,554.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.65	96.98
J-140	2,554.50	Zone	Demand	0.15	COMMERCIAL	0.15	2,778.95	97.11
J-141	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.95	97.33
J-142	2,554.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.92	97.31
J-143	2,610.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.24	73.22
J-144	2,611.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.21	72.78
J-145	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.26	92.70
J-146	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.24	93.56
J-147	2,615.00	Zone	Demand	4.48	RESIDENTIAL	4.48	2,781.44	72.01
J-148	2,623.00	Zone	Demand	10.58	RESIDENTIAL	10.58	2,789.31	71.95
J-149	2,621.00	Zone	Demand	29.20	RESIDENTIAL	29.20	2,787.70	72.12
J-150	2,620.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,790.02	73.56
J-151	2,624.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,789.73	71.49
J-152	2,625.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,789.76	71.28
J-153	2,626.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,789.79	70.87
J-154	2,561.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,773.19	91.59
J-155	2,556.50	Zone	Demand	16.54	RESIDENTIAL	16.54	2,773.19	93.75
J-156	2,556.20	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.19	93.88
J-157	2,559.50	Zone	Demand	3.02	COMMERCIAL	3.02	2,771.48	91.71
J-158	2,562.00	Zone	Demand	25.09	Composite	25.09	2,771.46	90.62
J-159	2,561.00	Zone	Demand	20.43	RESIDENTIAL	20.43	2,770.42	90.61

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-160	2,560.00	Zone	Demand	1.12	Composite	1.12	2,770.56	91.10
J-161	2,565.00	Zone	Demand	13.62	RESIDENTIAL	13.62	2,770.41	88.87
J-162	2,559.50	Zone	Demand	0.97	RESIDENTIAL	0.97	2,770.26	91.19
J-163	2,558.50	Zone	Demand	7.05	Composite	7.05	2,770.27	91.62
J-164	2,556.50	Zone	Demand	15.57	RESIDENTIAL	15.57	2,770.05	92.39
J-165	2,557.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,770.05	91.96
J-166	2,555.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,769.83	92.95
J-167	2,554.00	Zone	Demand	6.69	RESIDENTIAL	6.69	2,769.83	93.38
J-168	2,553.50	Zone	Demand	1.37	Composite	1.37	2,769.77	93.57
J-169	2,553.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,769.77	93.57
J-170	2,554.50	Zone	Demand	6.51	Composite	6.51	2,769.72	93.11
J-171	2,556.50	Zone	Demand	13.97	Composite	13.97	2,769.71	92.24
J-172	2,555.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,769.68	92.67
J-173	2,556.50	Zone	Demand	2.24	Composite	2.24	2,769.68	92.23
J-174	2,557.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,769.68	92.02
J-175	2,557.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,769.68	92.02
J-176	2,559.00	Zone	Demand	4.70	IRRIGATION	4.70	2,769.67	91.15
J-177	2,559.50	Zone	Demand	23.86	Composite	23.86	2,769.96	91.05
J-178	2,557.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,769.95	92.14
J-179	2,559.50	Zone	Demand	36.70	Composite	36.70	2,768.40	90.38
J-180	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,768.28	92.93
J-181	2,549.00	Zone	Demand	7.77	RESIDENTIAL	7.77	2,768.26	94.86
J-182	2,550.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,768.24	94.42
J-183	2,548.00	Zone	Demand	10.69	RESIDENTIAL	10.69	2,768.26	95.29
J-184	2,548.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,768.25	95.29
J-185	2,549.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,768.23	94.85
J-186	2,547.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,768.24	95.72
J-187	2,546.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,768.25	95.94
J-188	2,551.00	Zone	Demand	10.69	RESIDENTIAL	10.69	2,768.27	94.00
J-189	2,553.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,768.27	93.14
J-190	2,553.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,768.27	93.14
J-191	2,552.00	Zone	Demand	3.88	RESIDENTIAL	3.88	2,768.27	93.57
J-192	2,552.50	Zone	Demand	2.22	Composite	2.22	2,768.27	93.35
J-193	2,551.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,768.27	93.78
J-194	2,553.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,768.26	93.13
J-195	2,555.00	Zone	Demand	49.67	Composite	49.67	2,768.23	92.26
J-196	2,556.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,768.26	91.84
J-197	2,551.50	Zone	Demand	30.83	Composite	30.83	2,768.75	93.99
J-198	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,768.28	92.93
J-199	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,768.28	94.66
J-200	2,616.50	Zone	Demand	4.69	Composite	4.69	2,779.05	70.33
J-201	2,617.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.05	70.11
J-202	2,601.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,778.98	77.00
J-203	2,600.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.95	77.42
J-204	2,603.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.93	76.12
J-205	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	75.90
J-206	2,603.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.93	76.12
J-207	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.93	75.90
J-208	2,599.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,778.95	77.86
J-209	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.14	87.46
J-210	2,597.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.14	78.80
J-211	2,597.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.14	78.59

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-212	2,591.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.14	81.18
J-213	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.14	80.97
J-214	2,587.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.14	83.13
J-215	2,552.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,778.91	98.17
J-216	2,553.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,778.90	97.74
J-217	2,553.50	Zone	Demand	8.96	RESIDENTIAL	8.96	2,778.90	97.52
J-218	2,554.00	Zone	Demand	1.74	COMMERCIAL	1.74	2,779.00	97.35
J-219	2,554.50	Zone	Demand	24.87	IRRIGATION	24.87	2,779.09	97.17
J-220	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.72	96.36
J-221	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.22	93.98
J-222	2,564.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.29	93.36
J-223	2,564.50	Zone	Demand	0.49	COMMERCIAL	0.49	2,780.18	93.31
J-224	2,561.50	Zone	Demand	1.81	RESIDENTIAL	1.81	2,780.01	94.54
J-225	2,562.50	Zone	Demand	5.06	COMMERCIAL	5.06	2,780.00	94.10
J-226	2,561.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,779.69	94.62
J-227	2,565.00	Zone	Demand	17.51	RESIDENTIAL	17.51	2,778.50	92.37
J-228	2,566.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,777.83	91.65
J-229	2,568.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.61	90.69
J-230	2,569.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,777.47	90.20
J-231	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.35	94.69
J-232	2,565.00	Zone	Demand	16.56	Composite	16.56	2,777.62	91.99
J-233	2,565.00	Zone	Demand	7.69	Composite	7.69	2,777.53	91.95
J-234	2,565.00	Zone	Demand	12.75	COMMERCIAL	12.75	2,792.69	98.51
J-235	2,603.00	Zone	Demand	0.00	Fixed	0.00	2,778.92	76.11
J-236	2,613.00	Zone	Demand	69.44	RESIDENTIAL	69.44	2,778.83	71.75
J-237	2,565.50	Zone	Demand	0.64	IRRIGATION	0.64	2,791.27	97.68
J-238	2,568.50	Zone	Demand	0.91	Composite	0.91	2,783.36	92.96
J-239	2,569.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,783.36	92.74
J-240	2,569.50	Zone	Demand	26.03	IRRIGATION	26.03	2,781.51	91.73
J-241	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.91	86.06
J-242	2,570.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.40	90.60
J-243	2,568.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,778.30	90.99
J-244	2,566.50	Zone	Demand	11.67	RESIDENTIAL	11.67	2,777.45	91.27
J-245	2,564.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,778.30	92.72
J-246	2,569.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,777.88	90.37
J-247	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,764.23	83.17
J-248	2,571.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,777.19	89.21
J-249	2,570.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,777.54	89.79
J-250	2,571.00	Zone	Demand	3.21	Composite	3.21	2,776.68	88.99
J-251	2,573.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,775.27	87.51
J-252	2,570.00	Zone	Demand	1.29	IRRIGATION	1.29	2,776.68	89.42
J-253	2,571.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.68	88.77
J-254	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.91	87.57
J-255	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.90	87.57
J-256	2,577.00	Zone	Demand	0.25	COMMERCIAL	0.25	2,774.83	85.59
J-257	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,797.38	73.28
J-258	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,801.69	70.39
J-259	2,638.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,801.96	70.94
J-260	2,635.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,801.99	72.25
J-261	2,633.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,801.99	73.12
J-262	2,634.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,801.99	72.68
J-263	2,625.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,801.99	76.58

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-264	2,634.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,802.05	72.71
J-265	2,633.00	Zone	Demand	5.85	RESIDENTIAL	5.85	2,802.05	73.14
J-266	2,635.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,802.31	72.39
J-267	2,636.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,802.31	71.95
J-268	2,632.00	Zone	Demand	14.59	RESIDENTIAL	14.59	2,802.63	73.82
J-269	2,633.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,803.67	73.84
J-270	2,630.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,803.80	75.20
J-271	2,632.50	Zone	Demand	2.46	Composite	2.46	2,803.84	74.13
J-272	2,638.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,803.83	71.75
J-273	2,634.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,803.86	73.49
J-274	2,634.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,803.86	73.27
J-275	2,635.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,803.89	73.07
J-276	2,635.70	Zone	Demand	14.59	RESIDENTIAL	14.59	2,803.92	72.78
J-277	2,636.00	Zone	Demand	10.08	RESIDENTIAL	10.08	2,803.92	72.65
J-278	2,641.00	Zone	Demand	19.47	RESIDENTIAL	19.47	2,804.10	70.57
J-279	2,638.00	Zone	Demand	4.46	Composite	4.46	2,804.38	71.99
J-280	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,805.05	71.84
J-281	2,653.00	Zone	Demand	6.25	Composite	6.25	2,820.58	72.51
J-282	2,644.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,821.18	76.66
J-283	2,640.00	Zone	Demand	4.24	Composite	4.24	2,821.18	78.39
J-284	2,638.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,821.54	79.41
J-285	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,821.54	80.28
J-286	2,635.00	Zone	Demand	3.36	RESIDENTIAL	3.36	2,821.54	80.71
J-287	2,639.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,821.94	79.15
J-288	2,637.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,821.88	79.99
J-289	2,644.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,822.08	77.05
J-290	2,647.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,822.08	75.75
J-291	2,643.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,822.08	77.48
J-292	2,654.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,822.07	72.72
J-293	2,654.00	Zone	Demand	5.50	Composite	5.50	2,822.34	72.83
J-294	2,667.00	Zone	Demand	8.03	IRRIGATION	8.03	2,837.01	73.56
J-295	2,565.50	Zone	Demand	3.21	COMMERCIAL	3.21	2,791.27	97.68
J-296	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.35	73.70
J-297	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.35	73.70
J-298	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,841.59	76.19
J-299	2,670.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,842.20	74.50
J-300	2,670.00	Zone	Demand	0.97	RESIDENTIAL	0.97	2,842.20	74.50
J-301	2,664.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,844.51	78.10
J-302	2,664.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,842.14	76.86
J-303	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,846.60	77.70
J-304	2,670.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,846.60	76.41
J-305	2,667.00	Zone	Demand	14.59	RESIDENTIAL	14.59	2,849.16	78.81
J-306	2,665.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,851.59	80.73
J-307	2,664.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,855.81	82.99
J-308	2,670.00	Zone	Demand	10.70	RESIDENTIAL	10.70	2,855.79	80.38
J-309	2,660.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,859.01	86.10
J-310	2,662.50	Zone	Demand	25.29	RESIDENTIAL	25.29	2,860.99	85.88
J-311	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,841.70	76.23
J-312	2,655.00	Zone	Demand	274.77	Composite	274.77	2,856.45	87.16
J-313	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,858.42	89.31
J-314	2,660.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,842.09	78.56
J-315	2,645.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,866.20	95.70

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-316	2,643.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,753.80	47.94
J-317	2,631.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.67	64.76
J-318	2,577.50	Zone	Demand	14.59	RESIDENTIAL	14.59	2,779.08	87.22
J-319	2,566.00	Zone	Demand	17.92	Composite	17.92	2,780.26	92.70
J-320	2,563.00	Zone	Demand	7.84	RESIDENTIAL	7.84	2,779.24	93.56
J-321	2,647.50	Zone	Demand	18.48	RESIDENTIAL	18.48	2,864.68	93.96
J-322	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.85	69.16
J-323	2,572.50	Zone	Demand	7.84	RESIDENTIAL	7.84	2,763.40	82.59
J-325	2,645.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,867.00	95.83
J-326	2,565.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.44	92.13
J-327	2,565.50	Zone	Demand	8.76	RESIDENTIAL	8.76	2,778.21	92.03
J-328	2,565.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,778.21	92.25
J-329	2,565.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.87	91.88
J-330	2,565.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,777.87	92.10
J-331	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.54	91.52
J-332	2,568.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,775.28	89.46
J-333	2,569.50	Zone	Demand	1.03	Composite	1.03	2,775.15	88.97
J-334	2,571.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,775.18	88.12
J-335	2,572.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,775.38	87.99
J-336	2,571.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,774.73	88.14
J-337	2,571.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,773.80	87.74
J-338	2,572.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,774.52	87.62
J-339	2,573.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,774.52	87.19
J-340	2,572.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,775.27	87.95
J-341	2,571.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,771.44	86.72
J-342	2,572.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,771.44	86.29
J-343	2,570.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,769.53	86.33
J-344	2,573.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,765.55	83.09
J-345	2,572.00	Zone	Demand	11.25	Composite	11.25	2,764.23	83.17
J-346	2,632.00	Zone	Demand	6.43	Composite	6.43	2,821.83	82.13
J-347	2,630.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,821.83	82.78
J-348	2,630.00	Zone	Demand	13.44	RESIDENTIAL	13.44	2,821.82	82.99
J-349	2,633.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,821.82	81.70
J-350	2,638.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,821.88	79.56
J-351	2,640.00	Zone	Demand	8.76	RESIDENTIAL	8.76	2,821.88	78.69
J-352	2,640.50	Zone	Demand	11.20	RESIDENTIAL	11.20	2,821.88	78.47
J-353	2,680.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,855.79	76.06
J-354	2,695.00	Zone	Demand	12.66	RESIDENTIAL	12.66	2,855.78	69.56
J-355	2,682.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,855.79	74.97
J-356	2,678.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,855.79	76.70
J-357	2,700.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,855.78	67.40
J-358	2,699.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.01	59.71
J-359	2,701.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.01	58.85
J-360	2,717.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.01	51.92
J-361	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,768.28	93.36
J-364	2,554.00	Zone	Demand	5.81	COMMERCIAL	5.81	2,777.54	96.72
J-365	2,554.00	Zone	Demand	0.96	COMMERCIAL	0.96	2,777.54	96.72
J-366	2,554.00	Zone	Demand	3.02	COMMERCIAL	3.02	2,777.54	96.72
J-367	2,550.00	Zone	Demand	9.87	COMMERCIAL	9.87	2,778.95	99.06
J-368	2,580.00	Zone	Demand	7.16	IRRIGATION	7.16	2,781.63	87.23
J-369	2,550.50	Zone	Demand	1.16	COMMERCIAL	1.16	2,778.11	98.48
J-370	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.63	87.88

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-371	2,554.00	Zone	Demand	19.01	COMMERCIAL	19.01	2,778.20	97.00
J-372	2,555.50	Zone	Demand	9.53	IRRIGATION	9.53	2,778.29	96.39
J-373	2,556.00	Zone	Demand	2.20	COMMERCIAL	2.20	2,778.29	96.18
J-374	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.29	96.18
J-375	2,550.00	Zone	Demand	0.73	COMMERCIAL	0.73	2,778.32	98.78
J-376	2,549.50	Zone	Demand	15.08	COMMERCIAL	15.08	2,778.32	99.00
J-377	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.32	99.00
J-378	2,550.00	Zone	Demand	12.40	COMMERCIAL	12.40	2,778.33	98.79
J-379	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.41	99.04
J-380	2,589.00	Zone	Demand	13.19	COMMERCIAL	13.19	2,778.87	82.15
J-381	2,593.50	Zone	Demand	1.62	COMMERCIAL	1.62	2,778.87	80.20
J-382	2,547.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.62	99.99
J-383	2,548.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.69	99.59
J-384	2,548.50	Zone	Demand	5.63	COMMERCIAL	5.63	2,778.69	99.59
J-385	2,557.00	Zone	Demand	0.94	COMMERCIAL	0.94	2,780.09	96.52
J-386	2,556.00	Zone	Demand	17.77	COMMERCIAL	17.77	2,778.87	96.42
J-387	2,556.00	Zone	Demand	1.74	Composite	1.74	2,778.93	96.45
J-388	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.98	95.61
J-389	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.16	97.85
J-390	2,553.50	Zone	Demand	0.22	Composite	0.22	2,780.16	98.07
J-391	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.16	97.42
J-392	2,554.00	Zone	Demand	7.77	COMMERCIAL	7.77	2,780.16	97.85
J-393	2,552.50	Zone	Demand	0.00	Composite	0.00	2,780.16	98.50
J-394	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.18	96.56
J-395	2,558.00	Zone	Demand	1.07	COMMERCIAL	1.07	2,780.07	96.08
J-396	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.83	95.11
J-397	2,560.00	Zone	Demand	0.34	Composite	0.34	2,779.83	95.11
J-398	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.39	98.81
J-399	2,554.00	Zone	Demand	18.48	RESIDENTIAL	18.48	2,780.31	97.91
J-400	2,556.50	Zone	Demand	13.43	Composite	13.43	2,780.25	96.81
J-401	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.14	95.46
J-402	2,555.50	Zone	Demand	2.47	COMMERCIAL	2.47	2,780.96	97.55
J-403	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.78	97.69
J-404	2,562.50	Zone	Demand	0.42	COMMERCIAL	0.42	2,781.64	94.81
J-405	2,567.00	Zone	Demand	3.66	COMMERCIAL	3.66	2,781.87	92.96
J-406	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.55	98.23
J-407	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.54	94.99
J-408	2,565.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.00	93.02
J-409	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.09	96.09
J-410	2,627.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,780.52	66.20
J-411	2,621.00	Zone	Demand	7.65	Composite	7.65	2,780.12	68.85
J-412	2,602.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,779.71	76.67
J-413	2,599.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.55	78.11
J-414	2,716.00	Zone	Demand	3.88	RESIDENTIAL	3.88	2,855.78	60.48
J-415	2,718.00	Zone	Demand	8.75	Composite	8.75	2,855.78	59.61
J-416	2,733.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,855.78	53.12
J-417	2,722.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,855.78	57.88
J-418	2,559.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,777.26	94.21
J-419	2,560.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,777.26	93.78
J-420	2,573.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,777.00	88.05
J-421	2,574.50	Zone	Demand	15.57	Composite	15.57	2,776.77	87.51
J-422	2,573.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.03	88.28

Title: INITIAL RUN

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-423	2,565.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.15	91.57
J-424	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.15	91.35
J-425	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.12	88.31
J-426	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.12	88.31
J-427	2,579.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.49	87.39
J-428	2,579.50	Zone	Demand	0.58	COMMERCIAL	0.58	2,781.53	87.41
J-429	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.57	88.94
J-430	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.57	88.94
J-431	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,781.58	88.73
J-432	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,781.58	88.73
J-433	2,572.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,781.59	90.46
J-434	2,572.50	Zone	Demand	0.00	Composite	0.00	2,781.59	90.46
J-435	2,578.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,781.59	87.87
J-436	2,579.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,781.58	87.65
J-437	2,578.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,781.58	87.86
J-438	2,579.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,781.58	87.43
J-439	2,580.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,781.58	87.00
J-440	2,580.00	Zone	Demand	0.82	Composite	0.82	2,781.58	87.22
J-441	2,554.00	Zone	Demand	11.15	IRRIGATION	11.15	2,778.93	97.32
J-442	2,592.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.97	80.68
J-443	2,556.00	Zone	Demand	7.55	RESIDENTIAL	7.55	2,778.93	96.45
J-444	2,554.00	Zone	Demand	0.72	COMMERCIAL	0.72	2,779.00	97.35
J-445	2,554.00	Zone	Demand	0.11	IRRIGATION	0.11	2,778.98	97.34
J-446	2,555.00	Zone	Demand	8.72	IRRIGATION	8.72	2,779.07	96.95
J-447	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.13	96.54
J-448	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.13	96.97
J-449	2,554.50	Zone	Demand	1.25	COMMERCIAL	1.25	2,779.13	97.19
J-450	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.15	96.55
J-451	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.23	96.58
J-452	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.25	96.59
J-453	2,556.50	Zone	Demand	0.12	COMMERCIAL	0.12	2,779.30	96.39
J-454	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.33	96.19
J-455	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.36	96.20
J-456	2,558.00	Zone	Demand	1.84	IRRIGATION	1.84	2,779.40	95.79
J-457	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.48	95.61
J-458	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.41	95.79
J-459	2,557.00	Zone	Demand	0.24	COMMERCIAL	0.24	2,779.28	96.17
J-460	2,556.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,779.22	96.36
J-461	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.15	96.55
J-462	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.22	96.58
J-463	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.22	96.14
J-464	2,557.00	Zone	Demand	0.55	IRRIGATION	0.55	2,779.22	96.14
J-465	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.15	96.55
J-466	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.22	95.93
J-467	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.22	95.49
J-468	2,558.00	Zone	Demand	0.03	COMMERCIAL	0.03	2,779.22	95.71
J-469	2,557.50	Zone	Demand	0.07	COMMERCIAL	0.07	2,779.22	95.93
J-470	2,558.00	Zone	Demand	0.01	COMMERCIAL	0.01	2,779.22	95.71
J-471	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.64	97.84
J-472	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.64	97.84
J-473	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.73	97.45
J-474	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.41	95.14

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-475	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.50	95.83
J-476	2,553.00	Zone	Demand	0.03	COMMERCIAL	0.03	2,779.13	97.84
J-477	2,553.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	98.03
J-478	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.73	97.45
J-479	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	97.82
J-480	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	97.82
J-481	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	96.95
J-482	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	98.25
J-483	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	97.60
J-484	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	97.60
J-485	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	97.60
J-486	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	97.60
J-487	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	98.25
J-488	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.59	98.25
J-489	2,561.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.28	93.58
J-490	2,565.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,777.08	91.54
J-491	2,565.50	Zone	Demand	4.86	RESIDENTIAL	4.86	2,777.08	91.54
J-492	2,569.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,776.95	89.97
J-493	2,570.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,776.95	89.54
J-494	2,575.50	Zone	Demand	6.81	RESIDENTIAL	6.81	2,776.77	87.08
J-495	2,639.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.81	78.88
J-496	2,628.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.80	83.63
J-497	2,628.50	Zone	Demand	31.36	RESIDENTIAL	31.36	2,821.80	83.63
J-498	2,628.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,821.80	83.85
J-499	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.80	83.85
J-500	2,625.50	Zone	Demand	9.73	RESIDENTIAL	9.73	2,821.79	84.93
J-501	2,613.50	Zone	Demand	11.55	RESIDENTIAL	11.55	2,821.79	90.12
J-502	2,612.50	Zone	Demand	15.58	IRRIGATION	15.58	2,821.79	90.55
J-503	2,616.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.79	88.82
J-504	2,587.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.08	82.89
J-505	2,587.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,779.08	82.89
J-506	2,584.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.12	84.42
J-507	2,618.00	Zone	Demand	6.83	RESIDENTIAL	6.83	2,779.28	69.78
J-508	2,592.00	Zone	Demand	11.67	RESIDENTIAL	11.67	2,779.17	80.98
J-509	2,588.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,779.17	82.71
J-510	2,594.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.17	80.11
J-511	2,594.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,779.23	79.93
J-512	2,595.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.23	79.71
J-513	2,612.00	Zone	Demand	7.79	RESIDENTIAL	7.79	2,779.28	72.37
J-514	2,601.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.31	76.93
J-515	2,593.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.37	80.42
J-516	2,612.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.28	72.37
J-517	2,589.00	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.37	82.36
J-518	2,603.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.32	76.29
J-519	2,604.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.32	75.85
J-520	2,604.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.34	75.64
J-521	2,616.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.28	70.43
J-522	2,575.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,764.93	82.17
J-523	2,578.00	Zone	Demand	2.25	Composite	2.25	2,764.92	80.87
J-524	2,574.00	Zone	Demand	16.61	IRRIGATION	16.61	2,764.47	82.41
J-525	2,559.50	Zone	Demand	2.92	RESIDENTIAL	2.92	2,777.30	94.23
J-527	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.03	88.71

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF
Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-528	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.06	81.80
J-529	2,546.00	Zone	Demand	12.63	RESIDENTIAL	12.63	2,768.20	96.14
J-530	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,768.28	93.58
J-531	2,579.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.08	86.57
J-532	2,572.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.06	89.37
J-533	2,572.00	Zone	Demand	1.95	RESIDENTIAL	1.95	2,779.06	89.58
J-534	2,572.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.04	89.36
J-535	2,572.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.04	89.58
J-536	2,571.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,779.03	90.01
J-537	2,569.50	Zone	Demand	28.00	RESIDENTIAL	28.00	2,779.03	90.65
J-538	2,571.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.04	90.01
J-539	2,572.00	Zone	Demand	2.92	RESIDENTIAL	2.92	2,779.04	89.58
J-540	2,571.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,779.05	89.80
J-541	2,572.50	Zone	Demand	1.95	RESIDENTIAL	1.95	2,779.05	89.36
J-542	2,572.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,779.06	89.37
J-543	2,553.00	Zone	Demand	6.29	Composite	6.29	2,778.20	97.44
J-544	2,554.00	Zone	Demand	9.30	Composite	9.30	2,778.20	97.00
J-546	2,555.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,778.20	96.57
J-547	2,558.00	Zone	Demand	3.05	Composite	3.05	2,779.53	95.84
J-548	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.55	95.42
J-549	2,559.50	Zone	Demand	8.05	IRRIGATION	8.05	2,779.56	95.21
J-550	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.58	95.22
J-551	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.62	95.23
J-552	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.69	95.27
J-553	2,557.50	Zone	Demand	24.32	RESIDENTIAL	24.32	2,779.56	96.07
J-554	2,557.50	Zone	Demand	19.46	RESIDENTIAL	19.46	2,779.57	96.08
J-555	2,558.50	Zone	Demand	10.70	RESIDENTIAL	10.70	2,779.59	95.65
J-556	2,559.00	Zone	Demand	11.73	Composite	11.73	2,779.59	95.44
J-557	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.70	95.05
J-558	2,561.50	Zone	Demand	11.26	Composite	11.26	2,779.70	94.40
J-559	2,559.00	Zone	Demand	15.57	RESIDENTIAL	15.57	2,779.71	95.49
J-560	2,558.50	Zone	Demand	7.78	Composite	7.78	2,779.71	95.71
J-561	2,557.50	Zone	Demand	7.78	RESIDENTIAL	7.78	2,779.73	96.15
J-562	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.80	95.96
J-563	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.84	96.19
J-564	2,557.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.84	96.19
J-565	2,560.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,779.84	95.11
J-566	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.89	95.78
J-567	2,556.00	Zone	Demand	3.39	COMMERCIAL	3.39	2,780.01	96.92
J-568	2,615.50	Zone	Demand	13.44	RESIDENTIAL	13.44	2,821.79	89.25
J-569	2,595.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,821.79	98.12
J-570	2,597.50	Zone	Demand	12.32	RESIDENTIAL	12.32	2,821.79	97.04
J-571	2,659.00	Zone	Demand	22.38	RESIDENTIAL	22.38	2,841.73	79.06
J-572	2,643.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,841.76	85.99
J-573	2,643.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,841.76	85.78
J-574	2,644.00	Zone	Demand	9.73	RESIDENTIAL	9.73	2,841.77	85.57
J-575	2,643.50	Zone	Demand	7.79	RESIDENTIAL	7.79	2,841.80	85.80
J-576	2,661.00	Zone	Demand	12.65	RESIDENTIAL	12.65	2,842.12	78.36
J-577	2,649.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,842.00	83.50
J-578	2,649.00	Zone	Demand	6.81	RESIDENTIAL	6.81	2,841.97	83.49
J-579	2,642.00	Zone	Demand	14.59	RESIDENTIAL	14.59	2,842.00	86.53
J-580	2,645.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,842.00	85.23

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-581	2,643.50	Zone	Demand	0.97	RESIDENTIAL	0.97	2,842.01	85.89
J-582	2,643.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,842.01	85.89
J-583	2,648.00	Zone	Demand	3.89	RESIDENTIAL	3.89	2,842.01	83.94
J-584	2,654.50	Zone	Demand	3.89	RESIDENTIAL	3.89	2,842.05	81.14
J-585	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,842.05	82.23
J-586	2,650.50	Zone	Demand	5.84	RESIDENTIAL	5.84	2,842.05	82.87
J-587	2,652.00	Zone	Demand	7.78	RESIDENTIAL	7.78	2,809.80	68.27
J-588	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.67	85.96
J-589	2,576.50	Zone	Demand	0.26	COMMERCIAL	0.26	2,781.38	88.64
J-590	2,574.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.38	89.51
J-591	2,579.50	Zone	Demand	0.36	COMMERCIAL	0.36	2,781.82	87.54
J-592	2,578.00	Zone	Demand	0.55	Composite	0.55	2,781.82	88.19
J-593	2,579.50	Zone	Demand	77.59	IRRIGATION	77.59	2,781.45	87.37
J-594	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.49	87.82
J-595	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.00	87.83
J-596	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.89	87.78
J-597	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.89	87.56
J-598	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.43	87.80
J-599	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.43	88.45
J-600	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.43	88.45
J-601	2,577.00	Zone	Demand	5.64	COMMERCIAL	5.64	2,780.43	88.01
J-602	2,577.50	Zone	Demand	9.84	COMMERCIAL	9.84	2,780.42	87.80
J-603	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.43	88.66
J-604	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.43	88.01
J-605	2,578.00	Zone	Demand	2.87	COMMERCIAL	2.87	2,779.39	87.13
J-606	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,779.39	87.13
J-607	2,572.00	Zone	Demand	2.01	COMMERCIAL	2.01	2,776.91	88.66
J-608	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.91	87.14
J-609	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.91	87.14
J-610	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.61	85.93
J-611	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.61	85.71
J-612	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.41	85.63
J-613	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,775.41	85.63
J-614	2,577.50	Zone	Demand	15.68	Composite	15.68	2,775.27	85.56
J-615	2,578.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,775.27	85.35
J-616	2,580.00	Zone	Demand	15.68	Composite	15.68	2,774.32	84.08
J-617	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.62	95.88
J-618	2,562.00	Zone	Demand	7.84	Composite	7.84	2,783.97	96.04
J-619	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.97	96.04
J-620	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.41	95.14
J-621	2,566.00	Zone	Demand	0.11	COMMERCIAL	0.11	2,786.73	95.50
J-622	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.73	95.28
J-623	2,567.50	Zone	Demand	8.96	Composite	8.96	2,786.73	94.85
J-624	2,567.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.49	95.39
J-625	2,567.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.89	95.57
J-628	2,569.00	Zone	Demand	7.84	Composite	7.84	2,788.00	94.75
J-636	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.12	88.31
J-637	2,558.50	Zone	Demand	13.62	RESIDENTIAL	13.62	2,768.72	90.95
J-638	2,559.00	Zone	Demand	15.68	RESIDENTIAL	15.68	2,768.72	90.73
J-639	2,556.00	Zone	Demand	27.74	Composite	27.74	2,768.70	92.03
J-640	2,564.50	Zone	Demand	39.20	RESIDENTIAL	39.20	2,770.40	89.08
J-650	2,610.00	Zone	Demand	22.38	RESIDENTIAL	22.38	2,779.88	73.50

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-651	2,553.50	Zone	Demand	12.65	RESIDENTIAL	12.65	2,778.90	97.52
J-653	2,627.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,789.90	70.48
J-654	2,682.00	Zone	Demand	21.40	RESIDENTIAL	21.40	2,855.78	75.19
J-655	2,680.00	Zone	Demand	18.48	RESIDENTIAL	18.48	2,855.78	76.05
J-656	2,693.00	Zone	Demand	23.68	RESIDENTIAL	23.68	2,855.77	70.42
J-657	2,563.00	Zone	Demand	16.54	RESIDENTIAL	16.54	2,778.01	93.03
J-658	2,598.00	Zone	Demand	0.30	RESIDENTIAL	0.30	2,779.07	78.34
J-659	2,638.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,757.35	51.64
J-660	2,640.00	Zone	Demand	0.62	COMMERCIAL	0.62	2,757.35	50.77
J-661	2,641.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,757.35	50.34
J-750	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,858.42	89.31
J-751	2,571.00	Zone	Demand	4.86	RESIDENTIAL	4.86	2,769.53	85.90
J-752	2,567.00	Zone	Demand	20.81	COMMERCIAL	20.81	2,787.17	95.26
J-813	2,565.00	Zone	Demand	0.00	Fixed	0.00	2,777.53	91.95
J-814	2,560.50	Zone	Demand	0.00	Fixed	0.00	2,777.28	93.79
J-822	2,615.00	Zone	Demand	0.00	Fixed	0.00	2,779.28	71.08
J-823	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,794.73	68.67
J-824	2,621.00	Zone	Demand	0.00	Fixed	0.00	2,790.03	73.13
J-825	2,609.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,767.95	68.77
J-826	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,781.49	87.61
J-827	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,781.53	87.63
J-828	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.67	85.09
J-829	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.64	85.08
J-830	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.61	85.06
J-831	2,585.00	Zone	Demand	109.76	Fixed	109.76	2,781.60	85.06
J-832	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.60	85.06
J-833	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.59	85.06
J-834	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.59	85.05
J-835	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.59	85.06
J-836	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.59	85.06
J-837	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.59	85.06
J-838	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.59	85.06
J-840	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,781.65	85.08
J-842	2,552.50	Zone	Demand	0.00	Fixed	0.00	2,769.00	93.67
J-844	2,663.30	Zone	Demand	0.68	RESIDENTIAL	0.68	2,831.71	72.86
J-845	2,664.70	Zone	Demand	0.00	Fixed	0.00	2,833.71	73.12
J-846	2,665.90	Zone	Demand	0.00	Fixed	0.00	2,835.53	73.39
J-847	2,661.70	Zone	Demand	2.04	RESIDENTIAL	2.04	2,831.71	73.56
J-848	2,664.70	Zone	Demand	1.37	RESIDENTIAL	1.37	2,833.71	73.12
J-849	2,665.90	Zone	Demand	1.37	RESIDENTIAL	1.37	2,835.53	73.39
J-850	2,567.00	Zone	Demand	0.00	Fixed	0.00	2,788.00	95.62
J-851	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,775.61	87.23
J-852	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,775.61	87.23
J-853	2,575.00	Zone	Demand	0.00	Fixed	0.00	2,775.61	86.79
J-901	2,591.00	Zone	Demand	0.00	Fixed	0.00	2,779.00	81.34
J-906	2,553.50	Zone	Demand	4.26	COMMERCIAL	4.26	2,768.28	92.93
J-917	2,625.00	Zone	Demand	0.00	Fixed	0.00	2,782.45	68.12
J-981	2,640.00	Zone	Demand	0.00	Fixed	0.00	2,745.58	45.68
J-982	2,644.50	Zone	Demand	0.00	Fixed	0.00	2,753.67	47.23

Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-1	370.00	8.0	PVC	Open		536.15	3.42	2,775.16	2,773.20	5.28	1.95
P-2	266.00	6.0	PVC	Open		0.00	0.00	2,775.16	2,775.16	0.00	0.00
P-3	365.00	8.0	PVC	Open		546.90	3.49	2,777.16	2,775.16	5.49	2.00
P-4	357.00	8.0	PVC	Open		320.38	2.04	2,777.86	2,777.16	1.98	0.71
P-5	369.00	8.0	PVC	Open		149.00	0.95	2,778.04	2,777.86	0.47	0.17
P-6	223.00	6.0	PVC	Open		1.16	0.01	2,778.04	2,778.04	0.00	0.00
P-7	358.00	8.0	PVC	Open		150.16	0.96	2,778.21	2,778.04	0.48	0.17
P-8	530.00	8.0	PVC	Open		14.44	0.09	2,778.21	2,778.20	0.01	0.00
P-9	320.00	8.0	PVC	Open		0.00	0.00	2,778.29	2,778.29	0.00	0.00
P-10	680.00	8.0	PVC	Open		136.24	0.87	2,778.48	2,778.21	0.40	0.27
P-11	314.00	8.0	PVC	Open		132.31	0.84	2,778.33	2,778.21	0.38	0.12
P-12	520.00	8.0	PVC	Open		31.27	0.20	2,778.34	2,778.33	0.03	0.01
P-13	660.00	8.0	PVC	Open		15.19	0.10	2,778.35	2,778.34	0.01	0.01
P-14	130.00	6.0	PVC	Open		2.92	0.03	2,778.34	2,778.34	0.00	0.00
P-15	770.00	6.0	PVC	Open		-35.54	0.40	2,778.34	2,778.45	0.14	0.11
P-16	446.00	8.0	PVC	Open		111.75	0.71	2,778.45	2,778.33	0.28	0.12
P-17	380.00	8.0	PVC	Open		158.96	1.01	2,778.65	2,778.45	0.53	0.20
P-18	270.00	8.0	PVC	Open		-23.17	0.15	2,778.65	2,778.66	0.02	0.00
P-19	440.00	8.0	PVC	Open		-102.61	0.65	2,778.65	2,778.75	0.24	0.10
P-20	83.00	8.0	PVC	Open		6.09	0.04	2,778.75	2,778.75	0.00	0.00
P-21	72.00	8.0	PVC	Open		-109.20	0.70	2,778.93	2,778.95	0.27	0.02
P-22	572.00	8.0	PVC	Open		-118.14	0.75	2,778.75	2,778.93	0.31	0.18
P-23	195.00	6.0	PVC	Open		67.53	0.77	2,778.75	2,778.66	0.45	0.09
P-24	826.00	6.0	PVC	Open		-43.51	0.49	2,778.75	2,778.92	0.20	0.17
P-25	368.00	8.0	PVC	Open		-15.70	0.10	2,778.92	2,778.92	0.01	0.00
P-26	282.00	8.0	PVC	Open		33.79	0.22	2,778.92	2,778.92	0.03	0.01
P-27	228.00	8.0	PVC	Open		49.36	0.32	2,778.94	2,778.92	0.06	0.01
P-28	603.00	8.0	PVC	Open		101.79	0.65	2,778.94	2,778.80	0.23	0.14
P-29	340.00	6.0	PVC	Open		36.67	0.42	2,778.80	2,778.75	0.15	0.05
P-30	560.00	8.0	PVC	Open		-49.56	0.32	2,778.76	2,778.80	0.06	0.04
P-31	249.00	8.0	PVC	Open		142.60	0.91	2,778.76	2,778.65	0.44	0.11
P-32	660.00	8.0	PVC	Open		106.65	0.68	2,778.93	2,778.76	0.25	0.17
P-33	400.00	6.0	PVC	Open		4.57	0.05	2,778.93	2,778.93	0.00	0.00
P-34	171.00	8.0	PVC	Open		114.14	0.73	2,778.98	2,778.93	0.29	0.05
P-35	375.00	8.0	PVC	Open		81.71	0.52	2,779.04	2,778.98	0.16	0.06
P-36	180.00	6.0	PVC	Open		-12.46	0.14	2,779.03	2,779.04	0.02	0.00
P-37	318.00	6.0	PVC	Open		11.67	0.13	2,779.03	2,779.03	0.02	0.01
P-38	310.00	6.0	PVC	Open		3.10	0.04	2,779.03	2,779.03	0.00	0.00
P-39	238.00	6.0	PVC	Open		-18.47	0.21	2,779.02	2,779.03	0.05	0.01
P-40	250.00	6.0	Asbestos	Open		-18.22	0.21	2,779.01	2,779.02	0.04	0.01
P-41	164.00	8.0	PVC	Open		-30.53	0.19	2,779.01	2,779.01	0.03	0.00
P-42	64.00	8.0	PVC	Open		42.42	0.27	2,778.66	2,778.65	0.05	0.00
P-43	80.00	8.0	PVC	Open		124.86	0.80	2,779.00	2,778.97	0.34	0.03
P-44	479.00	8.0	PVC	Open		-84.14	0.54	2,778.98	2,779.06	0.17	0.08
P-45	70.00	8.0	PVC	Open		-73.84	0.47	2,779.00	2,779.01	0.13	0.01
P-46	61.00	8.0	PVC	Open		-196.85	1.26	2,779.04	2,779.09	0.79	0.05
P-47	451.00	8.0	PVC	Open		-47.20	0.30	2,779.01	2,779.04	0.06	0.03
P-48	172.00	8.0	PVC	Open		-72.64	0.46	2,779.04	2,779.06	0.13	0.02
P-49	149.00	6.0	PVC	Open		21.55	0.24	2,779.04	2,779.03	0.06	0.01
P-50	390.00	6.0	Asbestos	Open		-16.20	0.18	2,779.01	2,779.03	0.03	0.01
P-51	250.00	6.0	Asbestos	Open		2.43	0.03	2,779.03	2,779.03	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-105	280.00	4.0	PVC	Open		14.51	0.37	2,784.96	2,784.90	0.20	0.06
P-106	50.00	6.0	PVC	Open		118.32	1.34	2,784.96	2,784.89	1.28	0.06
P-107	233.00	4.0	PVC	Open		4.78	0.12	2,784.90	2,784.89	0.03	0.01
P-108	110.00	4.0	PVC	Open		6.82	0.17	2,784.90	2,784.89	0.06	0.01
P-109	207.00	6.0	PVC	Open		120.17	1.36	2,784.89	2,784.62	1.32	0.27
P-110	300.00	6.0	PVC	Open		298.48	3.39	2,784.62	2,782.40	7.39	2.22
P-111	470.00	6.0	PVC	Open		-26.38	0.30	2,782.40	2,782.44	0.08	0.04
P-112	120.00	2.0	PVC	Open		3.89	0.40	2,782.44	2,782.37	0.57	0.07
P-113	124.00	6.0	PVC	Open		-32.21	0.37	2,782.44	2,782.46	0.12	0.01
P-114	145.00	6.0	PVC	Open		-22.30	0.25	2,782.46	2,782.47	0.06	0.01
P-115	430.00	6.0	PVC	Open		14.59	0.17	2,782.47	2,782.45	0.03	0.01
P-116	316.00	8.0	PVC	Open		0.00	0.00	2,782.45	2,782.45	0.00	0.00
P-117	250.00	6.0	PVC	Open		40.79	0.46	2,782.51	2,782.47	0.18	0.05
P-118	190.00	4.0	PVC	Open		2.91	0.07	2,782.51	2,782.51	0.01	0.00
P-119	240.00	6.0	PVC	Open		46.62	0.53	2,782.57	2,782.51	0.23	0.06
P-120	621.00	6.0	PVC	Open		32.00	0.36	2,782.57	2,782.49	0.12	0.07
P-121	100.00	4.0	PVC	Open		3.89	0.10	2,782.49	2,782.49	0.01	0.00
P-122	280.00	6.0	PVC	Open		23.53	0.27	2,782.49	2,782.48	0.07	0.02
P-123	140.00	6.0	PVC	Open		3.89	0.04	2,782.48	2,782.48	0.00	0.00
P-124	530.00	6.0	PVC	Open		-15.75	0.18	2,782.46	2,782.48	0.03	0.02
P-125	270.00	6.0	PVC	Open		82.52	0.94	2,782.74	2,782.57	0.66	0.18
P-126	78.00	6.0	PVC	Open		13.62	0.15	2,782.74	2,782.74	0.03	0.00
P-127	610.00	4.0	PVC	Open		10.70	0.27	2,782.74	2,782.67	0.12	0.07
P-128	430.00	8.0	PVC	Open		96.14	0.61	2,782.84	2,782.74	0.21	0.09
P-129	250.00	8.0	PVC	Open		36.09	0.23	2,782.84	2,782.84	0.04	0.01
P-130	480.00	6.0	PVC	Open		10.70	0.12	2,782.84	2,782.84	0.02	0.01
P-131	100.00	6.0	PVC	Open		2.92	0.03	2,782.84	2,782.84	0.00	0.00
P-132	80.00	6.0	PVC	Open		2.92	0.03	2,782.84	2,782.84	0.00	0.00
P-133	165.00	8.0	PVC	Open		54.57	0.35	2,782.86	2,782.84	0.08	0.01
P-134	270.00	6.0	PVC	Open		5.84	0.07	2,782.86	2,782.86	0.00	0.00
P-135	243.00	8.0	PVC	Open		68.19	0.44	2,782.88	2,782.86	0.11	0.03
P-136	600.00	8.0	PVC	Open		354.88	2.27	2,782.88	2,781.44	2.40	1.44
P-137	1,300.00	8.0	PVC	Open		428.91	2.74	2,787.36	2,782.88	3.44	4.48
P-138	194.00	8.0	PVC	Open		-20.73	0.13	2,787.36	2,787.36	0.01	0.00
P-139	1,200.00	4.0	PVC	Open		71.37	1.82	2,787.36	2,782.84	3.77	4.53
P-140	400.00	8.0	PVC	Open		-92.11	0.59	2,787.36	2,787.44	0.20	0.08
P-141	67.00	8.0	PVC	Open		-281.91	1.80	2,787.44	2,787.55	1.55	0.10
P-142	940.00	6.0	PVC	Open		186.10	2.11	2,787.44	2,784.62	3.00	2.82
P-143	95.00	8.0	PVC	Open		414.02	2.64	2,787.67	2,787.36	3.22	0.31
P-144	700.00	8.0	PVC	Open		451.96	2.88	2,790.33	2,787.67	3.81	2.66
P-145	260.00	8.0	PVC	Open		242.06	1.55	2,790.03	2,789.73	1.17	0.30
P-146	420.00	8.0	PVC	Open		764.80	4.88	2,794.73	2,790.33	10.48	4.40
P-147	656.00	8.0	PVC	Open		32.10	0.20	2,787.67	2,787.65	0.03	0.02
P-148	548.00	6.0	PVC	Open		11.11	0.13	2,787.65	2,787.64	0.02	0.01
P-149	1,112.00	6.0	PVC	Open		7.38	0.08	2,787.65	2,787.64	0.01	0.01
P-150	867.00	12.0	PVC	Open		1,811.15	5.14	2,763.40	2,757.30	7.04	6.10
P-151	601.00	6.0	PVC	Open		2.92	0.03	2,787.64	2,787.64	0.00	0.00
P-152	570.00	8.0	PVC	Open		742.98	4.74	2,786.59	2,780.94	9.91	5.65
P-154	5.00	6.0	Ductile I	Open		79.91	0.91	2,611.00	2,611.00	0.68	0.00
P-155	5.00	6.0	Ductile I	Open		36.62	0.42	2,611.00	2,611.00	0.15	0.00
P-156	5.00	6.0	Ductile I	Open		-0.00	0.00	2,611.00	2,611.00	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-52	390.00	6.0	Asbestos	Open		-6.56	0.07	2,779.02	2,779.03	0.01	0.00
P-53	261.00	6.0	Asbestos	Open		17.51	0.20	2,779.03	2,779.02	0.04	0.01
P-54	211.00	6.0	Asbestos	Open		3.89	0.04	2,779.02	2,779.02	0.00	0.00
P-55	330.00	6.0	Asbestos	Open		8.76	0.10	2,779.02	2,779.01	0.01	0.00
P-56	352.00	6.0	PVC	Open		-29.43	0.33	2,779.03	2,779.06	0.10	0.04
P-57	330.00	6.0	PVC	Open		26.44	0.30	2,779.06	2,779.03	0.08	0.03
P-58	220.00	6.0	PVC	Open		64.62	0.73	2,779.15	2,779.06	0.42	0.09
P-59	444.00	6.0	PVC	Open		9.73	0.11	2,779.15	2,779.15	0.01	0.01
P-60	31.00	6.0	PVC	Open		79.21	0.90	2,779.17	2,779.15	0.61	0.02
P-61	83.00	6.0	PVC	Open		51.12	0.58	2,779.20	2,779.17	0.27	0.02
P-63	87.00	6.0	Ductile I	Open		435.36	4.94	2,612.55	2,611.00	17.79	1.55
P-64	15.00	6.0	PVC	Open		51.12	0.58	2,779.20	2,779.20	0.28	0.00
P-65	251.00	8.0	PVC	Open		65.42	0.42	2,779.20	2,779.17	0.11	0.03
P-66	334.00	6.0	PVC	Open		-28.10	0.32	2,779.17	2,779.20	0.09	0.03
P-67	129.00	8.0	PVC	Open		76.79	0.49	2,779.22	2,779.20	0.14	0.02
P-68	556.00	8.0	PVC	Open		29.25	0.19	2,779.24	2,779.22	0.03	0.01
P-69	387.00	8.0	PVC	Open		64.08	0.41	2,779.28	2,779.24	0.10	0.04
P-71	131.00	8.0	PVC	Open		-3.04	0.02	2,779.28	2,779.28	0.00	0.00
P-72	150.00	8.0	PVC	Open		-76.73	0.49	2,779.28	2,779.30	0.14	0.02
P-73	326.00	6.0	PVC	Open		57.43	0.65	2,779.30	2,779.19	0.34	0.11
P-74	570.00	6.0	PVC	Open		-5.38	0.06	2,779.19	2,779.19	0.00	0.00
P-75	280.00	8.0	PVC	Open		43.83	0.28	2,779.20	2,779.19	0.05	0.01
P-76	402.00	8.0	PVC	Open		38.48	0.25	2,779.19	2,779.17	0.04	0.02
P-77	150.00	6.0	PVC	Open		98.06	1.11	2,779.17	2,779.04	0.90	0.14
P-78	700.00	6.0	PVC	Open		45.08	0.51	2,779.13	2,778.98	0.22	0.15
P-79	325.00	6.0	PVC	Open		41.32	0.47	2,779.19	2,779.13	0.19	0.06
P-80	360.00	6.0	PVC	Open		-17.38	0.20	2,779.13	2,779.15	0.04	0.01
P-81	158.00	4.0	PVC	Open		4.86	0.12	2,779.15	2,779.14	0.03	0.00
P-82	985.00	6.0	PVC	Open		37.81	0.43	2,779.30	2,779.15	0.16	0.16
P-83	930.00	8.0	PVC	Open		80.04	0.51	2,779.30	2,779.16	0.15	0.14
P-84	550.00	6.0	PVC	Open		8.76	0.10	2,779.16	2,779.15	0.01	0.01
P-85	410.00	8.0	PVC	Open		160.88	1.03	2,779.16	2,778.94	0.54	0.22
P-86	660.00	6.0	PVC	Open		112.94	1.28	2,779.94	2,779.16	1.17	0.78
P-87	130.00	4.0	PVC	Open		4.86	0.12	2,779.94	2,779.93	0.03	0.00
P-88	314.00	4.0	PVC	Open		9.73	0.25	2,779.94	2,779.90	0.10	0.03
P-89	1,283.00	6.0	PVC	Open		146.99	1.67	2,782.40	2,779.94	1.92	2.47
P-90	910.00	6.0	PVC	Open		170.09	1.93	2,782.40	2,780.10	2.53	2.30
P-91	383.00	8.0	PVC	Open		298.71	1.91	2,780.10	2,779.44	1.73	0.66
P-92	300.00	8.0	PVC	Open		144.87	0.92	2,779.44	2,779.30	0.45	0.13
P-93	292.00	8.0	PVC	Open		147.04	0.94	2,779.44	2,779.30	0.46	0.13
P-94	372.00	8.0	PVC	Open		135.43	0.86	2,780.25	2,780.10	0.40	0.15
P-95	150.00	2.0	PVC	Open		4.86	0.50	2,780.25	2,780.12	0.85	0.13
P-96	340.00	8.0	PVC	Open		144.18	0.92	2,780.40	2,780.25	0.44	0.15
P-97	125.00	8.0	PVC	Open		113.38	0.72	2,780.43	2,780.40	0.29	0.04
P-98	158.00	2.0	PVC	Open		4.86	0.50	2,780.43	2,780.30	0.85	0.13
P-99	360.00	8.0	PVC	Open		121.17	0.77	2,780.55	2,780.43	0.32	0.12
P-100	809.00	6.0	PVC	Open		41.50	0.47	2,780.55	2,780.40	0.19	0.15
P-101	95.00	4.0	PVC	Open		2.92	0.07	2,779.28	2,779.28	0.01	0.00
P-102	620.00	8.0	PVC	Open		174.34	1.11	2,780.94	2,780.55	0.63	0.39
P-103	150.00	6.0	PVC	Open		94.78	1.08	2,786.71	2,786.59	0.85	0.13
P-104	980.00	6.0	PVC	Open		141.58	1.61	2,786.71	2,784.96	1.79	1.76

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-157	20.00	6.0	Ductile I	Open		79.91	0.91	2,779.21	2,779.20	0.68	0.01
P-158	15.00	6.0	Ductile I	Open		36.62	0.42	2,779.20	2,779.20	0.16	0.00
P-159	10.00	6.0	Ductile I	Open		-0.00	0.00	2,779.20	2,779.20	0.00	0.00
P-160	170.00	8.0	PVC	Open		-24.24	0.15	2,779.69	2,779.70	0.02	0.00
P-161	575.00	8.0	PVC	Open		-27.51	0.18	2,779.70	2,779.71	0.02	0.01
P-162	797.00	6.0	PVC	Open		-10.35	0.12	2,779.70	2,779.71	0.02	0.01
P-163	505.00	6.0	PVC	Open		-49.53	0.56	2,779.71	2,779.84	0.26	0.13
P-164	420.00	8.0	PVC	Open		650.15	4.15	2,789.80	2,786.59	7.65	3.21
P-165	150.00	8.0	PVC	Open		41.09	0.26	2,789.80	2,789.79	0.05	0.01
P-166	507.00	8.0	PVC	Open		350.40	2.24	2,781.44	2,780.26	2.34	1.19
P-167	1.00	96.0	PVC	Open		51.02	0.00	2,534.00	2,534.00	0.00	0.00
P-169	48.00	8.0	PVC	Open		51.02	0.33	2,779.00	2,779.00	0.07	0.00
P-170	364.00	4.0	PVC	Open		3.89	0.10	2,778.65	2,778.65	0.02	0.01
P-171	880.00	8.0	PVC	Open		691.24	4.41	2,797.38	2,789.80	8.61	7.58
P-172	340.00	8.0	PVC	Open		-109.35	0.70	2,778.95	2,779.04	0.27	0.09
P-173	160.00	6.0	PVC	Open		0.15	0.00	2,778.95	2,778.95	0.00	0.00
P-174	460.00	8.0	PVC	Open		7.78	0.05	2,778.92	2,778.92	0.00	0.00
P-175	260.00	8.0	PVC	Open		54.35	0.35	2,779.24	2,779.22	0.08	0.02
P-176	80.00	2.0	PVC	Open		2.92	0.30	2,779.24	2,779.21	0.34	0.03
P-177	170.00	8.0	PVC	Open		42.04	0.27	2,778.92	2,778.91	0.05	0.01
P-178	420.00	6.0	PVC	Open		3.02	0.03	2,778.90	2,778.90	0.00	0.00
P-179	393.00	8.0	PVC	Open		20.74	0.13	2,778.91	2,778.90	0.01	0.01
P-180	120.00	8.0	PVC	Open		8.96	0.06	2,778.90	2,778.90	0.00	0.00
P-181	394.00	8.0	PVC	Open		-85.76	0.55	2,778.93	2,779.00	0.17	0.07
P-182	225.00	8.0	PVC	Open		-87.50	0.56	2,779.00	2,779.04	0.18	0.04
P-183	442.00	8.0	PVC	Open		-221.72	1.42	2,779.09	2,779.53	0.99	0.44
P-185	258.00	8.0	PVC	Open		288.76	1.84	2,789.73	2,789.31	1.62	0.42
P-186	1,300.00	6.0	PVC	Open		116.35	1.32	2,789.31	2,787.70	1.24	1.61
P-187	700.00	6.0	PVC	Open		161.84	1.84	2,789.31	2,787.70	2.31	1.61
P-188	800.00	8.0	PVC	Open		248.99	1.59	2,787.70	2,786.71	1.23	0.98
P-189	158.00	8.0	PVC	Open		312.85	2.00	2,790.33	2,790.03	1.89	0.30
P-190	700.00	8.0	PVC	Open		40.74	0.26	2,789.76	2,789.73	0.05	0.03
P-191	260.00	8.0	PVC	Open		72.96	0.47	2,789.79	2,789.76	0.13	0.03
P-192	700.00	6.0	PVC	Open		18.61	0.21	2,789.76	2,789.73	0.05	0.03
P-193	698.00	6.0	PVC	Open		36.74	0.42	2,789.90	2,789.79	0.15	0.10
P-194	448.00	8.0	PVC	Open		30.16	0.19	2,773.20	2,773.19	0.03	0.01
P-195	480.00	8.0	PVC	Open		8.97	0.06	2,773.19	2,773.19	0.00	0.00
P-196	800.00	8.0	PVC	Open		7.57	0.05	2,773.19	2,773.19	0.00	0.00
P-197	242.00	8.0	PVC	Open		0.00	0.00	2,773.19	2,773.19	0.00	0.00
P-198	371.00	8.0	PVC	Open		501.30	3.20	2,773.20	2,771.48	4.64	1.72
P-199	846.00	8.0	PVC	Open		25.09	0.16	2,771.48	2,771.46	0.02	0.02
P-200	1,095.00	8.0	PVC	Open		-73.25	0.47	2,770.42	2,770.56	0.13	0.14
P-201	221.00	8.0	PVC	Open		473.19	3.02	2,771.48	2,770.56	4.15	0.92
P-202	273.00	8.0	PVC	Open		234.87	1.50	2,770.56	2,770.26	1.10	0.30
P-203	523.00	8.0	PVC	Open		163.95	1.05	2,770.56	2,770.27	0.56	0.29
P-204	573.00	8.0	PVC	Open		-28.89	0.18	2,770.41	2,770.42	0.02	0.01
P-205	257.00	8.0	PVC	Open		28.42	0.18	2,770.27	2,770.26	0.02	0.01
P-206	616.00	8.0	PVC	Open		128.47	0.82	2,770.27	2,770.05	0.36	0.22
P-207	173.00	6.0	PVC	Open		3.89	0.04	2,770.05	2,770.05	0.00	0.00
P-208	796.00	8.0	PVC	Open		109.01	0.70	2,770.05	2,769.83	0.27	0.21
P-209	188.00	6.0	PVC	Open		4.86	0.06	2,769.83	2,769.83	0.00	0.00

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-210	310.00	8.0	PVC	Open		97.46	0.62	2,769.83	2,769.77	0.22	0.07
P-211	158.00	6.0	PVC	Open		4.86	0.06	2,769.77	2,769.77	0.00	0.00
P-212	275.00	8.0	PVC	Open		91.22	0.58	2,769.77	2,769.72	0.19	0.05
P-213	272.00	6.0	PVC	Open		13.97	0.16	2,769.72	2,769.71	0.03	0.01
P-214	270.00	8.0	PVC	Open		70.74	0.45	2,769.72	2,769.68	0.12	0.03
P-215	438.00	8.0	PVC	Open		8.07	0.05	2,769.68	2,769.68	0.00	0.00
P-216	49.00	6.0	PVC	Open		1.95	0.02	2,769.68	2,769.68	0.00	0.00
P-217	129.00	6.0	PVC	Open		3.89	0.04	2,769.68	2,769.68	0.00	0.00
P-218	168.00	8.0	PVC	Open		55.86	0.36	2,769.68	2,769.67	0.08	0.01
P-219	462.00	8.0	PVC	Open		10.70	0.07	2,769.96	2,769.95	0.00	0.00
P-220	225.00	8.0	PVC	Open		262.32	1.67	2,770.26	2,769.96	1.36	0.30
P-221	276.00	8.0	PVC	Open		227.76	1.45	2,769.96	2,769.67	1.04	0.29
P-223	460.00	8.0	PVC	Open		191.05	1.22	2,768.75	2,768.40	0.75	0.34
P-224	1,737.00	12.0	PVC	Open		154.35	0.44	2,768.40	2,768.28	0.07	0.12
P-225	309.00	8.0	PVC	Open		57.36	0.37	2,768.28	2,768.26	0.08	0.03
P-226	502.00	8.0	PVC	Open		10.69	0.07	2,768.26	2,768.26	0.00	0.00
P-227	237.00	4.0	PVC	Open		6.81	0.17	2,768.26	2,768.24	0.05	0.01
P-228	299.00	8.0	PVC	Open		32.09	0.20	2,768.26	2,768.25	0.03	0.01
P-229	498.00	6.0	PVC	Open		7.78	0.09	2,768.25	2,768.24	0.01	0.00
P-230	317.00	4.0	PVC	Open		7.78	0.20	2,768.25	2,768.23	0.07	0.02
P-231	327.00	8.0	PVC	Open		12.63	0.08	2,768.25	2,768.25	0.01	0.00
P-232	487.00	12.0	PVC	Open		-92.73	0.26	2,768.27	2,768.28	0.03	0.01
P-233	464.00	6.0	PVC	Open		5.84	0.07	2,768.27	2,768.27	0.00	0.00
P-234	494.00	6.0	PVC	Open		5.84	0.07	2,768.27	2,768.27	0.00	0.00
P-235	332.00	12.0	PVC	Open		-70.36	0.20	2,768.27	2,768.27	0.02	0.01
P-236	458.00	8.0	PVC	Open		4.86	0.03	2,768.27	2,768.27	0.00	0.00
P-237	298.00	6.0	PVC	Open		2.22	0.03	2,768.27	2,768.27	0.00	0.00
P-238	363.00	12.0	PVC	Open		-59.40	0.17	2,768.26	2,768.27	0.01	0.00
P-239	465.00	8.0	PVC	Open		-49.67	0.32	2,768.23	2,768.26	0.06	0.03
P-240	513.00	12.0	PVC	Open		4.86	0.01	2,768.26	2,768.26	0.00	0.00
P-241	654.00	8.0	PVC	Open		-36.50	0.23	2,778.93	2,778.95	0.04	0.02
P-242	880.00	12.0	PVC	Open		111.32	0.32	2,779.15	2,779.12	0.04	0.03
P-243	980.00	12.0	PVC	Open		291.98	0.83	2,779.37	2,779.15	0.22	0.22
P-244	759.00	12.0	PVC	Open		91.65	0.26	2,779.07	2,779.05	0.03	0.02
P-245	100.00	12.0	PVC	Open		0.00	0.00	2,779.05	2,779.05	0.00	0.00
P-246	430.00	8.0	PVC	Open		86.95	0.56	2,779.05	2,778.98	0.18	0.08
P-247	712.00	8.0	PVC	Open		36.39	0.23	2,778.98	2,778.95	0.04	0.03
P-248	760.00	8.0	PVC	Open		47.65	0.30	2,778.98	2,778.93	0.06	0.05
P-249	50.00	8.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-250	263.00	8.0	PVC	Open		25.68	0.16	2,778.93	2,778.92	0.02	0.01
P-251	50.00	8.0	PVC	Open		0.00	0.00	2,778.93	2,778.93	0.00	0.00
P-252	800.00	8.0	PVC	Open		30.55	0.19	2,778.95	2,778.93	0.03	0.02
P-253	655.00	12.0	PVC	Open		78.80	0.22	2,779.15	2,779.14	0.02	0.01
P-254	370.00	8.0	PVC	Open		78.80	0.50	2,779.14	2,779.08	0.15	0.05
P-255	1,670.00	12.0	PVC	Open		0.00	0.00	2,779.14	2,779.14	0.00	0.00
P-256	40.00	8.0	PVC	Open		0.00	0.00	2,779.14	2,779.14	0.00	0.00
P-257	650.00	12.0	PVC	Open		0.00	0.00	2,779.14	2,779.14	0.00	0.00
P-258	40.00	8.0	PVC	Open		0.00	0.00	2,779.14	2,779.14	0.00	0.00
P-259	1,020.00	12.0	PVC	Open		0.00	0.00	2,779.14	2,779.14	0.00	0.00
P-260	480.00	8.0	PVC	Open		332.48	2.12	2,780.26	2,779.24	2.12	1.02
P-261	167.00	8.0	PVC	Open		488.06	3.12	2,779.24	2,778.50	4.41	0.74

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-262	395.00	8.0	PVC	Open		296.38	1.89	2,778.50	2,777.83	1.71	0.67
P-263	527.00	8.0	PVC	Open		139.32	0.89	2,777.83	2,777.61	0.42	0.22
P-264	477.00	8.0	PVC	Open		144.41	0.92	2,777.83	2,777.62	0.45	0.21
P-265	341.00	8.0	PVC	Open		26.56	0.17	2,777.62	2,777.61	0.02	0.01
P-266	261.00	8.0	PVC	Open		158.10	1.01	2,777.61	2,777.47	0.53	0.14
P-267	136.00	8.0	PVC	Open		212.13	1.35	2,777.47	2,777.35	0.91	0.12
P-268	604.00	8.0	PVC	Open		64.73	0.41	2,777.53	2,777.47	0.10	0.06
P-269	355.00	8.0	PVC	Open		101.29	0.65	2,777.62	2,777.53	0.23	0.08
P-270	776.00	8.0	PVC	Open		174.18	1.11	2,778.50	2,778.01	0.63	0.49
P-271	810.00	8.0	PVC	Open		-163.42	1.04	2,779.24	2,779.69	0.56	0.45
P-272	547.00	8.0	PVC	Open		9.73	0.06	2,779.69	2,779.69	0.00	0.00
P-273	618.00	8.0	PVC	Open		-153.78	0.98	2,779.69	2,780.00	0.50	0.31
P-274	332.00	8.0	PVC	Open		-158.84	1.01	2,780.00	2,780.18	0.53	0.18
P-275	700.00	8.0	PVC	Open		103.40	0.66	2,780.18	2,780.01	0.24	0.17
P-276	83.00	8.0	PVC	Open		-262.73	1.68	2,780.18	2,780.29	1.36	0.11
P-277	419.00	8.0	PVC	Open		82.49	0.53	2,780.29	2,780.22	0.16	0.07
P-278	620.00	12.0	PVC	Open		0.00	0.00	2,780.00	2,780.00	0.00	0.00
P-280	813.00	8.0	PVC	Open		69.44	0.44	2,778.92	2,778.83	0.12	0.10
P-281	287.00	12.0	PVC	Open		1,509.31	4.28	2,792.69	2,791.27	4.94	1.42
P-282	797.00	12.0	PVC	Open		1,484.65	4.21	2,787.17	2,783.36	4.79	3.82
P-283	320.00	8.0	PVC	Open		2.66	0.02	2,783.36	2,783.36	0.00	0.00
P-284	388.00	12.0	PVC	Open		1,481.07	4.20	2,783.36	2,781.51	4.77	1.85
P-285	1,528.00	12.0	PVC	Open		197.67	0.56	2,781.67	2,781.51	0.11	0.17
P-286	358.00	12.0	PVC	Open		1,652.71	4.69	2,781.51	2,779.40	5.89	2.11
P-287	419.00	8.0	PVC	Open		372.23	2.38	2,779.40	2,778.30	2.63	1.10
P-288	341.00	8.0	PVC	Open		361.53	2.31	2,778.30	2,777.45	2.49	0.85
P-289	193.00	8.0	PVC	Open		3.89	0.02	2,778.30	2,778.30	0.00	0.00
P-290	267.00	12.0	PVC	Open		1,275.62	3.62	2,779.40	2,778.44	3.57	0.95
P-291	640.00	8.0	PVC	Open		180.83	1.15	2,777.88	2,777.45	0.68	0.43
P-292	460.00	12.0	PVC	Open		809.81	2.30	2,777.88	2,777.19	1.50	0.69
P-293	302.00	8.0	PVC	Open		241.20	1.54	2,777.54	2,777.19	1.16	0.35
P-294	213.00	12.0	PVC	Open		1,042.25	2.96	2,777.19	2,776.68	2.43	0.52
P-295	511.00	12.0	PVC	Open		1,112.48	3.16	2,776.68	2,775.27	2.75	1.40
P-296	305.00	12.0	PVC	Open		73.43	0.21	2,776.68	2,776.68	0.02	0.01
P-297	650.00	8.0	PVC	Open		0.00	0.00	2,776.68	2,776.68	0.00	0.00
P-298	516.00	12.0	PVC	Open		807.19	2.29	2,776.68	2,775.91	1.49	0.77
P-299	19.00	12.0	PVC	Open		607.40	1.72	2,775.91	2,775.90	0.86	0.02
P-300	1,334.00	8.0	PVC	Open		199.79	1.28	2,775.91	2,774.83	0.81	1.08
P-301	241.00	8.0	PVC	Open		784.26	5.01	2,797.38	2,794.73	11.00	2.65
P-302	911.00	12.0	PVC	Open		1,475.50	4.19	2,801.69	2,797.38	4.73	4.31
P-303	156.00	8.0	PVC	Open		296.49	1.89	2,801.96	2,801.69	1.71	0.27
P-304	239.00	8.0	PVC	Open		79.61	0.51	2,801.99	2,801.96	0.15	0.04
P-305	176.00	8.0	PVC	Open		11.67	0.07	2,801.99	2,801.99	0.00	0.00
P-306	140.00	6.0	PVC	Open		4.86	0.06	2,801.99	2,801.99	0.00	0.00
P-307	283.00	8.0	PVC	Open		4.86	0.03	2,801.99	2,801.99	0.00	0.00
P-308	265.00	8.0	PVC	Open		94.20	0.60	2,802.05	2,801.99	0.20	0.05
P-309	205.00	6.0	PVC	Open		5.85	0.07	2,802.05	2,802.05	0.00	0.00
P-310	977.00	8.0	PVC	Open		109.78	0.70	2,802.31	2,802.05	0.27	0.26
P-311	142.00	6.0	PVC	Open		4.86	0.06	2,802.31	2,802.31	0.00	0.00
P-312	850.00	8.0	PVC	Open		131.18	0.84	2,802.63	2,802.31	0.37	0.32
P-313	666.00	8.0	PVC	Open		223.69	1.43	2,802.63	2,801.96	1.00	0.67

Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-314	402.00	8.0	PVC	Open		369.46	2.36	2,803.67	2,802.63	2.59	1.04
P-315	547.00	8.0	PVC	Open		256.49	1.64	2,804.38	2,803.67	1.30	0.71
P-316	401.00	8.0	PVC	Open		121.73	0.78	2,803.80	2,803.67	0.32	0.13
P-317	742.00	8.0	PVC	Open		55.61	0.35	2,803.86	2,803.80	0.08	0.06
P-318	343.00	6.0	PVC	Open		6.81	0.08	2,803.86	2,803.86	0.01	0.00
P-319	273.00	8.0	PVC	Open		71.18	0.45	2,803.89	2,803.86	0.12	0.03
P-320	288.00	8.0	PVC	Open		89.02	0.57	2,803.89	2,803.84	0.18	0.05
P-321	290.00	8.0	PVC	Open		58.22	0.37	2,803.92	2,803.89	0.09	0.02
P-322	133.00	8.0	PVC	Open		10.08	0.06	2,803.92	2,803.92	0.01	0.00
P-323	270.00	8.0	PVC	Open		77.79	0.50	2,803.84	2,803.80	0.14	0.04
P-324	472.00	6.0	PVC	Open		8.76	0.10	2,803.84	2,803.83	0.01	0.01
P-325	298.00	8.0	PVC	Open		215.04	1.37	2,804.38	2,804.10	0.93	0.28
P-326	747.00	8.0	PVC	Open		112.67	0.72	2,804.10	2,803.89	0.28	0.21
P-327	1,154.00	8.0	PVC	Open		82.90	0.53	2,804.10	2,803.92	0.16	0.19
P-328	160.00	8.0	PVC	Open		475.99	3.04	2,805.05	2,804.38	4.20	0.67
P-329	1,094.00	12.0	PVC	Open		1,179.01	3.34	2,805.05	2,801.69	3.07	3.36
P-330	804.00	12.0	PVC	Open		1,655.00	4.69	2,809.80	2,805.05	5.91	4.75
P-331	474.00	8.0	PVC	Open		251.61	1.61	2,821.18	2,820.58	1.25	0.59
P-332	221.00	6.0	PVC	Open		4.24	0.05	2,821.18	2,821.18	0.00	0.00
P-333	260.00	8.0	PVC	Open		267.52	1.71	2,821.54	2,821.18	1.41	0.37
P-334	213.00	6.0	PVC	Open		0.00	0.00	2,821.54	2,821.54	0.00	0.00
P-335	138.00	8.0	PVC	Open		3.36	0.02	2,821.54	2,821.54	0.00	0.00
P-336	267.00	8.0	PVC	Open		275.75	1.76	2,821.94	2,821.54	1.49	0.40
P-337	592.00	12.0	PVC	Open		182.45	0.52	2,821.94	2,821.88	0.09	0.06
P-338	260.00	12.0	PVC	Open		468.89	1.33	2,822.08	2,821.94	0.53	0.14
P-339	281.00	8.0	PVC	Open		18.48	0.12	2,822.08	2,822.08	0.01	0.00
P-340	449.00	12.0	PVC	Open		494.19	1.40	2,822.34	2,822.08	0.59	0.26
P-341	174.00	6.0	PVC	Open		4.86	0.06	2,822.08	2,822.08	0.00	0.00
P-342	286.00	8.0	PVC	Open		8.76	0.06	2,822.08	2,822.07	0.00	0.00
P-343	402.00	12.0	PVC	Open		1,417.42	4.02	2,822.34	2,820.58	4.38	1.76
P-344	1,192.00	12.0	PVC	Open		1,917.11	5.44	2,831.71	2,822.34	7.86	9.37
P-345	504.00	12.0	PVC	Open		608.38	1.73	2,842.14	2,841.70	0.87	0.44
P-346	261.00	12.0	PVC	Open		-176.39	0.50	2,842.12	2,842.14	0.09	0.02
P-347	228.00	8.0	PVC	Open		-75.30	0.48	2,842.09	2,842.12	0.13	0.03
P-348	532.00	12.0	PVC	Open		1,930.61	5.48	2,841.59	2,837.35	7.97	4.24
P-349	172.00	12.0	PVC	Open		1,272.32	3.61	2,842.20	2,841.59	3.56	0.61
P-350	180.00	8.0	PVC	Open		0.97	0.01	2,842.20	2,842.20	0.00	0.00
P-351	641.00	12.0	PVC	Open		1,280.10	3.63	2,844.51	2,842.20	3.60	2.31
P-352	215.00	8.0	PVC	Open		784.77	5.01	2,844.51	2,842.14	11.01	2.37
P-353	228.00	12.0	PVC	Open		2,074.60	5.89	2,846.60	2,844.51	9.16	2.09
P-354	388.00	8.0	PVC	Open		7.78	0.05	2,846.60	2,846.60	0.00	0.00
P-355	278.00	12.0	PVC	Open		2,082.38	5.91	2,849.16	2,846.60	9.23	2.57
P-356	862.00	8.0	PVC	Open		385.47	2.46	2,851.59	2,849.16	2.81	2.42
P-357	384.00	12.0	PVC	Open		1,711.51	4.86	2,851.59	2,849.16	6.31	2.42
P-358	445.00	12.0	PVC	Open		2,112.54	5.99	2,855.81	2,851.59	9.49	4.22
P-359	285.00	12.0	PVC	Open		127.77	0.36	2,855.81	2,855.79	0.05	0.01
P-360	433.00	12.0	PVC	Open		-803.19	2.28	2,855.81	2,856.45	1.47	0.64
P-361	110.00	12.0	PVC	Open		658.29	1.87	2,841.70	2,841.59	1.01	0.11
P-362	701.00	12.0	PVC	Open		1,447.82	4.11	2,859.01	2,855.81	4.56	3.20
P-363	278.00	12.0	PVC	Open		1,825.23	5.18	2,860.99	2,859.01	7.14	1.99
P-364	1,033.00	8.0	PVC	Open		360.87	2.30	2,859.01	2,856.45	2.48	2.56

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-365	213.00	8.0	PVC	Open		-717.09	4.58	2,856.45	2,858.42	9.25	1.97
P-366	15.00	8.0	PVC	Open		0.00	0.00	2,858.42	2,858.42	0.00	0.00
P-367	928.00	8.0	PVC	Open		717.09	4.58	2,867.00	2,858.42	9.25	8.58
P-370	40.00	8.0	PVC	Open		17.92	0.11	2,780.26	2,780.26	0.01	0.00
P-371	40.00	8.0	PVC	Open		7.84	0.05	2,779.24	2,779.24	0.00	0.00
P-372	360.00	12.0	PVC	Open		561.82	1.59	2,780.94	2,780.67	0.75	0.27
P-373	479.00	8.0	PVC	Open		-162.85	1.04	2,779.72	2,779.98	0.56	0.27
P-374	102.00	12.0	PVC	Open		61.62	0.17	2,768.28	2,768.28	0.01	0.00
P-375	90.00	12.0	PVC	Open		4.26	0.01	2,768.28	2,768.28	0.00	0.00
P-376	789.00	12.0	PVC	Open		1,466.26	4.16	2,864.68	2,860.99	4.68	3.69
P-377	1,321.00	8.0	PVC	Open		384.26	2.45	2,864.68	2,860.99	2.79	3.69
P-378	203.00	12.0	PVC	Open		1,869.00	5.30	2,866.20	2,864.68	7.48	1.52
P-379	775.00	12.0	PVC	Open		1,811.15	5.14	2,757.30	2,751.85	7.04	5.45
P-380	558.00	12.0	PVC	Open		0.00	0.00	2,821.81	2,821.81	0.00	0.00
P-381	890.00	12.0	PVC	Open		1,811.15	5.14	2,751.85	2,745.58	7.04	6.26
P-383	107.00	12.0	PVC	Open		1,869.00	5.30	2,867.00	2,866.20	7.48	0.80
P-384	154.00	8.0	PVC	Open		275.25	1.76	2,778.44	2,778.21	1.48	0.23
P-385	378.00	6.0	PVC	Open		4.86	0.06	2,778.21	2,778.21	0.00	0.00
P-386	257.00	8.0	PVC	Open		261.63	1.67	2,778.21	2,777.87	1.35	0.35
P-387	333.00	8.0	PVC	Open		6.81	0.04	2,777.87	2,777.87	0.00	0.00
P-388	270.00	8.0	PVC	Open		247.04	1.58	2,777.87	2,777.54	1.21	0.33
P-389	185.00	8.0	PVC	Open		0.00	0.00	2,777.54	2,777.54	0.00	0.00
P-390	419.00	8.0	PVC	Open		530.69	3.39	2,777.45	2,775.28	5.18	2.17
P-391	250.00	8.0	PVC	Open		159.83	1.02	2,775.28	2,775.15	0.54	0.13
P-392	535.00	8.0	PVC	Open		-49.33	0.31	2,775.15	2,775.18	0.06	0.03
P-393	113.00	8.0	PVC	Open		-305.23	1.95	2,775.18	2,775.38	1.80	0.20
P-394	377.00	8.0	PVC	Open		245.20	1.57	2,775.18	2,774.73	1.19	0.45
P-395	474.00	8.0	PVC	Open		208.13	1.33	2,775.15	2,774.73	0.88	0.42
P-396	250.00	8.0	PVC	Open		445.54	2.84	2,774.73	2,773.80	3.70	0.93
P-397	598.00	8.0	PVC	Open		360.16	2.30	2,775.28	2,773.80	2.47	1.48
P-398	270.00	12.0	PVC	Open		1,091.07	3.10	2,774.52	2,773.80	2.65	0.71
P-399	202.00	8.0	PVC	Open		3.89	0.02	2,774.52	2,774.52	0.00	0.00
P-400	280.00	12.0	PVC	Open		1,100.80	3.12	2,775.27	2,774.52	2.69	0.75
P-401	233.00	8.0	PVC	Open		3.89	0.02	2,775.27	2,775.27	0.00	0.00
P-402	310.00	12.0	PVC	Open		1,888.99	5.36	2,773.80	2,771.44	7.64	2.37
P-403	377.00	8.0	PVC	Open		4.86	0.03	2,771.44	2,771.44	0.00	0.00
P-404	252.00	12.0	PVC	Open		1,877.32	5.33	2,771.44	2,769.53	7.54	1.90
P-405	213.00	8.0	PVC	Open		4.86	0.03	2,769.53	2,769.53	0.00	0.00
P-406	535.00	12.0	PVC	Open		1,865.65	5.29	2,769.53	2,765.55	7.45	3.99
P-407	160.00	8.0	PVC	Open		457.05	2.92	2,765.55	2,764.93	3.89	0.62
P-408	308.00	12.0	PVC	Open		1,398.87	3.97	2,765.55	2,764.23	4.27	1.31
P-409	9.00	8.0	PVC	Open		0.00	0.00	2,764.23	2,764.23	0.00	0.00
P-410	265.00	8.0	PVC	Open		26.09	0.17	2,821.83	2,821.83	0.02	0.01
P-411	136.00	8.0	PVC	Open		13.44	0.09	2,821.83	2,821.82	0.01	0.00
P-412	330.00	8.0	PVC	Open		7.78	0.05	2,821.83	2,821.82	0.00	0.00
P-413	942.00	12.0	PVC	Open		139.14	0.39	2,821.88	2,821.83	0.06	0.05
P-414	216.00	8.0	PVC	Open		27.74	0.18	2,821.88	2,821.88	0.02	0.00
P-415	433.00	8.0	PVC	Open		8.76	0.06	2,821.88	2,821.88	0.00	0.00
P-416	265.00	8.0	PVC	Open		11.20	0.07	2,821.88	2,821.88	0.00	0.00
P-417	392.00	12.0	PVC	Open		73.35	0.21	2,855.79	2,855.79	0.02	0.01
P-418	493.00	12.0	PVC	Open		56.81	0.16	2,855.79	2,855.78	0.01	0.01

Title: INITIAL RUN

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Project Engineer: DMC
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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-419	263.00	6.0	PVC	Open		6.81	0.08	2,855.79	2,855.79	0.01	0.00
P-420	336.00	6.0	PVC	Open		5.84	0.07	2,855.79	2,855.79	0.00	0.00
P-421	907.00	8.0	PVC	Open		21.10	0.13	2,855.79	2,855.78	0.01	0.01
P-422	377.00	12.0	PVC	Open		47.99	0.14	2,855.78	2,855.78	0.01	0.00
P-423	770.00	8.0	PVC	Open		22.62	0.14	2,855.79	2,855.78	0.02	0.01
P-424	20.00	12.0	PVC	Open		0.00	0.00	2,837.35	2,837.35	0.00	0.00
P-425	1,980.00	12.0	PVC	Open		0.00	0.00	2,837.01	2,837.01	0.00	0.00
P-426	209.00	12.0	PVC	Open		0.00	0.00	2,837.01	2,837.01	0.00	0.00
P-427	207.00	12.0	PVC	Open		0.00	0.00	2,837.01	2,837.01	0.00	0.00
P-428	251.00	12.0	PVC	Open		1,000.37	2.84	2,778.44	2,777.88	2.24	0.56
P-429	281.00	4.0	PVC	Open		12.63	0.32	2,768.25	2,768.20	0.16	0.04
P-430	370.00	8.0	PVC	Open		-228.02	1.46	2,777.16	2,777.54	1.04	0.39
P-431	54.00	6.0	PVC	Open		0.96	0.01	2,777.54	2,777.54	0.00	0.00
P-432	55.00	6.0	PVC	Open		3.02	0.03	2,777.54	2,777.54	0.00	0.00
P-433	506.00	8.0	PVC	Open		-237.81	1.52	2,777.54	2,778.11	1.13	0.57
P-434	155.00	12.0	PVC	Open		-131.97	0.37	2,778.32	2,778.33	0.05	0.01
P-435	467.00	8.0	PVC	Open		46.37	0.30	2,778.98	2,778.95	0.06	0.03
P-436	360.00	8.0	PVC	Open		-168.49	1.08	2,778.11	2,778.33	0.59	0.21
P-437	760.00	8.0	PVC	Open		70.47	0.45	2,778.20	2,778.11	0.12	0.09
P-438	348.00	8.0	PVC	Open		-104.44	0.67	2,778.20	2,778.29	0.25	0.09
P-439	51.00	12.0	PVC	Open		-113.97	0.32	2,778.29	2,778.29	0.04	0.00
P-440	18.00	12.0	PVC	Open		0.00	0.00	2,778.29	2,778.29	0.00	0.00
P-441	642.00	12.0	PVC	Open		-116.17	0.33	2,778.29	2,778.32	0.04	0.03
P-442	350.00	12.0	PVC	Open		15.08	0.04	2,778.32	2,778.32	0.00	0.00
P-443	336.00	12.0	PVC	Open		-312.87	0.89	2,778.33	2,778.41	0.25	0.08
P-444	829.00	12.0	PVC	Open		-312.87	0.89	2,778.41	2,778.62	0.25	0.21
P-445	120.00	8.0	PVC	Open		209.00	1.33	2,778.97	2,778.87	0.89	0.11
P-446	470.00	8.0	PVC	Open		1.62	0.01	2,778.87	2,778.87	0.00	0.00
P-447	265.00	12.0	PVC	Open		-312.87	0.89	2,778.62	2,778.69	0.25	0.07
P-448	337.00	8.0	PVC	Open		-118.04	0.75	2,779.98	2,780.09	0.31	0.10
P-449	39.00	8.0	PVC	Open		5.63	0.04	2,778.69	2,778.69	0.00	0.00
P-450	705.00	12.0	PVC	Open		-318.50	0.90	2,778.69	2,778.87	0.26	0.18
P-451	197.00	12.0	PVC	Open		-336.28	0.95	2,778.87	2,778.93	0.29	0.06
P-452	250.00	12.0	PVC	Open		0.00	0.00	2,778.32	2,778.32	0.00	0.00
P-453	546.00	8.0	PVC	Open		82.49	0.53	2,780.22	2,780.14	0.16	0.09
P-454	526.00	8.0	PVC	Open		-44.81	0.29	2,779.98	2,780.01	0.05	0.03
P-455	730.00	8.0	PVC	Open		101.59	0.65	2,780.01	2,779.84	0.23	0.17
P-456	236.00	8.0	PVC	Open		-118.98	0.76	2,780.09	2,780.16	0.31	0.07
P-457	235.00	12.0	PVC	Open		7.99	0.02	2,780.16	2,780.16	0.00	0.00
P-458	311.00	12.0	PVC	Open		7.77	0.02	2,780.16	2,780.16	0.00	0.00
P-459	314.00	12.0	PVC	Open		0.00	0.00	2,780.16	2,780.16	0.00	0.00
P-460	331.00	6.0	PVC	Open		0.00	0.00	2,780.16	2,780.16	0.00	0.00
P-461	399.00	12.0	PVC	Open		-126.97	0.36	2,780.16	2,780.18	0.05	0.02
P-462	322.00	12.0	PVC	Open		370.56	1.05	2,780.18	2,780.07	0.34	0.11
P-463	711.00	12.0	PVC	Open		369.49	1.05	2,780.07	2,779.83	0.34	0.24
P-464	355.00	12.0	PVC	Open		497.53	1.41	2,780.39	2,780.18	0.60	0.21
P-465	158.00	8.0	PVC	Open		161.24	1.03	2,780.39	2,780.31	0.55	0.09
P-466	432.00	8.0	PVC	Open		-73.25	0.47	2,780.25	2,780.31	0.13	0.06
P-467	475.00	8.0	PVC	Open		-69.50	0.44	2,780.25	2,780.31	0.12	0.06
P-468	316.00	8.0	PVC	Open		-129.32	0.83	2,780.14	2,780.25	0.36	0.11
P-469	347.00	12.0	PVC	Open		534.76	1.52	2,780.78	2,780.55	0.68	0.24

Title: INITIAL RUN

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01/17/07 12:26:58 Bentley Systems, Inc. Haestad Methods Solution Center Watertown, CT 06795 USA

Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-470	178.00	12.0	PVC	Open		658.77	1.87	2,780.96	2,780.78	1.01	0.18
P-471	660.00	12.0	PVC	Open		661.24	1.88	2,781.64	2,780.96	1.02	0.67
P-472	224.00	12.0	PVC	Open		661.67	1.88	2,781.87	2,781.64	1.02	0.23
P-473	296.00	12.0	PVC	Open		-1,010.54	2.87	2,781.87	2,782.54	2.28	0.68
P-474	153.00	12.0	PVC	Open		658.77	1.87	2,780.55	2,780.39	1.01	0.15
P-476	304.00	8.0	PVC	Open		0.00	0.00	2,780.00	2,780.00	0.00	0.00
P-477	692.00	8.0	PVC	Open		-345.22	2.20	2,780.29	2,781.87	2.28	1.58
P-478	13.00	8.0	PVC	Open		0.34	0.00	2,779.83	2,779.83	0.00	0.00
P-479	84.00	8.0	PVC	Open		22.75	0.15	2,779.84	2,779.84	0.01	0.00
P-480	200.00	12.0	PVC	Open		561.82	1.59	2,780.67	2,780.52	0.75	0.15
P-481	550.00	12.0	PVC	Open		551.12	1.56	2,780.52	2,780.12	0.72	0.40
P-482	703.00	8.0	PVC	Open		126.04	0.80	2,780.12	2,779.88	0.35	0.24
P-483	960.00	12.0	PVC	Open		417.43	1.18	2,780.12	2,779.71	0.43	0.41
P-484	265.00	12.0	PVC	Open		508.45	1.44	2,779.71	2,779.55	0.62	0.16
P-485	447.00	12.0	PVC	Open		23.56	0.07	2,855.78	2,855.78	0.00	0.00
P-486	160.00	12.0	PVC	Open		19.68	0.06	2,855.78	2,855.78	0.00	0.00
P-487	159.00	12.0	PVC	Open		0.00	0.00	2,855.78	2,855.78	0.00	0.00
P-488	981.00	8.0	PVC	Open		12.75	0.08	2,855.78	2,855.77	0.01	0.01
P-489	135.00	12.0	PVC	Open		0.00	0.00	2,855.78	2,855.78	0.00	0.00
P-490	338.00	8.0	PVC	Open		108.58	0.69	2,777.35	2,777.26	0.26	0.09
P-491	317.00	8.0	PVC	Open		8.65	0.06	2,777.26	2,777.26	0.00	0.00
P-492	1,010.00	8.0	PVC	Open		106.53	0.68	2,777.26	2,777.00	0.25	0.26
P-493	314.00	8.0	PVC	Open		189.64	1.21	2,777.00	2,776.77	0.74	0.23
P-494	159.00	8.0	PVC	Open		95.76	0.61	2,777.03	2,777.00	0.21	0.03
P-495	527.00	8.0	PVC	Open		95.76	0.61	2,777.15	2,777.03	0.21	0.11
P-496	134.00	12.0	PVC	Open		839.31	2.38	2,782.12	2,781.91	1.60	0.21
P-498	1.00	96.0	PVC	Open		-0.00	0.00	2,493.50	2,493.50	0.00	0.00
P-499	356.00	12.0	PVC	Open		478.17	1.36	2,781.82	2,781.63	0.55	0.20
P-500	259.00	12.0	PVC	Open		471.00	1.34	2,781.63	2,781.49	0.54	0.14
P-501	152.00	12.0	PVC	Open		346.57	0.98	2,781.53	2,781.49	0.30	0.05
P-503	30.00	8.0	PVC	Open		0.00	0.00	2,781.57	2,781.57	0.00	0.00
P-504	120.00	8.0	PVC	Open		55.91	0.36	2,781.58	2,781.57	0.08	0.01
P-505	30.00	8.0	PVC	Open		0.00	0.00	2,781.58	2,781.58	0.00	0.00
P-507	27.00	8.0	PVC	Open		0.00	0.00	2,781.59	2,781.59	0.00	0.00
P-508	197.00	8.0	PVC	Open		-12.49	0.08	2,781.59	2,781.59	0.00	0.00
P-509	785.00	8.0	PVC	Open		-10.54	0.07	2,781.58	2,781.59	0.00	0.00
P-510	222.00	8.0	PVC	Open		1.95	0.01	2,781.58	2,781.58	0.00	0.00
P-511	683.00	8.0	PVC	Open		-4.71	0.03	2,781.58	2,781.58	0.00	0.00
P-512	819.00	8.0	PVC	Open		1.95	0.01	2,781.58	2,781.58	0.00	0.00
P-513	283.00	8.0	PVC	Open		-0.82	0.01	2,781.58	2,781.58	0.00	0.00
P-514	136.00	6.0	PVC	Open		0.00	0.00	2,781.63	2,781.63	0.00	0.00
P-515	560.00	6.0	PVC	Open		0.00	0.00	2,777.15	2,777.15	0.00	0.00
P-516	19.00	8.0	PVC	Open		-281.91	1.80	2,787.55	2,787.58	1.55	0.03
P-517	0.25	96.0	Steel	Open		1,522.06	0.07	2,419.00	2,419.00	0.00	0.00
P-518	250.00	8.0	PVC	Open		16.87	0.11	2,778.93	2,778.93	0.01	0.00
P-519	673.00	8.0	PVC	Open		194.19	1.24	2,778.87	2,778.35	0.77	0.52
P-520	32.00	8.0	PVC	Open		-84.14	0.54	2,778.97	2,778.98	0.17	0.01
P-521	769.00	8.0	PVC	Open		174.13	1.11	2,778.35	2,777.86	0.63	0.48
P-522	105.00	8.0	PVC	Open		-28.95	0.18	2,778.93	2,778.93	0.03	0.00
P-523	305.00	12.0	PVC	Open		309.06	0.88	2,779.00	2,778.93	0.25	0.07
P-524	94.00	6.0	PVC	Open		46.48	0.53	2,779.00	2,778.98	0.23	0.02

Title: INITIAL RUN

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-525	232.00	12.0	PVC	Open		356.26	1.01	2,779.07	2,779.00	0.32	0.07
P-526	294.00	12.0	PVC	Open		268.34	0.76	2,779.13	2,779.07	0.19	0.06
P-527	248.00	8.0	PVC	Open		1.28	0.01	2,779.13	2,779.13	0.00	0.00
P-528	83.00	8.0	PVC	Open		1.28	0.01	2,779.13	2,779.13	0.00	0.00
P-529	115.00	12.0	PVC	Open		269.62	0.76	2,779.15	2,779.13	0.19	0.02
P-530	384.00	12.0	PVC	Open		269.63	0.76	2,779.23	2,779.15	0.19	0.07
P-531	153.00	12.0	PVC	Open		269.63	0.76	2,779.25	2,779.23	0.19	0.03
P-532	216.00	12.0	PVC	Open		269.63	0.76	2,779.30	2,779.25	0.19	0.04
P-533	169.00	12.0	PVC	Open		269.75	0.77	2,779.33	2,779.30	0.19	0.03
P-534	163.00	12.0	PVC	Open		269.75	0.77	2,779.36	2,779.33	0.19	0.03
P-535	222.00	12.0	PVC	Open		269.75	0.77	2,779.40	2,779.36	0.19	0.04
P-536	395.00	12.0	PVC	Open		271.59	0.77	2,779.48	2,779.40	0.19	0.08
P-537	322.00	8.0	PVC	Open		97.56	0.62	2,779.48	2,779.41	0.22	0.07
P-538	574.00	8.0	PVC	Open		97.56	0.62	2,779.41	2,779.28	0.22	0.12
P-539	315.00	8.0	PVC	Open		97.31	0.62	2,779.28	2,779.22	0.22	0.07
P-540	306.00	8.0	PVC	Open		96.64	0.62	2,779.22	2,779.15	0.21	0.07
P-541	359.00	8.0	PVC	Open		96.64	0.62	2,779.15	2,779.07	0.21	0.08
P-542	145.00	8.0	PVC	Open		0.67	0.00	2,779.22	2,779.22	0.00	0.00
P-543	289.00	8.0	PVC	Open		0.00	0.00	2,779.22	2,779.22	0.00	0.00
P-544	387.00	8.0	PVC	Open		0.37	0.00	2,779.22	2,779.22	0.00	0.00
P-545	57.00	12.0	PVC	Open		0.00	0.00	2,779.15	2,779.15	0.00	0.00
P-546	50.00	8.0	PVC	Open		0.66	0.00	2,779.22	2,779.22	0.00	0.00
P-547	329.00	8.0	PVC	Open		0.29	0.00	2,779.22	2,779.22	0.00	0.00
P-548	284.00	8.0	PVC	Open		0.03	0.00	2,779.22	2,779.22	0.00	0.00
P-549	284.00	8.0	PVC	Open		0.26	0.00	2,779.22	2,779.22	0.00	0.00
P-550	210.00	8.0	PVC	Open		0.17	0.00	2,779.22	2,779.22	0.00	0.00
P-551	171.00	8.0	PVC	Open		0.01	0.00	2,779.22	2,779.22	0.00	0.00
P-552	269.00	8.0	PVC	Open		124.01	0.79	2,780.64	2,780.55	0.34	0.09
P-553	161.00	8.0	PVC	Open		124.01	0.79	2,780.78	2,780.73	0.34	0.05
P-554	90.00	8.0	PVC	Open		0.00	0.00	2,779.41	2,779.41	0.00	0.00
P-555	63.00	12.0	PVC	Open		369.15	1.05	2,779.50	2,779.48	0.34	0.02
P-556	252.00	8.0	PVC	Open		0.03	0.00	2,779.13	2,779.13	0.00	0.00
P-557	256.00	12.0	PVC	Open		369.15	1.05	2,779.59	2,779.50	0.34	0.09
P-558	702.00	12.0	PVC	Open		369.15	1.05	2,779.83	2,779.59	0.34	0.24
P-559	110.00	12.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-560	275.00	8.0	PVC	Open		124.01	0.79	2,780.73	2,780.64	0.34	0.09
P-561	436.00	12.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-562	79.00	8.0	PVC	Open		0.00	0.00	2,780.64	2,780.64	0.00	0.00
P-563	442.00	12.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-564	68.00	8.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-565	42.00	12.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-566	86.00	8.0	PVC	Open		0.00	0.00	2,780.73	2,780.73	0.00	0.00
P-567	433.00	12.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-568	64.00	12.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-569	222.00	8.0	PVC	Open		3.89	0.02	2,777.28	2,777.28	0.00	0.00
P-570	307.00	8.0	PVC	Open		166.18	1.06	2,777.26	2,777.08	0.58	0.18
P-571	220.00	8.0	PVC	Open		4.86	0.03	2,777.08	2,777.08	0.00	0.00
P-572	247.00	8.0	PVC	Open		157.43	1.00	2,777.08	2,776.95	0.52	0.13
P-573	254.00	6.0	PVC	Open		5.84	0.07	2,776.95	2,776.95	0.00	0.00
P-574	400.00	8.0	PVC	Open		146.73	0.94	2,776.95	2,776.77	0.46	0.18
P-575	287.00	8.0	PVC	Open		6.81	0.04	2,776.77	2,776.77	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-576	606.00	12.0	PVC	Open		106.63	0.30	2,821.83	2,821.81	0.04	0.02
P-577	326.00	12.0	PVC	Open		106.63	0.30	2,821.81	2,821.80	0.04	0.01
P-578	16.00	8.0	PVC	Open		31.36	0.20	2,821.80	2,821.80	0.03	0.00
P-579	125.00	12.0	PVC	Open		75.27	0.21	2,821.80	2,821.80	0.02	0.00
P-580	48.00	8.0	PVC	Open		0.00	0.00	2,821.80	2,821.80	0.00	0.00
P-581	307.00	12.0	PVC	Open		48.81	0.14	2,821.80	2,821.79	0.01	0.00
P-582	1,252.00	8.0	PVC	Open		13.80	0.09	2,821.80	2,821.79	0.01	0.01
P-583	906.00	8.0	PVC	Open		13.33	0.09	2,821.79	2,821.79	0.01	0.01
P-584	151.00	8.0	PVC	Open		15.58	0.10	2,821.79	2,821.79	0.01	0.00
P-585	259.00	12.0	PVC	Open		25.76	0.07	2,821.79	2,821.79	0.00	0.00
P-586	471.00	12.0	PVC	Open		12.32	0.03	2,821.79	2,821.79	0.00	0.00
P-588	320.00	8.0	PVC	Open		10.60	0.07	2,779.28	2,779.28	0.00	0.00
P-589	481.00	8.0	PVC	Open		65.70	0.42	2,779.17	2,779.12	0.11	0.05
P-590	480.00	8.0	PVC	Open		6.81	0.04	2,779.17	2,779.17	0.00	0.00
P-591	500.00	8.0	PVC	Open		7.78	0.05	2,779.17	2,779.17	0.00	0.00
P-592	334.00	8.0	PVC	Open		91.96	0.59	2,779.23	2,779.17	0.19	0.06
P-593	250.00	6.0	PVC	Open		5.84	0.07	2,779.23	2,779.23	0.00	0.00
P-594	832.00	8.0	PVC	Open		-10.81	0.07	2,779.23	2,779.24	0.00	0.00
P-595	350.00	8.0	PVC	Open		99.64	0.64	2,779.31	2,779.23	0.23	0.08
P-596	325.00	8.0	PVC	Open		6.83	0.04	2,779.28	2,779.28	0.00	0.00
P-597	223.00	8.0	PVC	Open		5.84	0.04	2,779.37	2,779.37	0.00	0.00
P-598	460.00	8.0	PVC	Open		61.47	0.39	2,779.28	2,779.24	0.09	0.04
P-599	540.00	12.0	PVC	Open		363.52	1.03	2,779.55	2,779.37	0.33	0.18
P-600	660.00	8.0	PVC	Open		57.92	0.37	2,779.37	2,779.31	0.08	0.06
P-601	160.00	8.0	PVC	Open		47.56	0.30	2,779.32	2,779.31	0.06	0.01
P-602	120.00	6.0	PVC	Open		3.89	0.04	2,779.32	2,779.32	0.00	0.00
P-603	200.00	8.0	PVC	Open		54.37	0.35	2,779.34	2,779.32	0.07	0.01
P-604	375.00	8.0	PVC	Open		79.86	0.51	2,779.34	2,779.28	0.15	0.06
P-605	500.00	8.0	PVC	Open		140.06	0.89	2,779.55	2,779.34	0.42	0.21
P-606	466.00	8.0	PVC	Open		2.25	0.01	2,764.93	2,764.92	0.00	0.00
P-607	121.00	8.0	PVC	Open		447.99	2.86	2,764.93	2,764.47	3.74	0.45
P-608	308.00	8.0	PVC	Open		431.37	2.75	2,764.47	2,763.40	3.48	1.07
P-609	198.00	12.0	PVC	Open		1,387.62	3.94	2,764.23	2,763.40	4.20	0.83
P-610	199.00	8.0	PVC	Open		103.55	0.66	2,777.35	2,777.30	0.24	0.05
P-611	673.00	8.0	PVC	Open		100.63	0.64	2,777.30	2,777.15	0.23	0.15
P-612	91.00	8.0	PVC	Open		0.00	0.00	2,777.03	2,777.03	0.00	0.00
P-613	354.00	8.0	PVC	Open		20.22	0.13	2,779.06	2,779.06	0.01	0.00
P-614	739.00	12.0	PVC	Open		0.00	0.00	2,768.28	2,768.28	0.00	0.00
P-615	878.00	12.0	PVC	Open		0.00	0.00	2,768.28	2,768.28	0.00	0.00
P-616	642.00	12.0	PVC	Open		0.00	0.00	2,768.28	2,768.28	0.00	0.00
P-617	35.00	8.0	PVC	Open		3.21	0.02	2,791.27	2,791.27	0.00	0.00
P-618	246.00	8.0	PVC	Open		0.00	0.00	2,780.09	2,780.09	0.00	0.00
P-619	179.00	8.0	PVC	Open		-57.74	0.37	2,778.92	2,778.93	0.08	0.01
P-620	215.00	6.0	PVC	Open		3.89	0.04	2,779.08	2,779.08	0.00	0.00
P-621	780.00	8.0	PVC	Open		33.63	0.21	2,779.08	2,779.06	0.03	0.03
P-622	123.00	6.0	PVC	Open		1.95	0.02	2,779.06	2,779.06	0.00	0.00
P-623	286.00	6.0	PVC	Open		23.90	0.27	2,779.06	2,779.04	0.07	0.02
P-624	160.00	6.0	PVC	Open		2.92	0.03	2,779.04	2,779.04	0.00	0.00
P-625	660.00	8.0	PVC	Open		13.20	0.08	2,779.04	2,779.03	0.01	0.00
P-626	225.00	8.0	PVC	Open		28.00	0.18	2,779.03	2,779.03	0.02	0.01
P-627	357.00	8.0	PVC	Open		19.66	0.13	2,779.04	2,779.03	0.01	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-628	114.00	6.0	PVC	Open		2.92	0.03	2,779.04	2,779.04	0.00	0.00
P-629	395.00	8.0	PVC	Open		25.50	0.16	2,779.05	2,779.04	0.02	0.01
P-630	97.00	6.0	PVC	Open		1.95	0.02	2,779.05	2,779.05	0.00	0.00
P-631	305.00	8.0	PVC	Open		33.28	0.21	2,779.06	2,779.05	0.03	0.01
P-632	1,280.00	8.0	PVC	Open		26.68	0.17	2,779.08	2,779.06	0.02	0.03
P-633	380.00	8.0	PVC	Open		1.95	0.01	2,778.95	2,778.95	0.00	0.00
P-634	316.00	8.0	PVC	Open		8.41	0.05	2,778.20	2,778.20	0.00	0.00
P-635	230.00	8.0	PVC	Open		-1.45	0.01	2,778.20	2,778.20	0.00	0.00
P-636	60.00	8.0	PVC	Open		-14.96	0.10	2,778.20	2,778.20	0.01	0.00
P-637	602.00	8.0	PVC	Open		-4.21	0.03	2,778.20	2,778.20	0.00	0.00
P-638	650.00	8.0	PVC	Open		3.57	0.02	2,778.20	2,778.20	0.00	0.00
P-639	346.00	8.0	PVC	Open		-162.85	1.04	2,779.53	2,779.72	0.56	0.19
P-640	269.00	8.0	PVC	Open		-61.92	0.40	2,779.53	2,779.55	0.10	0.03
P-641	215.00	8.0	PVC	Open		-38.53	0.25	2,779.55	2,779.56	0.04	0.01
P-642	245.00	8.0	PVC	Open		-52.28	0.33	2,779.56	2,779.58	0.07	0.02
P-643	325.00	8.0	PVC	Open		-72.57	0.46	2,779.58	2,779.62	0.13	0.04
P-644	190.00	8.0	PVC	Open		-136.18	0.87	2,779.62	2,779.69	0.40	0.08
P-645	503.00	8.0	PVC	Open		-23.39	0.15	2,779.55	2,779.56	0.02	0.01
P-646	268.00	8.0	PVC	Open		-42.01	0.27	2,779.56	2,779.57	0.05	0.01
P-647	349.00	8.0	PVC	Open		-41.17	0.26	2,779.57	2,779.59	0.05	0.02
P-648	172.00	8.0	PVC	Open		11.73	0.07	2,779.59	2,779.59	0.01	0.00
P-649	299.00	8.0	PVC	Open		63.60	0.41	2,779.62	2,779.59	0.10	0.03
P-650	355.00	8.0	PVC	Open		20.29	0.13	2,779.58	2,779.57	0.01	0.00
P-651	265.00	8.0	PVC	Open		5.70	0.04	2,779.56	2,779.56	0.00	0.00
P-652	260.00	8.0	PVC	Open		-29.28	0.19	2,779.69	2,779.70	0.03	0.01
P-653	432.00	8.0	PVC	Open		11.26	0.07	2,779.70	2,779.70	0.01	0.00
P-654	153.00	8.0	PVC	Open		-40.55	0.26	2,779.70	2,779.71	0.04	0.01
P-655	154.00	8.0	PVC	Open		106.90	0.68	2,779.73	2,779.69	0.26	0.04
P-656	96.00	8.0	PVC	Open		178.57	1.14	2,779.80	2,779.73	0.66	0.06
P-657	191.00	8.0	PVC	Open		94.97	0.61	2,779.84	2,779.80	0.21	0.04
P-658	46.00	8.0	PVC	Open		14.96	0.10	2,779.84	2,779.84	0.01	0.00
P-659	352.00	8.0	PVC	Open		80.01	0.51	2,779.89	2,779.84	0.15	0.05
P-660	566.00	8.0	PVC	Open		83.60	0.53	2,779.89	2,779.80	0.16	0.09
P-661	219.00	8.0	PVC	Open		163.61	1.04	2,780.01	2,779.89	0.56	0.12
P-662	175.00	8.0	PVC	Open		3.89	0.02	2,779.84	2,779.84	0.00	0.00
P-663	197.00	8.0	PVC	Open		7.78	0.05	2,779.71	2,779.71	0.00	0.00
P-664	259.00	8.0	PVC	Open		63.89	0.41	2,779.73	2,779.71	0.10	0.03
P-665	637.00	8.0	PVC	Open		-88.45	0.56	2,842.00	2,842.12	0.18	0.12
P-666	120.00	8.0	PVC	Open		109.27	0.70	2,842.00	2,841.97	0.27	0.03
P-667	1,504.00	8.0	PVC	Open		4.07	0.03	2,842.00	2,842.00	0.00	0.00
P-668	167.00	6.0	PVC	Open		4.86	0.06	2,842.00	2,842.00	0.00	0.00
P-669	251.00	8.0	PVC	Open		23.52	0.15	2,842.01	2,842.00	0.02	0.00
P-670	104.00	6.0	PVC	Open		3.89	0.04	2,842.01	2,842.01	0.00	0.00
P-671	231.00	8.0	PVC	Open		28.39	0.18	2,842.01	2,842.01	0.02	0.01
P-672	341.00	8.0	PVC	Open		33.29	0.21	2,842.01	2,842.00	0.03	0.01
P-673	337.00	8.0	PVC	Open		65.57	0.42	2,842.05	2,842.01	0.11	0.04
P-674	285.00	8.0	PVC	Open		5.84	0.04	2,842.05	2,842.05	0.00	0.00
P-675	199.00	6.0	PVC	Open		5.84	0.07	2,842.05	2,842.05	0.00	0.00
P-676	283.00	8.0	PVC	Open		75.30	0.48	2,842.09	2,842.05	0.14	0.04
P-677	397.00	8.0	PVC	Open		49.91	0.32	2,841.73	2,841.70	0.06	0.03
P-678	865.00	8.0	PVC	Open		35.33	0.23	2,841.76	2,841.73	0.03	0.03

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-679	123.00	8.0	PVC	Open		0.00	0.00	2,841.76	2,841.76	0.00	0.00
P-680	231.00	8.0	PVC	Open		47.98	0.31	2,841.77	2,841.76	0.06	0.01
P-681	142.00	8.0	PVC	Open		94.66	0.60	2,841.80	2,841.77	0.20	0.03
P-682	1,166.00	8.0	PVC	Open		36.96	0.24	2,841.77	2,841.73	0.04	0.04
P-683	818.00	8.0	PVC	Open		0.00	0.00	2,821.54	2,821.54	0.00	0.00
P-684	325.00	12.0	PVC	Open		1,662.79	4.72	2,811.74	2,809.80	5.96	1.94
P-685	51.00	8.0	PVC	Open		13.44	0.09	2,821.79	2,821.79	0.01	0.00
P-686	53.00	8.0	PVC	Open		12.32	0.08	2,821.79	2,821.79	0.00	0.00
P-687	22.00	6.0	PVC	Open		360.23	4.09	2,781.91	2,781.67	10.61	0.23
P-688	146.00	12.0	PVC	Open		479.08	1.36	2,781.91	2,781.82	0.56	0.08
P-689	70.00	12.0	PVC	Open		471.00	1.34	2,781.49	2,781.45	0.54	0.04
P-691	524.00	8.0	PVC	Open		162.56	1.04	2,781.67	2,781.38	0.55	0.29
P-692	113.00	6.0	PVC	Open		0.00	0.00	2,781.38	2,781.38	0.00	0.00
P-693	166.00	6.0	PVC	Open		0.55	0.01	2,781.82	2,781.82	0.00	0.00
P-694	689.00	8.0	PVC	Open		162.30	1.04	2,781.38	2,781.00	0.55	0.38
P-695	356.00	12.0	PVC	Open		739.98	2.10	2,781.45	2,781.00	1.26	0.45
P-696	63.00	12.0	PVC	Open		902.28	2.56	2,781.00	2,780.89	1.84	0.12
P-697	126.00	6.0	PVC	Open		0.00	0.00	2,780.89	2,780.89	0.00	0.00
P-698	248.00	12.0	PVC	Open		902.28	2.56	2,780.89	2,780.43	1.84	0.46
P-699	173.00	8.0	PVC	Open		15.48	0.10	2,780.43	2,780.43	0.01	0.00
P-700	11.00	8.0	PVC	Open		0.00	0.00	2,780.43	2,780.43	0.00	0.00
P-701	280.00	8.0	PVC	Open		15.48	0.10	2,780.43	2,780.43	0.01	0.00
P-702	156.00	8.0	PVC	Open		9.84	0.06	2,780.43	2,780.42	0.00	0.00
P-703	299.00	8.0	PVC	Open		0.00	0.00	2,780.43	2,780.43	0.00	0.00
P-704	279.00	8.0	PVC	Open		0.00	0.00	2,780.43	2,780.43	0.00	0.00
P-705	582.00	12.0	PVC	Open		886.79	2.52	2,780.43	2,779.39	1.78	1.04
P-706	10.00	6.0	PVC	Open		0.00	0.00	2,779.39	2,779.39	0.00	0.00
P-707	1,401.00	12.0	PVC	Open		883.93	2.51	2,779.39	2,776.91	1.77	2.48
P-708	201.00	8.0	PVC	Open		0.00	0.00	2,776.91	2,776.91	0.00	0.00
P-709	14.00	8.0	PVC	Open		0.00	0.00	2,776.91	2,776.91	0.00	0.00
P-710	132.00	12.0	PVC	Open		881.91	2.50	2,776.91	2,776.68	1.76	0.23
P-711	335.00	12.0	PVC	Open		607.40	1.72	2,775.90	2,775.61	0.87	0.29
P-712	323.00	12.0	PVC	Open		0.00	0.00	2,775.61	2,775.61	0.00	0.00
P-713	228.00	12.0	PVC	Open		607.40	1.72	2,775.61	2,775.41	0.87	0.20
P-714	8.00	12.0	PVC	Open		0.00	0.00	2,775.41	2,775.41	0.00	0.00
P-715	163.00	12.0	PVC	Open		607.39	1.72	2,775.41	2,775.27	0.87	0.14
P-716	160.00	8.0	PVC	Open		0.00	0.00	2,775.27	2,775.27	0.00	0.00
P-718	620.00	8.0	PVC	Open		199.54	1.27	2,774.83	2,774.32	0.81	0.50
P-719	471.00	12.0	PVC	Open		-1,010.54	2.87	2,782.54	2,783.62	2.29	1.08
P-720	153.00	12.0	PVC	Open		-1,010.54	2.87	2,783.62	2,783.97	2.29	0.35
P-721	14.00	12.0	PVC	Open		0.00	0.00	2,783.97	2,783.97	0.00	0.00
P-723	141.00	12.0	PVC	Open		-1,018.38	2.89	2,786.41	2,786.73	2.32	0.33
P-724	320.00	12.0	PVC	Open		-1,027.45	2.91	2,786.73	2,787.49	2.36	0.75
P-725	502.00	12.0	PVC	Open		8.96	0.03	2,786.73	2,786.73	0.00	0.00
P-726	214.00	12.0	PVC	Open		8.96	0.03	2,786.73	2,786.73	0.00	0.00
P-727	372.00	8.0	PVC	Open		57.04	0.36	2,768.75	2,768.72	0.08	0.03
P-728	156.00	8.0	PVC	Open		15.68	0.10	2,768.72	2,768.72	0.01	0.00
P-729	708.00	8.0	PVC	Open		27.74	0.18	2,768.72	2,768.70	0.02	0.02
P-730	797.00	8.0	PVC	Open		-23.93	0.15	2,770.41	2,770.42	0.02	0.01
P-731	160.00	8.0	PVC	Open		-39.20	0.25	2,770.40	2,770.41	0.04	0.01
P-732	48.00	12.0	PVC	Open		0.00	0.00	2,782.12	2,782.12	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-733	425.00	8.0	PVC	Open		136.25	0.87	2,778.65	2,778.48	0.40	0.17
P-735	62.00	12.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-736	65.00	12.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-737	33.00	8.0	PVC	Open		0.00	0.00	2,779.59	2,779.59	0.00	0.00
P-738	136.00	8.0	PVC	Open		-211.81	1.35	2,780.01	2,780.14	0.91	0.12
P-739	392.00	12.0	PVC	Open		140.56	0.40	2,779.08	2,779.06	0.06	0.02
P-740	14.00	8.0	PVC	Open		36.46	0.23	2,779.08	2,779.08	0.03	0.00
P-741	414.00	12.0	PVC	Open		177.02	0.50	2,779.12	2,779.08	0.09	0.04
P-742	275.00	8.0	PVC	Open		-16.23	0.10	2,779.06	2,779.06	0.01	0.00
P-743	120.00	8.0	PVC	Open		36.58	0.23	2,778.65	2,778.65	0.04	0.00
P-744	43.00	12.0	PVC	Open		1,930.61	5.48	2,837.35	2,837.01	7.97	0.34
P-745	171.00	12.0	PVC	Open		-1,027.45	2.91	2,787.49	2,787.89	2.36	0.40
P-747	1,566.00	12.0	PVC	Open		1,308.71	3.71	2,788.00	2,782.12	3.75	5.88
P-749	50.00	96.0	PVC	Open		1,316.08	0.06	2,422.00	2,422.00	0.00	0.00
P-751	37.00	8.0	PVC	Open		0.00	0.00	2,782.12	2,782.12	0.00	0.00
P-752	42.00	8.0	PVC	Open		0.00	0.00	2,782.12	2,782.12	0.00	0.00
P-753	697.00	8.0	PVC	Open		103.67	0.66	2,779.88	2,779.71	0.24	0.17
P-754	420.00	6.0	PVC	Open		9.62	0.11	2,778.91	2,778.90	0.01	0.01
P-755	452.00	6.0	PVC	Open		53.27	0.60	2,790.03	2,789.90	0.29	0.13
P-756	895.00	8.0	PVC	Open		0.30	0.00	2,855.78	2,855.78	0.00	0.00
P-757	777.00	8.0	PVC	Open		4.14	0.03	2,855.78	2,855.78	0.00	0.00
P-758	967.00	8.0	PVC	Open		10.93	0.07	2,855.78	2,855.77	0.00	0.00
P-759	920.00	8.0	PVC	Open		157.64	1.01	2,778.01	2,777.53	0.52	0.48
P-760	2,830.00	12.0	PVC	Open		91.94	0.26	2,779.15	2,779.07	0.03	0.08
P-762	30.00	8.0	PVC	Open		0.00	0.00	2,757.35	2,757.35	0.00	0.00
P-763	833.00	12.0	PVC	Open		1,505.46	4.27	2,791.27	2,787.17	4.92	4.10
P-764	330.00	8.0	PVC	Open		774.95	4.95	2,757.35	2,753.80	10.75	3.55
P-765	140.00	6.0	Steel	Open		435.36	4.94	2,543.00	2,541.14	13.29	1.86
P-766	2.00	12.0	PVC	Open		1,662.78	4.72	2,820.58	2,820.57	5.98	0.01
P-767	356.00	8.0	PVC	Open		775.57	4.95	2,761.18	2,757.35	10.76	3.83
P-768	239.00	12.0	PVC	Open		0.00	0.00	2,751.85	2,751.85	0.00	0.00
P-769	2.00	12.0	PVC	Open		0.00	0.00	2,792.69	2,792.69	0.00	0.00
P-844	254.00	12.0	PVC	Open		1,919.84	5.45	2,833.71	2,831.71	7.88	2.00
P-845	230.00	12.0	PVC	Open		1,921.20	5.45	2,835.53	2,833.71	7.89	1.81
P-846	188.00	12.0	PVC	Open		1,922.57	5.45	2,837.01	2,835.53	7.90	1.49
P-847	383.00	8.0	PVC	Open		2.04	0.01	2,831.71	2,831.71	0.00	0.00
P-848	176.00	8.0	PVC	Open		1.37	0.01	2,833.71	2,833.71	0.00	0.00
P-849	168.00	8.0	PVC	Open		1.37	0.01	2,835.53	2,835.53	0.00	0.00
P-900	587.00	12.0	PVC	Open		2,586.10	7.34	2,875.26	2,867.00	14.08	8.26
P-901	2.00	8.0	Steel	Open		51.02	0.33	2,779.00	2,779.00	0.12	0.00
P-904	143.00	12.0	PVC	Open		1,522.06	4.32	2,793.41	2,792.69	5.02	0.72
P-906	60.00	12.0	PVC	Open		0.00	0.00	2,768.28	2,768.28	0.00	0.00
P-907	1,798.00	8.0	PVC	Open		1,316.08	8.40	2,842.21	2,788.00	30.15	54.21
P-950	171.00	8.0	PVC	Open		43.76	0.28	2,778.93	2,778.92	0.05	0.01
P-954	23.00	64.0	PVC	Open		-281.91	0.03	2,574.50	2,574.50	0.00	0.00
P-958	76.00	8.0	PVC	Open		-28.87	0.18	2,777.53	2,777.53	0.03	0.00
P-959	345.00	8.0	PVC	Open		186.51	1.19	2,777.53	2,777.28	0.72	0.25
P-960	37.00	8.0	PVC	Open		182.61	1.17	2,777.28	2,777.26	0.69	0.03
P-964	1,139.00	12.0	PVC	Open		591.71	1.68	2,775.27	2,774.32	0.83	0.94
P-965	21.00	12.0	PVC	Open		0.00	0.00	2,781.51	2,781.51	0.00	0.00
P-968	1,673.00	8.0	PVC	Open		0.62	0.00	2,757.35	2,757.35	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-971	601.00	6.0	PVC	Open		-5.85	0.07	2,779.28	2,779.28	0.00	0.00
P-972	79.00	6.0	PVC	Open		2.81	0.03	2,779.28	2,779.28	0.00	0.00
P-973	180.00	8.0	PVC	Open		-3.04	0.02	2,779.28	2,779.28	0.00	0.00
P-974	904.00	8.0	PVC	Open		11.67	0.07	2,794.73	2,794.73	0.01	0.00
P-975	179.00	6.0	PVC	Open		11.67	0.13	2,794.73	2,794.72	0.02	0.00
P-976	344.00	6.0	PVC	Open		9.73	0.11	2,790.03	2,790.03	0.01	0.00
P-977	178.00	6.0	PVC	Open		9.73	0.11	2,790.03	2,790.02	0.02	0.00
P-978	629.00	8.0	PVC	Open		775.57	4.95	2,767.95	2,761.18	10.76	6.77
P-979	592.00	8.0	PVC	Open		775.57	4.95	2,774.32	2,767.95	10.76	6.37
P-980	752.00	8.0	PVC	Open		774.95	4.95	2,753.67	2,745.58	10.75	8.08
P-981	7.00	8.0	PVC	Open		2,586.10	16.51	2,745.58	2,744.79	113.80	0.80
P-982	100.00	12.0	PVC	Open		774.95	2.20	2,753.80	2,753.67	1.38	0.14
P-984	126.00	12.0	PVC	Open		346.57	0.98	2,781.49	2,781.45	0.30	0.04
P-985	103.00	6.0	PVC	Open		0.00	0.00	2,781.49	2,781.49	0.00	0.00
P-986	207.00	8.0	PVC	Open		0.58	0.00	2,781.53	2,781.53	0.00	0.00
P-987	32.00	8.0	PVC	Open		0.00	0.00	2,809.80	2,809.80	0.00	0.00
P-988	415.00	8.0	PVC	Open		55.91	0.36	2,781.57	2,781.53	0.08	0.03
P-989	710.00	8.0	PVC	Open		313.99	2.00	2,776.77	2,775.42	1.90	1.35
P-990	846.00	12.0	PVC	Open		-469.40	1.33	2,781.67	2,782.12	0.53	0.45
P-991	19.00	8.0	PVC	Open		313.99	2.00	2,775.42	2,775.38	1.90	0.04
P-992	269.00	12.0	PVC	Open		-189.60	0.54	2,781.64	2,781.67	0.10	0.03
P-993	340.00	12.0	PVC	Open		-189.60	0.54	2,781.61	2,781.64	0.10	0.03
P-994	67.00	12.0	PVC	Open		-189.60	0.54	2,781.60	2,781.61	0.10	0.01
P-995	230.00	12.0	PVC	Open		-79.84	0.23	2,781.60	2,781.60	0.02	0.00
P-996	172.00	12.0	PVC	Open		-79.84	0.23	2,781.59	2,781.60	0.02	0.00
P-997	147.00	8.0	PVC	Open		55.91	0.36	2,781.59	2,781.58	0.08	0.01
P-998	54.00	8.0	PVC	Open		-12.49	0.08	2,781.59	2,781.59	0.00	0.00
P-999	190.00	12.0	PVC	Open		-68.41	0.19	2,781.59	2,781.59	0.02	0.00
P-1000	80.00	12.0	PVC	Open		11.43	0.03	2,781.59	2,781.59	0.00	0.00
P-1001	141.00	12.0	PVC	Open		11.43	0.03	2,781.59	2,781.59	0.00	0.00
P-1002	262.00	12.0	PVC	Open		11.43	0.03	2,781.59	2,781.59	0.00	0.00
P-1003	11.00	12.0	PVC	Open		11.43	0.03	2,781.59	2,781.59	0.00	0.00
P-1005	258.00	12.0	PVC	Open		291.24	0.83	2,781.59	2,781.53	0.22	0.06
P-1006	84.00	12.0	PVC	Open		279.80	0.79	2,781.67	2,781.65	0.20	0.02
P-1007	290.00	12.0	PVC	Open		279.80	0.79	2,781.65	2,781.59	0.20	0.06
P-1008	716.00	8.0	PVC	Open		102.45	0.65	2,841.97	2,841.80	0.24	0.17
P-1014	443.00	8.0	PVC	Open		278.92	1.78	2,769.67	2,769.00	1.52	0.67
P-1015	162.00	8.0	PVC	Open		278.92	1.78	2,769.00	2,768.75	1.52	0.25
P-1025	64.00	12.0	PVC	Open		1,027.92	2.92	2,788.15	2,788.00	2.36	0.15
P-1026	50.00	96.0	PVC	Open		-1,027.92	0.05	2,422.00	2,422.00	0.00	0.00
P-1027	46.00	12.0	PVC	Open		-1,027.45	2.91	2,787.89	2,788.00	2.36	0.11
P-1029	716.00	12.0	PVC	Open		0.00	0.00	2,775.61	2,775.61	0.00	0.00
P-1030	229.00	12.0	PVC	Open		0.00	0.00	2,775.61	2,775.61	0.00	0.00
P-1031	211.00	12.0	PVC	Open		0.00	0.00	2,775.61	2,775.61	0.00	0.00
P-1032	536.00	8.0	PVC	Open		-36.44	0.23	2,779.06	2,779.08	0.04	0.02
P-1034	1,051.00	12.0	PVC	Open		-1,018.38	2.89	2,783.97	2,786.41	2.32	2.44
P-1035	20.00	12.0	PVC	Open		0.47	0.00	2,788.00	2,788.00	0.00	0.00
P-1036	1,271.00	14.0	PVC	Open		0.47	0.00	2,788.00	2,788.00	0.00	0.00

Scenario: 2010 WELL 6 OFF

Fire Flow Analysis

Pump Report

Label	Discharge (gpm)	Control Status	Elevation (ft)	Intake Pump Grade (ft)	Pump Head (ft)	Discharge Pump Grade (ft)	Calculated Water Power (Hp)
PMP-1	51.02	On	2,534.00	2,534.00	245.00	2,779.00	3.16
PMP-2	435.36	On	2,543.00	2,541.14	71.41	2,612.55	7.85
PMP-2.1	79.91	On	2,610.00	2,611.00	168.22	2,779.21	3.39
PMP-2.2	36.62	On	2,610.00	2,611.00	168.20	2,779.20	1.56
PMP-2.3	0.00	Off	2,610.00	2,611.00	0.00	2,779.20	0.00
PMP-3	281.91	On	2,624.50	2,574.50	213.08	2,787.58	15.17
PMP-4	1,522.06	On	2,399.00	2,419.00	374.41	2,793.41	143.88
PMP-6	0.00	Off	2,473.50	2,493.50	0.00	2,768.28	0.00
PMP-7	1,316.08	On	2,372.00	2,422.00	420.21	2,842.21	139.63
PMP-8	1,027.92	On	2,567.00	2,422.00	366.15	2,788.15	95.02
PMP-Boost	2,586.10	On	2,640.00	2,744.79	130.48	2,875.26	85.19

Scenario: 2010 WELL 6 OFF
Fire Flow Analysis
Tank Report

Label	Base Elevation (ft)	Minimum Elevation (ft)	Initial HGL (ft)	Maximum Elevation (ft)	Inactive Volume (gal)	Tank Diameter (ft)	Inflow (gpm)	Current Status	Calculated Hydraulic Grade (ft)	Calculated Percent Full (%)
T-1	2,610.00	2,610.50	2,611.00	2,618.00	0.00	N/A	318.83	Filling	2,611.00	6.7

Scenario: 2010 WELL 6 OFF
Fire Flow Analysis
Valve Report

Label	Elevation (ft)	Diameter (in)	Control Status	Discharge (gpm)	From HGL (ft)	To HGL (ft)	Headloss (ft)	Calculated Pressure Setting (psi)
FCV-2-Hwy 55	2,602.00	12.0	Closed	0.00	2,821.81	2,751.85	0.00	
FCV-5 Southhampton	2,652.00	8.0	Closed	0.00	2,809.80	2,821.54	0.00	
FCV-6 GREAT SKY Wy	2,569.50	12.0	Inactive	-0.00	2,781.51	2,781.51	0.00	
TCV-3-Horse Shoe Bend	2,620.00	8.0	Throttling	775.57	2,761.18	2,761.18	0.00	
PSV-1 Floating Feather	2,653.00	12.0	Throttling	1,662.79	2,820.57	2,811.74	8.83	72.50
TCV-4-State at Well 4	2,565.00	12.0	Closed	0.00	2,780.00	2,792.69	0.00	
PSV-Gladestone	2,572.00	6.0	Inactive	313.99	2,775.42	2,775.42	0.00	62.83
PSV-2	2,567.00	10.0	Inactive	0.47	2,788.00	2,788.00	0.00	65.00