

# **CITY OF BATTLE GROUND PUBLIC WORKS**

**Operations Department**

## **MONTHLY REPORT**

**March 2005**

## Status through March 31, 2005

### Water

*Produced 36.1 million gallons of water this month at an average of 1.2million gallons per day with a peak flow of 1.7 million gallons on 03/05/05*

*Drained the steel tank on Tukes Mountain in preparation for painting*

*Repaired one damaged fire hydrant and ordered parts for another.*

### Sewer

*Collected and pumped 47.4 million gallons of effluent averaging 1.5million gallons per day with a peak day flow of 2.99 million gallons on 03/30/05*

*We finished cleaning the sewer main from SE Commerce*

*Cleaned and prepped the chemical injection system for odor control*

*Purchased a new PH meter and established a schedule for H2S testing at the sewer outfall at Salmon Creek*

### Streets

*Pressure washed and sealed the “brick” crosswalks on east Main street*

*Replaced a damaged tree on NW 10<sup>th</sup> Way after an auto accident*

### Parks

*Created a wall with landscape blocks, established a “landscape strip” and paved the pathway through Hidden Glen connecting SE 5<sup>th</sup> Circle and SE 5<sup>th</sup> streets*

*Installed a new sign at the entrance, removed all the dead tree limbs, leveled out some uneven soil, planted grass and began to edge the pathways at Florence Robison Park*

*Installed a new pathway drain to relieve a water problem near the entrance to Central Park*

*Finished a complete mowing of Gardner Oaks during this month, substantially ahead of previous years*

*Painted over graffiti at Kiwanis Park and installed a portable toilet*

### **Drainage**

*Began working with the Offender crews to cut our many drainage swales*

*Coordinate with Clark County for cleaning catch basins in the NE quadrant*

*Cleaned blocked ditches throughout town to keep the storm drains flowing*

### **Facilities**

*Installed a new changing table into the lower women's rest room at city hall*

*Set up and tear down the tent, chairs, speaker system, etc for the groundbreaking ceremony at the new BG Police Station*

*Poured a new concrete pad at the entrance to City Hall*

*Installed the construction sign and parking signs at the Police station*

### **Administration**

*Worked with Lombard-Conrad Architects on the finishing touches for the new Operations Center office*

*Coordinated the efforts of HDR Engineering and US Filter in setting up our Odor Control program for this year*

*Met with Wallis Engineering on the Sewer system upgrade at Operations*

*Assisted in the design of the Gardner Pump Station Phase II upgrade*

*In conjunction with DOE and Hazel Dell Sewer District, met with an industrial customer to resolve issues of flow impurities.*

*Coordinated the efforts of many agencies to finish cleaning the sewer line and send billing out for SE Commerce Ave.*

**Steven Rommel**

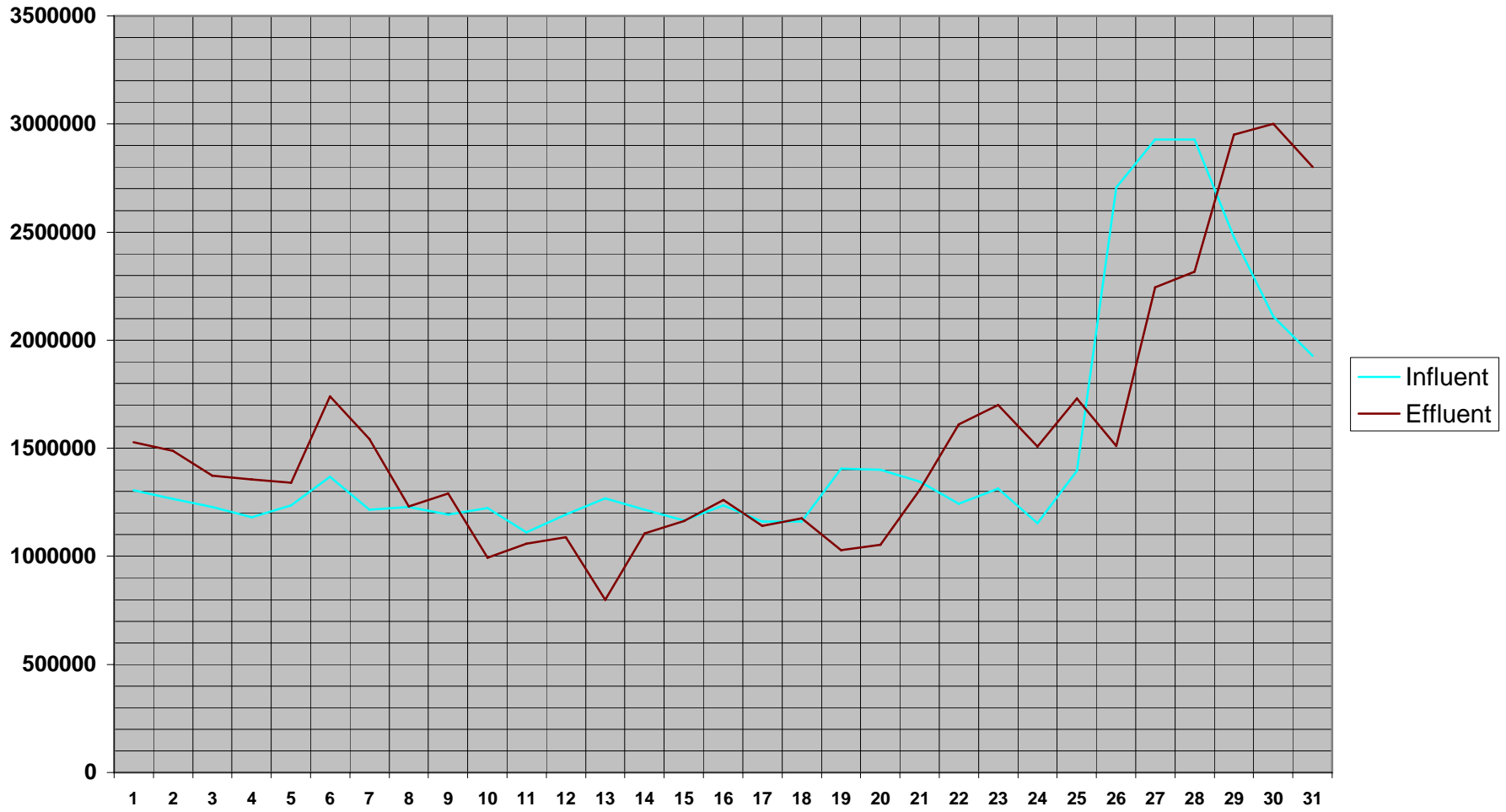
Superintendent of Public Works

# WasteWater Flow in Gallons

March 2005

Day	Hockinson	Meadow Glade	Battle Ground	Influent Totals	Effluent Totals					
1	11000	147000	1147300	1305300	1528500					
2	9000	147000	1110800	1266800	1487400					
3	11000	138000	1078800	1227800	1372900					
4	10000	125000	1045900	1180900	1356700					
5	8000	149000	1079700	1236700	1341000					
6	8000	183000	1177900	1368900	1739200					
7	10000	146000	1060900	1216900	1542400					
8	13000	154000	1060000	1227000	1231200					
9	14000	156000	1022600	1192600	1291600					
10	13000	154000	1055500	1222500	993900	Avg      Min      Max				
11	10000	130000	972100	1112100	1058500	<b>Influent</b>				
12	8000	150000	1034500	1192500	1087400	<b>Hockinson</b>	396000	12774.19	8000	28000
13	8000	181000	1080100	1269100	798000	<b>Meadow Glade</b>	5103000	164612.9	125000	248000
14	12000	153000	1050800	1215800	1106100	<b>Battle Ground</b>	40793100	1315906	972100	2667900
15	11000	144000	1011400	1166400	1163700					
16	13000	157000	1066100	1236100	1260500	<b>Total Influent</b>	46292100	1493294	1112100	2928900
17	11000	140000	1011000	1162000	1140700					
18	11000	133000	1018000	1162000	1176100	Avg      Min      Max				
19	8000	158000	1239000	1405000	1028600	<b>Total Effluent</b>	47439500	1530306	798000	2999600
20	8000	180000	1212800	1400800	1053100					
21	15000	155000	1174900	1344900	1308500					
22	11000	149000	1082400	1242400	1611100					
23	12000	159000	1142500	1313500	1700600					
24	11000	137000	1004800	1152800	1508700					
25	12000	171000	1211900	1394900	1731000					
26	25000	238000	2441900	2704900	1510100					
27	28000	248000	2652000	2928000	2243700					
28	24000	237000	2667900	2928900	2315800					
29	19000	199000	2258700	2476700	2951900					
30	17000	199000	1893500	2109500	2999600					
31	15000	186000	1727400	1928400	2801000					
Total	396000	5103000	40793100	46292100	47439500					
Total Ytd	1083000	14695000	117709500	133487500	136858000					

# Battle Ground Waste Water Flow March 2005



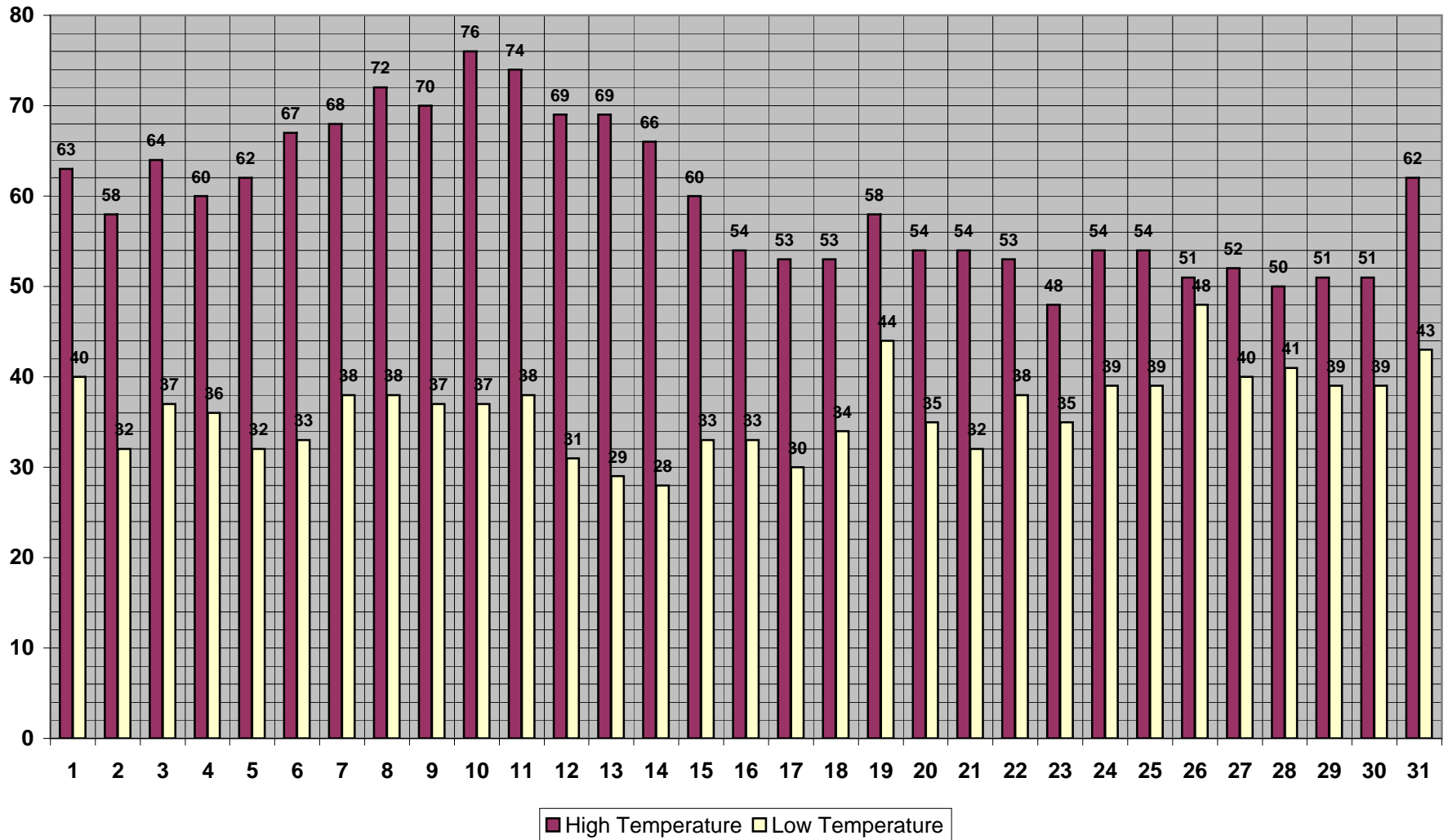
# BATTLE GROUND TEMPERATURES

March 2005

Day	High Temp	Low Temp	Average
1	63	40	51.5
2	58	32	45
3	64	37	50.5
4	60	36	48
5	62	32	47
6	67	33	50
7	68	38	53
8	72	38	55
9	70	37	53.5
10	76	37	56.5
11	74	38	56
12	69	31	50
13	69	29	49
14	66	28	47
15	60	33	46.5
16	54	33	43.5
17	53	30	41.5
18	53	34	43.5
19	58	44	51
20	54	35	44.5
21	54	32	43
22	53	38	45.5
23	48	35	41.5
24	54	39	46.5
25	54	39	46.5
26	51	48	49.5
27	52	40	46
28	50	41	45.5
29	51	39	45
30	51	39	45
31	62	43	52.5

Highest Temperature	76
Lowest Temperature	28
<i>Average High Temperature</i>	59.7
<i>Average Low Temperature</i>	36.4

Battle Ground Temperature March 2005



# BATTLE GROUND PRECIPITATION

March 2005

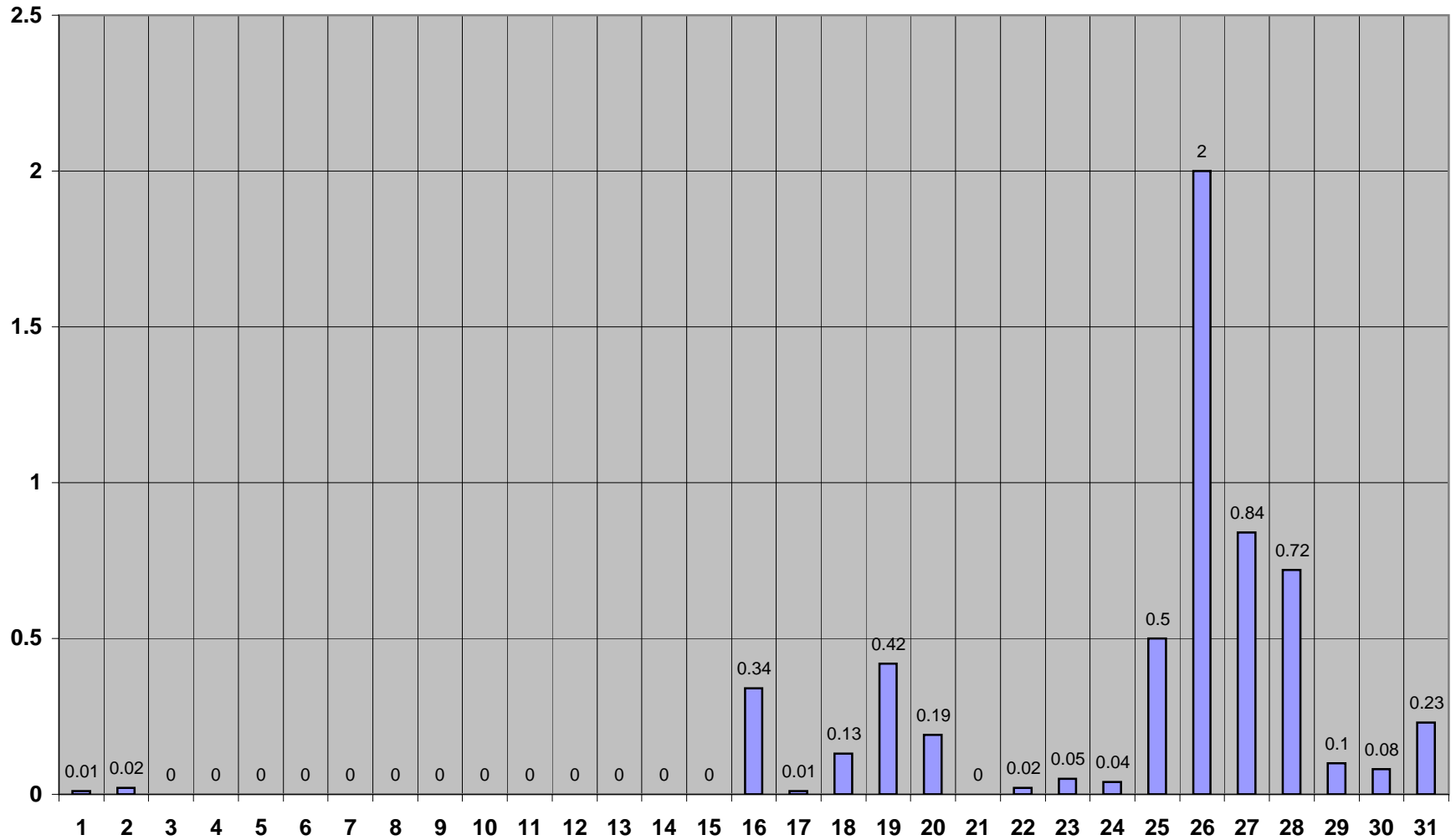
Day

1	0.01
2	0.02
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0.34
17	0.01
18	0.13
19	0.42
20	0.19
21	0
22	0.02
23	0.05
24	0.04
25	0.5
26	2
27	0.84
28	0.72
29	0.1
30	0.08
31	0.23

<b>Total Precipitation</b>	<b>5.7</b>
Min	0
Max	2
Avg	0.183871

<b>Total Precip. YTD =</b>	<b>10.24</b>
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Battle Ground Precipitation March 2005



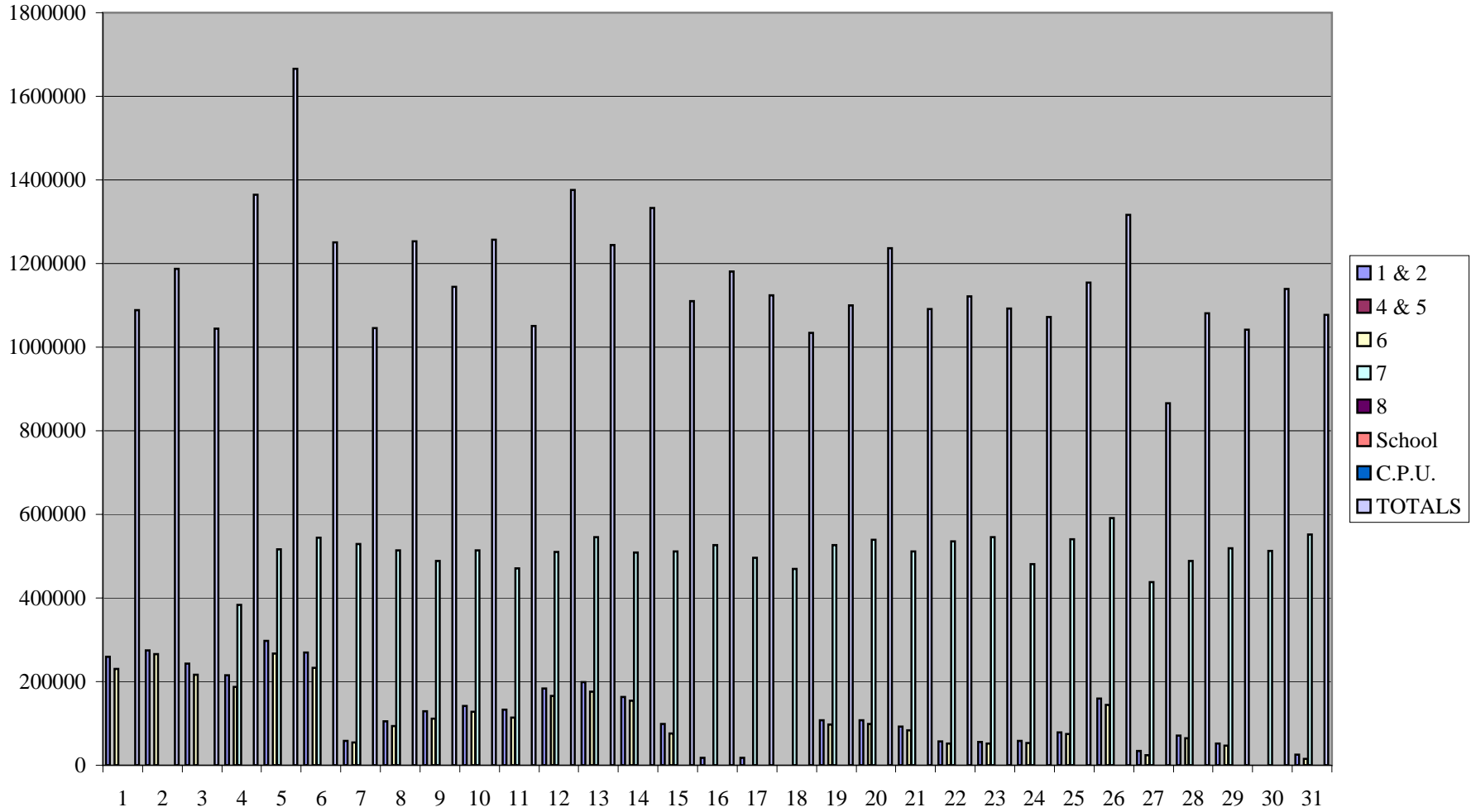
# CITY OF BATTLE GROUND - WELL PRODUCTION

Mar '05

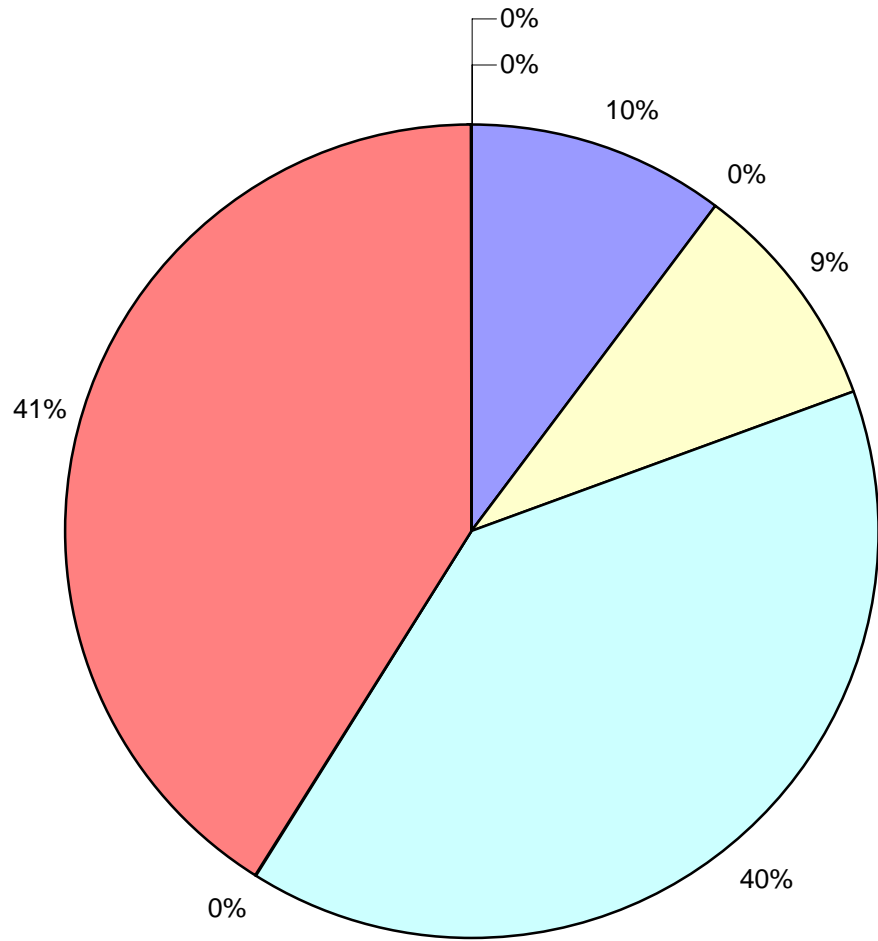
## Pump Station

Day	1 & 2	4 & 5	6	7	8	9	School	C.P.U.	TOTALS
1	258,884		229,912	0		600,000		0	1,088,796
2	275,138		265,217	0		647,000		0	1,187,355
3	243,441		216,373	0		585,000		0	1,044,814
4	215,222		187,401	383,000		579,000		0	1,364,623
5	297,702		267,531	516,000		585,000		0	1,666,233
6	269,299		233,390	544,000		204,000		0	1,250,689
7	57,611		54,000	529,000		405,000		100	1,045,711
8	104,764		94,114	514,000		540,000		0	1,252,878
9	129,406		111,996	489,000		414,000		0	1,144,402
10	142,339		127,223	514,000		474,000		0	1,257,562
11	132,819		114,387	471,000		332,000		0	1,050,206
12	183,012		165,343	510,000		518,000		0	1,376,355
13	198,250		175,606	546,000		324,000		0	1,243,856
14	162,848		154,733	509,000		506,000		0	1,332,581
15	98,259		75,395	511,000		425,000		0	1,109,654
16	17,403		0	526,000		637,000		0	1,180,403
17	17,732		0	496,000		610,000		0	1,123,732
18	0		0	469,000		565,000		0	1,034,000
19	107,397		97,274	526,000		369,000		0	1,099,671
20	108,226		98,215	539,000		491,000		0	1,236,441
21	92,099		83,242	511,000		405,000		0	1,091,341
22	57,069		51,270	535,000		478,000		0	1,121,339
23	56,315		51,490	545,000		439,000		0	1,091,805
24	58,563		53,059	481,000		479,000		0	1,071,622
25	78,806		74,198	540,000		462,000		0	1,155,004
26	159,772		144,479	591,000		421,000		0	1,316,251
27	34,341		24,083	438,000		370,000		0	866,424
28	70,766		64,336	488,000		458,000		0	1,081,102
29	52,022		46,945	519,000		424,000		0	1,041,967
30	214		0	513,000		626,000		0	1,139,214
31	25,423		15,470	552,000		484,000		0	1,076,893
<b>TOTAL</b>	<b>3,705,142</b>	<b>0</b>	<b>3,276,682</b>	<b>14,305,000</b>	<b>0</b>	<b>14,856,000</b>	<b>0</b>	<b>100</b>	<b>36,142,924</b>
<b>Daily Avg.</b>	<b>119,521</b>	<b>#DIV/0!</b>	<b>105,699</b>	<b>461,452</b>	<b>#DIV/0!</b>	<b>479,226</b>	<b>#DIV/0!</b>	<b>3</b>	<b>1,165,901</b>
<b>Maximum</b>	<b>297,702</b>	<b>0</b>	<b>267,531</b>	<b>591,000</b>	<b>0</b>	<b>647,000</b>	<b>0</b>	<b>100</b>	<b>1,666,233</b>
<b>Minimum</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>204,000</b>	<b>0</b>	<b>0</b>	<b>866,424</b>
Total A.F.	11.37	0.00	10.06	43.90	0.00	45.59	0.00	0.00	110.93
A.F. YTD	35.97	0.00	29.59	92.47	12.62	131.06	0.00	0.22	207.8316
Total A.F. produced this month by BG Wells				110.92	Total A.F. produced by BG wells YTD				302.0000

### Battle Ground Well Production March 2005

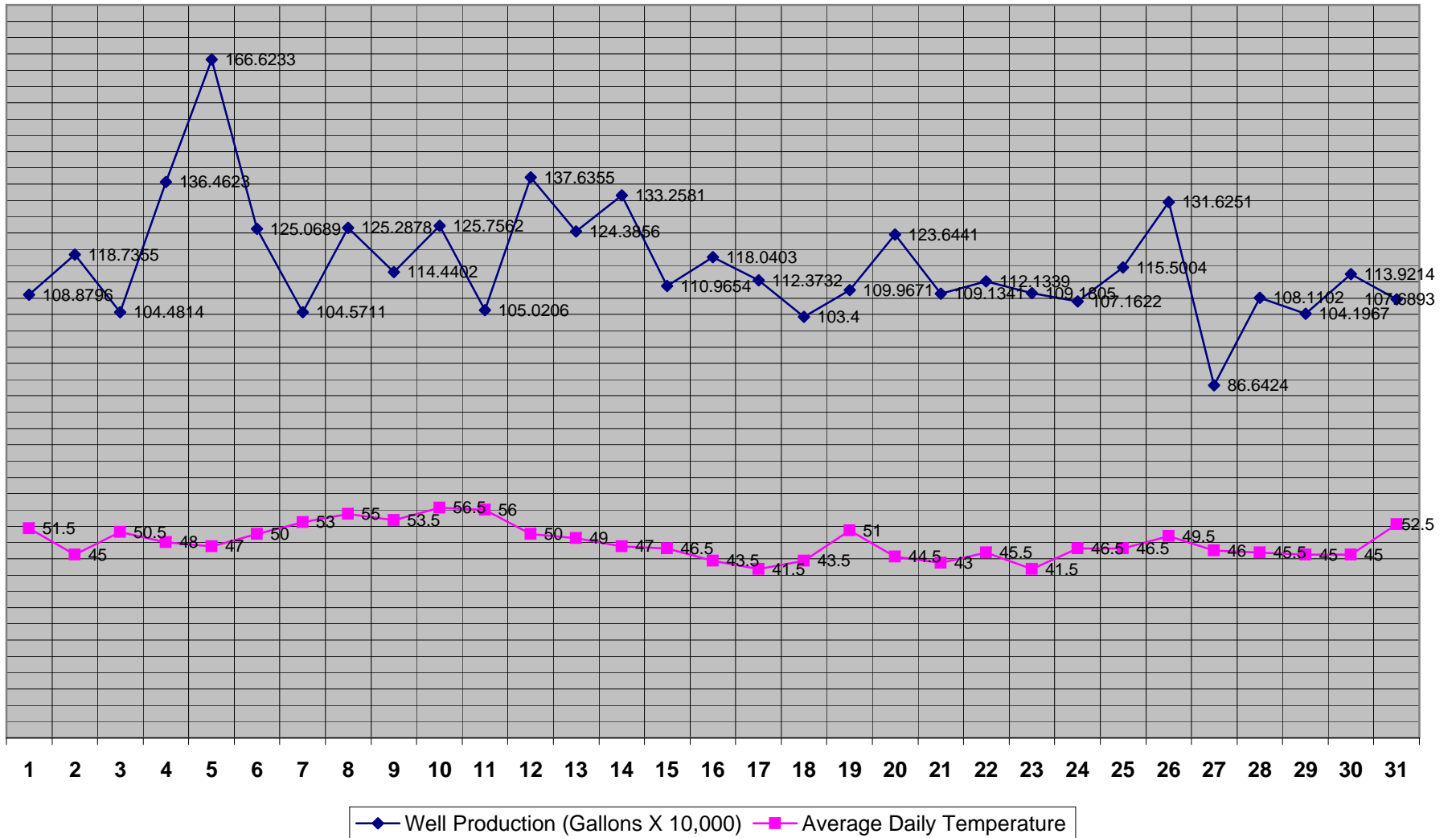


# Battle Ground Well Production March 2005



- 1 & 2
- 4 & 5
- 6
- 7
- 8
- 9
- School
- C.P.U.

Battle Ground Avg. Daily Temperature - Total Daily Well Production March 2005



### Waste Water Influent - Precipitation March 2005

