



Town of Chatham
Department of Public Works
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TO: Honorable Select Board
Jill R. Goldsmith, Town Manager

FROM: Rob Faley, Director, Department of Public Works

DATE: June 13, 2024 (for the June 18, 2024 SB Meeting)

SUBJECT: Chatham Wells, PFAS, and Drinking Water Testing and Pumping Update

The following is a water supply update for the month of May 2024:

Water & Sewer Maintenance and Operations contract:

- RFP's went out earlier this year for the next 5 years of Chatham's Water and Sewer Operations (contract is currently held by Weston & Sampson).
- Three well-qualified proposals were received.
- Town has decided to contract with Veolia. Once they are on-board (July 1st) anticipate having them attend a SB meeting to talk about their program and answer questions.

Training Field Wells 5 and 8 - Permanent Treatment Facility

Temporary Treatment at Well 5:

1. Project Update:
 - Well 5 in production for the summer.

Permanent Treatment Facility at Wells 5 & 8:

1. Project Update:
 - A pre-construction meeting was held with general contractor Winston Builders, designer Weston & Sampson, OPM Tighe & Bond, and the Town. Submittals are underway with sitework expected to begin during the 3rd week of June. The projected cost for the iron and manganese filtration and PFAS treatment plant is \$15,862,889.

Mill Pond Wells 10 and 11 - Pumping & Treatment Construction

Project Progress

1. Well #11 on-line. Having a few growing pains with the pump for Well #11. Currently determining if it is a warranty issue or the result of a faulty VFD.
2. Well #11 currently off-line as we replace the pump motor and trouble shoot. This is a short-duration repair.
3. Still waiting for comments on Well #10 Conservation Easement by the Secretary of Energy and Environmental Affairs.

Chatham Water Pumping Status:

For the month of May, wells have been running 4-12 hours a day.

The Water Storage Tanks did not hit the low-level alarm this month.

Water Sampling

- 30 bacteria samples were taken for the month of May and the results reported to DEP. All samples were free of bacteria.
- 60 Lead & Copper samples from representative residents along with 2 schools and 2 daycare facilities were collected and are currently being analyzed.
- PFAS6 samples were taken from Wells 4 & 5 and the results submitted to DEP. Both sites were non-detect.

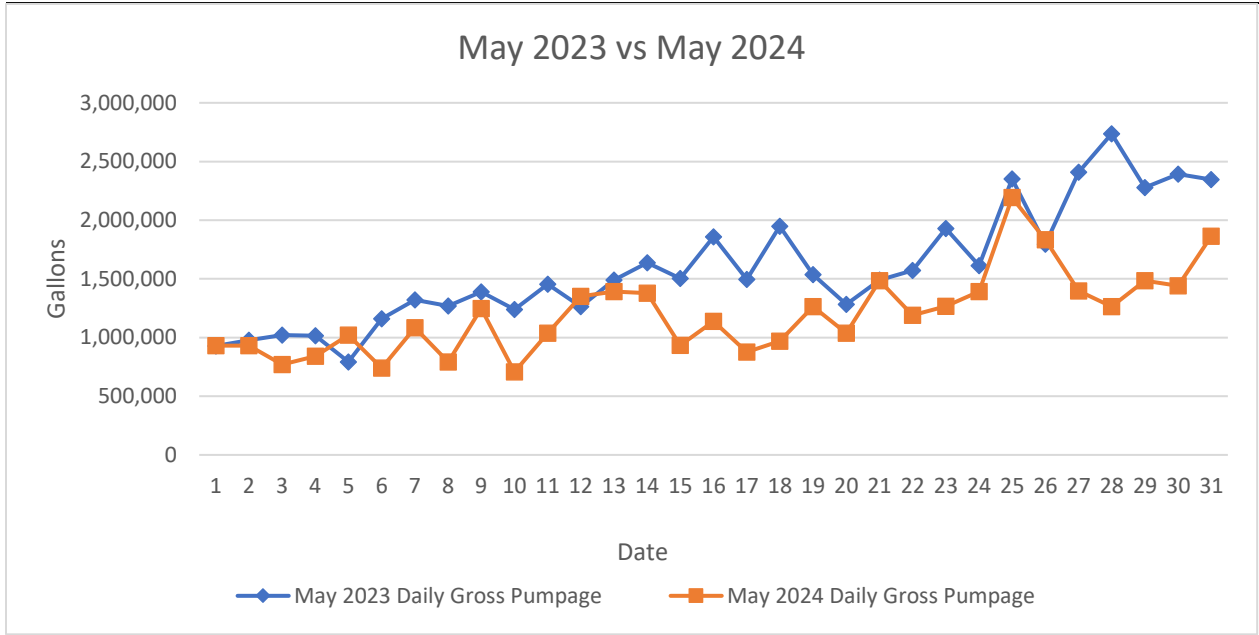
Station & System Maintenance

- Annual flushing of the distribution system is complete.

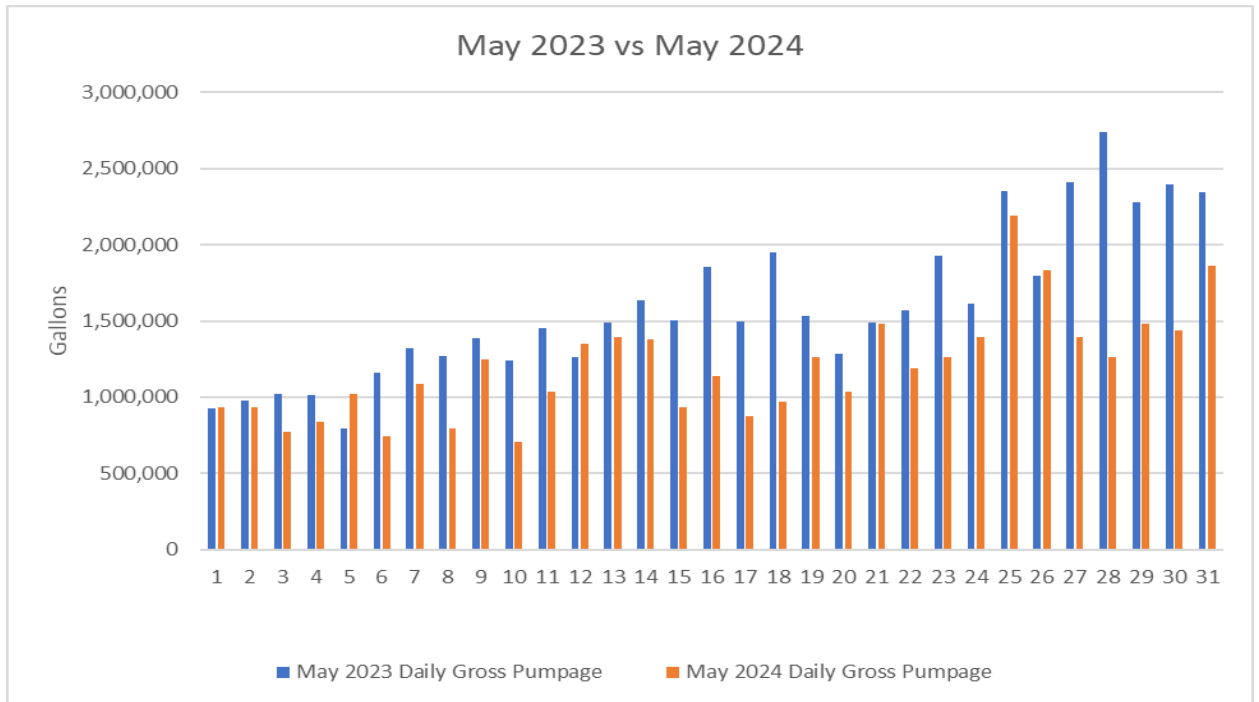
May 2023 vs May 2024

DATE	May 2023 Daily Gross Pumpage	May 2024 Daily Gross Pumpage	May 2023 vs. May 2024 Increase / Decrease (Gallons)	May 2023 vs May 2024 Increase / Decrease (Percent)
1	928,400	930,200	1,800	0%
2	978,400	932,100	(46,300)	-5%
3	1,019,800	770,800	(249,000)	-24%
4	1,014,900	840,600	(174,300)	-17%
5	793,300	1,022,300	229,000	29%
6	1,159,000	741,000	(418,000)	-36%
7	1,321,300	1,084,200	(237,100)	-18%
8	1,268,600	792,200	(476,400)	-38%
9	1,388,600	1,246,400	(142,200)	-10%
10	1,238,400	707,700	(530,700)	-43%
11	1,454,700	1,038,500	(416,200)	-29%
12	1,265,000	1,351,500	86,500	7%
13	1,491,000	1,390,700	(100,300)	-7%
14	1,638,600	1,378,300	(260,300)	-16%
15	1,504,500	934,500	(570,000)	-38%
16	1,857,300	1,138,500	(718,800)	-39%
17	1,494,200	876,200	(618,000)	-41%
18	1,949,100	969,500	(979,600)	-50%
19	1,535,200	1,264,200	(271,000)	-18%
20	1,282,800	1,036,300	(246,500)	-19%
21	1,489,400	1,484,200	(5,200)	0%
22	1,571,900	1,189,000	(382,900)	-24%
23	1,930,000	1,265,600	(664,400)	-34%
24	1,612,600	1,392,600	(220,000)	-14%
25	2,352,000	2,192,600	(159,400)	-7%
26	1,796,100	1,832,900	36,800	2%
27	2,410,100	1,396,300	(1,013,800)	-42%
28	2,735,900	1,262,500	(1,473,400)	-54%
29	2,277,200	1,484,600	(792,600)	-35%
30	2,392,000	1,441,600	(950,400)	-40%
31	2,347,200	1,862,800	(484,400)	-21%
Total	49,497,500	37,250,400	(12,247,100)	-24.7%

Pumping Comparison

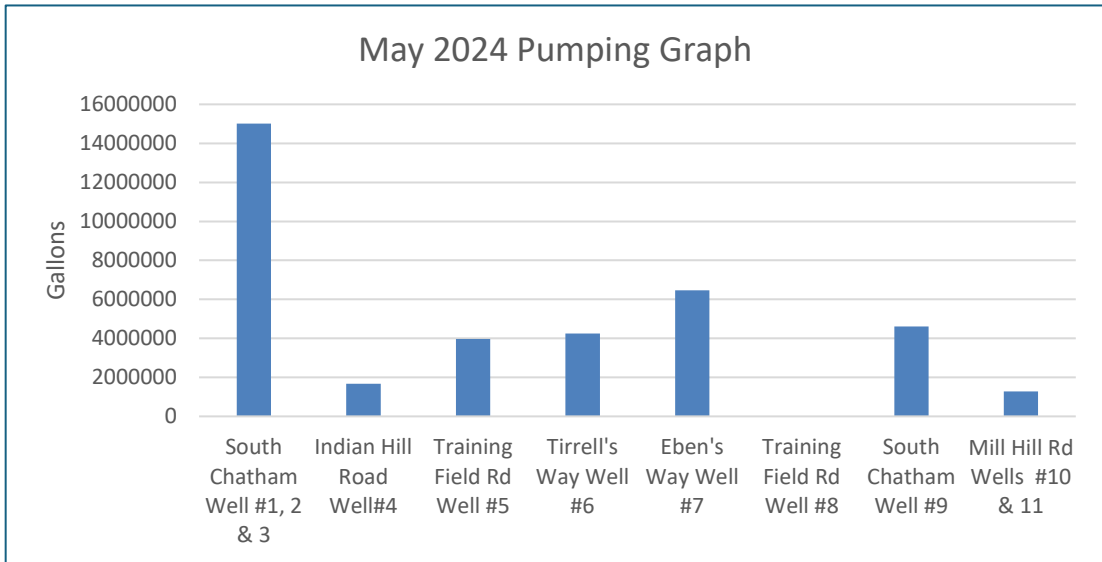


Pumping Comparison



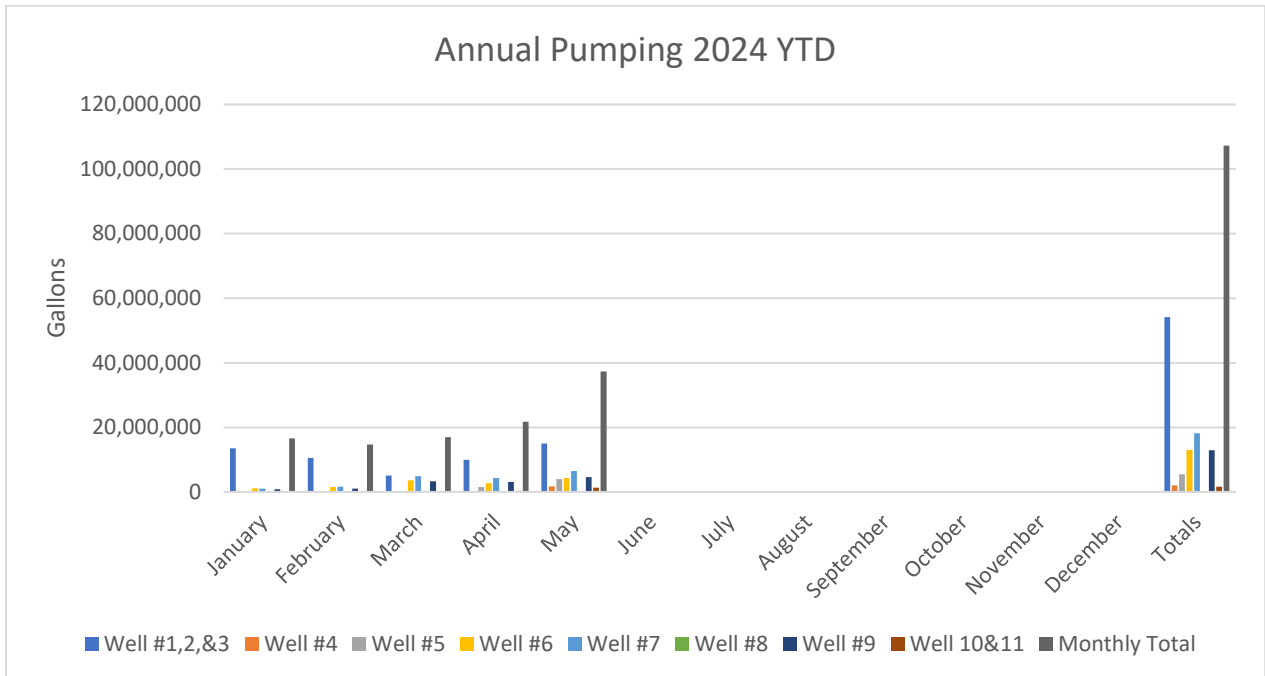
May 2024 Pumping Report

DATE	DAY	South Chatham Well #1, 2 & 3	Indian Hill Road Well#4	Training Field Rd Well #5	Tirrell's Way Well #6	Eben's Way Well #7	Training Field Rd Well #8	South Chatham Well #9	Mill Hill Rd Wells #10 & 11	Daily Gross Pumpage
1			7,600	161,000	191,200	288,100		242,200	40,100	930,200
2			38,400	175,000	194,600	328,600		195,500		932,100
3				164,400	162,200	262,600		181,600		770,800
4				148,500	186,300	306,400		199,400		840,600
5				165,000	230,400	367,900		259,000		1,022,300
6		494,500		246,500						741,000
7		788,300	75,400	220,500						1,084,200
8		474,400	17,200	300,600						792,200
9		1,157,700	13,000	33,400					42,300	1,246,400
10		477,900		203,000					26,800	707,700
11		744,900		293,600						1,038,500
12		829,600		357,900					164,000	1,351,500
13		650,500	95,100	9,000	141,800	229,900		156,100	108,300	1,390,700
14		433,200		10,000	208,400	337,800		222,200	166,700	1,378,300
15		229,600	71,700	9,200	135,300	219,700		155,100	113,900	934,500
16		265,300		162,100	160,300	260,800		176,300	113,700	1,138,500
17		641,700		155,300	9,000	13,800		10,000	46,400	876,200
18		404,300		202,600	101,300	156,000		105,300		969,500
19		432,300		40,000	164,100	273,500		185,000	169,300	1,264,200
20		382,200		100	129,100	232,800		157,700	134,400	1,036,300
21		592,500			189,700	375,100		251,000	75,900	1,484,200
22		464,000			195,100	295,600		202,800	31,500	1,189,000
23		542,600		2,100	189,900	316,900		214,100		1,265,600
24		414,900	221,300		231,400	313,300		211,700		1,392,600
25		1,130,200	590,900		143,200	191,600		136,700		2,192,600
26		1,139,800		124,800	168,200	249,400		150,700		1,832,900
27		619,400		286,700	125,500	185,300		135,500	43,900	1,396,300
28		344,300		451,700	139,100	190,400		137,000		1,262,500
29		557,200		34,900	240,900	394,300		257,300		1,484,600
30		387,900	328,100		194,100	312,100		219,400		1,441,600
31		418,400	207,300	12,700	411,500	359,000		453,900		1,862,800
Total		15,017,600	1,666,000	3,970,600	4,242,600	6,460,900		4,615,500	1,277,200	37,250,400

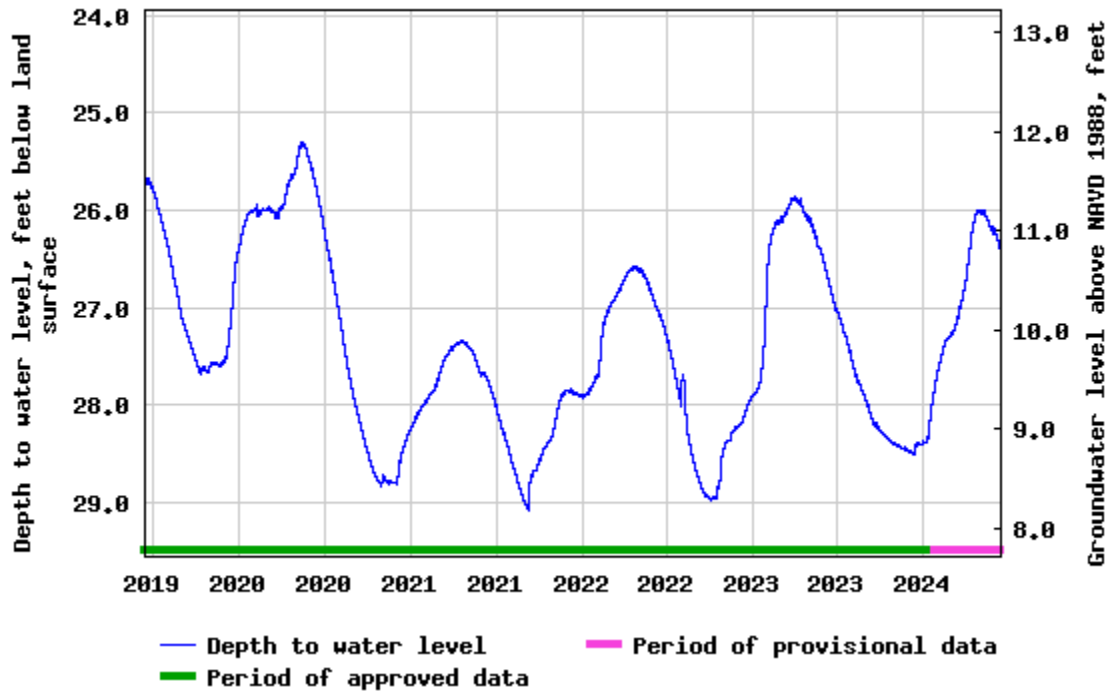


Annual Pumping 2024 YTD

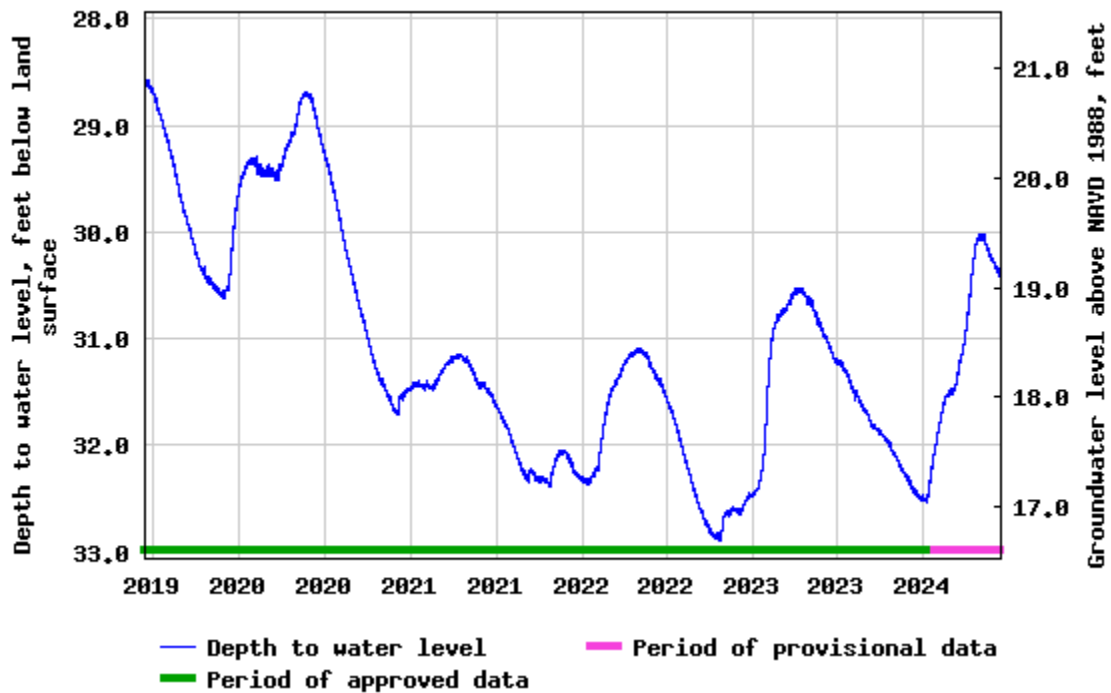
	Well #1,2,&3	Well #4	Well #5	Well #6	Well #7	Well #8	Well #9	Well 10&11	Monthly Total	Last Years Pumping	Variance
January	13,524,300	198,400	0	1,076,200	988,300	0	788,400	0	16,575,600	17,179,500	-603,900
February	10,556,600	12,400	0	1,482,600	1,583,000	0	1,061,000	0	14,695,600	17,798,000	-3,102,400
March	5,107,800	55,000	0	3,571,000	4,877,400	0	3,321,700	0	16,932,900	17,807,500	-874,600
April	9,948,800	34,400	1,494,800	2,658,000	4,258,000	0	3,080,100	305,700	21,779,800	21,827,900	-48,100
May	15,017,600	1,666,000	3,970,600	4,242,600	6,460,900	0	4,615,500	1,277,200	37,250,400	49,497,500	-12,247,100
June									0		0
July									0		0
August									0		0
September									0		0
October									0		0
November									0		0
December									0		0
Totals	54,155,100	1,966,200	5,465,400	13,030,400	18,167,600	0	12,866,700	1,582,900	107,234,300	124,110,400	-16,876,100



USGS 414181070011001 MA-CGM 138R CHATHAM, MA



USGS 414632070014901 MA-BMW 22R BREWSTER, MA



Chatham 5-year Pumping Comparison (Month of May)

May Date	May 2020 Daily Gross Pumpage	Hours	May 2021 Daily Gross Pumpage	Hours	May 2022 Daily Gross Pumpage	Hours	May 2023 Daily Gross Pumpage	Hours	May 2024 Daily Gross Pumpage	Hours	Average Daily Pumpage (gallons)	Average Daily Pumpage (hours)
1	804,800	6	1,134,000	7.75	850,400	5	928,400	5	930,200	9	929,560	6.55
2	983,400	6	1,199,400	8.5	817,100	5	978,400	5	932,100	8	982,080	6.5
3	724,100	9	945,200	10	732,000	4	1,019,800	6.25	770,800	7	838,380	7.25
4	716,400	8	965,000	6	766,600	5	1,014,900	5.75	840,600	6	860,700	6.15
5	953,100	6	1,039,500	7	805,800	4	793,300	4.5	1,022,300	7	922,800	5.7
6	753,100	6	1,141,500	8.75	696,200	5	1,159,000	6.5	741,000	7.75	898,160	6.8
7	985,600	5	1,008,400	6.25	801,900	6	1,321,300	7.25	1,084,200	12.25	1,040,280	7.35
8	587,700	5	1,090,300	7	929,700	6	1,268,600	7	792,200	7.5	933,700	6.5
9	918,200	5	1,335,300	8.25	883,700	7	1,388,600	8	1,246,400	18.75	1,154,440	9.4
10	1,089,500	5	1,235,000	9.25	902,200	7	1,238,400	7	707,700	7	1,034,560	7.05
11	854,300	5	1,364,100	8.25	788,500	6	1,454,700	8	1,038,500	11.5	1,100,020	7.75
12	948,600	5	1,274,700	8	1,004,200	5	1,265,000	7.25	1,351,500	12.75	1,168,800	7.6
13	1,095,500	7	1,491,800	9.5	814,900	6	1,491,000	8.5	1,390,700	10	1,256,780	8.2
14	1,186,500	8	1,523,600	9.75	957,900	5	1,638,600	8	1,378,300	8	1,336,980	7.75
15	998,700	7	1,799,600	11	1,065,000	5	1,504,500	9	934,500	5	1,260,460	7.4
16	1,001,500	5	2,037,200	12	827,800	5	1,857,300	10.5	1,138,500	5	1,372,460	7.5
17	1,380,500	6	1,560,300	8.25	1,680,800	7	1,494,200	7.75	876,200	9.25	1,398,400	7.65
18	1,000,100	6	1,859,800	11.5	1,030,200	7	1,949,100	10	969,500	6.25	1,361,740	8.15
19	1,413,500	6	1,890,300	11.5	1,118,200	6	1,535,200	7.25	1,264,200	7.25	1,444,280	7.6
20	1,241,500	6	2,077,600	13	969,000	7	1,282,800	6.25	1,036,300	6.5	1,321,440	7.75
21	1,517,000	7	1,958,400	12	1,110,600	6	1,489,400	7.5	1,484,200	9.75	1,511,920	8.45
22	1,661,800	10	1,928,600	11	1,461,400	6	1,571,900	7.75	1,189,000	7.25	1,562,540	8.4
23	1,506,900	7	2,334,000	13	1,182,000	8	1,930,000	9.75	1,265,600	8.25	1,643,700	9.2
24	1,855,500	9	1,901,800	12	1,367,600	8	1,612,600	7.25	1,392,600	6.25	1,626,020	8.5
25	1,262,100	10	2,293,600	12	1,416,000	8	2,352,000	12.75	2,192,600	17	1,903,260	11.95
26	1,879,400	8	2,097,100	12	1,628,900	9	1,796,100	9	1,832,900	17.25	1,846,880	11.05
27	1,496,900	9	2,312,300	13	1,378,500	10	2,410,100	12	1,396,300	10	1,798,820	10.8
28	1,852,900	8.5	1,823,700	9.5	1,291,000	9	2,735,900	12.5	1,262,500	6	1,793,200	9.1
29	1,560,100	8	1,746,200	10	1,739,200	9	2,277,200	11	1,484,600	9.25	1,761,460	9.45
30	1,474,200	8	1,742,500	9	1,932,700	10	2,392,000	12	1,441,600	6	1,796,600	9
31	2,434,100	9	1,756,600	10	1,782,900	10	2,347,200	11.5	1,862,800	6.75	2,036,720	9.45
Total	38,137,500	216	49,867,400	305	34,732,900	206	49,497,500	258	37,250,400	276	41,897,140	251.95