



Surfside Water Department Water System Manager's Report

Report on water system operations for the month of April, 2014

Water production and use report:

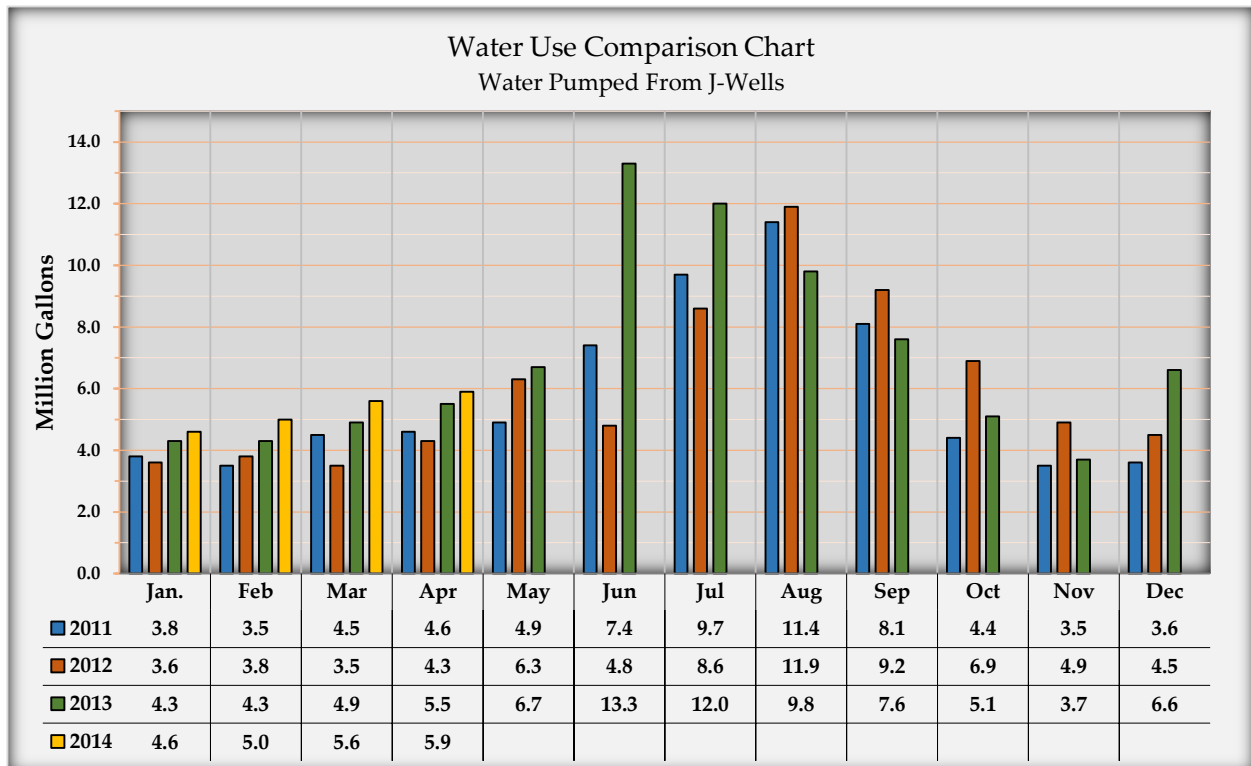
The metering period for April, 2014 is from **March 31, 2014 to April 30, 2014**.

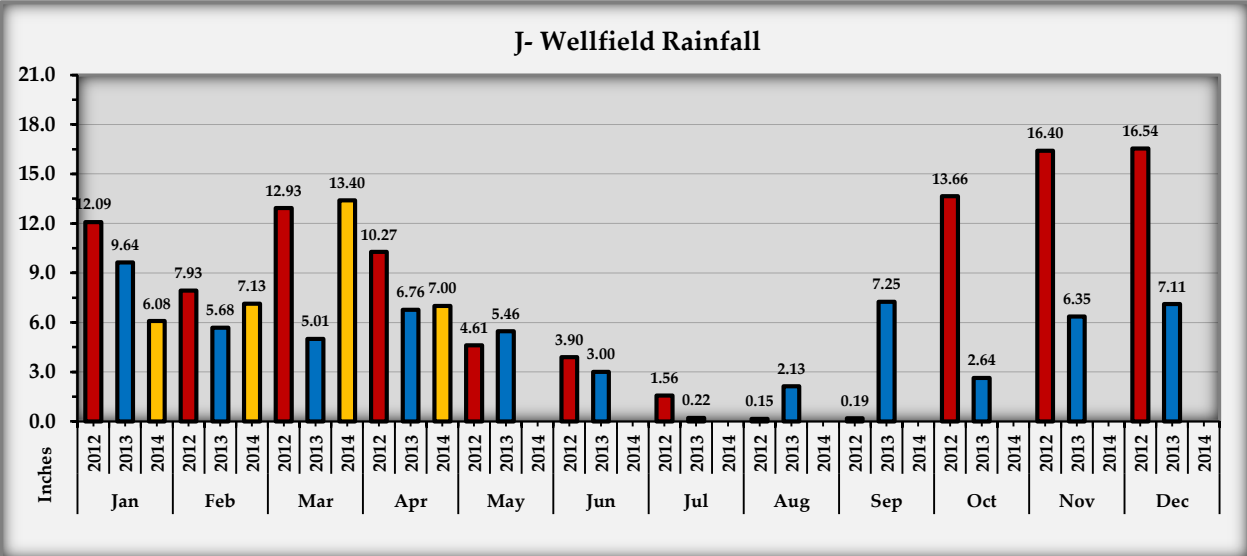
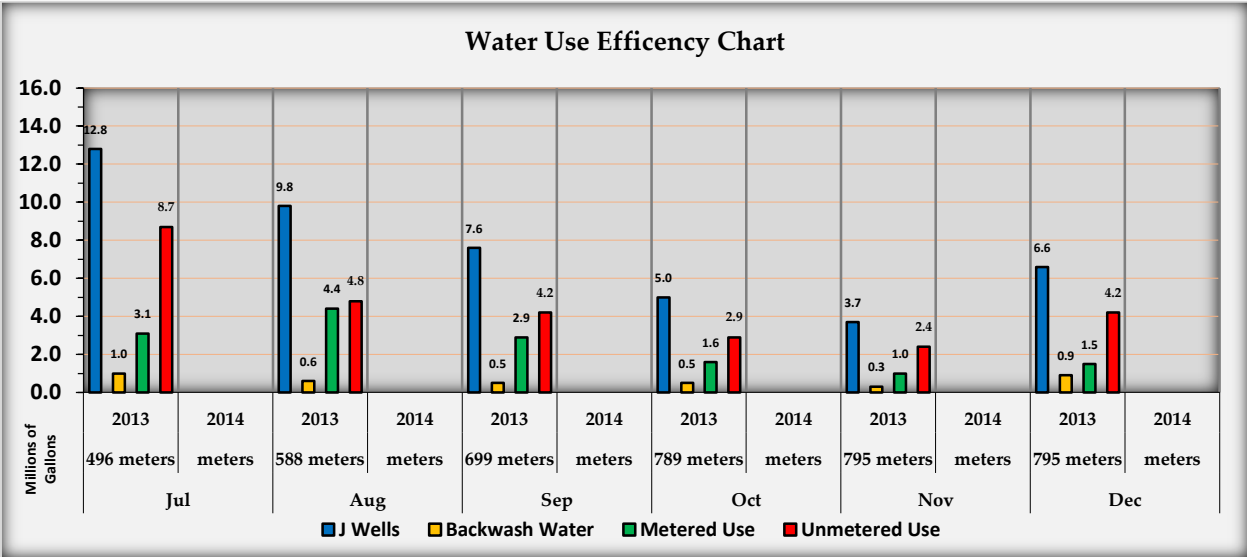
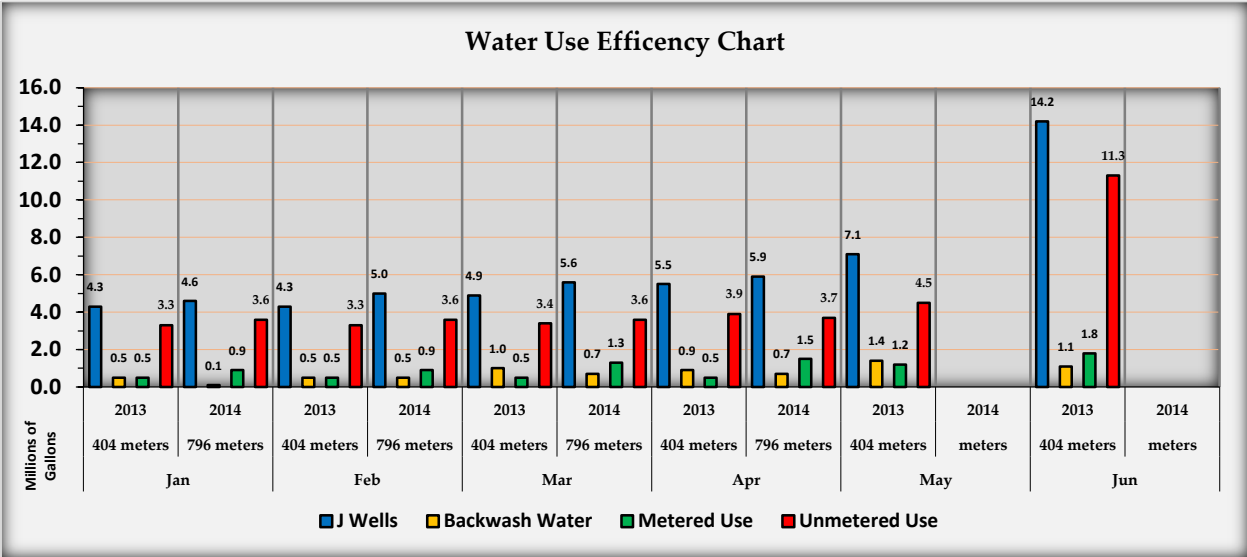
The water department pumped **5.9** million gallons from the J-Well field in the April metering period.

The water department used **0.7** million gallons of water backwashing the filter and flushing water mains in the April metering period.

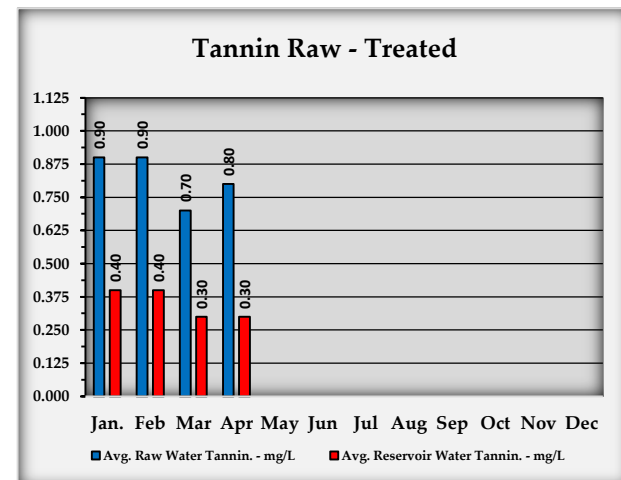
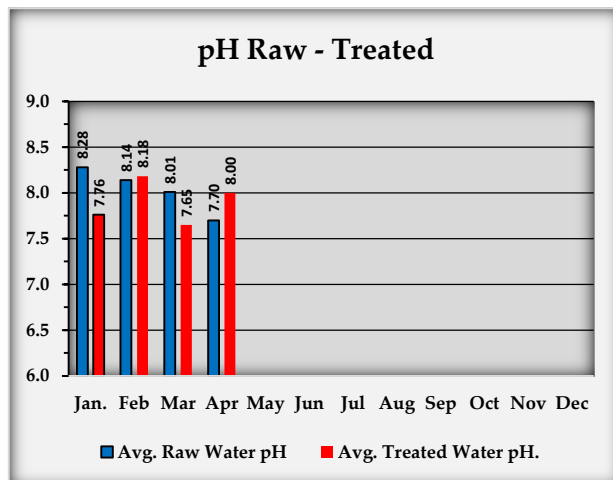
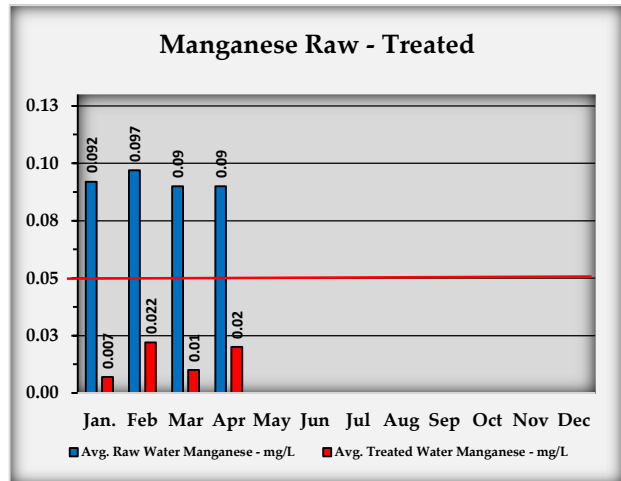
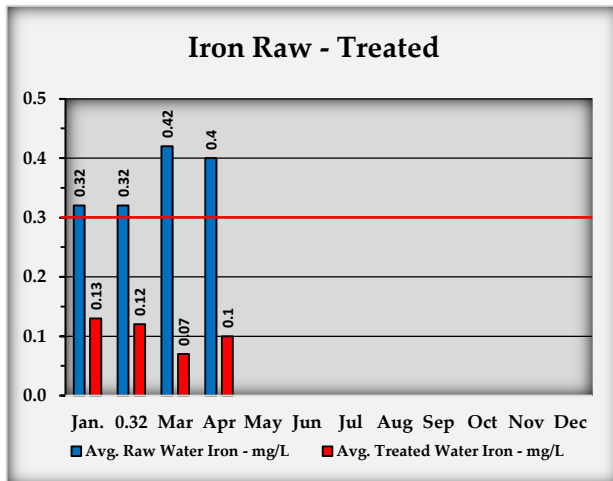
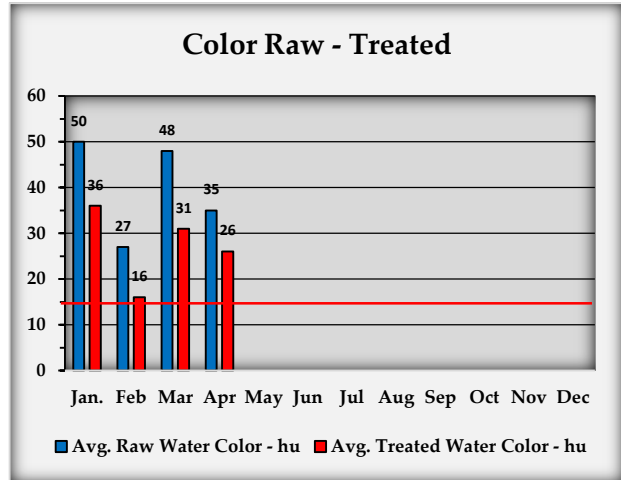
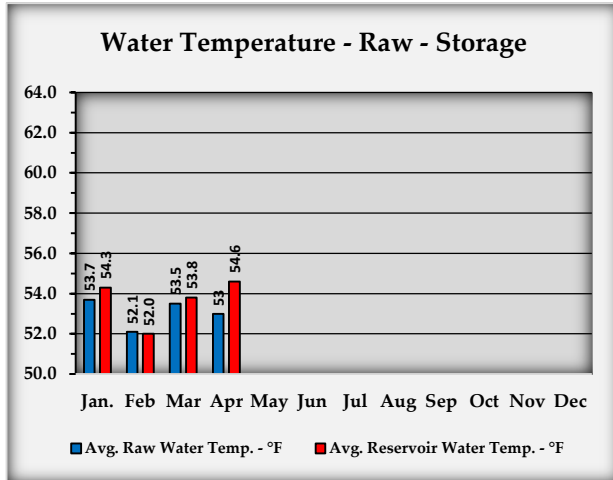
The water department read **796** service meters on April 30, 2014. Those service meters recorded **1.5** million gallons of water use in the April metering period.

The water department recorded **3.7** million gallons of water as unmetered water use in the April metering period.

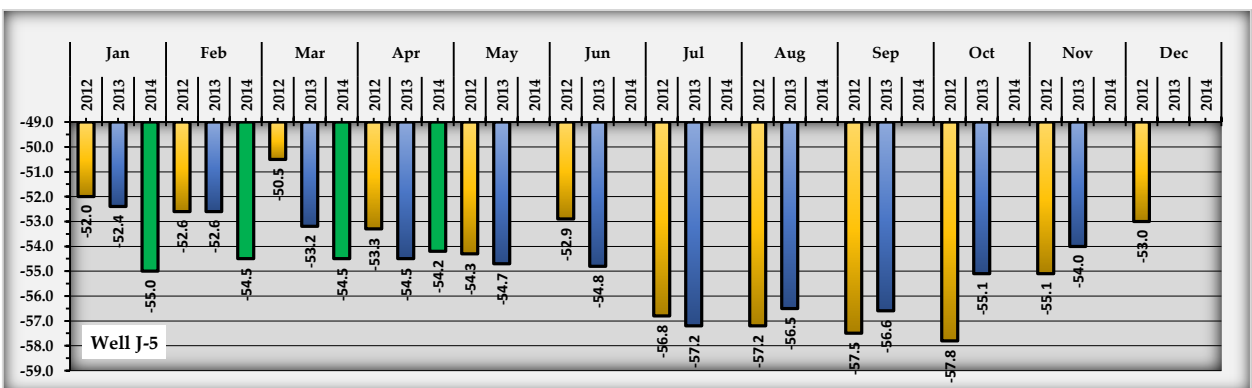
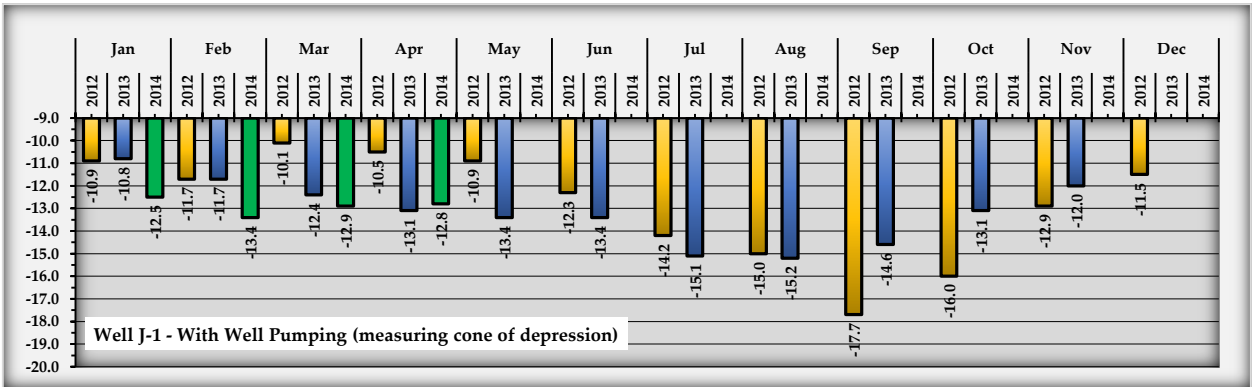
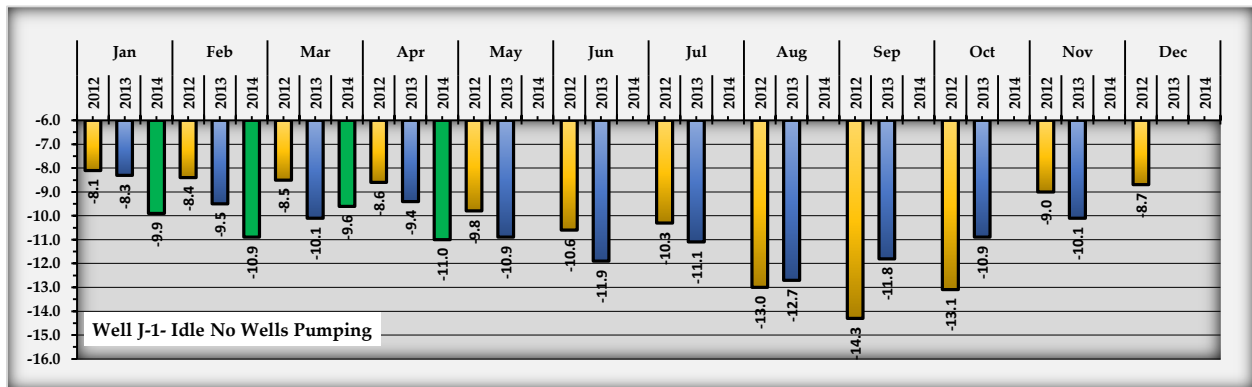
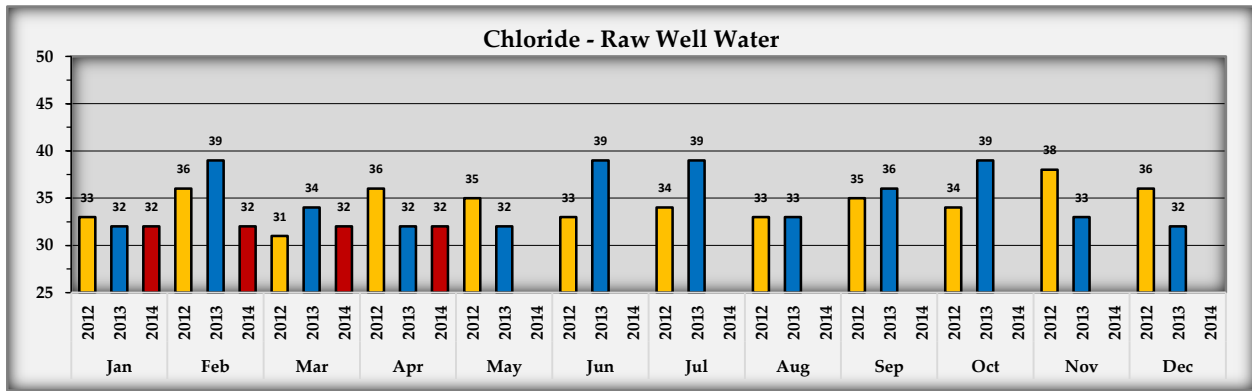


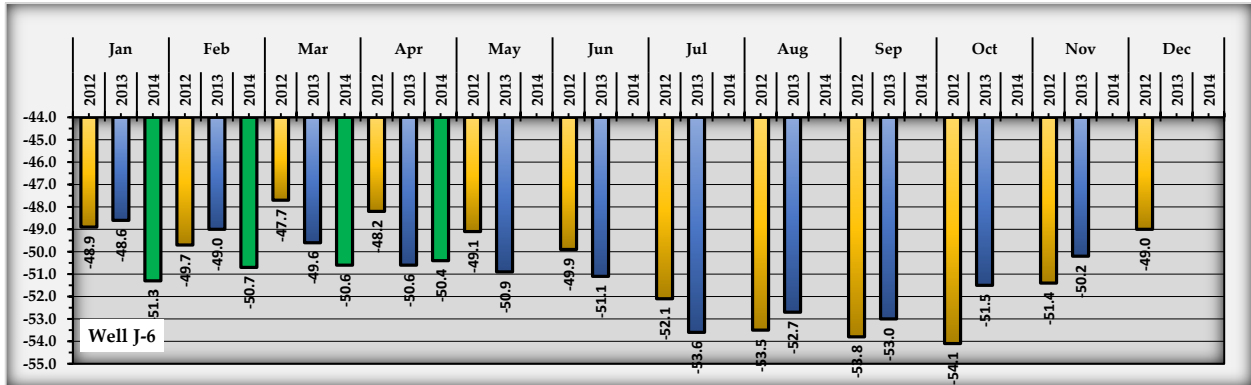


Raw and finished water quality report:

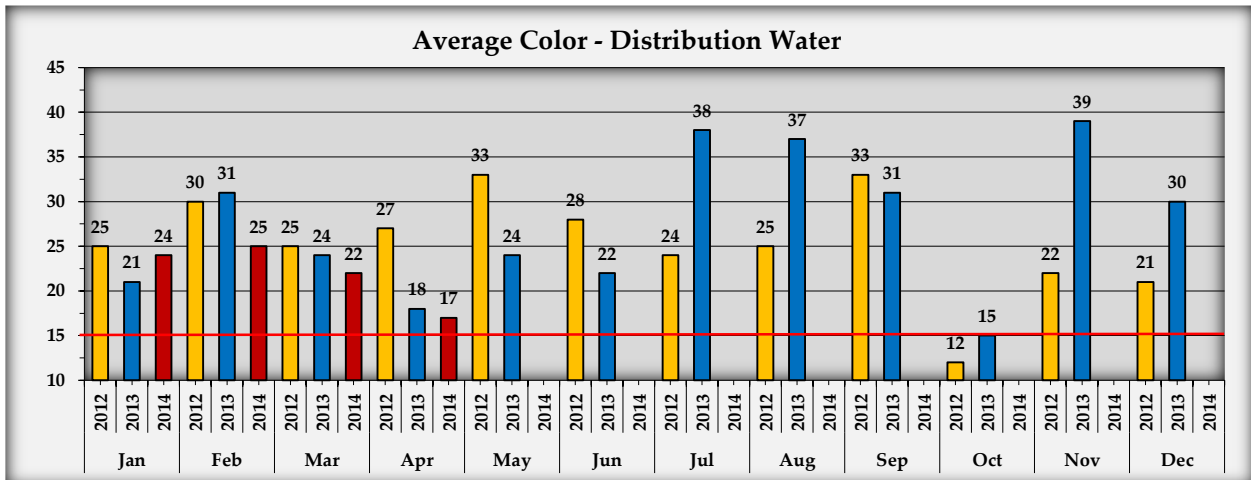
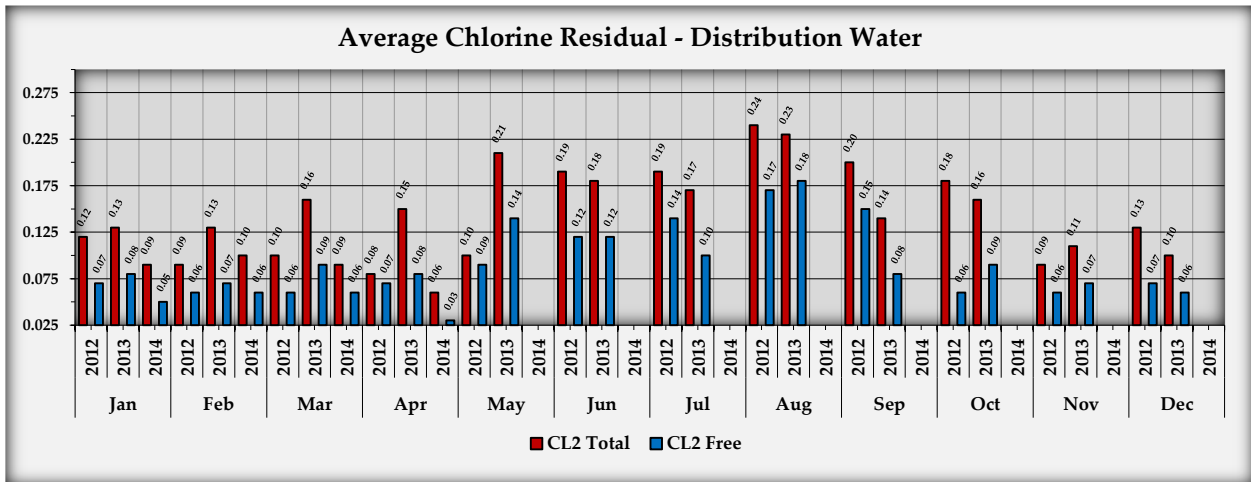


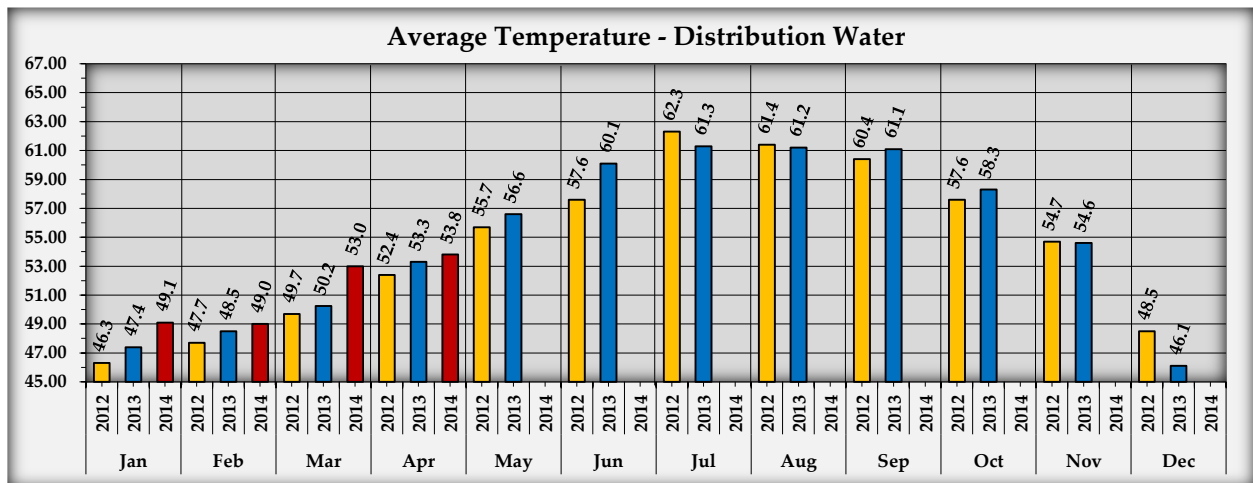
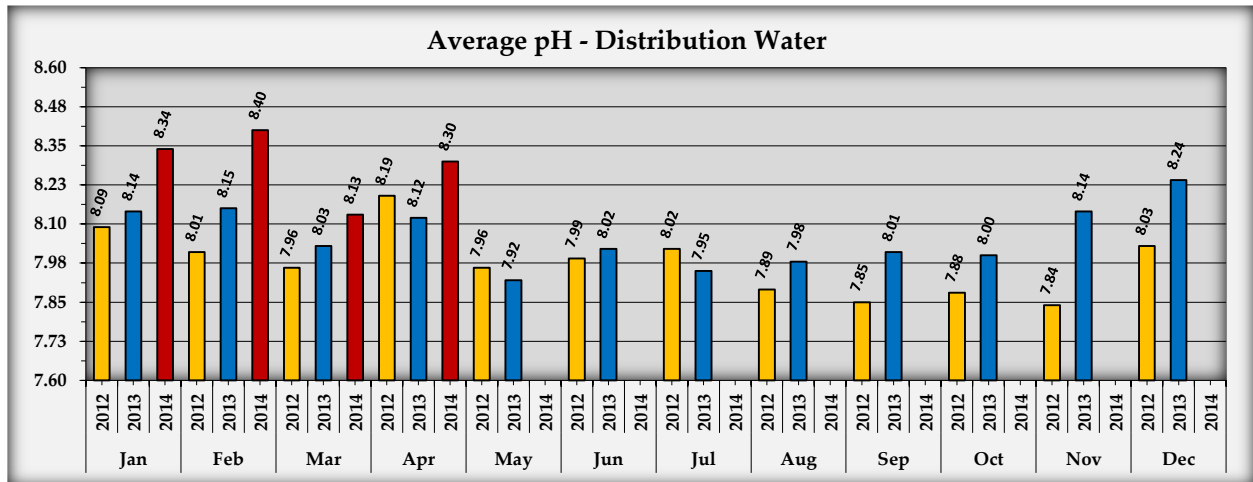
J-Wellfield Report:





Distribution Water Quality Report:





New Services: No new services in April.

Locates: The crew did five locates in April.

Service Calls: The crew responded to three service calls in April. All three service calls were resolved to the member's satisfaction.

April Project Reports:

WMR:

The water department crew concentrated on the WMR project in April. The crew installed 600 feet of water main on O Place between 306th and 311th. The work also included reconnecting 15 services and the installation of a fire hydrant at the intersection of 306th and O Place. The crew also restored over five hundred feet of road right-of way.

You will find a WMR 2012 -2014 Budget to Actual Cost Report attached to this report. The report will show that the project for 2014 is on time and on budget through March 31, 2014. The work has been slow going in

April. The Water System Manager does not anticipate reaching the one mile of pipe goal in 2014.

MIP:

You will find a MIP 2012-2014 Budget to Actual Cost Report attached to this report. The report shows that the actual funds expended for 2012 and 2013 equal 41% of budgeted funds to install 43% of budgeted meters. The project for the first two years is under budget by approximately 2%. That is a very close margin. There are a couple of factors that will have a negative impact on the MIP project going forward. On January 4, 2011 Congress amended the Safe Drinking Water Act (SDWA) by passing the Reduction of Lead in Drinking Water Act (RLDWA). The January 4, 2011 RLDWA, among other things, ammended section 1417 of the SDWA by redefining "lead free" as used in section 1417 of the SDWA. The January 4, 2011 RLDWA went into effect on January 1, 2014. The new definition of "Lead Free" means that the brass used to make meters, meter setters, valves, and fittings in 2014 is going to be 35% more expensive than it was in 2013. The other factor that will have an impact on the budget is the cost of labor. The crew recived well deserved pay rasies in 2013. The raises were more than the projected rasies used in the 5 year budget. I will be keeping a close watch on the costs and keep the Board apprised of the budget condition as we move forward on this project.

Chloroform Reduction Pilot Test:

Please find attached a progress report from Russell Porter, project engineer, for the Chloroform Reduction Pilot Test.

Water System Plan:

Gray and Osborne has been working on the water system plan for several months. I hope to have a draft plan for the boards review in June. I have had two meetings with the engineer and the Department of Health regarding the Water System Plan. At the March 27, 2014 pre-planning meeting in Olympia the Department of Health provided a checklist of items they want to see in Surfside's water system plan.

Water System Plans by Statute (WAC 246-290-100) are required to have ten elements or chapters. They are delineated below:

1. Water System Description
Chapter one will have Surfside's water system polices such as, Conditions of Service, Cross Connection Control Program, Rate Setting, Charges and Fees, and other Water System Rules and Regulations.
2. Basic Planning Data
3. Water System Analysis
4. Water Use Efficiency Program (metering requirement)

5. Source Water Protection
6. Operation and Maintenance Program
7. Distribution Facilities Design and Construction Standards
8. Improvement Program
9. Financial Program
10. Miscellaneous Documents

The Water Planning Committee met on May 7, 2014 and discussed chapter 8 of the Water System Plan.

The 2008 Water System Plan's 6-year Capital Improvement Program included 25 projects. The projects were scheduled to be completed in years 2009 through 2014. The total estimated cost of the projects was **\$2,257,710**.

The 2008 Water System Plan's 20-year Capital Improvement Program included 15 projects. The estimated cost of those projects was **\$6,841,000**.

The water department has completed 16 of the 6-year Capital Improvement projects mostly consisting of annual water main replacement and annual meter installation.

Along with Water Main Replacement and meter installation the water department also completed the following projects:

Arsenic Rule Compliance:

2011 - 2012 - Decommissioned the Oysterville, Bridgeside, and Ocean Side Well Fields.

Booster Station Improvements:

2012 - Installed Booster Station Bypass.

The remaining 9 projects are either not needed or will be extended into the future due to the ongoing nature of the metering and water main replacement projects.

The projects completed by the water department were completed for significantly less money than estimated in the 2008 Water System Plan.

The water department has completed 2 of the 20-year Capital Improvement Program projects and started a pilot test that will address one of the projects. The two projects that have been completed are:

J-Well Field Treatment Capacity:

2010 - Added three new ATEC® filter vessels.

Installed a Permanganate Feed System to the ATEC® filter system.

Engineers Estimate: _____ \$95,000

Approximate Cost: _____ \$50,000

Extend Three Phase Power to J Well Field:

2011 -2012 Extended 480 three phase power to the J well field and installed new pumps in wells and new well heads. Upgrade electrical panels, conductors, feeders, controls and telemetry.

Engineers Estimate:_____ \$321,000

Approximate Cost:_____ \$130,000

Due to a water quality violation in 2010 Surfside has been researching a way to economically and effectively reduce the disinfection by-products from its drinking water supply. Chloroform is the most serious disinfection by-product that needs reducing in our drinking water. The Chloroform Reduction Pilot Test may provide the added benefit of improving the color, taste, and smell of Surfside’s water as it removes Volatile Organic Compounds such as Chloroform. Color removal treatment is one of the 20-year capital improvement projects identified in the 2008 20-year capital improvement program.

The Board of Trustees has proven to be good stewards of the water system as they have remained committed to the goals of the 2008 Water System Plan. They have consistently provided the water department the funds and support needed to implement the lion’s share of the 2008 Capital Improvement Program. They have certainly stepped up to the plate in a large way.

Land and Buildings Projects:

The Crew did several small projects for the Lands and Buildings Department in April:

- o Cleared the new path to Sea Breeze Lake off of I Street at 357th.
- o Installed the new swing set at the playground.

Unidirectional Flushing Program:



The water department started its annual flushing program on Monday April 28th. The flushing should be completed by May 19th. The water department

flushed the mains each year as part of its regular maintenance program. Unidirectional Flushing is a specific method of flushing water mains that is designed to improve system hydraulics by removing sediment in mains and improve water quality by removing shear biofilm, improve chlorine residual, and improve water color and taste.

--END OF REPORT --



Monthly Water System Data Compilation

Month/Year	Metering Period ¹
APRIL 2014	MARCH 31- APRIL 30 2014

Data	Target	Int ²	Amt.	UM ³	Date ⁴
Total Water Pumped from J- Wells for Metering Period	N/A	AP	5.9	Mg ⁵	5/2
Total Backwash and Authorized Use Water for Metering Period	N/A	AP	.7	Mg	5/2
Total Metered Water for Metering Period	N/A	AP	1.5	Mg	5/5
Total Unmetered Water for Metering Period	N/A	AP	3.7	Mg	5/5
Total Number of Service Meters Read in the Metering Period	N/A	AP	796	Ea	5/5
Average Raw Water Iron for Month	< .5 mg/L	AP	.4	mg/L	5/2
Average Finished Water Iron for Month (reservoir)	< .1 mg/L	AP	.1	mg/L	5/2
Average Raw Water Manganese for Month	< .15 mg/L	AP	.09	mg/L	5/2
Average Finished Water Manganese for Month (reservoir)	< .01 mg/L	AP	.02	mg/L	5/2
Average Raw Water pH for Month	7.5-8.5	AP	7.7	pH	5/2
Average Finished Water pH for the Month (reservoir)	7.2-7.8	AP	8.0	pH	5/2
Average Raw Water Color for the Month	<60 HU	AP	35	HU	5/2
Average Finished Water Color for the Month (reservoir)	< 15 HU	AP	26	HU	5/2
Average Raw Water Temperature - Fahrenheit	N/A	AP	53	°F	5/2
Average Finished Water Temperature - Fahrenheit (reservoir)	N/A	AP	54.6	°F	5/2
J-1 Idle Depth to Water (no well pumping for a minimum of 30 minutes) ⁶	N/A	AP	-11	Ft.	5/2
J-1 Depth to Water (wells pumping for a minimum of 30 minutes)	N/A	AP	-12.8	Ft.	5/2
J-2 Depth to Water (wells pumping for a minimum of 30 minutes)	N/A	AP	-16.5	Ft.	5/2
J-3 Depth to Water (wells pumping for a minimum of 30 minutes)	N/A	AP	-18.3	Ft.	5/2
J-4 Depth to Water (wells pumping for a minimum of 30 minutes)	N/A	AP	-54.7	Ft.	5/2

¹ Metering period is the days between meter readings. Example: Meters are read on 11/29/13. The meter readings total is 10. The meters are next read on 12/31/13. The meter readings total is 20. The metering period is 11/29/13 to 12/31/13 and the use is 10 (20-10=10). The meters are next read on 1/31/14. The readings total is 35. The next metering period is 12/31/13 to 1/31/14 and the use for that metering period is 15 (35-20=15). All meter readings in this report need to be from the same metering period.

² Provide the initials of the person recording the data.


³ Unit of measurement.

⁴ Provide the date the data was recorded. Record the day and month only.

⁵ Million Gallons. All metered water for this report will be converted to "millions of gallons".

⁶ Well water depth readings will be taken in the first week of each month. Readings will be measured from the water level to the top of casing (TOC).

Data	Target	Int.	Amt.	UM	Date
J-5 Depth to Water (wells pumping for a minimum of 30 minutes)	N/A	AP	-54.2	Ft.	5/2
J-6 Depth to Water (wells pumping for a minimum of 30 minutes)	N/A	AP	-50.4	Ft.	5/2
J-7 Depth to Water (wells pumping for a minimum of 30 minutes)	N/A	AP	-49.8	Ft.	5/2
Average Distribution Water Color for the Month	< 15 HU	AP	17	HU	5/2
Average Distribution Water Temperature for the Month - Fahrenheit	N/A	AP	53.8	°F	5/2
Average Distribution Water Total CL2 for the Month	> .8 mg/L < .2 mg/L	AP	.06	mg/L	5/2
Average Distribution Water Free CL2 for the Month	> .4 mg/L < .05 mg/L	AP	.03	mg/L	5/2
Average Distribution Water pH for the Month	7.2-7.8	AP	8.3	pH	5/2
Total Rainfall at J-Wellfield for the Month	N/A	AP	7.0	In.	5/2
Average Raw Water Conductivity for the Month	< 800 µhos/cm	AP	382	µhos/cm	5/2
Average Raw Water TDS for the Month	< 400 mg/L	AP	272	mg/L	5/2
Average Raw Water Salt for the Month	< 500 mg/L	AP	200	mg/L	5/2
Average Raw Water Ammonia (NH3) for the Month	< 30 mg/L	AP	.22	mg/L	5/2
Average Raw Water Silica(SiO2) for the Month	< 70 mg/L	AP	15	mg/L	5/2
Average Raw Water Tannin for the Month	< 1 mg/L	AP	.8	mg/L	5/2
Average Raw Water Chloride (Cl ⁻) for the Month	< 250 mg/L	AP	32	mg/L	5/2
Average Treated Water Total CL2 for the Month (green pipe)	> 2.5 mg/L < 1.7 mg/L	AP	1.7	mg/L	5/2
Average Treated Water Free CL2 for the Month (green pipe)	> 1.5 mg/L < .5 mg/L	AP	.6	mg/L	5/2
Average Treated Water Manganese for Month (green pipe)	< .2 mg/L	AP	.2	mg/L	5/2
Average Finished Water Total CL2 for the Month (blue pipe)	> 1.2 mg/L < .5 mg/L	AP	.92	mg/L	5/2
Average Finished Water Free CL2 for the Month (blue pipe)	> .75 mg/L < .20 mg/L	AP	.21	mg/L	5/2
Average Finished Water Total CL2 for the Month (reservoir)	> .8 mg/L < .3 mg/L	AP	.50	mg/L	5/2
Average Finished Water Free CL2 for the Month (reservoir)	> .20 mg/L < .05 mg/L	AP	.03	mg/L	5/2
Average Finished Water Ammonia (NH3) for the Month (reservoir)	< 15 mg/L	AP	0	mg/L	5/2
Average Finished Water Silica(SiO2) for the Month (reservoir)	< 70 mg/L	AP	22	mg/L	5/2
Average Finished Water Tannin for the Month (reservoir)	< .5 mg/L	AP	.3	mg/L	5/2
Average Post CL2 Total (just outside booster)	> 1 mg/L	AP	1.0	mg/L	5/2
Average Post CL2 Free (just outside booster)	> .5 mg/L	AP	.43	mg/L	5/2
Jar Test	> 1.2 mg/L < 1.8 mg/L	AP	1.6	mg/L	5/2


 Water System Manager

5-6-14
 Date

WMR 2012 - 2014 Budget To Actual Report

	2012		2013		2014		31-Mar	% of Budget
	Budget	% of Budget	Actual	% of Budget	Budget	% of Budget		
Revenue								
WMR Assessment	142,650	100%	142,032	96%	148,356	100%	110,950	75%
Other Revenue	0	0%	0	0%	0	0%	0	0%
Total Revenue	142,650	100%	142,032	89%	148,356	100%	110,950	75%
Expenses								
Labor	51,486	61%	44,053	94%	54,061	94%	21,108	37%
Wages	34,000	62%	29,290	62%	35,700	62%	14,730	35%
Payroll Taxes	8,449	78%	9,326	78%	8,871	78%	3,334	38%
Benefits	7,881	44%	4,772	44%	8,275	44%	2,721	44%
Pension	1,156	39%	628	39%	1,214	39%	323	26%
Materials	89,501	91%	85,620	107%	92,634	107%	82,606	87%
Pipe, Hydrants, & Fittings	89,501	91%	85,620	91%	92,634	91%	51,067	91%
Other Expenses	0	0%	0	0%	0	0%	31,539	83%
Total Expenses	140,987	80%	129,673	102%	146,694	102%	103,714	68%
Summary								
Total Revenue	142,650	100%	142,032	96%	148,356	100%	110,950	75%
Total Expenses	140,987	92%	129,673	102%	146,694	102%	103,714	68%
Cash Increase/Decrease	1,663	743%	12,360	-389%	1,662	(3,864)	7,236	-187%
Cash at Beginning of Year	3,769	100%	3,769	100%	16,129	9,664	9,664	100%
Cash at End of Year	5,432	297%	16,129	54%	17,791	5,800	16,900	291%

Note: The above report was prepared by the Water System Manager using data supplied by the Surfside Business Office. The report has not been audited.

MIP 2012 - 2014 Budget To Actual Report

	Budget	Actual	% of Budget	Budget	Actual	% of Budget	Budget	Actual	% of Budget	Budget	Actual	% of Budget	Budget	Actual	% of Budget	Budget	Actual	% of Budget		
	2012	2012	2012	2013	2013	2013	2014	2014	2014	2014	2015	2015	2015	2015	2015	2016	2016	2016		
Revenue																				
WMR Assessment	737,500	609,041	83%	71,500	130,598	183%	71,500	52,500	73%	71,500	71,500	100%	71,500	71,500	100%	71,500	71,500	100%	71,500	0%
Other Revenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue	737,500	609,041	83%	71,500	130,598	183%	71,500	52,500	73%	71,500	71,500	100%	71,500	71,500	100%	71,500	71,500	100%	71,500	0%

Expenses

Labor	29,529	37,923	128%	30,562	33,206	94%	31,632	0	0%	32,740	0	0%	33,886	0	0%	33,886	0	0%
Wages	19,500	25,030	128%	20,183	22,705	112%	20,889	-	0%	21,620	21,620	100%	22,377	22,377	100%	22,377	22,377	100%
Payroll Taxes	4,846	8,431	174%	5,015	7,151	143%	5,191	-	0%	5,373	5,373	100%	5,561	5,561	100%	5,561	5,561	100%
Benefits	4,520	3,940	87%	4,678	2,841	61%	4,842	-	0%	5,012	5,012	100%	5,187	5,187	100%	5,187	5,187	100%
Pension	663	522	79%	686	509	74%	710	-	0%	735	735	100%	761	761	100%	761	761	100%
Materials	157,657	184,637	117%	163,175	151,426	107%	168,886	0	0%	174,797	0	0%	180,915	0	0%	180,915	0	0%
Pipe, Hydrants, & Fittings	72,046	89,905	125%	74,568	75,486	107%	77,177	-	0%	79,879	79,879	100%	82,674	82,674	100%	82,674	82,674	100%
Other Expenses	85,611	94,732	111%	88,607	75,940	86%	91,709	-	0%	94,918	94,918	100%	98,241	98,241	100%	98,241	98,241	100%
Other Expenses	0	0	0%	0	0	0%	0	-	0%	0	0	0%	0	0	0%	0	0	0%
Total Expenses	187,186	222,560	80%	193,737	184,632	102%	200,518	0	0%	207,537	0	0%	214,801	0	0%	214,801	0	0%

	Budget	Actual	% of Budget	Budget	Actual	% of Budget	Budget	Actual	% of Budget	Budget	Actual	% of Budget	Budget	Actual	% of Budget	Budget	Actual	% of Budget
	2012	2012	2012	2013	2013	2013	2014	2014	2014	2015	2015	2015	2016	2016	2016	2016	2016	2016
Summary																		
Total Revenue	737,500	609,041	83%	71,500	130,598	183%	71,500	52,500	73%	71,500	71,500	100%	71,500	71,500	100%	71,500	71,500	100%
Total Expenses	187,186	222,560	119%	193,737	184,632	95%	200,518	0	0%	200,518	200,518	100%	200,518	200,518	100%	200,518	200,518	100%
Cash Increase/Decrease	550,314	386,481	70%	(122,237)	(54,034)	44%	(129,018)	52,500	-41%	(129,018)	(129,018)	-100%	(129,018)	(129,018)	-100%	(129,018)	(129,018)	-100%
Cash at Beginning of Year				386,481	386,481	100%	332,447	332,447	100%	384,947	384,947	100%	384,947	384,947	100%	384,947	384,947	100%
Cash at End of Year	550,314	386,481	70%	264,244	332,447	126%	203,429	384,947	189%	255,929	384,947	150%	255,929	255,929	100%	255,929	255,929	100%

	5-Year Budget	2012 Actual	% of Budget	2012-2013 Actual	% of Budget	2012-2014 Actual	% of Budget	2012-2015 Actual	% of Budget	2012-2016 Actual	% of Budget
Accumulated Summary											
Total Revenue	1,023,500	609,041	60%	739,639	72%						
Total Expense	1,003,779	222,560	22%	407,192	41%						
Total Meters	1,850	390	21%	796	43%						

Note: The above report was prepared by the Water System Manager using data supplied by the Surfside Business Office. The report has not been audited

MEMORANDUM

TO: Mr. Bill Neal, Surfside HOA
FROM: Russell Porter
DATE: April 30, 2014
SUBJECT: GAC Pilot Test Update

The purpose of this memo is to provide an update on the first portion of the GAC pilot test. Two pilot columns of carbon were installed at Surfside HOA (Surfside) in February 2014. One column contains Calgon Filtrasorb 400 while the other column contains Siemens AW1230CX. The units were placed online on February 27, 2014.

Carbon Performance

One measure of carbon performance is UV 254 absorbance. UV 254 absorbance can be correlated to the amount of various organic compounds (discussed in detail below) and can be used as an indicator of carbon performance. A comparison of the two carbon performances to date is included as Figure 1.

The data in Figure 1 shows the ratio of the UV 254 absorbance of the treated water divided by the UV 254 absorbance of the raw water as a function of the amount of water that has been treated with the carbon. If the carbon is removing all of the organic matter from the water, the $UV_{treated}/UV_{raw}$ value is 0 and if it is removing none of the organic matter, the value would be 1. Both units initially had ratios less than 0.1 indicating that over 90 percent of the organic matter was being removed. The Siemens unit has show steady performance degradation over the test to a point where it appears to be removing only 40 percent of the organic matter after treating 4,000 gallons. The Calgon unit has steadily removed over 90 percent with no indication of performance degradation. It is too early to predict the expected life of the Calgon carbon at this time. The Siemens carbon does not appear to be a workable solution since it has shown such a rapid decrease in performance.

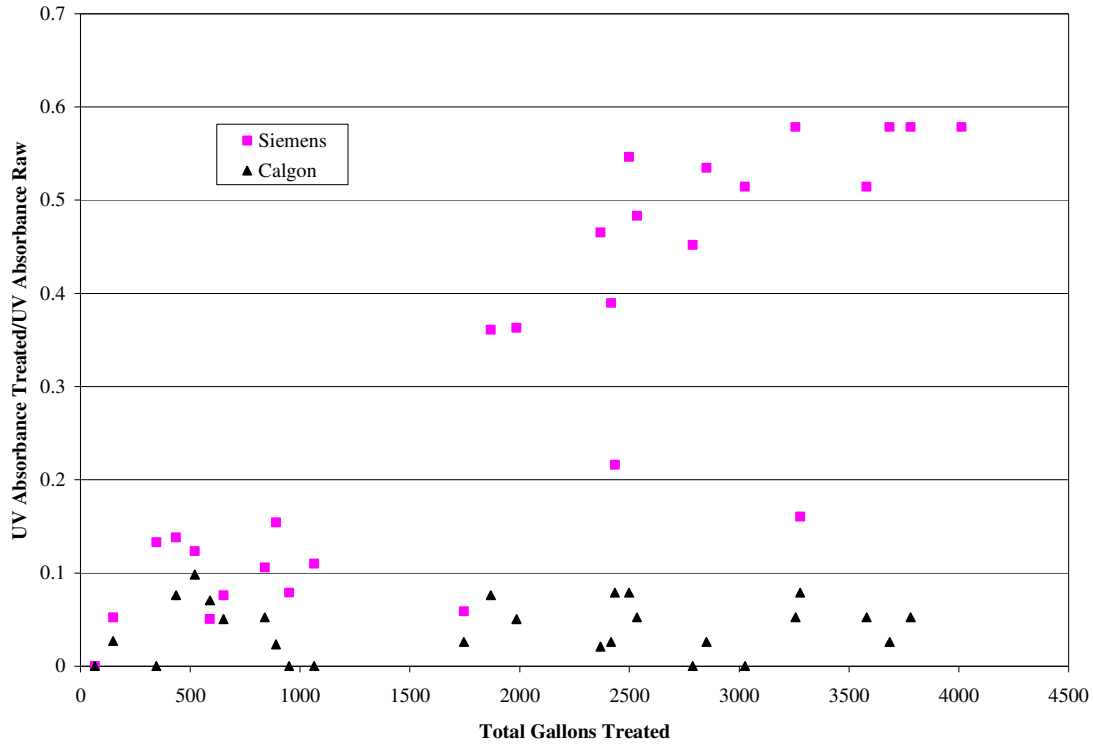


FIGURE 1 Comparison of carbon performance.

Since the purpose of the pilot test is to reduce THMs, maximum total THM formation potential (MTTHMFP) samples were taken to ascertain THM precursor removal. The results of the tests from samples taken on April 9, 2014 after each carbon had treated approximately 3,000 gallons are shown in Table 1.

**TABLE 1
TTHMFP Test Results**

Sample Location	Total THM Formation Potential, $\mu\text{g/L}$
Post Siemens Carbon	285
Post Calgon Carbon	29
Post Atec Filter (No Carbon)	344

The data in Table 1 indicate that the Calgon carbon is providing excellent removal while the Siemens unit is allowing approximately 10 times the THM precursors through the carbon. This is consistent with the UV absorbance data discussed above. While the MTTHMFP represents the maximum THM level that can be formed, the actual THM level is much lower. For example, the

April 9, 2014 post-Atec MTTHMFP level was 344 µg/L while the distribution system THM compliance sample from April 2, 2014 was only 75.5 µg/L suggesting that the distribution system THM levels are only 20-25 percent of the maximum formation potential. The current MCL is 80 µg/L.

UV254 as a Measurement Tool

UV254 was selected as a measuring tool because of its simplicity and ease of use. It is thought to be a surrogate for THM precursors. With the unit that was provided for Surfside use, UV percent transmittance is measured and this value is then converted to UV absorbance by the following formula:

$$\text{UV absorbance} = -\log(\text{UV transmittance expressed as a fraction})$$

Surfside has taken tannin, TOC, and MTTHMFP during the pilot study and these data can be compared with UV254 data to ascertain the effectiveness of UV254 as a surrogate. Figure 2 contains a comparison of UV data and tannin. It appears that the correlation is fairly good and possibly exponential in correlation.

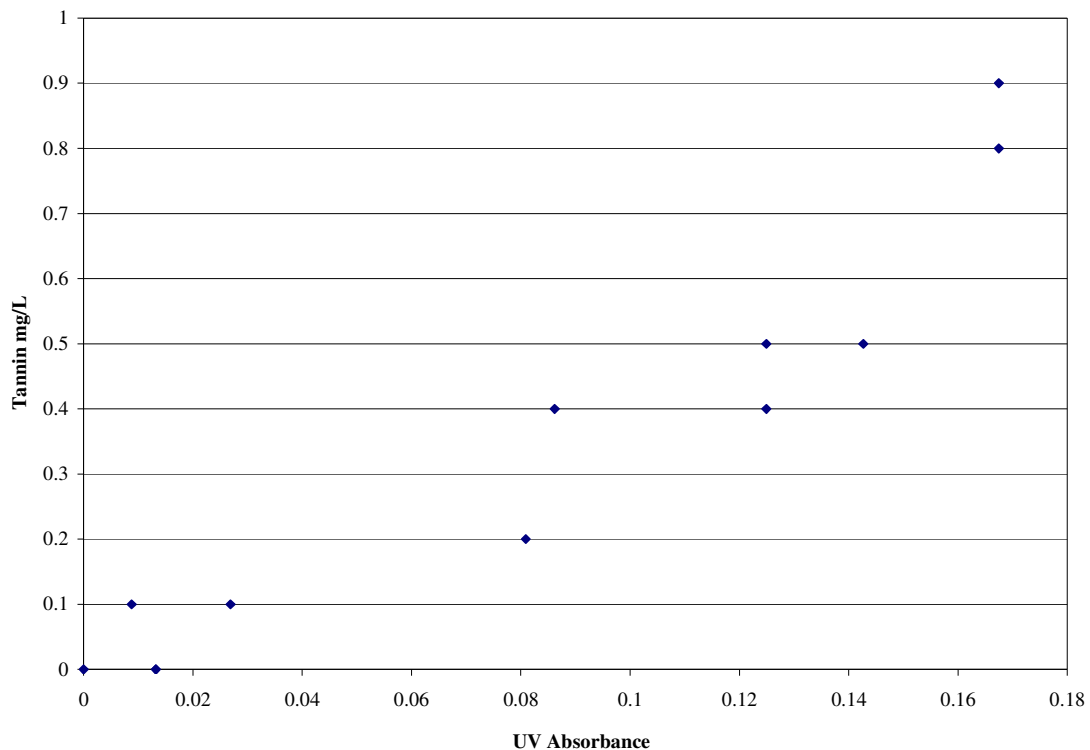


FIGURE 2 Comparison of UV254 Absorbance and Tannin Concentration

Figure 3 shows the correlation between UV absorbance and total organic carbon (TOC). The comparison is roughly linear for the limited number of data points.

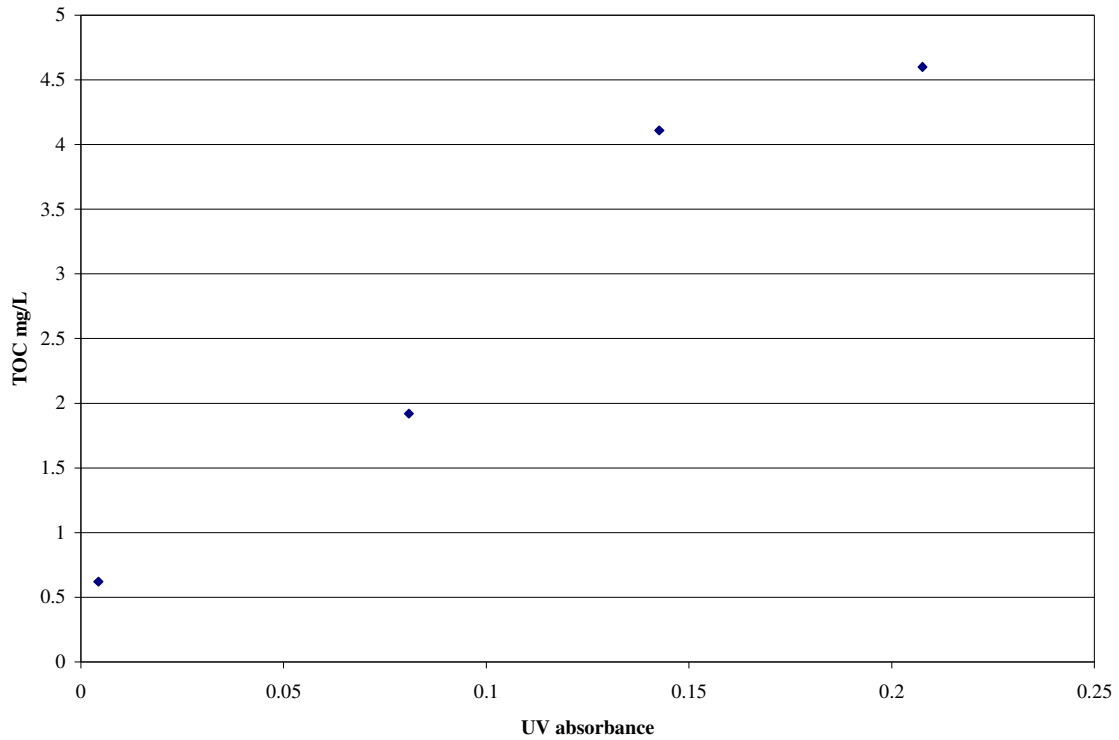


FIGURE 3 Comparison of UV Absorbance and Total Organic Carbon (TOC)

Figure 4 shows a comparison of UV absorbance and the MTTHMFP data. The correlation appears to be linear and excellent but the data only includes three points. The data point at left corresponds to the Calgon carbon data while the post-Atec (no carbon) data is the far upper right. The middle data point is from the Siemens unit.

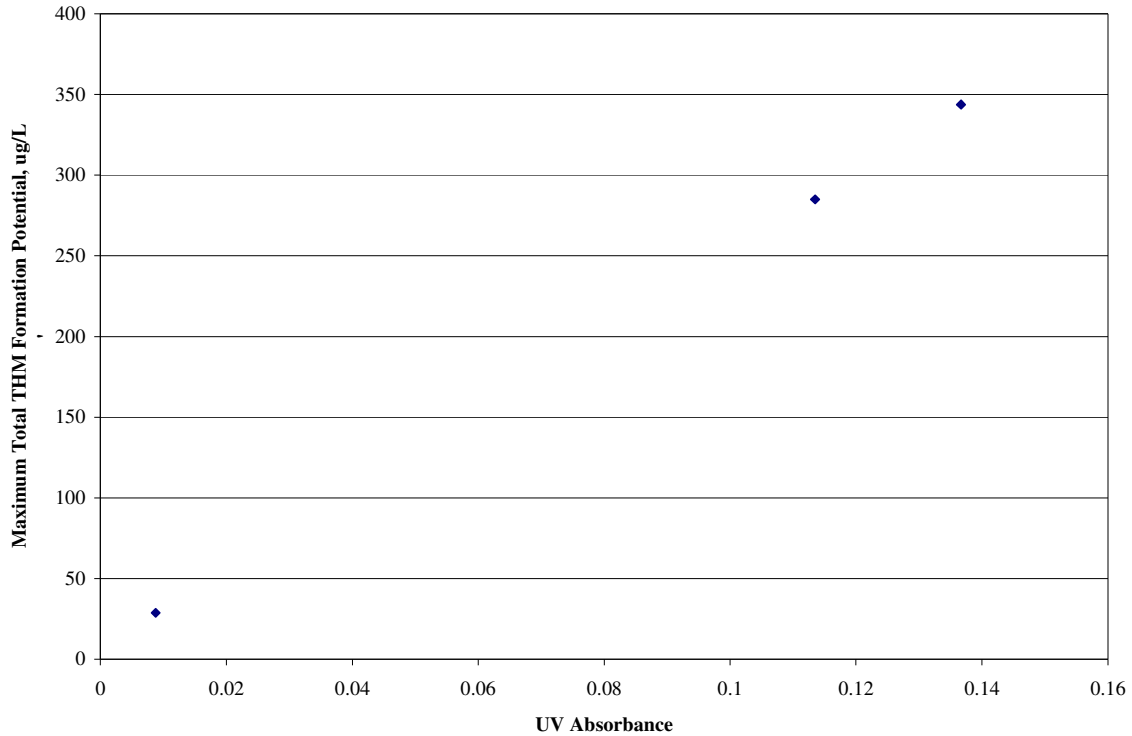


FIGURE 4 Comparison of UV Absorbance and MTTHMFP data.

In short, UV254 appears to be a good surrogate for measuring the organic parameters, especially MTTHMFP.

Other Items

Both columns appear to be removing significant portions of iron and manganese from the water. The majority of the iron is removed and significant amounts of manganese are also removed. Surfside staff have backwashed the units a couple of times in an attempt to removed accumulated precipitated iron and manganese. However, the units are not set up to provide a vigorous and thorough backwash. The long term effect of this activity has not been determined but it is possible that the accumulation of iron and manganese solids on the carbon may decrease the life of the carbon and affect its ability to remove THM precursors.

A single baseline sample of THMs was taken immediately after the Atec unit without carbon treatment. The sample indicated that the water had a concentration of THMs at that point of 18 µg/L. A compliance sample in the distribution system from a week earlier had 75.5 µg/L of total

THMs suggesting that approximately 80 percent of the THMs are formed in the reservoirs and distribution system. This is consistent with Gray & Osborne's experience at other systems.

Recommendation

It is our recommendation that the pilot study continue to be operated in its current fashion to establish the carbon life of the Calgon carbon. The Siemens carbon appears to be sufficiently spent to conclude that it will not be a good candidate for this project.

We would recommend installing another test after the Atec unit to help determine the best location for installing a future full-scale unit. One possibility would be to remove the Siemens unit and reinstall it after the Atec unit and fill it with Calgon Filtrasorb 400 carbon. Because of the uncertainty of the effect of removing iron and manganese on the carbon life, installing a pilot unit after the Atec unit, which removes iron and manganese, would provide a good comparison and possible insight into the effect of iron and manganese removal on the carbon.

Date	Employee	M&O	WMR	MIP	common prop.	CMP	Total	Work Description/Service Call Description	Locate	Service Call	New Service	Main Break	Main Break Time		
													Start	End	Address of Locate, Service Call, New Service, or Main Break
Mon	Gil		8.0					WMMR - 120 FEET, 1 SERVICE		1					
7-Apr	Aaron		8.0												
	Larry		8.0												
	Chris		8.0												
	April	8.0													
	John				7.5										
	Dan	5.5													
Tue	Gil	8.0						WMMR - 100 FEET, 1 SERVICE							
8-Apr	Aaron		8.0												
	Larry		8.0												
	Chris		8.0												
	April	8.0													
	John				5.5										
	Dan	5.5													
Wed	Gil	7.0	2.5					WMMR - 3 SERVICES, 80 FEET							
9-Apr	Aaron		9.5												
	Larry		9.5												
	Chris		9.5												
	April	8.0													
	John														
	Dan	5.5													
Thu	Gil	6.0				2.0		WMMR - 100 FEET							
10-Apr	Aaron		8.0												
	Larry		8.0												
	Chris		8.0												
	April	8.0						BAT TESTING							
	John														
	Dan	5.5													
Fri	Gil	8.0						WMMR - 80 FEET, 2 SERVICES							
11-Apr	Aaron		8.0												
	Larry		8.0												
	Chris		8.0												
	April	8.0						OPEN RESERVOIRS, MARK SCOTT							
	John				5.0										
	Dan														
	AH SC	3.0						LARRY - WEEKEND							
	Total	94.0	135.0	0.0	18.0	2.0	0.0		0	1	0	0			

AH SC = After Hours/Service Calls

Date	Employee	M&O	WMR	MIP	common prop.	CMP	Total	Work Description/Service Call Description	Locate	Service Call	New Service	Main Break	Main Break Time		
													Start	End	Total
Mon	Gil	8.0						Began push. Class							
14-Apr	Aaron	8.0													
	Larry	8.0													
	Chris	8.0													
	April	8.0						BAT test							
	John														
	Dan														
Tue	Gil				8.0			Removed tree & stump at 357th path.							
15-Apr	Aaron	8.0													
	Larry				8.0										
	Chris				8.0										
	April	8.0													
	John														
	Dan														
Wed	Gil	5.0			3.0			357th path. Locates	2						
16-Apr	Aaron	8.0													
	Larry	5.0			3.0										
	Chris	5.0			3.0										
	April	8.0													
	John														
	Dan														
Thu	Gil	8.0						Replaced cl2 pump. Sent 2 pumps for rebuild. Cleaned valve covers in distribution. Rocked hydrant.	1						
17-Apr	Aaron	8.0													
	Larry	8.0													
	Chris	8.0													
	April	8.0						Replace post-filter feed pump. BAT test.							
	John														
	Dan														
Fri	Gil	8.0						Dug out DC at business office, cleaned out and repositioned. BAT test.							
18-Apr	Aaron	8.0													
	Larry	8.0													
	Chris	8.0													
	April	8.0						Backwash pilot test columns. BAT test.							
	John														
	Dan														
	AH SC	3.0						Chris - weekend							
	Total	170.0	0.0	0.0	33.0	0.0	0.0		3	0	0	0			

AH SC = After Hours/Service Calls

M&O WMR MIP L&B CMP Total

Date	Employee	M&O	WMR	MIP	common prop.	CMP	Total	Work Description/Service Call Description	Locate	Service Call	New Service	Main Break	Main Break Time		
													Start	End	Total
Mon	Gil	8.0						WMR & CLEAN UP	1						
28-Apr	Aaron	1.0	7.0												
	Lawrence	1.0	7.0												
	Chris	1.0	7.0												
	April	8.0													
	John	8.0						FLUSHING							
	Dan	5.0													
Tue	Gil	8.0						WMR							
29-Apr	Aaron		8.0												
	Lawrence		8.0												
	Chris		8.0												
	April	8.0													
	John	8.0													
	Dan	5.0													
Wed	Gil	8.0													
30-Apr	Aaron		8.0												
	Lawrence		8.0												
	Chris		8.0												
	April	8.0						BAT REPAIR & TEST	1						
	John	5.5			3.0			FLUSHING							
	Dan	5.0													
Thu	Gil	8.0													
1-May	Aaron	4.0			4.0										
	Lawrence	4.0			4.0										
	Chris	4.0			4.0										
	April	8.0						BAT							
	John	6.0			2.0			FLUSHING, MOWING							
	Dan	5.0													
Fri	Gil	8.0							1						
2-May	Aaron	5.5			2.5					1					
	Lawrence	5.5			2.5										
	Chris	5.5			2.5										
	April	8.0													
	John	8.0						FLUSHING							
	Dan	0.0													
5/3-5/4	AH SC	3.0						AARON - WEEKEND	2	2	0	0			
	Total	170.0	69.0	0.0	24.5	0.0	0.0								

AH SC = After Hours/Service Calls

WAC 246-290-100

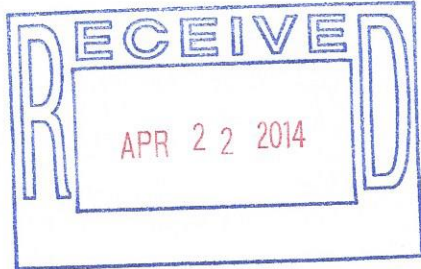
Water System Plan

- 1) The purpose of this section is to establish a uniform process for purveyors to:
 - a) Demonstrate the system's operational, technical, managerial, and financial capability to achieve and maintain compliance with relevant local, state, and federal plans and regulations;
 - b) Demonstrate how the system will address present and future needs in a manner consistent with other relevant plans and local, state, and federal laws, including applicable land use plans;
 - c) Establish eligibility for funding under chapter 246-296 WAC.
- 2) Purveyors of the following categories of community public water systems shall submit a water system plan for review and approval by the department:
 - a) Systems having one thousand or more services;
 - b) Systems required to develop water system plans under the Public Water System Coordination Act of 1977 (chapter 70.116 RCW);
 - c) Any system experiencing problems related to planning, operation, and/or management as determined by the department;
 - d) All new systems;
 - e) Any expanding system; and
 - f) Any system proposing to use the document submittal exception process in WAC 246-290-125.
- 3) The purveyor shall work with the department to establish the level of detail for a water system plan. In general, the scope and detail of the plan will be related to size, complexity, water supply characteristics, forecasted demand characteristics, past performance, and use of the water system. Project reports may be combined with a water system plan.
- 4) In order to demonstrate system capacity, the water system plan shall address the following elements, as a minimum, for a period of at least twenty years into the future:
 - a) Description of the water system, including:
 - i. Ownership and management, including the current names, addresses, and telephone numbers of the owners, operators, and emergency contact persons for the system;
 - ii. System history and background;
 - iii. Related plans, such as coordinated water system plans, abbreviated coordinated water system plans, local land use plans, groundwater management plans, and basin plans;
 - iv. Service area maps, characteristics, agreements, and policies. Water systems must include their existing service area and future service area. Municipal water suppliers must define their retail service area and meet the requirements under WAC 246-290-106. Municipal water suppliers must identify where their water rights place of use will be expanded to their service area if the requirements under WAC 246-290-107 have been met; and

- v. Satellite management, if applicable.
- b) Basic planning data, including:
- i. Current population, service connections, water use, and equivalent residential units; and
 - ii. Sufficient water production and consumption data to identify trends including the following elements:
 - A. Monthly and annual production totals for each source, including water purchased from another public water system;
 - B. Annual usage totals for each customer class as determined by the purveyor;
 - C. Annual usage totals for water supplied to other public water systems; and
 - D. For systems serving one thousand or more total connections, a description of the seasonal variations in consumption patterns of each customer class defined by the purveyor.
 - iii. Designated land use, zoning, future population, and water demand for a consecutive six-year and twenty-year planning period within the water system's service area.
- c) Demand forecasts, developed under WAC 246-290-221, for a consecutive six-year and twenty-year planning period. These shall show future use with and without savings expected from the system's water use efficiency program.
- d) For systems serving one thousand or more total connections, a demand forecast projecting demand if the measures deemed cost-effective per WAC 246-290-810 were implemented.
- e) System analysis, including:
- i. System design standards;
 - ii. Water quality analysis;
 - iii. System inventory description and analysis; and
 - iv. Summary of system deficiencies.
- f) Water resource analysis, including:
- i. A water use efficiency program. Municipal water suppliers must meet the requirements in WAC 246-290-810;
 - ii. Source of supply analysis, which includes:
 - A. An evaluation of water supply alternatives if additional water rights will be pursued within twenty years; and
 - B. A narrative description of the system's water supply characteristics and the foreseeable effect from current and future use on the water quantity and quality of any body of water from which its water is diverted or withdrawn based on existing data and studies;
 - iii. A water shortage response plan as a component of the reliability and emergency response requirements under WAC 246-290-420;
 - iv. Water right self-assessment;
 - v. Water supply reliability analysis;

- vi. Interties; and
- vii. For systems serving one thousand or more total connections, an evaluation of opportunities for the use of reclaimed water, where they exist, as defined in RCW 90.46.010(4).
- g) Source water protection under WAC 246-290-135.
- h) Operation and maintenance program under WAC 246-290-415 and 246-290-654(5), as applicable.
- i) Improvement program, including a six-year capital improvement schedule.
- j) Financial program, including demonstration of financial viability by providing:
 - i. A summary of past income and expenses;
 - ii. A one-year balanced operational budget for systems serving one thousand or more connections or a six-year balanced operational budget for systems serving less than one thousand connections;
 - iii. A plan for collecting the revenue necessary to maintain cash flow stability and to fund the capital improvement program and emergency improvements; and
 - iv. An evaluation that has considered:
 - A. The affordability of water rates; and
 - B. The feasibility of adopting and implementing a rate structure that encourages water demand efficiency.
- k) Other documents, such as:
 - i. Documentation of SEPA compliance;
 - ii. Agreements; and
 - iii. Comments from each local government with jurisdiction and adjacent utilities.
- 5) Purveyors intending to implement the project report and construction document submittal exceptions authorized under WAC 246-290-125 must include:
 - a) Standard construction specifications for distribution mains; and/or
 - b) Design and construction standards for distribution-related projects, including:
 - i. Description of project report and construction document internal review procedures, including engineering design review and construction completion reporting requirements;
 - ii. Construction-related policies and requirements for external parties, including consumers and developers;
 - iii. Performance and sizing criteria; and
 - iv. General reference to construction materials and methods.
- 6) The department, at its discretion, may require reports from purveyors identifying the progress in developing their water system plans.
- 7) Purveyors shall transmit water system plans to adjacent utilities and each local government with jurisdiction, to assess consistency with ongoing and adopted planning efforts.
- 8) Prior to department approval of a water system plan or a water system plan update, the purveyor shall:

- a) Hold an informational meeting for the water system consumers and notify consumers in a way that is appropriate to the size of the water system; and
 - b) Obtain the approval of the water system plan from the purveyor's governing body or elected governing board.
- 9) Department approval of a water system plan shall be in effect for six years from the date of written approval unless:
- a) Major projects subject to SEPA as defined in WAC 246-03-030 (3) (a) are proposed that are not addressed in the plan;
 - b) Changes occur in the basic planning data significantly affecting system improvements identified; or
 - c) The department requests an updated plan or plan amendment.
- 10) The purveyor shall update the plan and obtain department approval at least every six years. If the system no longer meets the conditions of subsection (2) of this section, the purveyor shall as directed by the department, either:
- a) Submit a water system plan amendment for review and approval with the scope to be determined by the department; or
 - b) Meet the requirements under WAC 246-290-105.



Pacific County
 Department of Community Development
 PO Box 68, South Bend, WA 98586

COLIFORM BACTERIA ANALYSIS

Date Sample Collected <u>4/15/2014</u> Month Day Year	Time Sample Collected <u>1:13</u> <input type="checkbox"/> AM <input checked="" type="checkbox"/> PM	County <u>Pacific</u>
---	---	--------------------------

Type of Water System (check only one box)
 Group A Group B Other _____

Group A and Group B Systems – Provide from Water Facilities Inventory (WFI):
 ID# 804704
 System Name: reside Homeowners Assoc.

Contact Person: Carl Gonzalez
 Day Phone: (509) 865-4171 Cell Phone: (509) 877-2397
 Eve. Phone: (509) 787-2393 FAX: (509) 865-5469

Send results to: (Print full name, address and zip code)
reside Homeowners Assoc.
1402 H St.
South Bend WA 98640

SAMPLE INFORMATION

Sample collected by (name): Carl Gonzalez
 Specific location where sample collected: 74 395 1st St NW
 Special instructions or comments:

Type of Sample (must check only one box of #1 through #4 listed below)

<p>1. <input type="checkbox"/> Routine Distribution Sample Chlorinated: Yes <u>X</u> No _____ Chlorine Residual: Total <u>05</u> Free <u>2</u></p>	<p>2. Repeat Sample (after unsatisfactory routine) <input type="checkbox"/> Distribution System <input type="checkbox"/> Source Groundwater Rule (GWR) (Population of 1,000 or less) Unsatisfactory routine lab number: _____ Unsatisfactory routine collect date: _____/_____/_____ Chlorinated: Yes _____ No _____ Chlorine Residual: Total _____ Free _____</p>
<p>3. Raw Water Source Sample <input type="checkbox"/> E. coli – GWR source sample <input type="checkbox"/> Fecal –Surface, GWI, some springs <input type="checkbox"/> Other <u>S</u> _____</p> <p><small>Public systems must provide source number from WFI</small></p>	

4. Sample Collected for Information Only
 Investigative _____ Construction / Repairs _____ Other _____

LAB USE ONLY **DRINKING WATER RESULTS** LAB USE ONLY

<input type="checkbox"/> Unsatisfactory Total Coliform Present and <input type="checkbox"/> E. coli present <input type="checkbox"/> E. coli absent <input type="checkbox"/> Fecal coliform present <input type="checkbox"/> Fecal coliform absent	<input checked="" type="checkbox"/> Satisfactory
--	--

Replacement Sample Required:
 Sample too old (>30 hours) TNTC _____
 Improper Container Turbid culture

Bacterial Density Results: Plate Count _____ /ml. E. coli _____ /100ml.
 Total Coliform _____ /100ml. Fecal Coliform _____ /100ml.

Method Code: MICR- <u>2720</u>	Date and Time Received: <u>4/15/14 1:13</u>
Date Analyzed: <u>4/15/14</u>	Date Reported: <u>4/16/14</u>
Sample Number (DOH number plus five digits): <u>137-127</u>	Lab Use Only: <u>141102009</u>



Pacific County

Department of Community Development
PO Box 68, South Bend, WA 98586

COLIFORM BACTERIA ANALYSIS

Date Sample Collected <u>4 18 2014</u> Month Day Year	Time Sample Collected <u>8:46</u> <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	County <u>Pacific</u>
---	---	--------------------------

Type of Water System (check only one box)
 Group A Group B Other _____

Group A and Group B Systems – Provide from Water Facilities Inventory (WFI):
 ID# 8 6 4 7 0 Y

System Name: units de Homeowners Assoc.

Contact Person: Carl Gonzalez

Day Phone: (509) 765-4171 Cell Phone: (509) 783-2393

Eve. Phone: (509) 783-2393 FAX: (509) 765-5409

Send results to: (Print full name, address and zip code)
units de Homeowners Assoc.
31402 11st
Ocean Park WA 98640

SAMPLE INFORMATION

Sample collected by (name): April Reynolds

Specific location where sample collected: 608 336th Ave NE corner of house

Special instructions or comments:

Type of Sample (must check only one box of #1 through #4 listed below)

<p>1. <input checked="" type="checkbox"/> Routine Distribution Sample</p> <p>Chlorinated: Yes <u>X</u> No _____</p> <p>Chlorine Residual: Total <u>10</u> Free <u>02</u></p>	<p>2. Repeat Sample (after unsatisfactory routine)</p> <p><input type="checkbox"/> Distribution System</p> <p><input type="checkbox"/> Source Groundwater Rule (GWR) (Population of 1,000 or less)</p> <p>Unsatisfactory routine lab number: _____</p> <p>Unsatisfactory routine collect date: _____/_____/_____</p> <p>Chlorinated: Yes _____ No _____</p> <p>Chlorine Residual: Total _____ Free _____</p>
<p>3. Raw Water Source Sample</p> <p><input type="checkbox"/> E. coli – GWR source sample</p> <p><input type="checkbox"/> Fecal – Surface, GWI, some springs</p> <p><input type="checkbox"/> Other</p> <p><u>S</u> _____</p> <p><small>Public systems must provide source number from WFI</small></p>	

4. Sample Collected for Information Only
 Investigative _____ Construction / Repairs _____ Other _____

LAB USE ONLY	DRINKING WATER RESULTS	LAB USE ONLY
<input type="checkbox"/> Unsatisfactory Total Coliform Present and <input type="checkbox"/> E. coli present <input type="checkbox"/> E. coli absent <input type="checkbox"/> Fecal coliform present <input type="checkbox"/> Fecal coliform absent		<input checked="" type="checkbox"/> Satisfactory

Replacement Sample Required:

Sample too old (>30 hours) TNTC _____

Improper Container Turbid culture

Bacterial Density Results: Plate Count _____ /ml. E. coli _____ /100ml.
 Total Coliform _____ /100ml. Fecal Coliform _____ /100ml.

Method Code: 2720 Date and Time Received: 4/18/14 7:20

MICR- _____ Date Reported: 4/19/14

Date Analyzed: 4/18/14 Lab Use Only: _____

Sample Number (DOH number plus five digits) 137 12786

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Surfside Homeowners Association
Project: Surfside Homeowners Assoc./86470Y
Sample Matrix: Water
Analysis Method: SM 5310 C
Prep Method: None

Service Request: K1403251
Date Collected: 04/2/14
Date Received: 04/2/14
Units: mg/L
Basis: NA

Carbon, Total Organic

Sample Name	Lab Code	Result	MRL	MDL	Dil.	Date Analyzed	Q
Pilot Test - Raw Water/S-11/Siemens Raw tap	K1403251-001	4.60	0.50	0.07	1	04/11/14	
Pilot Test - Post Calgon/S-11/Calgon finished tap	K1403251-002	0.62	0.50	0.07	1	04/11/14	
Pilot Test - Post Siemens/S-11/Siemens finished tap	K1403251-003	1.92	0.50	0.07	1	04/11/14	
Pilot Test - Post Atec/S-11/Blue pipe tap at booster sink	K1403251-004	4.11	0.50	0.07	1	04/11/14	
Method Blank	K1403251-MB	ND U	0.50	0.07	1	04/11/14	



for the State of Washington
TTHM TEST PANEL
 (Total Trihalomethanes by EPA METHOD - 524.2)

Distribution System - Report of Analyses

TRIHALOMETHANE ANALYSIS		System Group Type : <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> Other (Specify):	
Water System ID Number : 86470Y		System Name : Surfside Homeowners Assoc.	
Source: S92 (Distribution samples)		County : Pacific	
Sample Purpose		Date Received (MM/DD/YY) : 4/2/2014	
X	RC – Routine/Compliance	Date Analyzed (MM/DD/YY) : 4/10/2014	
	C-Confirmation	Date Reported (MM/DD/YY) : 4/17/2014	
	I – Investigative	COMMENTS : K1403280	
	O – Other		
Send Report to : Surfside Homeowners Association		Bill to (Client Name) :	
WA DOH			

(DOH #) ANALYTE	(0027) Chloroform	(0028) Bromo- dichloro- methane	(0029) Chlorodi- bromo- methane	(0030) Bromoform	(0031) Total THMS
SRL,ug/L	0.25	0.5	0.5	0.5	
Trigger Level, ug/L					60 *
MCL. Ug/L					80 *
Analytical Method	524.2				
Analysts Initials	HB				

Results

Lab Sample # 017+ 5 digit Lab ID	Date Collected	Sample Location	Chloro-form	Bromo- dichloro- methane	Chlorodi- bromo- methane	Bromo- form	Total THMs
01732801	4/2/2014	304 & Stackpole/Faucet in Center of Lot	55	17	3.4	0.1	75.5

SRL (State Reporting Level): The minimum reporting level established by the Washington State Department of Health (DOH)

Trigger Level: DOH Drinking Water response level. Systems with compounds detected at concentrations in excess of this level may be required to take additional samples or monitor more frequently. Please contact your DOH drinking water regional office for

MCL (maximum contaminant level): If the contaminant amount exceeds the MCL, please contact your regional DOH office to determine follow-up actions.

NA (Not Analyzed): In the results column, indicates this compound was not included in the current analysis.

ND (Not Detected): In the results column, indicates this compound was analyzed and not detected at a level greater than or equal to the SRL

< (0.00X) : The compound was not detected in the sample at or above the concentration indicated (usually the lab MRL).

*: Value listed is for the sum of the five trihalomethanes.

Additional Comments:



for the State of Washington
HALOACETIC ACID (HAA5) TEST PANEL
 HAA5s by EPA Method 552.2

Distribution System - Report of Analyses

HALOACETIC ACIDS		System Group Type : <input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> Other (Specify):	
Water System ID Number : 86470Y		System Name : Surfside Homeowners Assoc.	
Source: S92 (Distribution samples)		County : Pacific	
Sample Purpose		Date Received (MM/DD/YY) : 4/2/2014	
X	RC – Routine/Compliance	Date Analyzed (MM/DD/YY) : 4/14/2014	
	C-Confirmation	Date Reported (MM/DD/YY) : 4/18/2014	
	I – Investigative	COMMENTS : K1403280	
	O – Other		
Send Report to : Surfside Homeowners Association		Bill to (Client Name) :	
WA DOH			
Abbreviations: Monochloroacetic Acid="MCCA" Dichloroacetic Acid="DCAA" Trichloroacetic Acid="TCAA" Monobromoacetic Acid="MBAA" Dibromoacetic Acid="DBAA" Total Haloacetic Acids="HAA5a"			

(DOH #) ANALYTE	(0411) MCCA	(0412) DCAA	(0413) TCAA	(0414) MBAA	(0415) DBAA	(0416) HAA5a
SRL,ug/L	2	1	1	1	1	6
Trigger Level, ug/L						45 *
MCL. Ug/L						60 *
Analytical Method	552.2					
Analysts Initials	SS					

Results

Lab Sample # 017+ 5 digit Lab ID	Date Collected	Sample Location	MCCA	DCAA	TCAA	MBAA	DBAA	HAA5s
01732801	4/2/2014	304 & Stackpole/Faucet in Center of Lot	ND	9.1	15	ND	ND	24.1

SRL (State Reporting Level): The minimum reporting level established by the Washington State Department of Health (DOH)

Trigger Level: DOH Drinking Water response level. Systems with compounds detected at concentrations in excess of this level may be required to take additional samples or monitor more frequently. Please contact your DOH drinking water regional office for

MCL (maximum contaminant level): If the contaminant amount exceeds the MCL, please contact your regional DOH office to determine follow-up actions.

NA (Not Analyzed): In the results column, indicates this compound was not included in the current analysis.

ND (Not Detected): In the results column, indicates this compound was analyzed and not detected at a level greater than or equal to the SRL

≤ (0.00X) : The compound was not detected in the sample at or above the concentration indicated (usually the lab MRL).

*: Value listed is for the sum of the five haloacetic acids (MCCA, DCAA, TCAA, MBAA, and DBAA)

Additional Comments

Analytical Results

Client: Surfside Homeowners Association
Project: Surfside Homeowners Assoc./986470Y
Sample Matrix: Drinking water

Service Request: K1403503
Date Collected: 04/09/2014
Date Received: 04/09/2014

Volatile Organic Compounds

Sample Name: Post Atec faucet-Booster Room/S-11
Lab Code: K1403503-003
Extraction Method: METHOD
Analysis Method: 524.2

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloroform	16		0.25	1	04/11/14	04/11/14	KWG1403199	
Dibromochloromethane	ND	U	0.50	1	04/11/14	04/11/14	KWG1403199	
Bromodichloromethane	2.1		0.50	1	04/11/14	04/11/14	KWG1403199	
Bromoform	ND	U	0.50	1	04/11/14	04/11/14	KWG1403199	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	82-124	04/11/14	Acceptable
Toluene-d8	102	82-124	04/11/14	Acceptable
4-Bromofluorobenzene	77	70-130	04/11/14	Acceptable

Comments: _____

Analytical Results

Client: Surfside Homeowners Association
Project: Surfside Homeowners Assoc./986470Y
Sample Matrix: Water

Service Request: K1403503
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1403199-4
Extraction Method: METHOD
Analysis Method: 524.2

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloroform	ND	U	0.25	1	04/11/14	04/11/14	KWG1403199	
Dibromochloromethane	ND	U	0.50	1	04/11/14	04/11/14	KWG1403199	
Bromodichloromethane	ND	U	0.50	1	04/11/14	04/11/14	KWG1403199	
Bromoform	ND	U	0.50	1	04/11/14	04/11/14	KWG1403199	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	96	82-124	04/11/14	Acceptable
Toluene-d8	102	82-124	04/11/14	Acceptable
4-Bromofluorobenzene	80	70-130	04/11/14	Acceptable

Comments: _____

Analytical Results

Client: Surfside Homeowners Association
Project: Surfside Homeowners Assoc./986470Y
Sample Matrix: Drinking water

Service Request: K1403503
Date Collected: 04/09/2014
Date Received: 04/09/2014
Date Prepared: 04/09/2014

Total Trihalomethane Formation Potential

Sample Name: Post Siemens faucet-manifold/S-11 **Units:** ug/L
Lab Code: K1403503-001 **Basis:** NA
Extraction Method: METHOD **Level:** Low
Analysis Method: 524.2

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloroform	200	D	5.0	10	04/18/14	04/18/14	KWG1403479	
Dibromochloromethane	13		0.50	1	04/17/14	04/17/14	KWG1403426	
Bromodichloromethane	72		0.50	1	04/17/14	04/17/14	KWG1403426	
Bromoform	ND	U	0.50	1	04/17/14	04/17/14	KWG1403426	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	82-124	04/17/14	Acceptable
Toluene-d8	104	82-124	04/17/14	Acceptable
4-Bromofluorobenzene	74	70-130	04/17/14	Acceptable

Comments: _____

Analytical Results

Client: Surfside Homeowners Association
Project: Surfside Homeowners Assoc./986470Y
Sample Matrix: Drinking water

Service Request: K1403503
Date Collected: 04/09/2014
Date Received: 04/09/2014
Date Prepared: 04/09/2014

Total Trihalomethane Formation Potential

Sample Name: Post Calgon faucet-manifold/S-11
Lab Code: K1403503-002
Extraction Method: METHOD
Analysis Method: 524.2

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloroform	2.6		0.50	1	04/17/14	04/17/14	KWG1403426	
Dibromochloromethane	9.2		0.50	1	04/17/14	04/17/14	KWG1403426	
Bromodichloromethane	16		0.50	1	04/17/14	04/17/14	KWG1403426	
Bromoform	0.95		0.50	1	04/17/14	04/17/14	KWG1403426	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	101	82-124	04/17/14	Acceptable
Toluene-d8	104	82-124	04/17/14	Acceptable
4-Bromofluorobenzene	74	70-130	04/17/14	Acceptable

Comments: _____

Analytical Results

Client: Surfside Homeowners Association
Project: Surfside Homeowners Assoc./986470Y
Sample Matrix: Drinking water

Service Request: K1403503
Date Collected: 04/09/2014
Date Received: 04/09/2014
Date Prepared: 04/09/2014

Total Trihalomethane Formation Potential

Sample Name: Post Atec faucet-Booster Room/S-11
Lab Code: K1403503-003
Extraction Method: METHOD
Analysis Method: 524.2

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloroform	270	D	5.0	10	04/18/14	04/18/14	KWG1403479	
Dibromochloromethane	8.8		0.50	1	04/17/14	04/17/14	KWG1403426	
Bromodichloromethane	65		0.50	1	04/17/14	04/17/14	KWG1403426	
Bromoform	ND	U	0.50	1	04/17/14	04/17/14	KWG1403426	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	103	82-124	04/17/14	Acceptable
Toluene-d8	103	82-124	04/17/14	Acceptable
4-Bromofluorobenzene	75	70-130	04/17/14	Acceptable

Comments: _____

Analytical Results

Client: Surfside Homeowners Association
Project: Surfside Homeowners Assoc./986470Y
Sample Matrix: Drinking water

Service Request: K1403503
Date Collected: NA
Date Received: NA
Date Prepared: 04/09/2014

Total Trihalomethane Formation Potential

Sample Name: Method Blank **Units:** ug/L
Lab Code: KWG1403426-3 **Basis:** NA
Extraction Method: METHOD **Level:** Low
Analysis Method: 524.2

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloroform	ND	U	0.50	1	04/17/14	04/17/14	KWG1403426	
Dibromochloromethane	ND	U	0.50	1	04/17/14	04/17/14	KWG1403426	
Bromodichloromethane	ND	U	0.50	1	04/17/14	04/17/14	KWG1403426	
Bromoform	ND	U	0.50	1	04/17/14	04/17/14	KWG1403426	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	99	82-124	04/17/14	Acceptable
Toluene-d8	104	82-124	04/17/14	Acceptable
4-Bromofluorobenzene	79	70-130	04/17/14	Acceptable

Comments: _____

Analytical Results

Client: Surfside Homeowners Association
Project: Surfside Homeowners Assoc./986470Y
Sample Matrix: Drinking water

Service Request: K1403503
Date Collected: NA
Date Received: NA
Date Prepared: 04/09/2014

Total Trihalomethane Formation Potential

Sample Name: Method Blank **Units:** ug/L
Lab Code: KWG1403479-3 **Basis:** NA
Extraction Method: METHOD **Level:** Low
Analysis Method: 524.2

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloroform	ND	U	0.50	1	04/18/14	04/18/14	KWG1403479	
Dibromochloromethane	ND	U	0.50	1	04/18/14	04/18/14	KWG1403479	
Bromodichloromethane	ND	U	0.50	1	04/18/14	04/18/14	KWG1403479	
Bromoform	ND	U	0.50	1	04/18/14	04/18/14	KWG1403479	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dibromofluoromethane	98	82-124	04/18/14	Acceptable
Toluene-d8	103	82-124	04/18/14	Acceptable
4-Bromofluorobenzene	76	70-130	04/18/14	Acceptable

Comments: _____



Homeowners Association
Water Department

James Flood – David Olson – Trustees

Highest Five Residential Water Users in March, 2014 (names redacted)

Location	Account Number	Previous	Current	Usage	Average Gallons Per Day
18-01-20	0481	61,491	67,015	5,524	1,377
06-01-17	1867	10,654	14,714	4,060	1,012
02-02-11	1090	14,617	17,193	2,567	642
0W-03-12	2323	1,698	3,932	2,234	557
11-03-10	0472	22,911	25,124	2,213	552

Median Five Residential Water Users in March, 2014 (names redacted)

Location	Account Number	Previous	Current	Usage	Average Gallons Per Day
20-01-38	0525	22,408	22,986	578	144
19-04-32	2072	12,956	13,505	549	137
11-01-19	0937	3,981	4,529	548	137
SD-01-04	1877	4,356	4,889	533	133
11-03-12	1144	15,668	16,196	528	127