

**MINUTES OF THE BOARD OF PUBLIC WORKS  
Tuesday, September 20, 2016**

The Regular Meeting of the Board of Public Works was held on Tuesday, September 20, 2016 at 7:30 p.m. in the City Council Chambers located at 405 Jefferson Street, Washington, Missouri. The following were present/absent:

<b>MEMBERS:</b>		
Chairman	Kurt Voss	Present
Member	John Vietmeier	Present
Member	Brad Mitchell	Present
Member	Mike Radetic	Present
Ex-officio Member		
<b>OTHERS:</b>		
Council Representative	Jeff Mohesky	Absent
Council Representative	Josh Brinker	Absent
Council Representative	Steve Sullentrup	Absent
Council Representative	Greg Skornia	Present
Mayor	Sandy Lucy	Absent
City Administrator	James A. Briggs	Absent
Public Works Director	Brian Boehmer	Present
Water/Wastewater Superintendent	Kevin Quaethem	Present
Water/Wastewater Secretary	Beverly Hoyt	Present
City Engineer	John Nilges	Present
Assistant City Engineer	Andrea Lueken	Absent
Fire Chief/Emergency Management Director	Bill Halmich	Present

Originals and/or copies of agenda items of the meeting, including recorded votes are available on record in the office of the Public Works Department for one year. Video/DVD and audio tapes are kept only until the minutes have been approved for the meeting. DVD copies of this meeting are distributed to Board Members if requested.

A motion was made by Mr. Vietmeier and seconded by Mr. Mitchell to approve the minutes from the regular August 9, 2016 meeting. The motion passed without dissent.

## Wastewater

Everything is good, we do have some issues on Front Street that we are working on and will continue. The heavy rain we have had caused the manholes to back up. We are working to try and figure where that's coming from and a process to alleviate.

## Water - Donohue Invoices and Final

Apparently there was an email that we never received from Donohue with these two invoices. We asked that Donohue resend the Invoices #12 and #13 along with their final invoice to complete out the Hydraulic Study. The City has already had the chance to use this twice and it has been helpful in the development of the Water Extension project for Autumn Leaf.

A motion was made by Mr. Radetic and second by Mr. Vietmeier to approve Invoice #12 and #13 along with the Final Pay for Donohue.

The Chlorination project has already been finalized and permit received. We will be meeting with Donohue next week to go through the buildings. Once this is done Donohue will sign off and send back to MDNR(Missouri Department of Natural Resources) and that will be the final.

## Manhole Coating (15)

We went out for bids for the coating of 15 manholes that we know have infiltration problems. We are planning to line these manholes this year and monitor to see how the process works and if it holds up well. Next year if the process worked we will continue the process and do more manholes. There were several ways the lining could have been done, there is cement lining, epoxy and there is a cured-in-place process which Insituform does and is a very expensive process. This would be for manholes that are too deep and falling to pieces. Hogan Painting & Sandblasting actually comes in and cleans the manholes with a special chemical and then pressure washes. Then an epoxy cementitious material will be used. They will drill holes into the manhole that will be shot into the outside of the manhole so it fills any voids around the outside. Then they will line the entire inside of the manhole with the same material. This all happens while the flow is still going through the manhole. We went out for bids and got only three (3) bids, Visu-Sewer, Hogans Painting & Sandblasting and Utility Solutions. Utility Solutions didn't want to send anyone out to look at the manholes and I don't feel comfortable with that so we went with Hogan. This will be done this calendar year. But the money is budgeted every year.

A motion was made by Mr. Mitchell and second by Mr. Vietmeier to accept Hogan Painting & Sandblasting to coat 15 manholes. It is approved.

### Water Line Extension (Autumn Leaf)

This would be to improve fire flow in Autumn Leaf Subdivision. At this time there is only one feed coming into this off Highway A so the fire protection has been low at 787 gallons per minute (gpm) that is well below our city codes of a 1,000 gpm per residential. The plan has always been to tie into another line. Sophia and Emily Lane both have 8" lines ran up to property line for future extensions. Now the property owner has started developing on High Street and ran a 12" down. I am proposing and would like to get the Boards approval to negotiate with the property owner to see about running a 12" line all the way down and tying into the Autumn Leaf Subdivision. If we do that it will give the subdivision a proposed fire flow of a little over 1,900 gpm, this will also improve water quality over time. There has never been a water quality problem, but on our last ISO rating this is one place we got dinged on for having inadequate fire flow protection. We really do need to install at least three (3) hydrants in this subdivision somewhere. Two Thousand one hundred (2,100) feet needed and cost around \$45,000.00, that money is always budgeted in our water line extensions. We are not proposing this for the fiscal year but hoping the next fiscal year.

This will benefit the property owner as well. We are looking into this being maybe a joint venture since it will benefit the property owner as well. We could at least sit down and have a discussion on the extension and how it will benefit both sides. Board members are in agreement that we should move forward with discussions on the water line extension to Autumn Leaf Subdivision.

Chief Halmich spoke to say that he feels we have a very good working relationship with the Public Works Water and Fire Department. Last year our ISO rating was Class 3 and we were reminded that the color code should match fire flow venue. Residential is 1,000 gpm, multi-family, townhouses, apartments all should be 1,250 and Commercial is 1,500 gpm. Residential color is green, so ISO drives around and sees an orange hydrant that is 750 and questions whether it's painted wrong or the flow is not in the pipes. ISO comes out and analyzes the code, fire flow periodically and do spot checking and the two have to match. This border line extension would be getting us up to par on residential fire flow and hydrants can be repainted with the appropriate flow. This was our only deficit in the fire flow requirements. This will help our ratings.

Over 1,500 are painted blue. We calculate the flow by flowing the fire hydrant, then taking static upstream and downstream residuals. Then we color code that fire hydrant to the color with system drawn down to 20 PSI. That is minimum requirements for fire protection by MDNR standards and the EPA standards.

### Other

No Discussion.

**Old Business**

No Discussion

**Open Discussion**

No Discussion

**Next Scheduled Meeting Date:**

The next scheduled meeting date is October 11, 2016.

**Adjourn:**

There being no further business the meeting adjourned on a motion by Mr. Mitchell and second by Mr. Radetic. All in favor aye, those oppose. We are adjourned.

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Prepared by: \_\_\_\_\_  
Beverly Hoyt  
Water/Wastewater Secretary

Adopted and Approved By the Board of Public Works:

Date: \_\_\_\_\_ Signature: \_\_\_\_\_  
Secretary

# Memo

**To:** Board of Public Works Members  
**From:** Kevin Quaethem, Public Works Superintendent  
**Date:** 10/6/2016  
**Re:** Well #4 Repair Bids

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Following is the list of bidders and prices for work to repair Well #4 as per city specifications:

Company	Amount
Brotcke Well & Pump, Fenton, Missouri	\$7,250
Flynn Drilling, Troy, Missouri	\$5,550
Layne-Western, Fenton, Missouri	\$18,491
Midwest Hydro, St. Clair, Missouri	\$6,500

Due to the significant price difference, I am currently recommending the acceptance of Flynn Drilling for the amount of \$5,550.00.



		Original Total Budget	Current Total Budget	Period Activity	Fiscal Activity	Variance Favorable (Unfavorable)	Percent Remaining
<b>Fund: 400 - WATER FUND</b>							
<b>Revenue</b>							
400-35-000-450600	Penalties/Interest Chgs.	22,000.00	22,000.00	1,815.60	22,742.99	742.99	103.38 %
400-35-000-450900	Revenues-All Other	15,000.00	15,000.00	1,500.00	27,749.83	12,749.83	185.00 %
400-35-000-453100	Water Sales	1,430,000.00	1,430,000.00	126,614.90	1,379,440.35	-50,559.65	3.54 %
400-35-000-453200	Water Meter Sales	10,000.00	10,000.00	4,504.52	18,277.42	8,277.42	182.77 %
400-35-000-453500	Connection Charges	15,000.00	15,000.00	0.00	7,100.00	-7,900.00	52.67 %
400-35-000-453550	Tap Charges	500.00	500.00	100.00	225.00	-275.00	55.00 %
400-35-000-453600	Labor & Equipment Charges	500.00	500.00	0.00	3,164.05	2,664.05	632.81 %
400-35-000-453700	Miscellaneous Materials Sold	10,000.00	10,000.00	137.36	5,145.60	-4,854.40	48.54 %
400-35-000-461200	Rent/Lease-Municipal Property/Bui	53,460.00	53,460.00	4,345.80	56,382.36	2,922.36	105.47 %
400-35-000-480000	Investment Income	3,000.00	3,000.00	0.00	7,790.15	4,790.15	259.67 %
400-35-000-480100	Investment Income-notes	3,300.00	3,300.00	0.00	2,733.34	-566.66	17.17 %
	<b>Revenue Total:</b>	<b>1,562,760.00</b>	<b>1,562,760.00</b>	<b>139,018.18</b>	<b>1,530,751.09</b>	<b>-32,008.91</b>	<b>2.05 %</b>
<b>Expense</b>							
400-35-000-510100	Salaries/Wages-Regular	362,910.00	362,910.00	27,157.06	346,536.76	16,373.24	4.51 %
400-35-000-510150	Elected Board Officials Compensati	200.00	200.00	0.00	200.00	0.00	0.00 %
400-35-000-510200	Wages-Part Time/Permanent	5,100.00	5,100.00	0.00	0.00	5,100.00	100.00 %
400-35-000-510300	Salaries/Wages-Overtime	8,360.00	8,360.00	761.04	14,341.95	-5,981.95	-71.55 %
400-35-000-511100	FICA Taxes	28,810.00	28,810.00	2,020.71	26,237.61	2,572.39	8.93 %
400-35-000-511300	Health Insurance	92,110.00	92,110.00	6,797.85	84,085.24	8,024.76	8.71 %
400-35-000-511400	Dental Insurance	6,620.00	6,620.00	437.44	5,524.07	1,095.93	16.55 %
400-35-000-511600	Life Insurance	730.00	730.00	55.01	627.16	102.84	14.09 %
400-35-000-511700	LAGERS Retirement Plan	40,100.00	40,100.00	2,897.85	37,783.61	2,316.39	5.78 %
400-35-000-512601	Tuition Reimbursement	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00 %
400-35-000-512605	Employee Incentive Program	300.00	300.00	0.00	193.18	106.82	35.61 %
400-35-000-512700	HRA Deductible	22,500.00	22,500.00	0.00	13,188.14	9,311.86	41.39 %
400-35-000-512701	HRA Administration Fee	490.00	490.00	0.00	0.00	490.00	100.00 %
400-35-000-520250	Administration, Finance & IT Depar	151,810.00	151,810.00	0.00	139,159.24	12,650.76	8.33 %
400-35-000-520300	Technical Services	10,400.00	10,400.00	3,415.15	29,714.48	-19,314.48	-185.72 %
400-35-000-520400	Other Contracted Services	80,000.00	80,000.00	2,227.06	51,999.42	28,000.58	35.00 %
400-35-000-521540	Uniform Cleaning Service	2,000.00	2,000.00	111.66	1,776.14	223.86	11.19 %
400-35-000-521560	Building Repair & Maintenance	10,000.00	10,000.00	0.00	294.50	9,705.50	97.06 %
400-35-000-521620	Equipment Repair & Maintenance	12,000.00	12,000.00	966.67	5,301.99	6,698.01	55.82 %
400-35-000-521630	Vehicle Repair & Maintenance	7,500.00	7,500.00	22.00	6,423.96	1,076.04	14.35 %
400-35-000-521635	Water System Repair & Maintenanc	10,000.00	10,000.00	0.00	0.00	10,000.00	100.00 %
400-35-000-521636	Well Pump Repair & Maintenance	40,000.00	40,000.00	0.00	0.00	40,000.00	100.00 %
400-35-000-521640	Equipment Rental	1,000.00	1,000.00	25.88	1,021.16	-21.16	-2.12 %
400-35-000-522100	Advertising	200.00	200.00	0.00	0.00	200.00	100.00 %
400-35-000-522200	Property, Liability & Casualty Insur	34,610.00	34,610.00	0.00	33,143.98	1,466.02	4.24 %
400-35-000-522210	Self-Insurance Deductible	0.00	0.00	0.00	690.88	-690.88	0.00 %
400-35-000-522300	Printing/Duplicating	1,300.00	1,300.00	0.00	998.46	301.54	23.20 %
400-35-000-522400	Telephone	8,000.00	8,000.00	828.04	6,803.14	1,196.86	14.96 %
400-35-000-522410	Telephone-Alarm Control	4,500.00	4,500.00	425.34	4,678.74	-178.74	-3.97 %
400-35-000-522500	Training/Seminars	1,400.00	1,400.00	45.00	1,319.75	80.25	5.73 %
400-35-000-522600	Travel	1,200.00	1,200.00	280.14	998.29	201.71	16.81 %
400-35-000-522700	Professional Dues & Memberships	2,050.00	2,050.00	0.00	782.00	1,268.00	61.85 %
400-35-000-522900	Postage	12,000.00	12,000.00	819.92	11,438.28	561.72	4.68 %
400-35-000-522950	Credit Card Fees	4,400.00	4,400.00	178.76	5,622.59	-1,222.59	-27.79 %
400-35-000-530410	Parts-Vehicle	2,000.00	2,000.00	11.40	1,436.43	563.57	28.18 %
400-35-000-530415	Parts-Equipment	2,000.00	2,000.00	271.90	2,925.11	-925.11	-46.26 %
400-35-000-530420	Offices Supplies	1,200.00	1,200.00	30.41	498.67	701.33	58.44 %

**Budget Report**

For Fiscal: 2015-2016 Period Ending: 09/30/2016

		Original Total Budget	Current Total Budget	Period Activity	Fiscal Activity	Variance Favorable (Unfavorable)	Percent Remaining
<u>400-35-000-530500</u>	Asphalt/Rock/Cement	15,000.00	15,000.00	189.21	20,896.96	-5,896.96	-39.31 %
<u>400-35-000-530600</u>	Straw/Seeding/Plants	500.00	500.00	47.44	663.50	-163.50	-32.70 %
<u>400-35-000-530800</u>	General Supplies	7,000.00	7,000.00	2,147.32	28,758.26	-21,758.26	-310.83 %
<u>400-35-000-530900</u>	Employee Appreciation Cost	1,500.00	1,500.00	0.00	1,739.40	-239.40	-15.96 %
<u>400-35-000-531110</u>	Electricity	150,000.00	150,000.00	17,379.39	149,338.52	661.48	0.44 %
<u>400-35-000-531120</u>	Heating Fuel	1,500.00	1,500.00	9.16	1,008.95	491.05	32.74 %
<u>400-35-000-531300</u>	Gasoline & Oil	22,000.00	22,000.00	0.00	11,362.43	10,637.57	48.35 %
<u>400-35-000-532100</u>	Meters & Hydrants	25,000.00	25,000.00	8,298.94	28,329.04	-3,329.04	-13.32 %
<u>400-35-000-532200</u>	Pipe & Fittings	22,000.00	22,000.00	3,869.70	29,639.83	-7,639.83	-34.73 %
<u>400-35-000-534100</u>	Depreciation Expense	385,000.00	385,000.00	0.00	0.00	385,000.00	100.00 %
<u>400-35-000-534200</u>	SmallTools/Equipment/Furnishings	29,650.00	29,650.00	5,118.98	21,655.95	7,994.05	26.96 %
<u>400-35-000-540200</u>	Buildings	220,000.00	220,000.00	0.00	0.00	220,000.00	100.00 %
<u>400-35-000-541100</u>	Improvements Other Than Building	0.00	0.00	0.00	392.10	-392.10	0.00 %
<u>400-35-000-541110</u>	Water System Improvements	168,000.00	168,000.00	0.00	111,344.80	56,655.20	33.72 %
<u>400-35-000-542100</u>	Vehicles	31,000.00	31,000.00	0.00	0.00	31,000.00	100.00 %
<u>400-35-000-559100</u>	Bad Debts Expense	0.00	0.00	0.00	3,843.87	-3,843.87	0.00 %
<u>400-35-000-559200</u>	Bond/Note Principal	121,200.00	121,200.00	0.00	0.00	121,200.00	100.00 %
<u>400-35-090-559110</u>	Interest Expense	129,140.00	129,140.00	0.00	0.00	129,140.00	100.00 %
	<b>Expense Total:</b>	<b>2,298,790.00</b>	<b>2,298,790.00</b>	<b>86,846.43</b>	<b>1,244,718.54</b>	<b>1,054,071.46</b>	<b>45.85 %</b>
	<b>Fund: 400 - WATER FUND Surplus (Deficit):</b>	<b>-736,030.00</b>	<b>-736,030.00</b>	<b>52,171.75</b>	<b>286,032.55</b>	<b>1,022,062.55</b>	<b>138.86 %</b>

**Fund: 410 - SEWAGE TREATMENT FUND**

**Revenue**

<u>410-36-000-418500</u>	Sanitary Sewer District	13,000.00	13,000.00	1,591.59	19,747.33	6,747.33	151.90 %
<u>410-36-000-450600</u>	Penalties/Interest Charges	43,000.00	43,000.00	3,335.57	40,491.95	-2,508.05	5.83 %
<u>410-36-000-450900</u>	Revenues-All Other	5,000.00	5,000.00	0.00	4,328.26	-671.74	13.43 %
<u>410-36-000-453600</u>	Labor & Equipment Charges	100.00	100.00	0.00	105.75	5.75	105.75 %
<u>410-36-000-453700</u>	Miscellaneous Materials Sold	500.00	500.00	0.00	6.60	-493.40	98.68 %
<u>410-36-000-454100</u>	Sewer Service Charges	2,390,000.00	2,390,000.00	210,630.45	2,441,999.90	51,999.90	102.18 %
<u>410-36-000-454125</u>	Surcharge Fees	15,000.00	15,000.00	2,144.47	24,577.61	9,577.61	163.85 %
<u>410-36-000-454150</u>	Leachate Disposal Charge	70,000.00	70,000.00	3,740.00	43,690.00	-26,310.00	37.59 %
<u>410-36-000-454200</u>	Sewer Connection Charges	25,000.00	25,000.00	25.00	22,388.70	-2,611.30	10.45 %
<u>410-36-000-480000</u>	Investment Income	2,000.00	2,000.00	0.00	4,534.83	2,534.83	226.74 %
<u>410-36-000-480200</u>	Investment Income.-Bond Acct.	460,000.00	460,000.00	0.00	421,977.47	-38,022.53	8.27 %
	<b>Revenue Total:</b>	<b>3,023,600.00</b>	<b>3,023,600.00</b>	<b>221,467.08</b>	<b>3,023,848.40</b>	<b>248.40</b>	<b>0.01 %</b>

**Expense**

<u>410-36-000-510100</u>	Salaries/Wages-Regular	72,350.00	72,350.00	7,034.31	105,532.41	-33,182.41	-45.86 %
<u>410-36-000-510200</u>	Wages-PartTime/Permanent	5,100.00	5,100.00	0.00	0.00	5,100.00	100.00 %
<u>410-36-000-510300</u>	Salaries/Wages-Overtime	5,150.00	5,150.00	805.21	5,503.06	-353.06	-6.86 %
<u>410-36-000-511100</u>	FICA Taxes	6,320.00	6,320.00	586.21	8,689.17	-2,369.17	-37.49 %
<u>410-36-000-511300</u>	Health Insurance	18,030.00	18,030.00	1,328.75	26,865.89	-8,835.89	-49.01 %
<u>410-36-000-511400</u>	Dental Insurance	1,200.00	1,200.00	116.64	1,964.00	-764.00	-63.67 %
<u>410-36-000-511600</u>	Life Insurance	150.00	150.00	14.71	218.21	-68.21	-45.47 %
<u>410-36-000-511700</u>	LAGERS Retirement Plan	8,810.00	8,810.00	788.03	12,360.26	-3,550.26	-40.30 %
<u>410-36-000-512605</u>	Employee Incentive Program	400.00	400.00	0.00	48.06	351.94	87.99 %
<u>410-36-000-512700</u>	HRA Deductible	6,000.00	6,000.00	0.00	1,402.88	4,597.12	76.62 %
<u>410-36-000-512701</u>	HRA Administration Fee	110.00	110.00	0.00	0.00	110.00	100.00 %
<u>410-36-000-520250</u>	Administration, Finance & IT Depar	68,125.00	68,125.00	0.00	62,447.99	5,677.01	8.33 %
<u>410-36-000-520300</u>	Technical Services	600.00	600.00	50.05	728.01	-128.01	-21.34 %
<u>410-36-000-520400</u>	Other Contracted Services	11,000.00	11,000.00	297.15	3,611.14	7,388.86	67.17 %
<u>410-36-000-520450</u>	Public Works Staff Services	0.00	0.00	0.00	9,035.88	-9,035.88	0.00 %
<u>410-36-000-521300</u>	Tipping Fee - City of Washington	300.00	300.00	0.00	0.00	300.00	100.00 %
<u>410-36-000-521540</u>	Uniform Cleaning Service	1,500.00	1,500.00	13.02	547.59	952.41	63.49 %
<u>410-36-000-521560</u>	Building Repair & Maintenance	1,000.00	1,000.00	0.00	0.00	1,000.00	100.00 %
<u>410-36-000-521620</u>	Equipment Repair & Maintenance	30,000.00	30,000.00	1,513.76	13,511.01	16,488.99	54.96 %
<u>410-36-000-521630</u>	Vehicle Repair & Maintenance	2,500.00	2,500.00	0.00	1,997.63	502.37	20.09 %
<u>410-36-000-521640</u>	Equipment Rental	500.00	500.00	25.88	321.16	178.84	35.77 %
<u>410-36-000-522100</u>	Advertising	0.00	0.00	0.00	299.40	-299.40	0.00 %

Budget Report

For Fiscal: 2015-2016 Period Ending: 09/30/2016

		Original Total Budget	Current Total Budget	Period Activity	Fiscal Activity	Variance Favorable (Unfavorable)	Percent Remaining
<a href="#">410-36-000-522200</a>	Property, Liability & Casualty Insur	15,560.00	15,560.00	0.00	17,032.61	-1,472.61	-9.46 %
<a href="#">410-36-000-522210</a>	Self-Insurance Deductible	500.00	500.00	0.00	368.00	132.00	26.40 %
<a href="#">410-36-000-522300</a>	Printing/Duplicating	400.00	400.00	0.00	272.69	127.31	31.83 %
<a href="#">410-36-000-522400</a>	Telephone	3,000.00	3,000.00	304.85	2,690.87	309.13	10.30 %
<a href="#">410-36-000-522410</a>	Telephone-Alarm Control	3,500.00	3,500.00	162.42	1,638.90	1,861.10	53.17 %
<a href="#">410-36-000-522500</a>	Training/Seminars	1,000.00	1,000.00	0.00	439.49	560.51	56.05 %
<a href="#">410-36-000-522600</a>	Travel	500.00	500.00	0.00	376.53	123.47	24.69 %
<a href="#">410-36-000-522700</a>	Professional Dues & Memberships	500.00	500.00	0.00	591.00	-91.00	-18.20 %
<a href="#">410-36-000-522900</a>	Postage	6,000.00	6,000.00	400.08	5,384.13	615.87	10.26 %
<a href="#">410-36-000-522950</a>	Credit Card Fees	4,400.00	4,400.00	178.77	5,541.38	-1,141.38	-25.94 %
<a href="#">410-36-000-530200</a>	Lab Supplies	50.00	50.00	0.00	0.00	50.00	100.00 %
<a href="#">410-36-000-530410</a>	Parts-Vehicle	600.00	600.00	0.00	139.57	460.43	76.74 %
<a href="#">410-36-000-530415</a>	Parts-Equipment	10,000.00	10,000.00	521.52	13,470.61	-3,470.61	-34.71 %
<a href="#">410-36-000-530420</a>	Offices Supplies	500.00	500.00	13.28	366.30	133.70	26.74 %
<a href="#">410-36-000-530500</a>	Asphalt/Rock/Cement	2,500.00	2,500.00	0.00	3,719.85	-1,219.85	-48.79 %
<a href="#">410-36-000-530600</a>	Straw/Seeding/Plants	250.00	250.00	0.00	191.97	58.03	23.21 %
<a href="#">410-36-000-530800</a>	General Supplies	2,300.00	2,300.00	606.32	2,856.91	-556.91	-24.21 %
<a href="#">410-36-000-530900</a>	Employee Appreciation Cost	200.00	200.00	0.00	49.71	150.29	75.15 %
<a href="#">410-36-000-531110</a>	Electricity	44,000.00	44,000.00	5,704.91	44,881.44	-881.44	-2.00 %
<a href="#">410-36-000-531120</a>	Heating Fuel	10,500.00	10,500.00	9.17	1,008.92	9,491.08	90.39 %
<a href="#">410-36-000-531300</a>	Gasoline & Oil	7,500.00	7,500.00	0.00	6,200.54	1,299.46	17.33 %
<a href="#">410-36-000-532200</a>	Pipe & Fittings	2,500.00	2,500.00	0.00	1,619.26	880.74	35.23 %
<a href="#">410-36-000-532270</a>	Manhole Replacement Program	11,000.00	11,000.00	0.00	18,905.95	-7,905.95	-71.87 %
<a href="#">410-36-000-533100</a>	Chemicals	3,000.00	3,000.00	39.90	39.90	2,960.10	98.67 %
<a href="#">410-36-000-534100</a>	Depreciation Expense	310,000.00	310,000.00	0.00	0.00	310,000.00	100.00 %
<a href="#">410-36-000-534200</a>	SmallTools/Equipment/Furnishings	13,320.00	13,320.00	378.64	4,145.36	9,174.64	68.88 %
<a href="#">410-36-000-541100</a>	Improvements Other Than Building	140,000.00	140,000.00	0.00	0.00	140,000.00	100.00 %
<a href="#">410-36-000-541120</a>	Sanitary Sewer System Improve	150,000.00	150,000.00	0.00	14,249.65	135,750.35	90.50 %
<a href="#">410-36-000-542100</a>	Vehicles	90,000.00	90,000.00	0.00	0.00	90,000.00	100.00 %
<a href="#">410-36-000-542200</a>	Machinery & Equipment	10,000.00	10,000.00	0.00	0.00	10,000.00	100.00 %
<a href="#">410-36-000-559100</a>	Bad Debts Expense	0.00	0.00	0.00	5,942.45	-5,942.45	0.00 %
<a href="#">410-36-090-559110</a>	Interest Expense	655,800.00	655,800.00	0.00	637,168.76	18,631.24	2.84 %
<a href="#">410-36-090-559120</a>	Agent Fees	83,000.00	83,000.00	0.00	81,126.93	1,873.07	2.26 %
<a href="#">410-36-090-559130</a>	Amortization of Bond Discount/Pre	-21,340.00	-21,340.00	0.00	0.00	-21,340.00	100.00 %
<a href="#">410-36-090-559200</a>	Bond/Note Principal	930,000.00	930,000.00	0.00	930,000.00	0.00	0.00 %
<a href="#">410-36-361-510100</a>	Salaries/Wages-Regular	310,550.00	310,550.00	17,001.02	209,207.56	101,342.44	32.63 %
<a href="#">410-36-361-510300</a>	Salaries/Wages-Overtime	2,500.00	2,500.00	788.73	5,024.79	-2,524.79	-100.99 %
<a href="#">410-36-361-511100</a>	FICA Taxes	23,950.00	23,950.00	1,282.77	16,137.75	7,812.25	32.62 %
<a href="#">410-36-361-511300</a>	Health Insurance	68,340.00	68,340.00	4,081.28	47,244.13	21,095.87	30.87 %
<a href="#">410-36-361-511400</a>	Dental Insurance	4,530.00	4,530.00	252.22	2,976.17	1,553.83	34.30 %
<a href="#">410-36-361-511600</a>	Life Insurance	580.00	580.00	34.07	422.04	157.96	27.23 %
<a href="#">410-36-361-511700</a>	LAGERS Retirement Plan	33,370.00	33,370.00	1,862.61	23,528.74	9,841.26	29.49 %
<a href="#">410-36-361-512605</a>	Employee Incentive Program	200.00	200.00	0.00	96.26	103.74	51.87 %
<a href="#">410-36-361-512700</a>	HRA Deductible	9,000.00	9,000.00	0.00	12,233.51	-3,233.51	-35.93 %
<a href="#">410-36-361-512701</a>	HRA Administration Fee	220.00	220.00	0.00	0.00	220.00	100.00 %
<a href="#">410-36-361-520250</a>	Administration, Finance & IT Depar	68,125.00	68,125.00	0.00	62,447.99	5,677.01	8.33 %
<a href="#">410-36-361-520300</a>	Technical Services	20,200.00	20,200.00	1,351.70	8,961.90	11,238.10	55.63 %
<a href="#">410-36-361-520400</a>	Other Contracted Services	16,350.00	16,350.00	354.29	5,569.43	10,780.57	65.94 %
<a href="#">410-36-361-520450</a>	Public Works Staff Services	0.00	0.00	0.00	9,035.87	-9,035.87	0.00 %
<a href="#">410-36-361-521300</a>	Tipping Fee - City of Washington	1,200.00	1,200.00	0.00	1,403.50	-203.50	-16.96 %
<a href="#">410-36-361-521540</a>	Uniform Cleaning Service	500.00	500.00	73.74	1,154.16	-654.16	-130.83 %
<a href="#">410-36-361-521560</a>	Building Repair & Maintenance	2,000.00	2,000.00	313.00	313.00	1,687.00	84.35 %
<a href="#">410-36-361-521620</a>	Equipment Repair & Maintenance	108,100.00	108,100.00	245.00	18,439.85	89,660.15	82.94 %
<a href="#">410-36-361-521630</a>	Vehicle Repair & Maintenance	3,000.00	3,000.00	279.62	4,701.15	-1,701.15	-56.71 %
<a href="#">410-36-361-521640</a>	Equipment Rental	500.00	500.00	0.00	0.00	500.00	100.00 %
<a href="#">410-36-361-522200</a>	Property, Liability & Casualty Insur	21,670.00	21,670.00	0.00	19,973.58	1,696.42	7.83 %
<a href="#">410-36-361-522210</a>	Self-Insurance Deductible	500.00	500.00	0.00	0.00	500.00	100.00 %
<a href="#">410-36-361-522300</a>	Printing/Duplicating	1,050.00	1,050.00	0.00	892.44	157.56	15.01 %

Budget Report

For Fiscal: 2015-2016 Period Ending: 09/30/2016

		Original Total Budget	Current Total Budget	Period Activity	Fiscal Activity	Variance Favorable (Unfavorable)	Percent Remaining
<u>410-36-361-522400</u>	Telephone	6,500.00	6,500.00	791.14	7,742.64	-1,242.64	-19.12 %
<u>410-36-361-522410</u>	Telephone-Alarm Control	1,000.00	1,000.00	0.00	0.00	1,000.00	100.00 %
<u>410-36-361-522500</u>	Training/Seminars	800.00	800.00	0.00	0.00	800.00	100.00 %
<u>410-36-361-522600</u>	Travel	700.00	700.00	0.00	0.00	700.00	100.00 %
<u>410-36-361-522700</u>	Professional Dues & Memberships	700.00	700.00	0.00	505.00	195.00	27.86 %
<u>410-36-361-522900</u>	Postage	4,500.00	4,500.00	400.08	5,214.04	-714.04	-15.87 %
<u>410-36-361-530200</u>	Lab Supplies	13,600.00	13,600.00	294.95	1,208.06	12,391.94	91.12 %
<u>410-36-361-530410</u>	Parts-Vehicle	1,000.00	1,000.00	0.00	423.39	576.61	57.66 %
<u>410-36-361-530415</u>	Parts-Equipment	28,600.00	28,600.00	1,733.03	14,928.87	13,671.13	47.80 %
<u>410-36-361-530420</u>	Offices Supplies	500.00	500.00	0.00	129.43	370.57	74.11 %
<u>410-36-361-530500</u>	Asphalt/Rock/Cement	1,000.00	1,000.00	0.00	0.00	1,000.00	100.00 %
<u>410-36-361-530600</u>	Straw/Seeding/Plants	250.00	250.00	0.00	0.00	250.00	100.00 %
<u>410-36-361-530800</u>	General Supplies	4,000.00	4,000.00	369.32	4,272.70	-272.70	-6.82 %
<u>410-36-361-531110</u>	Electricity	170,000.00	170,000.00	20,893.26	170,356.93	-356.93	-0.21 %
<u>410-36-361-531120</u>	Heating Fuel	13,000.00	13,000.00	72.77	10,071.39	2,928.61	22.53 %
<u>410-36-361-531300</u>	Gasoline & Oil	3,000.00	3,000.00	0.00	1,994.12	1,005.88	33.53 %
<u>410-36-361-532200</u>	Pipe & Fittings	1,200.00	1,200.00	7.96	1,816.49	-616.49	-51.37 %
<u>410-36-361-533100</u>	Chemicals	17,300.00	17,300.00	2,700.00	14,515.08	2,784.92	16.10 %
<u>410-36-361-534100</u>	Depreciation Expense	890,000.00	890,000.00	0.00	0.00	890,000.00	100.00 %
<u>410-36-361-534200</u>	Small Tools/Equipment/Furnishings	14,280.00	14,280.00	106.99	5,165.96	9,114.04	63.82 %
	<b>Expense Total:</b>	<b>4,598,550.00</b>	<b>4,598,550.00</b>	<b>76,183.13</b>	<b>2,743,611.35</b>	<b>1,854,938.65</b>	<b>40.34 %</b>
	<b>Fund: 410 - SEWAGE TREATMENT FUND Surplus (Deficit):</b>	<b>-1,574,950.00</b>	<b>-1,574,950.00</b>	<b>145,283.95</b>	<b>280,237.05</b>	<b>1,855,187.05</b>	<b>117.79 %</b>
	<b>Report Surplus (Deficit):</b>	<b>-2,310,980.00</b>	<b>-2,310,980.00</b>	<b>197,455.70</b>	<b>566,269.60</b>	<b>2,877,249.60</b>	<b>124.50 %</b>

**Group Summary**

Account Type	Original Total Budget	Current Total Budget	Period Activity	Fiscal Activity	Variance Favorable (Unfavorable)	Percent Remaining
<b>Fund: 400 - WATER FUND</b>						
Revenue	1,562,760.00	1,562,760.00	139,018.18	1,530,751.09	-32,008.91	2.05 %
Expense	2,298,790.00	2,298,790.00	86,846.43	1,244,718.54	1,054,071.46	45.85 %
<b>Fund: 400 - WATER FUND Surplus (Deficit):</b>	<b>-736,030.00</b>	<b>-736,030.00</b>	<b>52,171.75</b>	<b>286,032.55</b>	<b>1,022,062.55</b>	<b>138.86 %</b>
<b>Fund: 410 - SEWAGE TREATMENT FUND</b>						
Revenue	3,023,600.00	3,023,600.00	221,467.08	3,023,848.40	248.40	0.01 %
Expense	4,598,550.00	4,598,550.00	76,183.13	2,743,611.35	1,854,938.65	40.34 %
<b>Fund: 410 - SEWAGE TREATMENT FUND Surplus (Deficit):</b>	<b>-1,574,950.00</b>	<b>-1,574,950.00</b>	<b>145,283.95</b>	<b>280,237.05</b>	<b>1,855,187.05</b>	<b>117.79 %</b>
<b>Report Surplus (Deficit):</b>	<b>-2,310,980.00</b>	<b>-2,310,980.00</b>	<b>197,455.70</b>	<b>566,269.60</b>	<b>2,877,249.60</b>	<b>124.50 %</b>

## Fund Summary

Fund	Original Total Budget	Current Total Budget	Period Activity	Fiscal Activity	Variance Favorable (Unfavorable)
400 - WATER FUND	-736,030.00	-736,030.00	52,171.75	286,032.55	1,022,062.55
410 - SEWAGE TREATMENT FUND	-1,574,950.00	-1,574,950.00	145,283.95	280,237.05	1,855,187.05
Report Surplus (Deficit):	-2,310,980.00	-2,310,980.00	197,455.70	566,269.60	2,877,249.60

## Memorandum

**TO:** James A. Briggs, City Administrator  
 Brian N. Boehmer, Public Works Director  
 Board of Public Works

**FROM:** Kevin Quaethem, Water and Wastewater Superintendent

**DATE:** October 7, 2016

**RE:** Work Performed by the Water and Wastewater Departments

### STATUS OF MAJOR CONTRACTS –SEPTEMBER 2016

PROJECT	VENDOR	CONTRACT AMOUNT	PREVIOUSLY APPROVED	CURRENTLY APPROVED	BALANCE
Hydraulic Study	Donohue	\$ 58,000.00		\$11,600.00	\$0.00
WWTP Electrical Modifications	Electric Unlimited	\$274,300.00			\$23,100.00

### SEPTEMBER 2016

Water Pumped September 2016..... 64,422,009 2.15 mgd  
 Wastewater Effluent Flow September 2016. .... 78,980,000 2.63 mgd  
 Missouri One Call Locate messages received for locates.....204  
 Meters Issued as new. ....2  
 Meters Issued as replacements. ....0  
 Meters Issued as new for irrigation systems .....0  
 Water breaks repaired. ....2  
 Sewer Routines .....8  
 Delinquent Accounts actually shut off in September 2016. ....42

### WATER DEPARTMENT FIELD WORK PERFORMED – SEPTEMBER 2016

- |  |   |
|--|---|
| 1. Shop Maintenance                    | 12. Water Break @ 620 Walnut                |
| 2. Meter/Swapping/Repair               | 13. Water Break @ Laura Ln & Laura Ct.      |
| 3. Repair/Replace/Number Hydrants      | 14. Water Break @ W. Main & Tiemann         |
| 4. Check Wells/Lift Stations/Heaters   | 15. Water Break @ 2812 Thoroughbred         |
| 5. Missouri One Call Locates           | 16. Painted Well Buildings                  |
| 6. Hydrant Flushing/Painting           | 17. Added Lights to Well #7                 |
| 7. Repair Service Line @ Elbert        | 18. Asphalt Patch Work (Various Locations)  |
| 8. Repair Service Line @ Apple Blossom | 19. Heaters Installed in Well Buildings     |
| 9. Water Tap @ Deutsch Crest           | 20. Ran Electrical Wiring to Sign @ Airport |
| 10. Repair Curb Stop @ Riverfront      |   |
| 11. Water Samples                      |   |

### **WASTEWATER DEPARTMENT FIELD WORK PERFORMED – SEPTEMBER 2016**

1. Sewer Routines
2. Daily lab work and routines.
3. Cleaned belt press.
4. Clean Process Filters
5. Run belt press.
6. Replace Belts on Blower
7. Sprayed all Lift Stations
8. Checked Drain & temp gauges
9. Cleaned polymer barrels
10. Emergency Call Out West End Lift Station
11. Emergency Call Out Walnut & West End
12. Locate Sewer @ 47 & Washington Dr.
13. TV'd Sewer @ 711 W 8<sup>th</sup> Street
14. Replaced Riser Ring @ 1045 Marilyn
15. TV's lines @ Marthasville

### **ROUTINE FIELD WORK**

1. Read meters and performed rereads as necessary.
2. Performed read-outs on meters (persons moving in and out)
3. Installed reading device receptacles on houses where new/replacement meters were installed.
4. Issued meters and materials to contractors, owners, etc.
5. Took necessary water samples of the distribution system.
6. Flushed hydrants – scheduled routine flushing.
7. Wastewater lab work.
8. Root-sawed and/or cleaned sewer lines where necessary.
9. Hauled sludge.
10. Televised sewer lines.
11. Performed river gauge measurement.
12. Performed sewer and water service main inspections.
13. Located water and sewer lines.
14. Monitored construction of water and sewer mains in new developments.
15. Responded to service call requests.
16. Invoiced for meters, materials and other charges as necessary.
17. Performed maintenance and repairs on buildings, vehicles, and equipment.

Missouri Department of Natural Resources  
 Division of Environmental Quality  
**Microbiological Analysis Report**

P.O. Box 176  
 Jefferson City, MO 65102  
 314--751-5331

Public Water System Name <b>Washington Water Dept.</b>				Laboratory Name <b>Franklin County Lab</b>			
Street Address <b>405 Jefferson Street</b>				<b>7419 Hwy 47 Ste. A Union, MO</b>			
City <b>Washington</b>		Zip Code <b>63090</b>		Certification Number <b>00700</b>			
County <b>Franklin</b>		I.D. Number <b>MO6010838</b>					
Date M/D/Y	Collection Point	Sample Type	Location Code	Sample Results		Chlorine Residual	
				Coliform	E-coli	Total	Free
9/6/16	404 E 2nd	R	R-13	A	A	0.57	0.44
9/6/16	4 Chamer	R	R-3	A	A	0.29	0.29
9/6/16	1651 W. 5th	R	R-16	A	A	1.33	1.31
9/6/16	1220 Lakeshore Dr	R	R-1	A	A	1.17	1.13
9/6/16	1901 W. Main	R	R-17	A	A	1.17	1.13
9/13/16	550 E 14th	R	R-5	A	A	0.63	0.54
9/13/16	200 E. 14th	R	R-8	A	A	0.66	0.53
9/13/16	1 Scenic	R	R-11	A	A	1.89	1.74
9/13/16	4 Chamer	R	R-3	A	A	0.48	0.44
9/13/16	519 Washington	R	R-12	A	A	1.51	1.39
9/20/16	4 Chamer	R	R-3	A	A	0.88	0.77
9/20/16	404 E 2nd	R	R-13	A	A	0.31	0.26
9/20/16	405 Jefferson	R	R-4	A	A	0.37	0.35
9/20/16	1901 W. Main	R	R-17	A	A	0.77	0.71
9/20/16	1651 W 5th	R	R-16	A	A	1.00	0.95
Total Routine Samples: 15				Signed: Kristen Wideman		Date: 9/26/2016	
Monitoring Violation ___ Yes <u>X</u> No				Title: Lab Assistant			
MCL Violation ___ Yes <u>X</u> No							



October 4, 2016

Mr. Franklin Fick  
St. Louis Regional Office  
7545 South Lindbergh Blvd., Suite 210  
St. Louis, MO 63125-4843

Re: Disinfectant Monitoring Log for Month of September 2016

Dear Mr. Fick:

Enclosed you will find the Disinfectant Monitoring Log containing all our daily chlorine readings as of September, 2016.

Please let us know if you need any additional data.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Kevin Quaethem', written in black ink.

Kevin Quaethem  
Water/WW Superintendent

KQ/bh

PUBLIC WORKS  
Office Location: 4 Chamber Drive  
Washington, MO 63090

Mailing Address: 405 Jefferson Street  
Washington, MO 63090

WATER/WASTE WATER/STREET DEPARTMENTS (636)390-1030 Fax: (636)390-1038

## Disinfectant Monitoring

<b>PWS:</b>	The City of Washington - Well # 3			
<b>PWSID:</b>	.MO6010838			
<b>County:</b>	Franklin			
<b>Month:</b>	September			
<b>Date</b>	<b>Time</b>	<b>Free Cl (mg/l)</b>	<b>Total Cl (mg/l)</b>	<b>Sampler</b>
1	8:08	0.77		KD
2	9:20	0.65		RW
3	7:34	1.08		RW
4	6:47	0.68		RW
5	6:48	0.61		RW
6	8:28	0.54	0.44	RW
7	8:36	0.5		CA
8	7:45	0.81		CA
9	9:20	0.99		BK
10	4:30	0.83		BK
11	7:02	0.8		CA
12	10:02	0.77		CA
13	8:05	0.78	1.39	CA
14	8:52	0.78		CA
15	8:23	0.76		CA
16	8:30	0.67		BK
17	7:37	0.89		KD
18	7:16	1.28		KD
19	9:43	0.7		CA
20	8:45	0.91	0.26	CA
21	8:21	0.65		CA
22	9:20	0.52		BK
23	8:46	0.59		CA
24	7:30	0.8		CDC
25	7:45	0.51		CDC
26	9:22	0.71		CA/RW
27	8:20	0.51		BK
28	10:38	0.51		KD
29	8:52	0.52		KD
30	8:40	0.51		CDC
31				

**Notes:**

## Disinfectant Monitoring

<b>PWS:</b>	The City of Washington - Well # 4			
<b>PWSID:</b>	.MO6010838			
<b>County:</b>	Franklin			
<b>Month:</b>	September			
<b>Date</b>	<b>Time</b>	<b>Free Cl (mg/l)</b>	<b>Total Cl (mg/l)</b>	<b>Sampler</b>
1		WELL OUT		
2		WELL OUT		
3		WELL OUT		
4		WELL OUT		
5		WELL OUT		
6	8:13	WELL OUT		KD
7	9:32	WELL OUT		CA
8	7:37	WELL OUT		CA
9	8:12	WELL OUT		BK
10	5:25	WELL OUT		BK
11	6:33	WELL OUT		CA
12	9:55	WELL OUT		CA
13	7:59	WELL OUT		CA
14	8:40	WELL OUT		CA
15	8:14	WELL OUT		CA
16	8:20	WELL OUT		BK
17	7:30	WELL OUT		KD
18	7:30	WELL OUT		KD
19	9:30	WELL OUT		CA
20	8:37	WELL OUT		CA
21	8:12	WELL OUT		CA
22	8:15	WELL OUT		BK
23	8:35	WELL OUT		CA
24	7:18	WELL OUT		CDC
25	7:30	WELL OUT		CDC
26	9:05	WELL OUT		CA
27	7:41	WELL OUT		CA
28	9:53	WELL OUT		KD
29	10:00	WELL OUT		KD
30	8:19	WELL OUT		CDC
31				

Notes:

## Disinfectant Monitoring

<b>PWS:</b>	The City of Washington - Well # 5			
<b>PWSID:</b>	.MO6010838			
<b>County:</b>	Franklin			
<b>Month:</b>	September			
<b>Date</b>	<b>Time</b>	<b>Free Cl (mg/l)</b>	<b>Total Cl (mg/l)</b>	<b>Sampler</b>
1	9:25	0.63		BK
2	9:13	0.56		RW
3	7:41	0.89		RW
4	7:12	0.7		RW
5	6:56	0.59		RW
6	8:51	0.59		KD
7	10:00	0.56		CA
8	7:54	0.5		CA
9	9:28	0.53		BK
10	4:40	0.5		BK
11	7:25	0.55		CA
12	11:00	0.5		CA
13	8:45	0.75		CA
14	9:36	0.5		CA
15	8:47	0.52		CA
16	8:36	0.5		BK
17	8:05	0.51		KD
18	6:39	0.52		KD
19	10:20	0.53		CA
20	9:15	0.53		CA
21	8:55	0.54		CA
22	9:30	0.52		BK
23	9:45	0.51		CA
24	8:27	1.05		CDC
25	9:00	0.54		CDC
26	9:55	0.52		CA/RW
27	8:36	0.67		CA
28	11:38	0.63		KD
29	7:10	0.68		RW
30	9:20	0.64		CDC
31				

Notes:

### Disinfectant Monitoring

<b>PWS:</b>	The City of Washington - Well # 6			
<b>PWSID:</b>	.MO6010838			
<b>County:</b>	Franklin			
<b>Month:</b>	September			
Date	Time	Free Cl (mg/l)	Total Cl (mg/l)	Sampler
1	7:35	Well out of Service		RW
2	7:08	Well out of Service		RW
3	8:05	Well out of Service		RW
4	7:38	Well out of Service		RW
5	7:18	Well out of Service		RW
6	8:09	Well out of Service		KD
7	9:28	Well out of Service		CA
8	7:32	Well out of Service		CA
9	8:05	Well out of Service		BK
10	5:25	Well out of Service		BK
11	8:27	Well out of Service		CA
12	9:50	Well out of Service		CA
13	7:52	Well out of Service		CA
14	8:38	Well out of Service		CA
15	8:10	Well out of Service		CA
16	8:10	Well out of Service		BK
17	7:23	Well out of Service		KD
18	7:23	Well out of Service		KD
19	8:00	Well out of Service		CA
20	8:32	Well out of Service		CA
21	8:08	Well out of Service		CA
22	7:50	Well out of Service		BK
23	8:23	Well out of Service		CA
24	7:10	Well out of Service		CDC
25	7:20	Well out of Service		CDC
26	8:59	Well out of Service		CA/RW
27	7:50	Well out of Service		BK
28	8:36	Well out of Service		KD
29	8:18	Well out of Service		KD
30	8:10	Well out of Service		CDC
31		Well out of Service		

Notes:

## Disinfectant Monitoring

<b>PWS:</b>	The City of Washington - Well # 7			
<b>PWSID:</b>	.MO6010838			
<b>County:</b>	Franklin			
<b>Month:</b>	September			
<b>Date</b>	<b>Time</b>	<b>Free Cl (mg/l)</b>	<b>Total Cl (mg/l)</b>	<b>Sampler</b>
1	9:35	0.62		BK
2	9:40	0.83		RW
3	7:00	0.6		RW
4	6:54	0.54		RW
5	7:06	0.59		RW
6	8:36	0.58		RW
7	8:11	0.53		CA
8	8:30	0.56		CA
9	9:42	0.68		BK
10	4:55	0.59		BK
11	7:10	0.61		CA
12	10:38	0.57		CA
13	8:12	0.64		CA
14	9:03	0.58		CA
15	8:30	0.54		CA
16	8:46	0.51		BK
17	7:44	0.58		KD
18	7:04	0.53		KD
19	9:54	0.87		CA
20	8:53	0.75		CA
21	8:24	0.7		CA
22	8:17	0.59		KD
23	9:17	0.62		CA
24	7:45	0.71		CDC
25	8:28	0.5		CDC
26	9:36	0.61		CA/RW
27	9:00	0.55		BK
28	10:28	0.64		CA
29	10:05	0.5		RW
30	8:55	0.66		CDC
31				

Notes:

## Disinfectant Monitoring

<b>PWS:</b>	The City of Washington - Well # 8			
<b>PWSID:</b>	.MO6010838			
<b>County:</b>	Franklin			
<b>Month:</b>	September			
<b>Date</b>	<b>Time</b>	<b>Free Cl (mg/l)</b>	<b>Total Cl (mg/l)</b>	<b>Sampler</b>
1	8:35	0.77		BK
2	7:36	0.5		RW
3	6:22	0.77		RW
4	6:27	0.62		RW
5	6:15	0.65		RW
6	7:54	0.7	0.29	RW
7	9:22	0.63		CA
8	7:24	0.59		CA
9	7:50	0.64		BK
10	5:42	1.55		BK
11	6:22	0.59		CA
12	9:42	0.6		CA
13	7:44	0.74	0.44	CA
14	8:15	0.62		CA
15	7:40	0.5		CA
16	8:00	0.5		BK
17	7:16	0.53		KD
18	7:32	0.55		KD
19	8:17	0.5		KD
20	8:26	0.52	0.77	CA
21	7:59	0.66		CA
22	7:40	0.7		BK
23	8:18	0.67		CA
24	6:30	0.7		CDC
25	6:30	0.55		CDC
26	8:53	0.74		CA/RW
27	7:40	0.72		BK
28	8:06	0.69		KD
29	8:00	0.7		RW
30	7:40	0.58		CDC
31				

Notes:

## Disinfectant Monitoring

<b>PWS:</b>	The City of Washington - Well # 9			
<b>PWSID:</b>	.MO6010838			
<b>County:</b>	Franklin			
<b>Month:</b>	September			
<b>Date</b>	<b>Time</b>	<b>Free Cl (mg/l)</b>	<b>Total Cl (mg/l)</b>	<b>Sampler</b>
1	7:50	1.31		BK
2	7:21	0.67		RW
3	6:04	0.65		RW
4	5:53	0.87		RW
5	5:55	0.5		RW
6	9:11	0.84	1.31	RW
7	8:55	1.22		CA
8	7:08	1.91		CA
9	7:15	1.5		BK
10	6:00	1.39		BK
11	5:43	1.62		CA
12	9:30	1.66		CA
13	7:23	0.88	0.66	CA
14	7:49	0.75		CA
15	7:32	0.9		CA
16	7:30	0.97		BK
17	6:58	0.93		KD
18	6:31	0.91		KD
19	7:43	0.67		KD/CA
20	8:09	0.64	0.95	CA
21	7:44	0.63		CA
22	7:10	0.54		BK
23	7:44	0.52		CA
24	6:06	0.5		CDC
25	6:13	0.5		CDC
26	8:34	0.53		CA
27	7:24	0.5		CA/BK
28	7:51	0.5		KD/DP
29	7:31	0.88		RW
30	7:27	0.88		CDC
31				

Notes:

## Disinfectant Monitoring

<b>PWS:</b>	The City of Washington - Well # 10			
<b>PWSID:</b>	.MO6010838			
<b>County:</b>	Franklin			
<b>Month:</b>	September			
<b>Date</b>	<b>Time</b>	<b>Free Cl (mg/l)</b>	<b>Total Cl (mg/l)</b>	<b>Sampler</b>
1	8:50	1.27		BK
2	7:30	1.12		RW
3	6:12	1.3		RW
4	6:03	1.4		RW
5	6:07	1.27		RW
6	7:39	0.6	1.13	RW
7	9:15	0.59		CA
8	7:15	0.61		CA
9	7:25	0.51		BK
10	6:23	0.9		CA
11	5:52	0.5		CA
12	9:37	1.32		CA
13	7:37	0.71	0.54	CA
14	8:01	0.81		CA
15	7:58	0.75		CA
16	7:40	1.41		BK
17	7:08	0.79		KD
18	7:41	0.79		KD
19	8:15	0.76		CA
20	8:16	0.65	0.71	CA
21	7:52	0.64		CA
22	7:20	0.63		BK
23	7:53	0.59		CA
24	6:57	0.57		CDC
25	7:00	0.57		CDC
26	8:44	0.72		CA/RW
27	7:30	0.61		BK
28	8:26	0.56		KD
29	7:39	0.64		RW
30	7:52	0.62		CDC
31				

Notes:

## Disinfectant Monitoring

<b>PWS:</b>	The City of Washington - Well # 11			
<b>PWSID:</b>	MO6010838			
<b>County:</b>	Franklin			
<b>Month:</b>	September			
<b>Date</b>	<b>Time</b>	<b>Free Cl (mg/l)</b>	<b>Total Cl (mg/l)</b>	<b>Sampler</b>
1	9:50	0.91		BK
2	10:00	0.94		RW
3	6:53	1.07		RW
4	7:02	1.08		RW
5	7:40	1.06		RW
6	8:43	1.16	1.13	KD
7	9:44	0.81		CA
8	8:17	0.96		CA
9	10:30	0.9		BK
10	5:10	1.02		BK
11	7:20	0.98		CA
12	10:46	1.39		CA
13	8:19	0.69	1.74	CA
14	9:25	0.72		CA
15	8:39	0.72		CA
16	9:05	0.63		BK
17	7:52	0.71		KD
18	6:52	0.76		KD
19	10:11	0.89		CA
20	9:23	0.8	0.35	CA
21	8:45	0.87		CA
22	10:35	1.05		BK
23	9:30	0.9		CA
24	8:00	1.03		CDC
25	8:40	0.92		CDC
26	9:44	1		CA/RW
27	9:30	0.8		BK
28	10:11	0.8		CA
29	9:30	0.7		RW
30	9:12	1.08		CDC
31				

Notes: