

**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Dec-2018**

<b>Mineral Analysis</b>	<b>Raw</b>	<b>Treated</b>	<b>Standards</b>			
			<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	348	362		500		1000
Silica (SiO2)	7.82	6.68				
Iron (Fe)	0.666	0.334		0.3		0.3
Calcium (Ca)	68.1	59.1				
Magnesium (Mg)	7.44	6.06				
Sodium (Na)	46.7	69.4				
Potassium (K)	4.20	4.13				
Sulfate (SO4)	54.6	95.1		250		
Nitrite (NO2)	<0.0100	<0.0100	1		1	
Nitrate (NO3)	0.488	0.540	10		10	
Chloride (Cl)	67.3	59.3		250		300
Fluoride (F)	0.218	0.206 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0680	0.0150				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	123 *	96.0 *				
Total Hardness	168	146				
Langelier Index		0.1407				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00213	0.00045	0.01		0.01	
Barium (Ba)	0.0607	0.0448	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.00518	0.00197	1.3	1	1.3	1.0
Iron (Fe)	0.666	0.334		0.3		0.3
Lead (Pb)	0.000302	<0.000250	0.015		0.015	
Manganese (Mn)	0.0229	0.00623		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00452	0.00723				
Selenium (Se)	0.000987	0.000577	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00338	0.00287		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.51 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.40 *	8.18 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	578 *	614 *				
Turbidity (NTU)	15.4 *	0.0690 *	0.3		0.3	
Threshold Odor Number	4.0	2.0				3

**Note 1: National Primary Drinking Water Regulations or Primary Standards are legally enforceable standards. National Secondary Drinking Water Regulations or Secondary Standards are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects In Drinking Water.**

**Note 2: TCEQ Primary Standards are the maximum contaminant level allowed for each constituent. TCEQ Primary Standards are legally enforceable standards.**

**Note 3: \* Identifies Monthly Average Process analyses.**

**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Nov-2018**

<b>Mineral Analysis</b>	<b>Raw</b>	<b>Treated</b>	<b>Standards</b>			
			<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	498	416		500		1000
Silica (SiO2)	7.13	6.71				
Iron (Fe)	0.729	0.277		0.3		0.3
Calcium (Ca)	63.3	50.2				
Magnesium (Mg)	11.8	5.96				
Sodium (Na)	77.5	54.5				
Potassium (K)	4.91	4.37				
Sulfate (SO4)	71.6	95.3		250		
Nitrite (NO2)	<0.0100	<0.0100	1		1	
Nitrate (NO3)	0.422	0.563	10		10	
Chloride (Cl)	97.7	54.0		250		300
Fluoride (F)	0.223	0.209 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0890	0.0160				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	110 *	85.1 *				
Total Hardness	179	142				
Langelier Index		0.1692				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00274	0.00044	0.01		0.01	
Barium (Ba)	0.0697	0.0461	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.00938	0.00139	1.3	1	1.3	1.0
Iron (Fe)	0.729	0.277		0.3		0.3
Lead (Pb)	0.000378	<0.000250	0.015		0.015	
Manganese (Mn)	0.0219	0.00433		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00438	0.00742				
Selenium (Se)	0.00117	0.000609	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00574	0.00272		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.60 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.23 *	8.12 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	701 *	581 *				
Turbidity (NTU)	9.63 *	0.0773 *	0.3		0.3	
Threshold Odor Number	4.0	Process Error				3

**Note 1: National Primary Drinking Water Regulations or Primary Standards are legally enforceable standards. National Secondary Drinking Water Regulations or Secondary Standards are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects In Drinking Water.**

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**Note 3: \* Identifies Monthly Average Process analyses.**

**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Oct-2018**

<u>Mineral Analysis</u>	<u>Raw</u> (mg/L)	<u>Treated</u> (mg/L)	<u>Standards</u>			
			<u>EPA Primary</u> (mg/L)	<u>EPA Secondary</u> (mg/L)	<u>TCEQ Primary</u> (mg/L)	<u>TCEQ Secondary</u> (mg/L)
			Residue on Evaporation	636	556	
Silica (SiO2)	6.61	6.38				
Iron (Fe)	0.634	0.375		0.3		0.3
Calcium (Ca)	54.3	45.9				
Magnesium (Mg)	13.0	9.37				
Sodium (Na)	95.0	91.7				
Potassium (K)	5.41	4.98				
Sulfate (SO4)	97.4	127		250		
Nitrite (NO2)	0.0120	<0.0100	1		1	
Nitrate (NO3)	0.222	0.377	10		10	
Chloride (Cl)	116	90.1		250		300
Fluoride (F)	0.253	0.222 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0580	<0.0100				

	(mg/L as CaCO3)	(mg/L as CaCO3)	(mg/L as CaCO3)	(mg/L as CaCO3)	(mg/L as CaCO3)	(mg/L as CaCO3)
Total Alkalinity	95.9 *	71.2 *				
Total Hardness	179	149				
Langelier Index		-0.1510				

**Trace Element Analysis**

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00284	0.00044	0.01		0.01	
Barium (Ba)	0.0632	0.0483	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.0310	0.00191	1.3	1	1.3	1.0
Iron (Fe)	0.634	0.375		0.3		0.3
Lead (Pb)	0.000384	<0.000250	0.015		0.015	
Manganese (Mn)	0.0269	0.00548		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00414	0.00723				
Selenium (Se)	0.00140	0.000660	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00689	0.00534		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.43 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.23 *	8.11 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	795 *	722 *				
Turbidity (NTU)	10.7 *	0.0813 *	0.3		0.3	
Threshold Odor Number	4.0	1.0				3

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**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Sep-2018**

<b>Mineral Analysis</b>	<b>Raw</b>	<b>Treated</b>	<b>Standards</b>			
			<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	362	432		500		1000
Silica (SiO2)	6.24	5.48				
Iron (Fe)	0.546	0.324		0.3		0.3
Calcium (Ca)	46.4	46.6				
Magnesium (Mg)	10.2	9.37				
Sodium (Na)	95.0	107				
Potassium (K)	6.18	5.66				
Sulfate (SO4)	79.4	134		250		
Nitrite (NO2)	0.0450	<0.0100	1		1	
Nitrate (NO3)	<0.0500	0.159	10		10	
Chloride (Cl)	78.5	91.6		250		300
Fluoride (F)	0.279	0.255 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0830	0.0130				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	89.5 *	66.9 *				
Total Hardness	145	142				
Langelier Index		-0.1630				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00378	0.00062	0.01		0.01	
Barium (Ba)	0.0604	0.0489	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.0117	0.00174	1.3	1	1.3	1.0
Iron (Fe)	0.546	0.324		0.3		0.3
Lead (Pb)	0.000283	<0.000250	0.015		0.015	
Manganese (Mn)	0.0357	0.00763		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00425	0.00653				
Selenium (Se)	0.00133	0.000701	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00445	0.00309		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.38 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.19 *	8.13 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	642 *	750 *				
Turbidity (NTU)	12.1 *	0.0762 *	0.3		0.3	
Threshold Odor Number	3.0	2.0				3

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**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Aug-2018**

<b>Mineral Analysis</b>	<b>Raw</b>	<b>Treated</b>	<b>Standards</b>			
			<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	512	440		500		1000
Silica (SiO2)	4.85	4.53				
Iron (Fe)	0.714	0.448		0.3		0.3
Calcium (Ca)	62.5	57.6				
Magnesium (Mg)	15.5	11.4				
Sodium (Na)	103	105				
Potassium (K)	6.37	6.87				
Sulfate (SO4)	102	127		250		
Nitrite (NO2)	<0.0100	<0.0100	1		1	
Nitrate (NO3)	0.0610	0.112	10		10	
Chloride (Cl)	125	91.2		250		300
Fluoride (F)	0.283	0.261 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0650	<0.0100				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	90.5 *	72.6 *				
Total Hardness	185	147				
Langelier Index		0.3250				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00396	0.00097	0.01		0.01	
Barium (Ba)	0.0804	0.0559	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.0193	0.00206	1.3	1	1.3	1.0
Iron (Fe)	0.714	0.448		0.3		0.3
Lead (Pb)	0.000346	<0.000250	0.015		0.015	
Manganese (Mn)	0.0431	0.00966		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00564	0.00858				
Selenium (Se)	0.00192	0.00105	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00602	0.00435		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.23 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.24 *	8.08 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	874 *	766 *				
Turbidity (NTU)	13.1 *	0.0752 *	0.3		0.3	
Threshold Odor Number	2.0	3.0				3

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**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Jul-2018**

<b>Mineral Analysis</b>	<b>Raw</b>	<b>Treated</b>	<b>Standards</b>			
			<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	212	288		500		1000
Silica (SiO2)	3.15	3.14				
Iron (Fe)	0.464	0.217		0.3		0.3
Calcium (Ca)	40.4	39.5				
Magnesium (Mg)	2.75	3.03				
Sodium (Na)	28.5	58.1				
Potassium (K)	4.49	4.19				
Sulfate (SO4)	34.6	86.0		250		
Nitrite (NO2)	<0.0100	<0.0100	1		1	
Nitrate (NO3)	<0.0500	0.107	10		10	
Chloride (Cl)	22.8	34.8		250		300
Fluoride (F)	0.267	0.243 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0720	<0.0100				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	90.6 *	75.5 *				
Total Hardness	100	105				
Langelier Index		0.0535				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00391	0.00057	0.01		0.01	
Barium (Ba)	0.0441	0.0388	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.0126	0.00455	1.3	1	1.3	1.0
Iron (Fe)	0.464	0.217		0.3		0.3
Lead (Pb)	0.000417	<0.000250	0.015		0.015	
Manganese (Mn)	0.0464	0.00484		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00374	0.00622				
Selenium (Se)	0.000575	<0.000500	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00768	0.00344		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.42 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.28 *	8.03 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	328 *	456 *				
Turbidity (NTU)	15.3 *	0.0736 *	0.3		0.3	
Threshold Odor Number	4.0	2.0				3

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**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Jun-2018**

<b>Mineral Analysis</b>	<b>Raw</b>	<b>Treated</b>	<b>Standards</b>			
			<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	406	472		500		1000
Silica (SiO2)	5.03	4.89				
Iron (Fe)	0.772	0.550		0.3		0.3
Calcium (Ca)	51.8	62.3				
Magnesium (Mg)	9.88	10.0				
Sodium (Na)	63.0	83.9				
Potassium (K)	4.70	4.61				
Sulfate (SO4)	79.1	131		250		
Nitrite (NO2)	0.0150	<0.0100	1		1	
Nitrate (NO3)	0.225	0.348	10		10	
Chloride (Cl)	86.2	93.7		250		300
Fluoride (F)	0.234	0.260 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0580	0.0110				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	104 *	87.2 *				
Total Hardness	192	188				
Langelier Index		0.4300				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00224	0.00051	0.01		0.01	
Barium (Ba)	0.0647	0.0597	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.00890	0.00292	1.3	1	1.3	1.0
Iron (Fe)	0.772	0.550		0.3		0.3
Lead (Pb)	<0.000250	<0.000250	0.015		0.015	
Manganese (Mn)	0.0351	0.00637		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00473	0.00698				
Selenium (Se)	0.00148	0.000763	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00238	0.00302		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.30 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.23 *	8.12 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	675 *	790 *				
Turbidity (NTU)	13.8 *	0.0623 *	0.3		0.3	
Threshold Odor Number	4.0	1.0				3

**Note 1: National Primary Drinking Water Regulations or Primary Standards are legally enforceable standards. National Secondary Drinking Water Regulations or Secondary Standards are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects In Drinking Water.**

**Note 2: TCEQ Primary Standards are the maximum contaminant level allowed for each constituent. TCEQ Primary Standards are legally enforceable standards.**

**Note 3: \* Identifies Monthly Average Process analyses.**

**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**May-2018**

<b>Mineral Analysis</b>	<b>Raw</b>	<b>Treated</b>	<b>Standards</b>			
			<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	416	488		500		1000
Silica (SiO2)	5.30	4.56				
Iron (Fe)	0.806	0.533		0.3		0.3
Calcium (Ca)	67.7					
Magnesium (Mg)	9.39	8.82				
Sodium (Na)	68.1					
Potassium (K)	5.79	5.34				
Sulfate (SO4)	72.2	129		250		
Nitrite (NO2)	0.0260	<0.0100	1		1	
Nitrate (NO3)	0.628	0.783	10		10	
Chloride (Cl)	76.1	81.7		250		300
Fluoride (F)	0.237	0.217 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0520	<0.0100				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	119 *	96.0 *				
Total Hardness	180	180				
Langelier Index		0.7500				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00179	0.00040	0.01		0.01	
Barium (Ba)	0.0645	0.0527	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.0277	0.00288	1.3	1	1.3	1.0
Iron (Fe)	0.806	0.533		0.3		0.3
Lead (Pb)	0.000534	<0.000250	0.015		0.015	
Manganese (Mn)	0.0201	0.0160		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00476	0.00750				
Selenium (Se)	0.00126	0.000530	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00774	0.00304		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.36 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.21 *	8.1 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	656 *	758 *				
Turbidity (NTU)	13.9 *	0.0591 *	0.3		0.3	
Threshold Odor Number	2	3				3

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**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Apr-2018**

<b>Mineral Analysis</b>	<b>Standards</b>					
	<b>Raw</b>	<b>Treated</b>	<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	258	318		500		1000
Silica (SiO2)	6.72	5.63				
Iron (Fe)	0.894	0.188		0.3		0.3
Calcium (Ca)	57.4	62.7				
Magnesium (Mg)	3.29	3.36				
Sodium (Na)	24.6	49.7				
Potassium (K)	5.85	5.66				
Sulfate (SO4)	37.0	112		250		
Nitrite (NO2)	0.0350	<0.0100	1		1	
Nitrate (NO3)	0.832	1.05	10		10	
Chloride (Cl)	21.6	30.8		250		300
Fluoride (F)	0.238	0.216 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0990	<0.0100				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	120 *	93.6 *				
Total Hardness	141	142				
Langelier Index		0.1110				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00179	0.00033	0.01		0.01	
Barium (Ba)	0.0531	0.0435	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	0.00162	<0.000500	0.1		0.1	
Copper (Cu)	0.0114	0.00283	1.3	1	1.3	1.0
Iron (Fe)	0.894	0.188		0.3		0.3
Lead (Pb)	0.000657	<0.000250	0.015		0.015	
Manganese (Mn)	0.0262	0.0111		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00403	0.00700				
Selenium (Se)	<0.000500	<0.000500	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00638	0.00503		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.50 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.33 *	8.14 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	393 *	524 *				
Turbidity (NTU)	26.5 *	0.0574 *	0.3		0.3	
Threshold Odor Number	2.0	2.0				3

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**Note 2: TCEQ Primary Standards are the maximum contaminant level allowed for each constituent. TCEQ Primary Standards are legally enforceable standards.**

**Note 3: \* Identifies Monthly Average Process analyses.**

**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Mar-2018**

<b>Mineral Analysis</b>	<b>Raw</b>	<b>Treated</b>	<b>Standards</b>			
			<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	254	312		500		1000
Silica (SiO2)	6.99	6.37				
Iron (Fe)	1.12	0.191		0.3		0.3
Calcium (Ca)	64.9	56.6				
Magnesium (Mg)	2.80	2.60				
Sodium (Na)	27.0	55.7				
Potassium (K)	4.81	4.15				
Sulfate (SO4)	33.4	106		250		
Nitrite (NO2)	<0.0100	<0.0100	1		1	
Nitrate (NO3)	0.823	0.940	10		10	
Chloride (Cl)	19.5	31.2		250		300
Fluoride (F)	0.235	0.219 *	4.0	2.0	4.0	2.0
Phosphates (PO4)	0.0290	0.0270				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	110 *	87.0 *				
Total Hardness	132	147				
Langelier Index		0.1197				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00183	0.00030	0.01		0.01	
Barium (Ba)	0.0483	0.0391	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	0.00194	<0.00125	0.1		0.1	
Copper (Cu)	0.0279	0.00136	1.3	1	1.3	1.0
Iron (Fe)	1.12	0.191		0.3		0.3
Lead (Pb)	0.000788	<0.000250	0.015		0.015	
Manganese (Mn)	0.0257	0.00840		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00375	0.00626				
Selenium (Se)	0.000691	<0.000500	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00861	0.00406		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.62 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.15 *	8.11 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	376 *	511 *				
Turbidity (NTU)	30.4 *	0.0603 *	0.3		0.3	
Threshold Odor Number	12F	50Cl				3

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**Note 3: \* Identifies Monthly Average Process analyses.**

**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Feb-2018**

<b>Mineral Analysis</b>	<b>Standards</b>					
	<b>Raw</b>	<b>Treated</b>	<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	478	376		500		1000
Silica (SiO2)	4.82	5.38				
Iron (Fe)	0.282	0.153		0.3		0.3
Calcium (Ca)	68.5	67.4				
Magnesium (Mg)	10.4	6.61				
Sodium (Na)	87.7	79.4				
Potassium (K)	5.77	5.88				
Sulfate (SO4)	97.3	102		250		
Nitrite (NO2)	<0.0100	<0.0100	1		1	
Nitrate (NO3)	0.600	0.762	10		10	
Chloride (Cl)	100	60.4		250		300
Fluoride (F)	0.259	0.268 *	4.0	2.0		2.0
Phosphates (PO4)	0.0440	0.0140				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	113 *	94.6 *				
Total Hardness	158	157				
Langelier Index		-0.0180				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00175	0.00065	0.01		0.01	
Barium (Ba)	0.0722	0.0499	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.000500	<0.000500	0.1		0.1	
Copper (Cu)	0.0121	0.00217	1.3		1.3	1.0
Iron (Fe)	0.282	0.153		0.3		
Lead (Pb)	0.000348	<0.000250	0.15		0.15	
Manganese (Mn)	0.0293	0.00413		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00396	0.00634				
Selenium (Se)	0.00111	0.000523	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00453	0.00393		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.67 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.35 *	8.11 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	864 *	742 *				
Turbidity (NTU)	17.2 *	0.0699 *	0.3		0.3	
Threshold Odor Number	12F	4Cl				3

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**NORTH TEXAS MUNICIPAL WATER DISTRICT - Wylie**

**Water Analysis**

**Jan-2018**

<b>Mineral Analysis</b>	<b>Raw</b>	<b>Treated</b>	<b>Standards</b>			
			<b>EPA Primary</b>	<b>EPA Secondary</b>	<b>TCEQ Primary</b>	<b>TCEQ Secondary</b>
	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Residue on Evaporation	412	456		500		1000
Silica (SiO2)	3.63	3.41				
Iron (Fe)	0.378	0.259		0.3		0.3
Calcium (Ca)	69.8	70.7				
Magnesium (Mg)	12.5	11.6				
Sodium (Na)	96.6	123				
Potassium (K)	7.44	6.87				
Sulfate (SO4)	86.6	128		250		
Nitrite (NO2)	0.0100	<0.0100	1		1	
Nitrate (NO3)	0.570	0.670	10		10	
Chloride (Cl)	97.8			250		300
Fluoride (F)	0.277	0.262 *	4.0	2.0		2.0
Phosphates (PO4)	0.0420	<0.0100				

	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>	<b>(mg/L as CaCO3)</b>
Total Alkalinity	111 *	93.3 *				
Total Hardness	185	182				
Langelier Index		-0.1625				

**Trace Element Analysis**

	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>	<b>(mg/L)</b>
Arsenic (As)	0.00190	0.00057	0.01		0.01	
Barium (Ba)	0.0645	0.0566	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.0199	0.00423	1.3		1.3	1.0
Iron (Fe)	0.378	0.259		0.3		
Lead (Pb)	0.000332	<0.000250	0.15		0.15	
Manganese (Mn)	0.0340	0.0227		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00392	0.00611				
Selenium (Se)	0.00119	0.000630	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00672	0.00632		5		5

**Other Analysis**

Chlorine Residual (mg/L)	--	3.72 *	4.0		4.0	
Total coliform ( Present / Absent )	--	A *	A		A	
pH (Standard Units) @ 25°C	8.30 *	8.23 *		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	829 *	758 *				
Turbidity (NTU)	11.9 *	0.0634 *	0.3		0.3	
Threshold Odor Number	8E	17Cl				3

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