

**North Texas Municipal Water District
Water Analysis
Jan-2016**

Generated: 02/10/2016

<u>Mineral Analysis</u>	<u>Raw</u> (mg/L)	<u>Treated</u> (mg/L)	<u>Standards</u>			
			<u>EPA</u> <u>Primary</u> (mg/L)	<u>EPA</u> <u>Secondary</u> (mg/L)	<u>TCEQ</u> <u>Primary</u> (mg/L)	<u>TCEQ</u> <u>Secondary</u> (mg/L)
Residue on Evaporation	278	336		500		1000
Silica (SiO2)	7.87	6.88				
Iron (Fe)	0.363	0.171		0.3		0.3
Calcium (Ca)	67.9	55.9				
Magnesium (Mg)	7.87	7.48				
Sodium (Na)	47.9	67.4				
Potassium (K)	6.03	5.77				
Sulfate (SO4)	52.4	113		250		
Nitrite (NO2)	<0.0200	<0.0200	1		1	
Nitrate (NO3)	0.629	0.632	10		10	
Chloride (Cl)	52.4	54.5		250		300
Fluoride (F)	<0.250	0.207	4.0	2.0		2.0
Phosphates (PO4)	0.0650	0.0150				

	(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	112	84.2				
Total Hardness	149	152				
Langelier Index	-	[- 0.0443]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00559	<0.00500	0.01		0.01	
Barium (Ba)	0.0545	0.0499	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.0131	0.00310	1.3		1.3	1.0
Iron (Fe)	0.363	0.171		0.3		
Lead (Pb)	0.000309	<0.000250	0.15		0.15	
Manganese (Mn)	0.0211	0.00866		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00302	0.00539				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00734	0.00550		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.74*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	8.35*	8.06*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	473	570				
Turbidity (NTU)	14.4	0.0900*	0.3		0.3	
Threshold Odor Number	50F	1.4CL				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
Water Analysis
Feb-2016**

Generated: 03/14/2016

Mineral Analysis	Raw (mg/L)	Treated (mg/L)	Standards			
			EPA Primary (mg/L)	EPA Secondary (mg/L)	TCEQ Primary (mg/L)	TCEQ Secondary (mg/L)
Residue on Evaporation	210	264		500		1000
Silica (SiO2)	7.99	7.20				
Iron (Fe)	0.568	<0.200		0.3		0.3
Calcium (Ca)	58.2	61.0				
Magnesium (Mg)	2.84	2.79				
Sodium (Na)	12.7	38.9				
Potassium (K)	4.81	4.72				
Sulfate (SO4)	25.5	120		250		
Nitrite (NO2)	<0.0200	<0.0200	1		1	
Nitrate (NO3)	0.597	0.622	10		10	
Chloride (Cl)	11.2	17.9		250		300
Fluoride (F)	<0.250	0	4.0	2.0		2.0
Phosphates (PO4)	0.0826	<0.0200				

	(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	114	52.1				
Total Hardness	139	127				
Langelier Index	-	[+ 0.144]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	<0.00500	<0.00500	0.01		0.01	
Barium (Ba)	0.0475	0.0402	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.00313	0.00152	1.3		1.3	1.0
Iron (Fe)	0.568	<0.200		0.3		
Lead (Pb)	<0.00100	<0.00100	0.15		0.15	
Manganese (Mn)	0.0451	0.00182		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00348	0.00754				
Selenium (Se)	<0.00100	<0.00100	0.05		0.05	
Silver (Ag)	<0.00100	<0.00100		0.10		0.1
Zinc (Zn)	0.00605	<0.00500		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.63*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	8.60*	8.42*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	323	418				
Turbidity (NTU)	15.4	0.290*	0.3		0.3	
Threshold Odor Number	24F	1.4CL				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
Water Analysis
Mar-2016**

Regenerated: 04/27/2016

<u>Mineral Analysis</u>	<u>Raw</u> (mg/L)	<u>Treated</u> (mg/L)	<u>Standards</u>			
			<u>EPA</u> <u>Primary</u> (mg/L)	<u>EPA</u> <u>Secondary</u> (mg/L)	<u>TCEQ</u> <u>Primary</u> (mg/L)	<u>TCEQ</u> <u>Secondary</u> (mg/L)
Residue on Evaporation	304	348		500		1000
Silica (SiO2)	5.54	5.09				
Iron (Fe)	0.741	0.201		0.3		0.3
Calcium (Ca)	63.1	63.6				
Magnesium (Mg)	6.73	6.19				
Sodium (Na)	44.8	57.0				
Potassium (K)	5.07	4.99				
Sulfate (SO4)	51.0	112		250		
Nitrite (NO2)	<0.0200	<0.0200	1		1	
Nitrate (NO3)	0.461	0.468	10		10	
Chloride (Cl)	53.2	58.0		250		300
Fluoride (F)	0.182	0.353	4.0	2.0		2.0
Phosphates (PO4)	0.0870	0.0160				

	(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	120	96.5				
Total Hardness	177	176				
Langelier Index	-	[- 0.0798]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	<0.00500	<0.00500	0.01		0.01	
Barium (Ba)	0.0616	0.0461	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.0296	0.00496	1.3		1.3	1.0
Iron (Fe)	0.741	0.201		0.3		
Lead (Pb)	0.593	<0.00100	0.15		0.15	
Manganese (Mn)	0.0347	0.00457		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00361	0.00454				
Selenium (Se)	0.598	<0.00100	0.05		0.05	
Silver (Ag)	<0.00100	<0.00100		0.10		0.1
Zinc (Zn)	0.0149	0.00623		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.85*	4.0		4.0	
Total coliform (Present / Absent)	P	A	A		A	
pH (Standard Units) @ 25°C	8.54*	7.91*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	537	603				
Turbidity (NTU)	28.1	0.0567*	0.3		0.3	
Threshold Odor Number	24F	2CL				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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**North Texas Municipal Water District
Water Analysis
Apr-2016**

Regenerated: 05/12/2016

<u>Mineral Analysis</u>	<u>Raw</u> (mg/L)	<u>Treated</u> (mg/L)	<u>Standards</u>			
			<u>EPA</u> <u>Primary</u> (mg/L)	<u>EPA</u> <u>Secondary</u> (mg/L)	<u>TCEQ</u> <u>Primary</u> (mg/L)	<u>TCEQ</u> <u>Secondary</u> (mg/L)
Residue on Evaporation	312	382		500		1000
Silica (SiO2)	2.54	2.45				
Iron (Fe)	0.618	0.149		0.3		0.3
Calcium (Ca)	65.4	66.7				
Magnesium (Mg)	6.95	7.07				
Sodium (Na)	45.0	67.2				
Potassium (K)	4.67	4.72				
Sulfate (SO4)	51.3	124		250		
Nitrite (NO2)	<0.0100	<0.0100	1		1	
Nitrate (NO3)	0.351	0.441	10		10	
Chloride (Cl)	45.6	63.0		250		300
Fluoride (F)	0.192	0.473	4.0	2.0		2.0
Phosphates (PO4)	0.0750	0.0180				

	(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	130	100				
Total Hardness	179	173				
Langelier Index	-	[+ 0.503]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	<0.00250	<0.00250	0.01		0.01	
Barium (Ba)	0.0621	0.0532	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00250	<0.00250	0.1		0.1	
Copper (Cu)	0.0191	0.00199	1.3		1.3	1.0
Iron (Fe)	0.618	0.149		0.3		
Lead (Pb)	0.00106	<0.000500	0.15		0.15	
Manganese (Mn)	0.0217	0.00424		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00357	0.00504				
Selenium (Se)	<0.000500	0.000578	0.05		0.05	
Silver (Ag)	<0.000500	<0.000500		0.10		0.1
Zinc (Zn)	0.0247	0.00424		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.22*	4.0		4.0	
Total coliform (Present / Absent)	P	A	A		A	
pH (Standard Units) @ 25°C	8.51*	8.21*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	509	610				
Turbidity (NTU)	19.9	0.0600*	0.3		0.3	
Threshold Odor Number	12E	ND				3

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Note 3: * Identifies Monthly Average Process analyses.

**North Texas Municipal Water District
Water Analysis
May-2016**

Generated: 06/06/2016

<u>Mineral Analysis</u>	<u>Raw</u> (mg/L)	<u>Treated</u> (mg/L)	<u>Standards</u>			
			<u>EPA</u> <u>Primary</u> (mg/L)	<u>EPA</u> <u>Secondary</u> (mg/L)	<u>TCEQ</u> <u>Primary</u> (mg/L)	<u>TCEQ</u> <u>Secondary</u> (mg/L)
Residue on Evaporation	292	364		500		1000
Silica (SiO2)	4.16	3.85				
Iron (Fe)	0.569	0.133		0.3		0.3
Calcium (Ca)	48.7	55.9				
Magnesium (Mg)	6.67	6.99				
Sodium (Na)	31.3	58.9				
Potassium (K)	4.56	4.70				
Sulfate (SO4)	47.0	104		250		
Nitrite (NO2)	<0.0100	<0.0100	1		1	
Nitrate (NO3)	0.498	0.732	10		10	
Chloride (Cl)	43.6	56.0		250		300
Fluoride (F)	0.198	0.435	4.0	2.0		2.0
Phosphates (PO4)	0.0820	0.0280				

	(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	126	103				
Total Hardness	170	181				
Langelier Index	-	[+ 0.711]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00263	<0.00250	0.01		0.01	
Barium (Ba)	0.0660	0.0532	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00250	<0.00250	0.1		0.1	
Copper (Cu)	0.0101	0.00390	1.3		1.3	1.0
Iron (Fe)	0.569	0.133		0.3		
Lead (Pb)	0.000528	<0.000500	0.15		0.15	
Manganese (Mn)	0.0397	0.00320		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00369	0.00507				
Selenium (Se)	<0.000500	0.000524	0.05		0.05	
Silver (Ag)	<0.000500	<0.000500		0.10		0.1
Zinc (Zn)	0.00909	0.00591		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.51*	4.0		4.0	
Total coliform (Present / Absent)	P	A	A		A	
pH (Standard Units) @ 25°C	8.13*	8.36*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	496	624				
Turbidity (NTU)	17.9	0.0600*	0.3		0.3	
Threshold Odor Number	1.4F	ND				3

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Note 3: * Identifies Monthly Average Process analyses.

**North Texas Municipal Water District
Water Analysis
Jun-2016**

Generated: 07/06/2016

<u>Mineral Analysis</u>	<u>Raw</u> (mg/L)	<u>Treated</u> (mg/L)	<u>Standards</u>			
			<u>EPA</u> <u>Primary</u> (mg/L)	<u>EPA</u> <u>Secondary</u> (mg/L)	<u>TCEQ</u> <u>Primary</u> (mg/L)	<u>TCEQ</u> <u>Secondary</u> (mg/L)
Residue on Evaporation	290	344		500		1000
Silica (SiO2)	5.93	4.63				
Iron (Fe)	0.298	0.119		0.3		0.3
Calcium (Ca)	55.5	62.2				
Magnesium (Mg)	6.03	6.09				
Sodium (Na)	40.0	64.8				
Potassium (K)	4.57	4.87				
Sulfate (SO4)	44.7	93.1		250		
Nitrite (NO2)	0.0182	<0.0100	1		1	
Nitrate (NO3)	0.404	0.512	10		10	
Chloride (Cl)	42.8	48.5		250		300
Fluoride (F)	0.199	0.197	4.0	2.0		2.0
Phosphates (PO4)	0.0500	0.0110				

	(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	119	103				
Total Hardness	154	154				
Langelier Index	-	[+ 0.414]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00251	<0.00250	0.01		0.01	
Barium (Ba)	0.0654	0.0547	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00250	<0.00250	0.1		0.1	
Copper (Cu)	0.0341	0.00337	1.3		1.3	1.0
Iron (Fe)	0.298	0.119		0.3		
Lead (Pb)	<0.000500	<0.000500	0.15		0.15	
Manganese (Mn)	0.0891	0.0101		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00333	0.00521				
Selenium (Se)	<0.000500	0.000662	0.05		0.05	
Silver (Ag)	<0.000500	<0.000500		0.10		0.1
Zinc (Zn)	0.0138	0.00477		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.40*	4.0		4.0	
Total coliform (Present / Absent)	P	A	A		A	
pH (Standard Units) @ 25°C	7.91*	8.09*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	487	574				
Turbidity (NTU)	14.2	0.0650*	0.3		0.3	
Threshold Odor Number	12F	ND				3

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Note 3: * Identifies Monthly Average Process analyses.

**North Texas Municipal Water District
Water Analysis
Jul-2016**

Generated: 08/11/2016

<u>Mineral Analysis</u>	<u>Raw</u> (mg/L)	<u>Treated</u> (mg/L)	<u>Standards</u>			
			<u>EPA</u> <u>Primary</u> (mg/L)	<u>EPA</u> <u>Secondary</u> (mg/L)	<u>TCEQ</u> <u>Primary</u> (mg/L)	<u>TCEQ</u> <u>Secondary</u> (mg/L)
Residue on Evaporation	180	242		500		1000
Silica (SiO2)	3.58	4.19				
Iron (Fe)	0.355	0.140		0.3		0.3
Calcium (Ca)	46.1	44.3				
Magnesium (Mg)	3.18	3.06				
Sodium (Na)	15.1	34.5				
Potassium (K)	4.79	4.58				
Sulfate (SO4)	23.6	77.3		250		
Nitrite (NO2)	<0.0100	<0.0100	1		1	
Nitrate (NO3)	<0.0500	<0.0500	10		10	
Chloride (Cl)	10.7	18.8		250		300
Fluoride (F)	0.211	0.204	4.0	2.0		2.0
Phosphates (PO4)	0.0610	0.0120				
	(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	116	94.3				
Total Hardness	153	149				
Langelier Index	-	[+ 0.459]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00444	0.000675	0.01		0.01	
Barium (Ba)	0.0587	0.0411	2		2	
Cadmium (Cd)	<0.000500	<0.000500	0.005		0.005	
Chromium (Cr)	<0.00125	<0.00125	0.1		0.1	
Copper (Cu)	0.0258	0.00316	1.3		1.3	1.0
Iron (Fe)	0.355	0.140		0.3		
Lead (Pb)	0.000463	<0.000250	0.15		0.15	
Manganese (Mn)	0.0596	0.00908		0.05		0.05
Mercury (Hg)	<0.0000500	<0.0000500	0.002		0.002	
Nickel (Ni)	0.00287	0.00409				
Selenium (Se)	<0.000500	<0.000500	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00529	0.00521		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.41*	4.0		4.0	
Total coliform (Present / Absent)	P	A	A		A	
pH (Standard Units) @ 25°C	8.18*	8.09*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	292	398				
Turbidity (NTU)	14.5	0.0650*	0.3		0.3	
Threshold Odor Number	12F	8CL				3

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