

North Texas Municipal Water District
Water Analysis
Jan-2014

<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	136	206		500		1000
Silica (SiO ₂)	<2.00	<2.00				
Iron (Fe)	0.137	0.214		0.3		0.3
Calcium (Ca)	30.4	40.6				
Magnesium (Mg)	3.47	3.01				
Sodium (Na)	13.5	20.4				
Potassium (K)	4.20	4.17				
Bicarbonates (HCO ₃)	88.7	76.6				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	11.7	45.6		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	7.69	14.0		250		300
Fluoride (F)	0.257	0.385	4.0	2.0		2.0
Phosphates (PO ₄)	0.0600	0.0230				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	88.7	76.6				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	34.2				
Total Hardness	81.0	111				
Langelier Index	-					

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00143	0.00514	0.01		0.01	
Barium (Ba)	0.0667	0.0627	2		2	
Cadmium (Cd)	<0.000250	<0.00100	0.005		0.005	
Chromium (Cr)	<0.000250	<0.00500	0.1		0.1	
Copper (Cu)	<0.000500	0.0516	1.3		1.3	1.0
Iron (Fe)	0.137	0.214		0.3		
Lead (Pb)	<0.000250	<0.000250	0.15		0.15	
Manganese (Mn)	0.0282	0.00489		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.000898	0.000680				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	<0.00250	<0.00250		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.29*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	*	*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	215	292				
Turbidity (NTU)	5.28	0.100*	0.3		0.3	
Threshold Odor Number	100F	1CL				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-2014

<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	148	188		500		1000
Silica (SiO ₂)	<2.00	<2.00				
Iron (Fe)	0.321	0.374		0.3		0.3
Calcium (Ca)	33.3	42.3				
Magnesium (Mg)	3.32	3.40				
Sodium (Na)	14.6	19.9				
Potassium (K)	4.63	4.54				
Bicarbonates (HCO ₃)	89.0	75.5				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	11.7	46.5		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	7.03	12.8		250		300
Fluoride (F)	0.277	0.513	4.0	2.0		2.0
Phosphates (PO ₄)	0.0575	0.0105				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	89.0	75.5				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	66.0	84.5				
Total Hardness	155	160				
Langelier Index	-	[- 0.241]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.0102	<0.00500	0.01		0.01	
Barium (Ba)	0.0804	0.0672	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.00119	0.0750	1.3		1.3	1.0
Iron (Fe)	0.321	0.374		0.3		
Lead (Pb)	<0.000250	<0.000250	0.15		0.15	
Manganese (Mn)	0.0249	0.00279		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.000959	0.00101				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00459	0.00719		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.34*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	8.10*	7.90*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	220	296				
Turbidity (NTU)	6.36	0.100*	0.3		0.3	
Threshold Odor Number	140F	1CL				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
Water Analysis
Mar-2014

<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	118	180		500		1000
Silica (SiO ₂)	3.92	<2.00				
Iron (Fe)	0.314	0.474		0.3		0.3
Calcium (Ca)	32.5	44.1				
Magnesium (Mg)	3.22	3.41				
Sodium (Na)	14.7	20.2				
Potassium (K)	4.52	4.61				
Bicarbonates (HCO ₃)	91.9	81.3				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	12.8	51.8		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	7.63	13.7		250		300
Fluoride (F)	0.270	0.394	4.0	2.0		2.0
Phosphates (PO ₄)	0.0477	0.0140				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	91.9	81.3				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	30.7				
Total Hardness	84.2	112				
Langelier Index	-	[- 0.0218]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00617	0.00561	0.01		0.01	
Barium (Ba)	0.0731	0.0672	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.000769	0.0794	1.3		1.3	1.0
Iron (Fe)	0.314	0.474		0.3		
Lead (Pb)	<0.000250	<0.000250	0.15		0.15	
Manganese (Mn)	0.0462	0.00519		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00257	0.00377				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00844	0.00335		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.34*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	8.10*	7.90*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	219	297				
Turbidity (NTU)	4.88	0.0700*	0.3		0.3	
Threshold Odor Number	17F	1E				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
Water Analysis
Apr-2014

<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	152	180		500		1000
Silica (SiO ₂)	<2.00	<2.00				
Iron (Fe)	0.553	0.146		0.3		0.3
Calcium (Ca)	30.7	36.6				
Magnesium (Mg)	3.58	3.74				
Sodium (Na)	13.4	19.1				
Potassium (K)	5.00	5.06				
Bicarbonates (HCO ₃)	94.3	87.4				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	12.4	46.4		250		
Nitrite (NO ₂)	0.0296	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	7.68	13.6		250		300
Fluoride (F)	<0.250	0.419	4.0	2.0		2.0
Phosphates (PO ₄)	0.0680	<0.0200				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	94.3	87.4				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	26.4				
Total Hardness	87.4	114				
Langelier Index	-	[- 0.219]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00773	0.00712	0.01		0.01	
Barium (Ba)	0.0842	0.0752	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.000913	0.0873	1.3		1.3	1.0
Iron (Fe)	0.553	0.146		0.3		
Lead (Pb)	0.000306	<0.000250	0.15		0.15	
Manganese (Mn)	0.0404	0.00141		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00245	0.00411				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00377	0.00625		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.19*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	7.70*	7.90*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	234	319				
Turbidity (NTU)	11.9	0.110*	0.3		0.3	
Threshold Odor Number	100F	1CL				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
Water Analysis
May-2014

<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	142	188		500		1000
Silica (SiO ₂)	3.05	3.03				
Iron (Fe)	0.608	0.241		0.3		0.3
Calcium (Ca)	35.5	47.3				
Magnesium (Mg)	3.51	3.64				
Sodium (Na)	14.8	20.9				
Potassium (K)	5.00	5.05				
Bicarbonates (HCO ₃)	0	0				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	11.1	46.7		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	6.85	12.7		250		300
Fluoride (F)	<0.250	0.346	4.0	2.0		2.0
Phosphates (PO ₄)	0.0760	0.0270				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	90.7	78.2				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	35.2				
Total Hardness	88.4	113				
Langelier Index	-	[+ 0.151]				

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)	0.0810	0.0722	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.00128	0.0815	1.3		1.3	1.0
Iron (Fe)	0.608	0.241		0.3		
Lead (Pb)	0.000397	<0.000250	0.15		0.15	
Manganese (Mn)	0.0462	0.00201		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00150	0.00270				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00410	0.00736		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.06*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	7.70*	7.90*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	236	328				
Turbidity (NTU)	12.7	0.120*	0.3		0.3	
Threshold Odor Number	17F	2CL				3

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Note 3: * Identifies Monthly Average Process analyses.

North Texas Municipal Water District
Water Analysis
Jun-2014

<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	186	206		500		1000
Silica (SiO ₂)	<2.00	2.76				
Iron (Fe)	0.114	0.129		0.3		0.3
Calcium (Ca)	31.1	40.4				
Magnesium (Mg)	3.13	3.68				
Sodium (Na)	12.5	21.9				
Potassium (K)	5.14	5.35				
Bicarbonates (HCO ₃)	0	0				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	11.8	56.9		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	8.00	14.8		250		300
Fluoride (F)	<0.250	0.382	4.0	2.0		2.0
Phosphates (PO ₄)	0.0540	0.0320				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	93.1	83.4				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	39.0				
Total Hardness	87.2	122				
Langelier Index	-	[+ 0.183]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00710	0.00556	0.01		0.01	
Barium (Ba)	0.0705	0.0641	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.000955	0.0633	1.3		1.3	1.0
Iron (Fe)	0.114	0.129		0.3		
Lead (Pb)	<0.000250	<0.000250	0.15		0.15	
Manganese (Mn)	0.000878	0.00155		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00144	0.00257				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00304	0.00849		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.10*	4.0		4.0	
Total coliform (Present / Absent)	-	P	A		A	
pH (Standard Units) @ 25°C	7.60*	8.10*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	231	321				
Turbidity (NTU)	7.29	0.110*	0.3		0.3	
Threshold Odor Number	6G	1W				3

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Note 3: * Identifies Monthly Average Process analyses.

North Texas Municipal Water District
Water Analysis
Jul-2014

<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	168	202		500		1000
Silica (SiO ₂)	0	0				
Iron (Fe)	0.249	0.159		0.3		0.3
Calcium (Ca)	29.2	40.4				
Magnesium (Mg)	3.23	3.31				
Sodium (Na)	12.8	17.6				
Potassium (K)	5.30	5.51				
Bicarbonates (HCO ₃)	0	0				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	12.1	54.5		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	7.70	13.6		250		300
Fluoride (F)	<0.250	0.403	4.0	2.0		2.0
Phosphates (PO ₄)	0.0420	0.0280				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	93.1	86.3				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	34.5				
Total Hardness	85.6	121				
Langelier Index	-	[- 0.0520]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.0100	0.00882	0.01		0.01	
Barium (Ba)	0.0824	0.0691	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.00103	0.0898	1.3		1.3	1.0
Iron (Fe)	0.249	0.159		0.3		
Lead (Pb)	<0.000250	<0.000250	0.15		0.15	
Manganese (Mn)	0.0705	0.00155		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00167	0.00276				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	<0.00250	0.00839		5		5

Other Analysis

Chlorine Residual (mg/L)	-	2.78*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	7.70*	7.70*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	237	344				
Turbidity (NTU)	5.92	0.100*	0.3		0.3	
Threshold Odor Number	17F	ND				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
Aug-2014

<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	126	178		500		1000
Silica (SiO ₂)	0	0				
Iron (Fe)	0.226	0.103		0.3		0.3
Calcium (Ca)	20.6	33.9				
Magnesium (Mg)	2.79	2.71				
Sodium (Na)	11.6	16.8				
Potassium (K)	4.88	4.81				
Bicarbonates (HCO ₃)	0	0				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	12.0	60.3		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	7.65	14.8		250		300
Fluoride (F)	<0.250	0.447	4.0	2.0		2.0
Phosphates (PO ₄)	0.0960	0.0420				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	78.0	67.1				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	31.1				
Total Hardness	75.0	98.2				
Langelier Index	-	[+ 0.176]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00957	<0.00500	0.01		0.01	
Barium (Ba)	0.0657	0.0576	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.000557	0.0515	1.3		1.3	1.0
Iron (Fe)	0.226	0.103		0.3		
Lead (Pb)	<0.000250	<0.000250	0.15		0.15	
Manganese (Mn)	0.0754	0.000717		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.000896	0.00166				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	<0.00250	0.00337		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.31*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	8.30*	8.10*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	208	318				
Turbidity (NTU)	5.52	0.0800*	0.3		0.3	
Threshold Odor Number	35F	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
Sep-2014

<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	158	214		500		1000
Silica (SiO ₂)	4.35	4.31				
Iron (Fe)	0.0654	0.0947		0.3		0.3
Calcium (Ca)	22.9	40.2				
Magnesium (Mg)	3.42	3.68				
Sodium (Na)	11.9	18.2				
Potassium (K)	5.31	5.37				
Bicarbonates (HCO ₃)	0	0				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	8.60	60.7		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	6.13	14.0		250		300
Fluoride (F)	0.285	0.418	4.0	2.0		2.0
Phosphates (PO ₄)	0.104	0.0334				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	86.6	72.6				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	33.0				
Total Hardness	79.6	106				
Langelier Index	-	[- 0.168]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00755	<0.00500	0.01		0.01	
Barium (Ba)	0.101	0.0637	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.000672	0.0800	1.3		1.3	1.0
Iron (Fe)	0.0654	0.0947		0.3		
Lead (Pb)	<0.000250	<0.000250	0.15		0.15	
Manganese (Mn)	0.109	0.0209		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00150	0.00287				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	<0.00250	0.00568		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.32*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	7.50*	7.70*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	211	328				
Turbidity (NTU)	5.36	0.0900*	0.3		0.3	
Threshold Odor Number	70F	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
Oct-2014

<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	118	180		500		1000
Silica (SiO ₂)	4.87	4.86				
Iron (Fe)	0.402	0.296		0.3		0.3
Calcium (Ca)	45.1	36.3				
Magnesium (Mg)	6.63	3.56				
Sodium (Na)	26.7	20.1				
Potassium (K)	10.2	4.80				
Bicarbonates (HCO ₃)	0	0				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	14.4	53.7		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	7.79	13.7		250		300
Fluoride (F)	0.265	0.478	4.0	2.0		2.0
Phosphates (PO ₄)	0.0908	0.0245				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	91.8	68.5				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	41.1				
Total Hardness	73.2	110				
Langelier Index	-	[+ 0.0761]				

Trace Element Analysis

	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Arsenic (As)	0.00530	<0.00500	0.01		0.01	
Barium (Ba)	0.0954	0.0603	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.00119	0.0501	1.3		1.3	1.0
Iron (Fe)	0.402	0.296		0.3		
Lead (Pb)	0.000288	<0.000250	0.15		0.15	
Manganese (Mn)	0.0591	0.00836		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00170	0.00327				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	0.00258	0.00677		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.35*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	7.80*	8.10*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	221	332				
Turbidity (NTU)	6.07	0.0800*	0.3		0.3	
Threshold Odor Number	140F	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.

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 - Tawakoni
Water Analysis
Nov-2014

<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	108	140		500		1000
Silica (SiO ₂)	3.00	3.09				
Iron (Fe)	0.127	0.246		0.3		0.3
Calcium (Ca)	24.3	38.2				
Magnesium (Mg)	3.41	3.68				
Sodium (Na)	14.1	20.6				
Potassium (K)	5.42	5.49				
Bicarbonates (HCO ₃)	0	0				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	11.3	52.1		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	7.58	12.8		250		300
Fluoride (F)	<0.250	0.471	4.0	2.0		2.0
Phosphates (PO ₄)	0.0970	0.0180				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	89.5	72.8				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	32.0				
Total Hardness	73.4	105				
Langelier Index	-	#N/A				

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)	0.0818	0.0608	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.000825	0.0484	1.3		1.3	1.0
Iron (Fe)	0.127	0.246		0.3		
Lead (Pb)	<0.000250	<0.000250	0.15		0.15	
Manganese (Mn)	0.000494	0.00396		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00176	0.00301				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	<0.00250	0.00416		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.34*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	*	*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	224	334				
Turbidity (NTU)	5.72	0.0500*	0.3		0.3	
Threshold Odor Number	140F	1CL				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 - Tawakoni
Water Analysis
Dec-2014

<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	126	198		500		1000
Silica (SiO ₂)	<2.00	<2.00				
Iron (Fe)	0.194	0.190		0.3		0.3
Calcium (Ca)	26.3	38.8				
Magnesium (Mg)	3.41	3.72				
Sodium (Na)	17.5	23.8				
Potassium (K)	5.15	5.19				
Bicarbonates (HCO ₃)	0	0				
Carbonates (CO ₃)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO ₄)	12.6	62.9		250		
Nitrite (NO ₂)	<0.0200	<0.0200	1		1	
Nitrate (NO ₃)	0	0	10		10	
Chloride (Cl)	7.64	15.7		250		300
Fluoride (F)	0.265	0.540	4.0	2.0		2.0
Phosphates (PO ₄)	0.0680	<0.0200				

	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)	(mg/L as CaCO ₃)
Total Alkalinity	84.6	69.4				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	36.6				
Total Hardness	75.2	106				
Langelier Index	-	[- 0.189]				

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)	0.0674	0.0610	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	0.000508	0.0464	1.3		1.3	1.0
Iron (Fe)	0.194	0.190		0.3		
Lead (Pb)	<0.000250	<0.000250	0.15		0.15	
Manganese (Mn)	0.00368	0.00178		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00116	0.00226				
Selenium (Se)	<0.00250	<0.00250	0.05		0.05	
Silver (Ag)	<0.000250	<0.000250		0.10		0.1
Zinc (Zn)	<0.00250	0.00403		5		5

Other Analysis

Chlorine Residual (mg/L)	-	3.40*	4.0		4.0	
Total coliform (Present / Absent)	-	A	A		A	
pH (Standard Units) @ 25°C	8.70*	8.10*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	227	344				
Turbidity (NTU)	5.98	0.0700*	0.3		0.3	
Threshold Odor Number	70F	1CL				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.