

**North Texas Municipal Water District  
Tawakoni Water Analysis  
Dec-2011**

<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	118	168		500		1000
Silica (SiO2)	<2.00	<2.00				
Iron (Fe)	<0.200	<0.200		0.3		0.3
Calcium (Ca)	24.7	38.6				
Magnesium (Mg)	2.55	2.71				
Sodium (Na)	10.7	15.0				
Potassium (K)	4.21	4.16				
Bicarbonates (HCO3)	84.0	67.0				
Carbonates (CO3)	0	0				
Hydroxides (OH)	0	0				
Sulfate (SO4)	11.9	58.7		250		
Nitrite (NO2)	<0.0200	<0.0200	1		1	
Nitrate (NO3)	0.384	0.401	10		10	
Chloride (Cl)	7.56	12.5		250		300
Fluoride (F)	0.241	0.262	4.0	2.0		2.0
Phosphates (PO4)	0.0524	0.122				

	<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	84.0	67.0				
Phenolphthalein Alkalinity	0	0				
Noncarbonate Hardness	0	37.0				
Total Hardness	82.0	104				
Langelier Index	-	[- 0.221 ]				

**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)	<0.00500	<0.00500	0.01		0.01	
Barium (Ba)	0.0684	0.0646	2		2	
Cadmium (Cd)	<0.00100	<0.00100	0.005		0.005	
Chromium (Cr)	<0.00500	<0.00500	0.1		0.1	
Copper (Cu)	<0.00100	0.0118	1.3		1.3	1.0
Iron (Fe)	<0.200	<0.200		0.3		
Lead (Pb)	<0.00100	<0.00100	0.15		0.15	
Manganese (Mn)	0.0497	0.0286		0.05		0.05
Mercury (Hg)	<0.000100	<0.000100	0.002		0.002	
Nickel (Ni)	0.00141	0.00322				
Selenium (Se)	<0.00100	<0.00100	0.05		0.05	
Silver (Ag)	<0.00100	<0.00100		0.10		0.1
Zinc (Zn)	<0.00500	<0.00500		5		5

**Other Analysis**

Chlorine Residual (mg/L)	-	3.10*	4.0		4.0	
Total coliform ( Present / Absent )	-	A	A		A	
pH (Standard Units) @ 25°C	8.17*	7.72*		6.5 - 8.5		>7.0
Specific Conductance (Umhos)	210	286				
Turbidity (NTU)	4.97*	0.0397*	0.3		0.3	
Threshold Odor Number	17F	2E				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.**