



City of San Angelo
Water Quality Laboratory



LABORATORY REPORT

Report To: City of San Angelo
 Water Production Plant
 San Angelo, TX

Lab Number: 1184
Collected: 5/9/2013
Received: 5/9/2013
Reported: 5/14/2013

Project Name: Water Production Plant
Sample ID: Tap Grab

Test Description	Results	Test Date	By	D.L.	Method
Total Hardness (as CaCO3)	436 mg/L	5/9/2013	AEV	4	SM 2340-C
Total Alkalinity (as CaCO3)	112 mg/L	5/9/2013	AEV	4	SM 2320-B
pH Value	7.6 units	5/9/2013	AEV		SM 4500-H+
Calcium (as Ca)	96 mg/L	5/9/2013	AEV	4	SM 3500-Ca-B
Magnesium (as Mg)	48 mg/L	5/9/2013	AEV	4	SM 3500-Mg-
Chloride (Cl)	280 mg/L	5/9/2013	AEV	4	SM 4500-Cl-B
Sulfate (SO4)	266 mg/L	5/9/2013	AEV	10	Hach 10227
Nitrate nitrogen (NO3-N)	0.29 mg/L	5/9/2013	AEV	0.23	Hach 10206
Ammonia nitrogen (NH3-N)	0.74 mg/L	5/9/2013	AEV	0.015	Hach 10205
Bicarbonate (HCO3)	137 mg/L	5/9/2013	AEV	4	SM 2320-B
Iron (Fe)	0.02 mg/L	5/9/2013	AEV	0.01	Hach 8008
Ortho-phosphate (PO4)	0.09 mg/L	5/9/2013	AEV	0.06	Hach 8048
Aluminum (Al)	0.10 mg/L	5/9/2013	AEV	0.1	Hach 8012
Fluoride (F)	0.47 mg/L	5/9/2013	AEV	0.1	Hach 8029
Potassium (K)	10.0 mg/L	5/9/2013	AEV	5	Hach 8049
Sodium (Na)	155 mg/L	5/9/2013	AEV	4	calc.
Conductivity	1576 µS	5/9/2013	AEV	1	SM 2510-B
Temperature (C°)	19.5 C°	5/9/2013	AEV		SM 2550-B
Langelier Saturation Index	-0.10	5/9/2013	AEV		TCEQ Calc.
Ryznar Stability Index	7.83	5/9/2013	AEV		AWWA calc
Total Dissolved Solids (TDS)	994 mg/L	5/9/2013	AEV	5	calc.
Total Hardness (in Grains)	25.7 gr/gallon	5/9/2013	AEV		SM 2340-C

Langelier's Index: <-0.5 No potential to scale, water will dissolve CaCO3
 >0.5 Scale can form, CaCO3 precipitation may occur
 -0.5 to 0.5, in balance.

Ryznar Index: 4-5 Heavy scale probable
 5-6 Light scale potential
 6-7 In Balance
 7-7.5 Moderate corrosion potential
 7.5-9 Heavy corrosion probable

CC: Lab File

Tymm Combest, Water Quality Superintendent