



City of San Angelo
Water Quality Laboratory



LABORATORY REPORT

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

Lab Number: 1191
Collected: 7/19/2013
Received: 7/19/2013
Reported: 7/22/2013

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	7/19/2013	MDC	4	SM 2340-C
Total Alkalinity (as CaCO3)	120 mg/L	7/19/2013	MDC	4	SM 2320-B
pH Value	8.6 units	7/19/2013	MDC		SM 4500-H+
Calcium (as Ca)	99 mg/L	7/19/2013	MDC	4	SM 3500-Ca-B
Magnesium (as Mg)	46 mg/L	7/19/2013	MDC	4	SM 3500-Mg-
Chloride (Cl)	268 mg/L	7/19/2013	MDC	4	SM 4500-Cl-B
Sulfate (SO4)	301 mg/L	7/19/2013	MDC	10	Hach 10227
Nitrate nitrogen (NO3-N)	0.26 mg/L	7/19/2013	MDC	0.23	Hach 10206
Ammonia nitrogen (NH3-N)	0.82 mg/L	7/19/2013	MDC	0.015	Hach 10205
Bicarbonate (HCO3)	146 mg/L	7/19/2013	MDC	4	SM 2320-B
Iron (Fe)	0.02 mg/L	7/19/2013	MDC	0.01	Hach 8008
Ortho-phosphate (PO4)	0.09 mg/L	7/19/2013	MDC	0.06	Hach 8048
Aluminum (Al)	0.1 mg/L	7/19/2013	MDC	0.1	Hach 8012
Fluoride (F)	0.57 mg/L	7/19/2013	MDC	0.1	Hach 8029
Potassium (K)	12.0 mg/L	7/19/2013	MDC	5	Hach 8049
Sodium (Na)	166 mg/L	7/19/2013	MDC	4	calc.
Conductivity	1578 µS	7/19/2013	MDC	1	SM 2510-B
Temperature (C°)	25.5 C°	7/19/2013	MDC		SM 2550-B
Langelier Saturation Index	1.02	7/19/2013	MDC		TCEQ Calc.
Ryznar Stability Index	6.50	7/19/2013	MDC		AWWA calc
Total Dissolved Solids (TDS)	1042 mg/L	7/19/2013	MDC	5	calc.
Total Hardness (in Grains)	25.7 gr/gallon	7/19/2013	MDC		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

Tynn Combest, Water Quality Superintendent

CC: Lab File