

**CITY OF EL PASO
EL PASO WATER UTILITIES
CHEMICAL ANALYSIS – CITY WATER**

(All results expressed in milligrams per liter, mg/l)

PARAMETER TESTED	WATER SOURCE LOCATION							MAXIMUM LEVEL PERMITTED
	UPPER VALLEY	DOWNTOWN CENTRAL	NORTHEAST	AIRPORT CENTRAL	FORT BLISS AIRPORT	LOWER VALLEY	LOWER VALLEY CENTRAL	
	UPPER VALLEY WELL FIELD SUPPLIES WELL WATER TO THE UPPER VALLEY WTP YEAR-ROUND	ROBERTSON/ UMBENHAUER WTP SUPPLIED BY RIO GRANDE MAR - SEPT	NORTHEAST WELL FIELD WELL WATER BLENDED INTO DISTRIBUTION OCT - FEB	AIRPORT WELL FIELD WELL WATER BLENDED INTO DISTRIBUTION OCT - FEB	FORT BLISS & AIRPORT WELL FIELDS SUPPLY WELL WATER TO KBH DESAL PLANT YEAR-ROUND	JONATHAN ROGERS WTP SUPPLIED BY RIO GRANDE MAR - SEPT	LOWER VALLEY & CENTRAL WELL FIELDS SUPPLY WELL WATER DIRECTLY INTO DISTRIBUTION OCT - FEB	
	SOURCE 1	SOURCE 2	SOURCE 3	SOURCE 4	SOURCE 5	SOURCE 6	SOURCE 7	
AVG	AVG	AVG	AVG	AVG	AVG	AVG	AVG	
Total Dissolved Solids	630	650	470	627	454	700	862	1000 mg/l
Phenol Alkalinity as CaCO ₃	3.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	Not established
Total Alkalinity as CaCO ₃	121	130	115	110	24.5	133	125	Not established
Total Hardness as CaCO ₃	119	235	149	168	63	230	236	Not established
Chlorides as Cl	117	107	177	195	182	133	283	300 mg/l
Sulfates as SO ₄	189	191	71	104	14	182	160	300 mg/l
Fluorides as F	0.59	0.58	0.87	0.68	NA	0.62	0.55	4.0 mg/l
Silica as SiO ₂	36	20	32	31	NA	20	29	Not established
Nitrates as NO ₃	<0.10	0.41	1.96	1.6	NA	2.1	0.95	10 mg/l
Nitrites as NO ₂	<0.05	<0.05	<0.05	<0.05	NA	<0.05	0.06	1.0 mg/l
Phosphates as PO ₄	<0.05	0.55	<0.05	0.07	0.51	0.68	0.14	Not established
Calcium as Ca	42	71	43	43	14	71	78	Not established
Magnesium as Mg	5.5	15	11.3	13	3.9	15	21	Not established
Sodium as Na	168	130	105	153	109	133	217	Not established
Potassium as K	3.6	7.9	7.3	10.4	4.5	8.6	9.4	Not established
Iron as Fe	<0.020	<0.020	<0.020	<0.020	<0.03	<0.03	0.027	0.3 mg/l
Manganese as Mn	0.050	0.012	<0.010	<0.010	NA	<0.010	0.016	0.05 mg/l
pH	8.1	7.3	7.7	7.9	7.5	7.3	7.6	pH 6.5-8.5

The city is supplied by seven distinct blended sources that are interconnected in the distribution system and it is possible that the water from one source can be distributed to other parts of the city. Normally, the distribution of these sources to the city's areas is as follows: **Upper Valley and Northwest – Source 1; West – Sources 1 & 2; Downtown Central – Sources 2, 4, & 7; Airport Central – Sources 2 & 4; Northeast – Sources 3, 5, & 6; East – Sources 4, 5 & 6; Far East – Sources 3, 5, & 6; and Lower Valley – Sources 4, 6, & 7.** The areas supplied by each of these sources are as indicated by the attached distribution maps on a seasonal basis. However, the ratios of water supplied by one source or another are constantly changing and therefore intermixing of water within these areas is possible.*

In general, the hardness may be considered to average about 175 mg/l or about 10.2 grains per gallon.** The fluoride content is considered ideal for maximum protection of teeth. A chlorine residual of 0.5 to 1.5 mg/l is maintained to prevent tastes and odors and to assure disinfected water. Disinfection is necessary to prevent waterborne illness caused by bacteria, protozoa or viruses. Primary drinking water regulations establish that surface and ground waters be tested for inorganic chemicals. A list of these chemicals along with their limits (in ppm, unless otherwise specified) follows:

Antimony (0.006 mg/l)	Barium (2.0 mg/l)	Chromium (0.1 mg/l)	Fluoride (4.0 mg/l)	Nitrate as N (10.0 mg/l)	Thallium (0.002 mg/l)
Arsenic (0.01 mg/l)	Beryllium (0.004 mg/l)	Copper (1.3 mg/l)	Lead (0.015 mg/l)	Nitrite as N (1.0 mg/l)	Uranium (0.03 mg/l)
Asbestos (7 MFL***)	Cadmium (0.005 mg/l)	Cyanide (0.2 mg/l)	Mercury (0.002 mg/l)	Selenium (0.05 mg/l)	

Drinking water must also be tested for Organic Chemicals (Pesticides and Insecticides), Disinfectants and Disinfection By-Products (e.g. Total Trihalomethanes (0.08 mg/l) and Haloacetic Acids (0.06 mg/l)), and Microbial Contaminants as specified by the State. Radiochemical analysis is also performed.

* The blended water received by customers meets all standards of the Texas Commission on Environmental Quality for drinking water.

** One grain per gallon = 17.1 mg/l

*** MFL, or million fibers per liter; fiber length greater than 10 µm

Revised 07/2014

EL PASO WATER UTILITIES TYPICAL WATER DISTRIBUTION SUPPLY PATTERN

March - September

October - February

