

Water Equivalents and Conversions

Characteristic	Equivalent / Conversion
1 Pound	7000 Grains
1 Grain	17.1 Parts Per Million
Parts Per Million (ppm)	Milligrams Per Liter (mg/l)
Megohm Per Milliliter (meg/ml)	21,800 Grains (milliequivalent per milliliter)
1%	10,000 Parts Per Million (ppm)
1 Cubic Foot	28.3 Liters / 7.48 Gallons
1 Gallon	3.785 Liters / 8.33 Pounds
1 Liter	1,000 Milliliters
8.33 Pounds of Steam	1 Gallon
1 Boiler Horse Power	Uses 4 Gallons Per Hour
Square Foot Surface	Diameter x Diameter x .785
Cubic Feet	Square Feet x Height
Ohms to Microsiemens	1,000,000 ÷ Ohms
Microsiemens to Ohms	1,000,000 ÷ Microsiemens
1 Cubic Feet of Rock/Solar Salt	72 Pounds
1 Pound per Square Inch (PSI)	2.3 Feet of water (head)
1 Atmosphere (bar)	17.4 Pounds per Square Inch (PSI)

CONDUCTIVITY vs RESISTIVITY vs TOTAL DISSOLVED SOLIDS vs GRAINS PER GALLON

Conductivity Microsiemens/Centimeter	Resistivity Ohms Per Centimeter	Total Dissolved Solids Milligrams Per Liter PPM as CaCO3	Total Dissolved Solids Grains Per Gallon as CaCO3
0.056	18,000,000	0.028	0.002
0.063	16,000,000	0.031	0.002
0.071	14,000,000	0.036	0.002
0.083	12,000,000	0.042	0.002
0.100	10,000,000	0.050	0.003
0.133	7,500,000	0.067	0.004
0.200	5,000,000	0.100	0.006
0.500	2,000,000	0.250	0.015
1.00	1,000,000	0.500	0.029
1.333	750,000	0.667	0.039
2.000	500,000	1.000	0.068
4.000	250,000	2.000	0.117
10.000	100,000	5.000	0.292
20.000	50,000	10.000	0.585
40.000	25,000	20.000	1.170
80.000	13,000	40.000	2.339
100.000	10,000	50.000	2.924
200.000	5,000	100.000	5.848
500.000	2,000	250.000	14.620
1,000.000	1,000	500.000	29.240
2,000.000	500	1,000.000	58.480
5,000.000	200	2,500.000	146.199
10,000.000	100	5,000.000	292.398