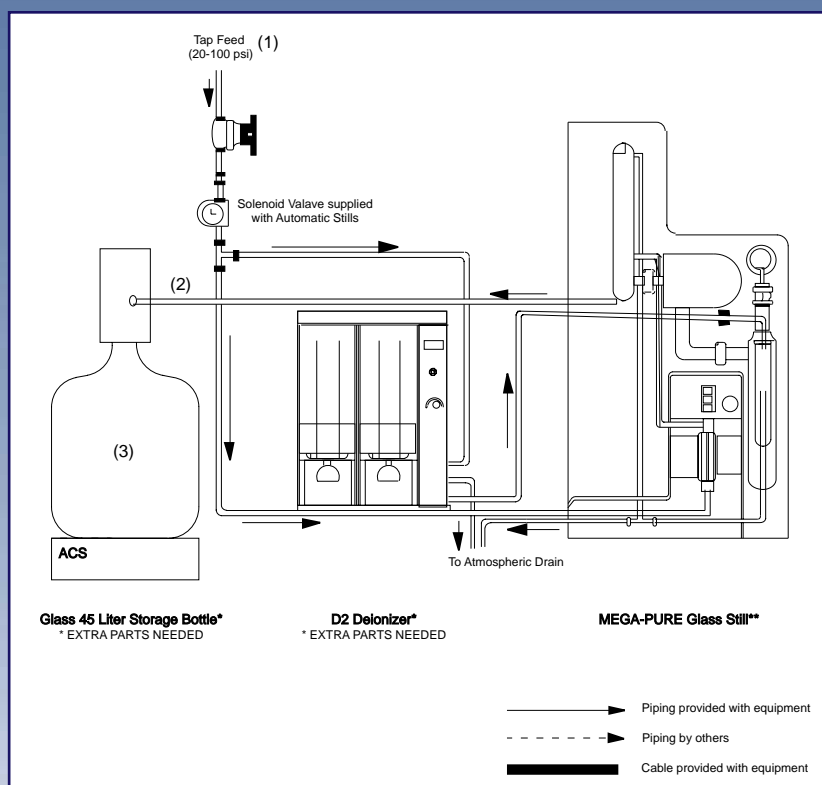


Barnstead Distillation



Mega-Pure® Glass Stills



Expected Purity from MEGA-PURE MP-3A with ACS

Tap water feed and still product water were assayed for important water quality parameters.

Conclusion

Except for resistivity, the MP-3A still and ACS combination meet and exceeds ASTM Type II reagent grade water specifications. Even with resistivity below the 1.0 megohm Type II specification, the product water is suitable for laboratory applications that do not require Type I water. Results will vary with pretreatment options and feed water quality.

WATER QUALITY RESULTS

SAMPLE LOCATION (Refer to drawing at right)	TAP water (1)	Distillate Tube (2)	ACS (3)
RESISTIVITY (megohm/cm2)	0.0042	0.76	0.68
TOC (mg/l)	1.30	< 0.05	0.058
BACTERIA CF U/ml			
24 hr.	-	0.0	0.0
48 hr.	-	0.0	0.0
72 hr.	-	0.0	0.0
ENDOTOXIN Eu/ml	7.0 average	< 0.005	< 0.005
CALCIUM (µg/l)	(23.25 mg/l)	6.0	< 5.0
MAGNESIUM (µg/l)	(75.03 mg/l)	< 1.0	< 1.0
SODIUM (µg/l)	(13.95 mg/l)	< 5.0	< 5.0
SILVER (µg/l)	-	< 1.0	< 1.0
COPPER (µg/l)	-	< 1.0	< 1.0
LEAD (µg/l)	-	< 1.0	< 1.0
NICKEL (µg/l)	-	< 5.0	< 5.0
MANGANESE (µg/l)	-	< 0.1	< 0.1
TIN (µg/l)	-	< 6.0	< 6.0
CADMIUM (µg/l)	-	< 0.2	< 0.2
CHROMIUM (µg/l)	-	< 1.0	< 1.0
SILICA (µg/l)	(12.04 mg/l)	< 3.0	< 3.0
CHLORIDE (µg/l)	(24.25 mg/l)	< 5.0	< 5.0
AMMONIA (µg/l)	-	< 10.0	< 10.0
FREE CHLORINE (mg/l)	0.15	0.19	BDL

BDL = Below Detection Limit