

**METHODS OF SAMPLING AND TESTING
MT 604-04
CONVERSION TABLES**

Water

7.5 gal. water	=	1 cu. ft.
1 cu. ft. water	=	62.4 lbs.
3785 cc water	=	1 gal.
8.32 lbs. Water @ 25°c	=	1 gal.
231 cu. in. water	=	1 gal.
1728 cu. in. water	=	1 cu. ft.

Volume Measurements

1 cu. in.	=	0.000579 cu. ft.
1 cu. ft.	=	1728 cu. in.
1 cu. yd.	=	27 cu. ft.
1 cu. meter	=	35.31445 cu. ft.
1 cu. centimeter	=	0.0000353 cu. ft.

Weight Measurements

1 oz.	=	28.35 grams	
1 lb.	=	453.59 grams	= 0.454 kilograms
1 oz.	=	0.0625 lbs.	
1 lb.	=	16 oz.	
1 kilogram	=	2.2 lb.	= 1000 grams

Length Measurements				Area			
1 in.	=	0.0833 ft.	=	2.54 cm.	Circle	=	3.1416 * R ²
1 yd.	=	3 ft.	=	36 in.	1 sq. mile	=	640 acres
1 rod	=	16.5 ft.	=	198 in.	1 acre	=	43560 sq. ft.
1 chain	=	66 ft.	=	792 in.	1 sq. yd.	=	9 sq. ft.
1 mile	=	5280 ft.	=	1760 yd.	1 sq. yd.	=	1296 sq. in.
1 cm	=	0.032808 ft.	=	0.3937 in.	1 sq. ft.	=	144 sq. in.

Estimated Equivalents

1 cu. ft. concrete	=	150 lbs.
1 cu. ft. clay, undisturbed	=	110 lbs. dry; 135 lbs. wet
1 cu. ft. sand	=	100 lbs. loose; 115 lbs. consolidated
1 cu. yd. compacted clay	=	3500 lbs. (wet weight)
1 cu. yd. compacted stabilized gravel	=	3800 lbs.

cu. yds. * 1.9 = tons compacted stabilized gravel
 1 mile * 1 ft. * 1 in. compacted stabilized gravel = 30.8 tons

Miscellaneous

<u>Multiply</u>	<u>by</u>	<u>To obtain</u>
ft. per second	0.68182	miles per hour
miles per hour	88	feet per min.
pounds of water per min.	0.016021	cu. ft. per min.
cu. ft. per min.	0.12468	gal. per second