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. cm	=	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

1 in.	=	0.0833 ft.	=	2.54 cm.
1 yd.	=	3 ft.	=	36 in.
1 rod	=	16.5 ft.	=	198 in.
1 chain	=	66 ft.	=	792 in.
1 mile	=	5280 ft.	=	1760 yd.
1 cm	=	0.032808 ft.	=	0.3937 in.

Area

Circle	=	3.1416 * R2
1 sq. mile	=	640 acres
1 acre	=	43560 sq. ft.
1 sq. yd.	=	9 sq. ft.
1 sq. yd.	=	1296 sq. 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

Multiply	ft. per second	by	0.68182	to obtain	miles per hour
Multiply	miles per hour	by	88	to obtain	feet per min.
Multiply	lbs of water per min.	by	0.016021	to obtain	cu. ft. per min.
Multiply	cu. ft. per min.	by	0.12468	to obtain	gal. per second