

Petroleum Systems and Geologic Assessment of Oil and Gas in the San Joaquin Basin Province, California

Chapter 31

Conversion Factors (Approximate)

Compiled by T.R. Klett

Note: For this assessment, 6,000 cubic feet of gas equals 1 barrel of oil equivalent (BOE).

To convert from	To	Multiply by
Length		
foot (ft)	kilometer (km)	0.000305
foot (ft)	meter (m)	0.305
foot (ft)	mile (mi)	0.000189
kilometer (km)	foot (ft)	3,280
kilometer (km)	mile (mi)	0.621
meter (m)	foot (ft)	3.28
mile (mi)	foot (ft)	5,280
mile (mi)	kilometer (km)	1.61
Area		
sq. kilometer (km ²)	sq. mile (mi ²)	0.386
sq. mile (mi ²)	sq. kilometer (km ²)	2.59
Weight		
metric ton	ton, short (2,000 lb)	1.10
ton, short (2,000 lb)	metric ton	0.907
Crude oil (based on average specific gravity at standard temperature and pressure)		
barrel (bbl)	metric ton	0.136
barrel (bbl)	ton, short (2,000 lb)	0.150
metric ton	barrel (bbl)	7.33
ton, short (2,000 lb)	barrel (bbl)	6.65

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To convert from	To	Multiply by
Liquid fuels		
barrel (bbl)	cubic meter (m ³)	0.159
barrel (bbl)	gallon (gal)	42.0
barrel (bbl)	liter (L)	159
cubic meter (m ³)	barrel (bbl)	6.29
gallon (gal)	barrel (bbl)	0.0238
liter (L)	barrel (bbl)	0.00629
Gaseous fuels		
cubic foot (ft ³)	cubic meter (m ³)	0.0283
cubic meter (m ³)	cubic foot (ft ³)	35.3
Coproduct ratios		
cubic feet per barrel (ft ³ /bbl or CF/B)	cubic meters per cubic meters (m ³ /m ³)	0.178
barrel per million cubic feet (bbl/1,000,000 ft ³ or B/MMCF)	cubic centimeters per cubic meter (cm ³ /m ³)	5.61
cubic meters per cubic meters (m ³ /m ³)	cubic feet per barrel (ft ³ /bbl or CF/B)	5.61
cubic centimeters per cubic meters (cm ³ /m ³)	barrel per million cubic feet (bbl/1,000,000 ft ³ or B/MMCF)	0.178
Geothermal gradients		
degree Celsius per 100 meters (°C/100 m)	degree Fahrenheit per 100 feet (°F/100 ft)	0.549
degree Fahrenheit per 100 feet (°F/100 ft)	degree Celsius per 100 meters (°C/100 m)	1.82