

Attachment C

EPA and USCG Defined Petroleum-Based Oil Groups¹

Group	Density (g/cm ³)	API [^]	Examples
Group 1	Less than 0.8	>45.2	Gasoline, Kerosene
Group 2	0.8 - 0.85	45.2-34.8	Bakken crude, Gas Oil, Alberta light crude
Group 3	0.85 - 0.95	34.8-17.3	Alberta medium to heavy crude oils; dilbits
Group 4	Greater than 0.95 and less than 1	<17.3 to ≥10	Intermediate Fuel Oil (IFO) 180, (Bunker B), IFO ≥380 (Bunker C)
Group 5	Greater than 1	<10	Orimulsion®, Boscan crude

[^] API is a measure of oil density, where API gravity = (141.5/Specific gravity)-131.5 . Pure water has an API of 10.

EX 0148-TSS

¹ After Polaris Applied Sciences, Inc. 2013. A comparison of the properties of diluted bitumen crudes with other oils, https://crrc.unh.edu/sites/crrc.unh.edu/files/comparison_bitumen_other_oils_polaris_2014.pdf .