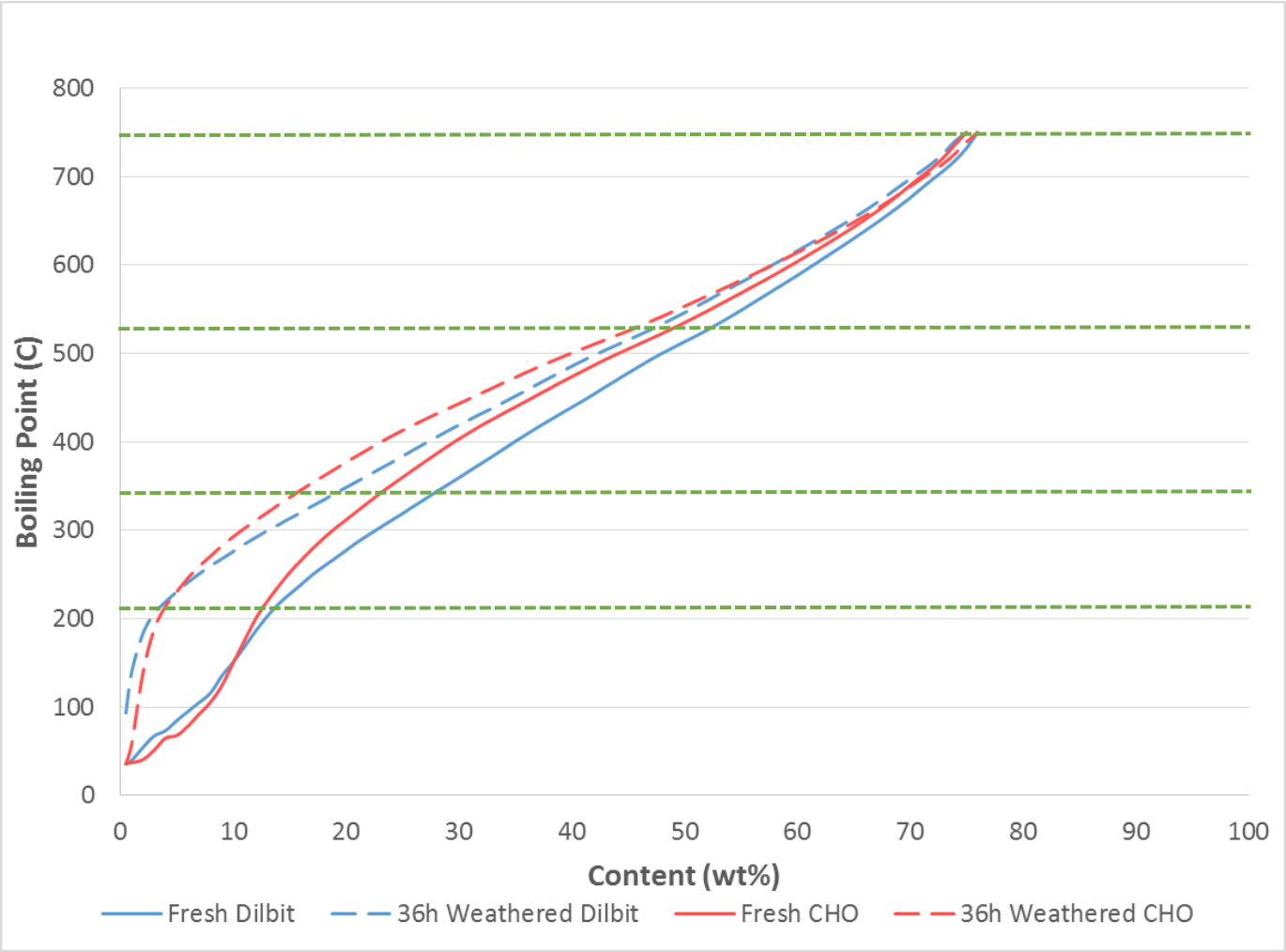
Hydrocarbon Distributions in Fresh and Weathered Oil



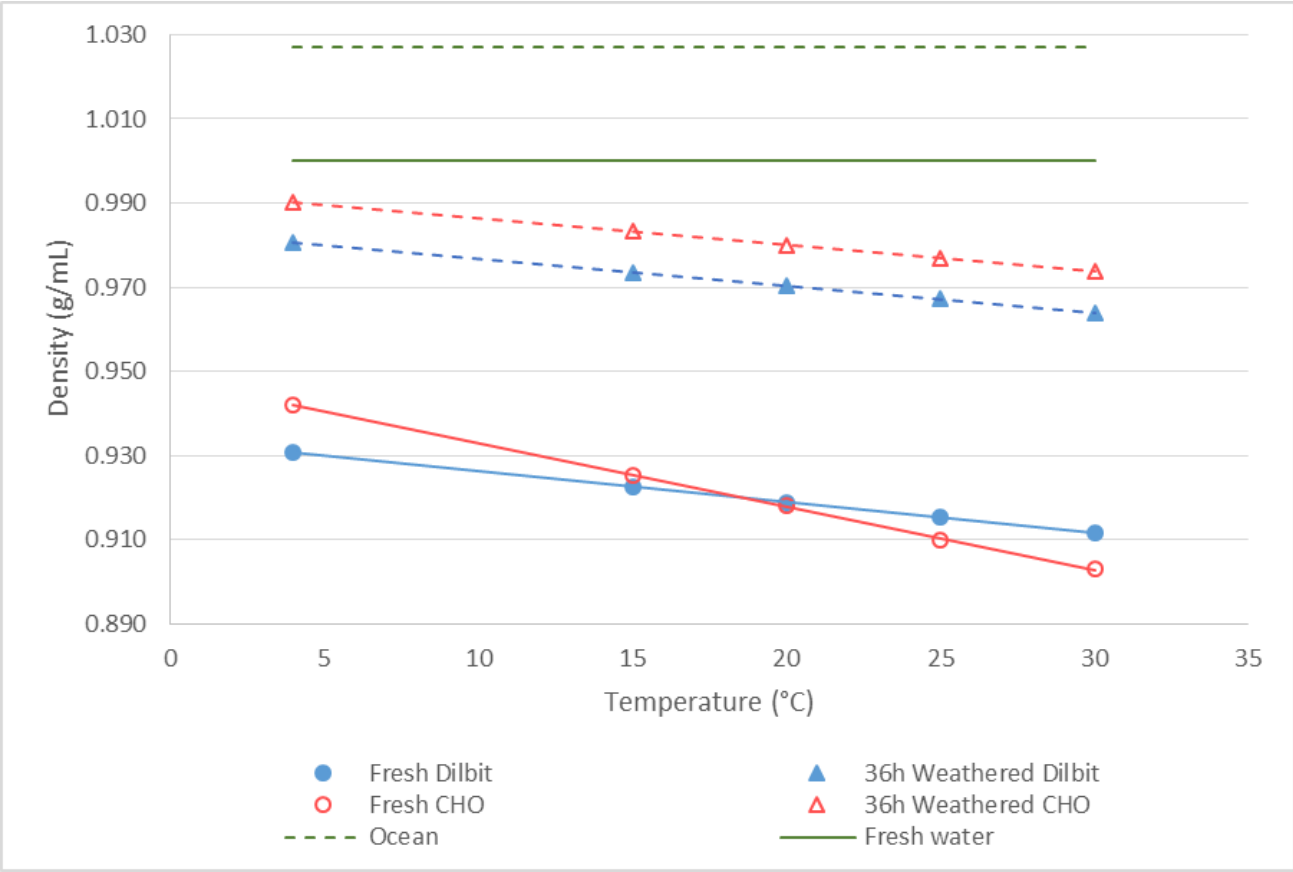
Sizes of hydrocarbons corresponding to boiling points:

- 196°C – 11 carbons (C11)
- 343°C – C20
- 524°C – C40
- 750°C – C120

Typical boiling ranges of petroleum products:

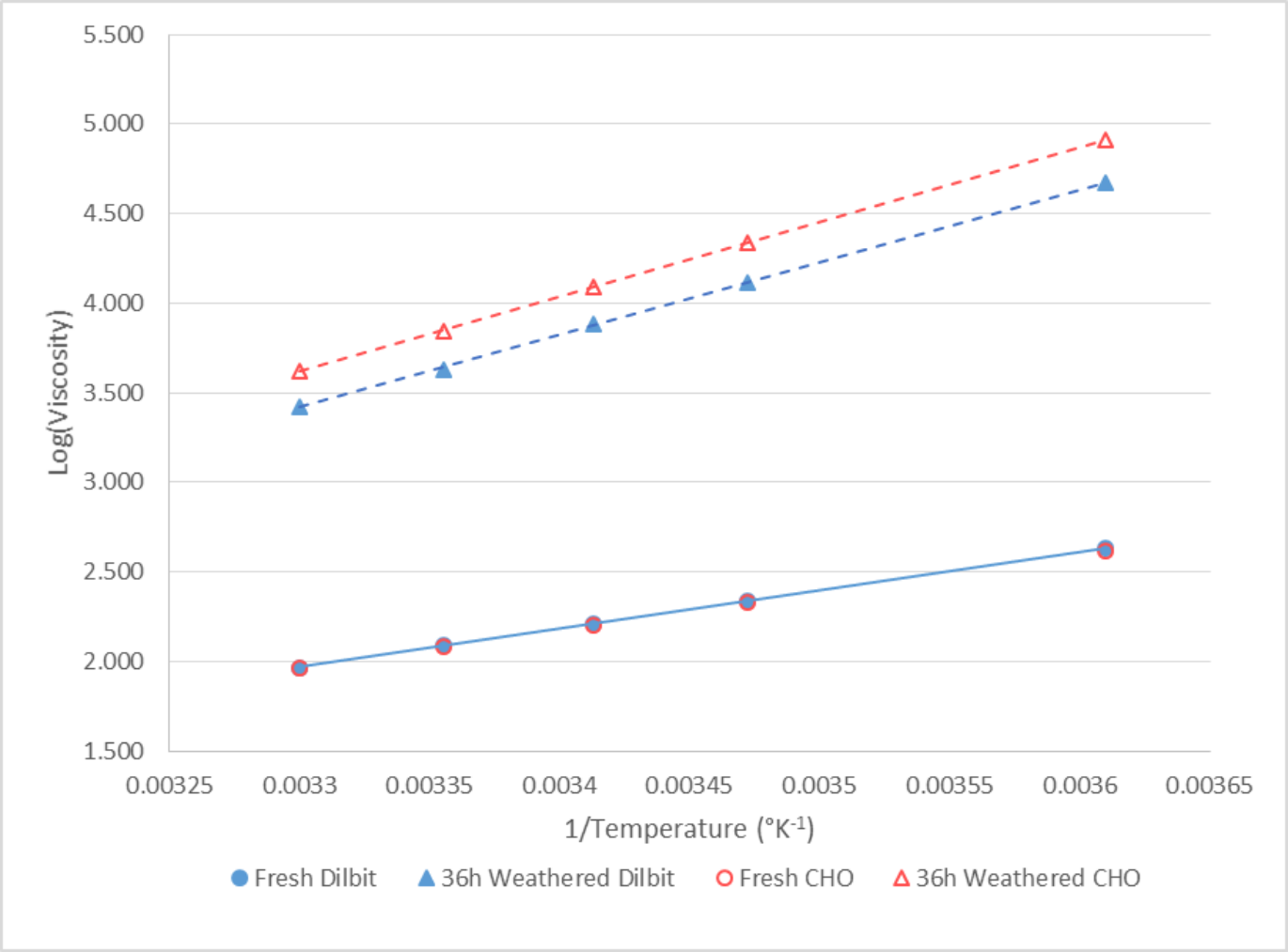
- Gasoline – 0 to 204°C
- Diesel – 204 to 343°C
- Bunker C – > 343°C
- Asphalt – > 524°C

Densities of Fresh and Weathered Oils



- Density behaviours for the dilbit and heavy oil were similar
- Neither oil became more dense than fresh water after 36 hours

Viscosity Results for Fresh and Weathered Oils



- Viscosities of fresh oils were similar
- Viscosities of both oils increased significantly after 36 hours where the heavy oil viscosity was higher than that of the dilbit

Temperature (°C)	Fresh Dilbit	36h Weathered Dilbit
4	431	47189
15	217	13026
20	162	7585
25	122	4280
30	93	2651

Temperature (°C)	Fresh CHO	36h Weathered CHO
4	417	80916
15	213	21610
20	159	12306
25	120	7020
30	92	4186

PACs in Water Accommodated Fractions of 36h Weathered Oils