AQA - Synthetic and naturally occurring polymers - GCSE Combine Science Chemistry

1. Jun/2019/Paper_8464/2H/No.7.0-7.4

This question is about hydrocarbons and crude oil.

Hydrocarbon fuels are produced from crude oil.

Describe how crude oil is separated into fractions.

[4 marks]

Butane is a hydrocarbon.

Two equations for the combustion of butane are:

- $2C_4H_{10}$ + $13O_2 \rightarrow 8CO_2$ + $10H_2O$
- $2C_4H_{10} + 5O_2 \rightarrow 8C + 10H_2O$ ٠

Why are different products formed?

One other product of the combustion of butane is carbon monoxide.

Balance the equation.

 $C_4H_{10} + __ O_2 \rightarrow __ CO + __ H_2O$

[1 mark]

[1 mark]

Carbon dioxide is a greenhouse gas.

Describe the greenhouse effect in terms of the interaction of short and long wavelength radiation with matter.

[4 marks]

