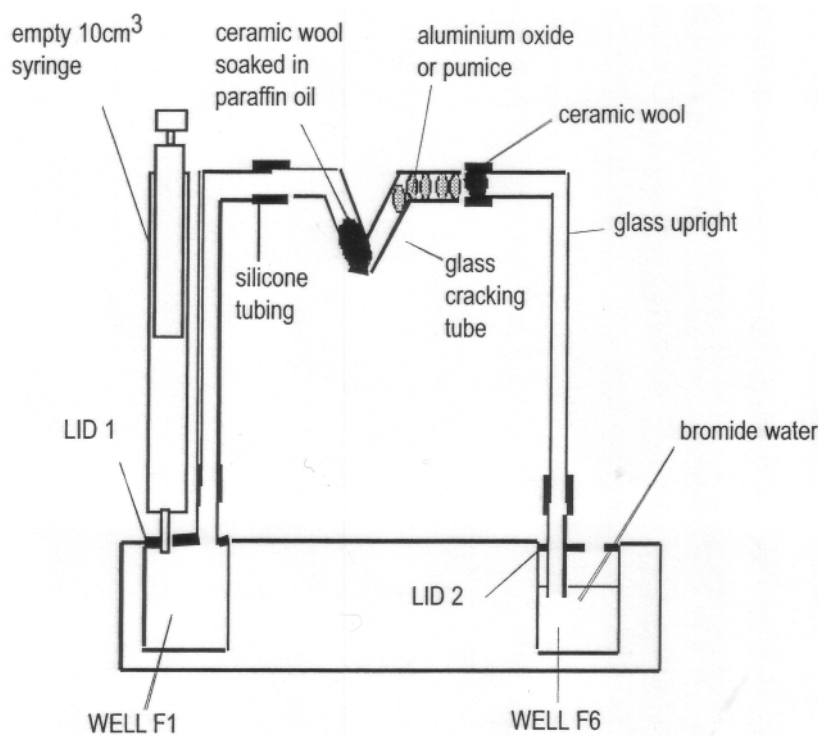


WHAT IS FORMED WHEN LARGE ALKANES ARE CRACKED?

METHOD

Set up your apparatus as shown below:



PROCEDURE

1. Using silicone tubing, connect a glass upright to 'LID 1' via the smaller outlet.
2. Do the same with a glass upright to 'LID 2'.
3. Make sure that the horizontal portions of the uprights are fixed to short lengths of silicone tubing as shown in the diagram.
4. Place some ceramic wool in the glass 'cracking tube' as shown and using a Propette add some paraffin oil so that the ceramic wool is soaked in the liquid.
5. Using the narrow end of a microspatula, add aluminium oxide or pumice **catalyst** to the other horizontal end of the cracking tube.
6. Place a small piece of ceramic wool in the end of the cracking tube nearer the catalyst. This ceramic wool should not be tightly packed.
7. Using the silicone tubing on the uprights complete the connections on the apparatus and make sure the syringe is connected but is pulled out to near its maximum volume.
8. Fill Wells F5 and F6 two-thirds full with dilute bromine water.

THE REACTION

1. **Heat the catalyst strongly** using a spirit burner. This has to be done for at least **2-3 minutes**.
2. When the catalyst is very hot, heat the paraffin oil and when it is boiling slowly depress the syringe so that the vapour passes over the catalyst and through the bromine water.