SUPPLEMENTARY INFORMATION:

1. Sample of residue from atmospheric distillation of crude oil wrapped in a polyethylene film.

![Sample of residue from atmospheric distillation of crude oil wrapped in a polyethylene film.]

2. Sequence of sample preparation for MIC procedure. (a) addition of absorbing solution; (b) addition of ammonium nitrate as aid for ignition (50 μl) and (c) sample of residue from atmospheric distillation of crude oil on the holder for combustion.

![Sequence of sample preparation for MIC procedure. (a) addition of absorbing solution; (b) addition of ammonium nitrate as aid for ignition (50 μl) and (c) sample of residue from atmospheric distillation of crude oil on the holder for combustion.]

3. (a) capping of the vessel for MIC procedure and (b) charging vessels with oxygen (20 bar) for MIC procedure.

4. View of sample combustion using MIC procedure (500 mg of sample, 6 ml of absorbing solution, 20 bar of $O_2$, 5 s of microwave irradiation at 1400 W, temperature about 1400 °C).