C L A I M S

1. A method for predicting one or more properties of bitumen using dielectric spectroscopy, wherein the method comprises:

(a) dissolving a bitumen sample in a solvent to form a bitumen solution;

(b) measuring the impedance response of the bitumen solution across a frequency range ~~of from 1,400 Hz to 1,580 Hz~~;

(c) converting the impedance response of the bitumen solution to a dielectric loss factor; and

(d) comparing the dielectric loss factor of the bitumen solution to a reference database comprising dielectric loss factors of reference bitumen samples to predict one or more properties of the bitumen sample comprising the bitumen solution; characterised in that measuring in step(b) is across a frequency range of from 1,400 Hz to 1,500 Hz and additionally across a frequency range of from 2,000 Hz to 3,000 Hz and/or across a frequency range of from 51,000 Hz to 54,000 Hz.

~~2. The method according to Claim 1, wherein at step (b), the impedance response of the bitumen solution is measured across a frequency range of from 1,400 Hz to 1,550 Hz.~~

~~3. The method according to Claim 1, wherein at step (b), the impedance response of the bitumen solution is measured at a frequency of 1,500 Hz.~~

~~4. The method according to Claim 2 or Claim 3, wherein at step (b), the impedance response of the bitumen solution is additionally measured across a frequency range of from 2,000 Hz to 3,000 Hz and/or across a frequency range of from 51,000 Hz to 54,000 Hz.~~

52. The method according to Claim 41, wherein at step (c), circuit theory analogy is used to convert the measured impedance response into the dielectric loss factor.

63. The method according to Claim 5any one of Claims 1 or 2, wherein the bitumen solution of step (a) comprises from 2 %wt. to 10 %wt. bitumen.

74. The method according to Claim 6any one of Claims 1 to 3, wherein the one or more properties of the bitumen to be predicted include change in softening point, softening point, penetration, upper performance grade (‘PG’) temperature (untreated, and after Rolling Thin-Film Oven Test (‘RTFOT’)), p-value, asphaltene content, m-value, change in softening point after Thin-Film Oven Test (TFOT) ageing, wax content, kinematic and dynamic viscosities, Fraass breaking point and/or viscosity based ageing index.

85. The method according to Claim 74, wherein step (b) is performed using a dielectric spectrometer.