

Supplementary information for

Total Sulfur Determination in Petroleum Fuels for Routine Quality Control by Sector Field Inductively Coupled Plasma Mass Spectrometry after Dilution Treatment

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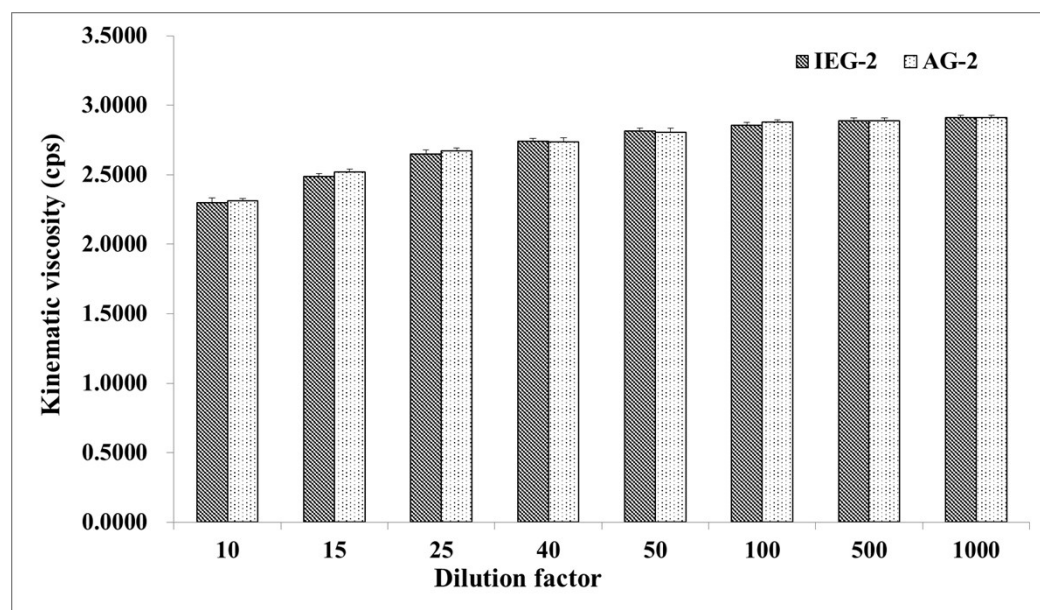
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(a)



(b)

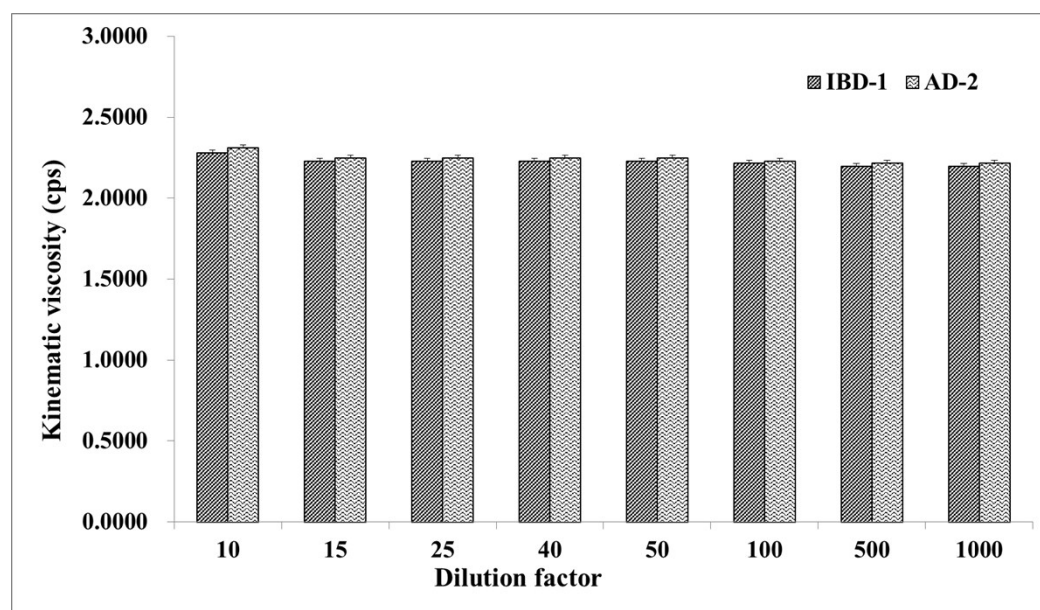


Figure S1 Kinematic viscosities of four petroleum fuel samples with different dilution factors, (a) gasoline samples (IEG-2, AG-2) and (b) diesel samples (IBD-1, AD-2). Error bars represent standard deviation for three tests.

(a)



(b)

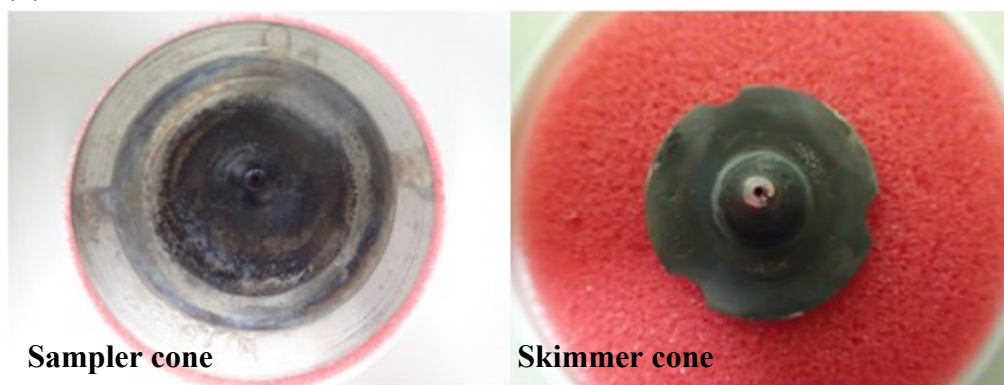
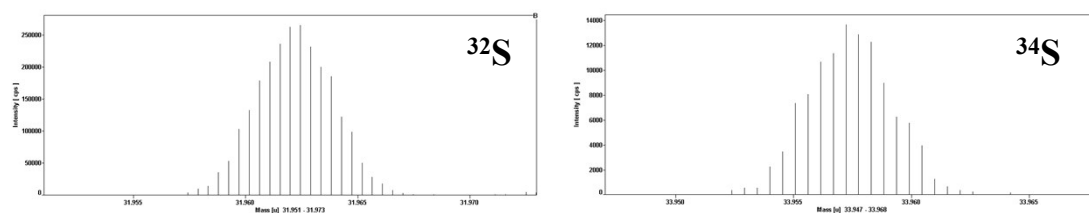
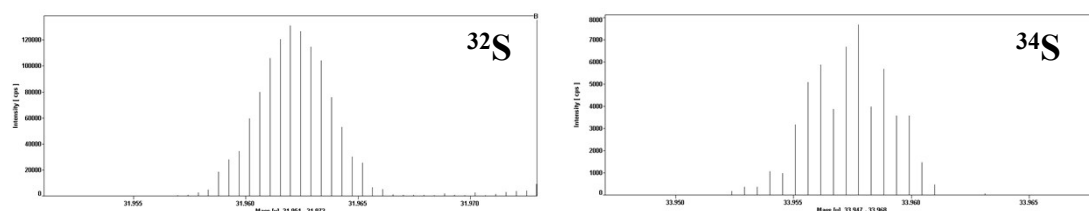


Figure S2 The appearances of sampler cone and skimmer cone after introducing organic samples, (a) with adding oxygen and (b) without adding oxygen.

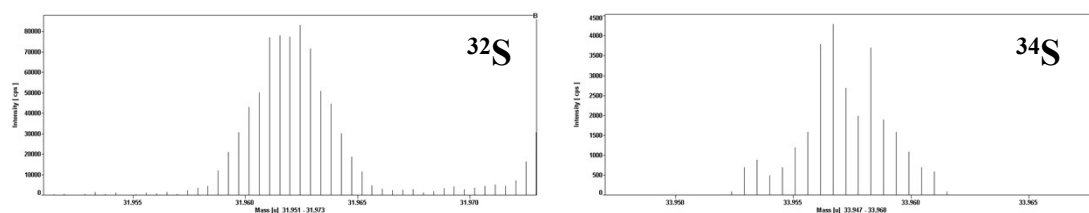
(a) O₂ flow rate: 0.150 L min⁻¹



(b) O₂ flow rate: 0.280 L min⁻¹



(c) O₂ flow rate: 0.300 L min⁻¹



(d) O₂ flow rate: 0.330 L min⁻¹

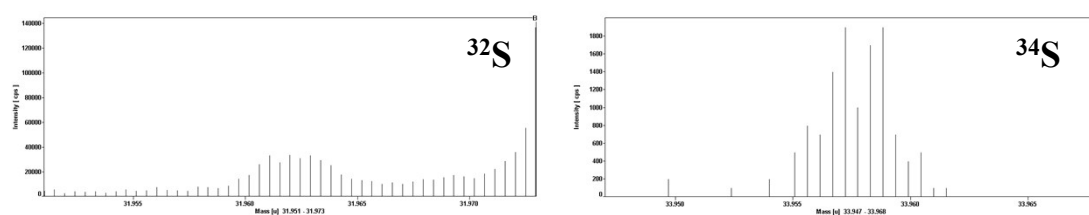


Figure S3 The spectral interference of ³²S and ³⁴S with different flow rates of oxygen at medium resolution, (a) 0.150 L min⁻¹ ; (b) 0.280 L min⁻¹ ;(c) 0.300 L min⁻¹ and (d) 0.330 L min⁻¹.