

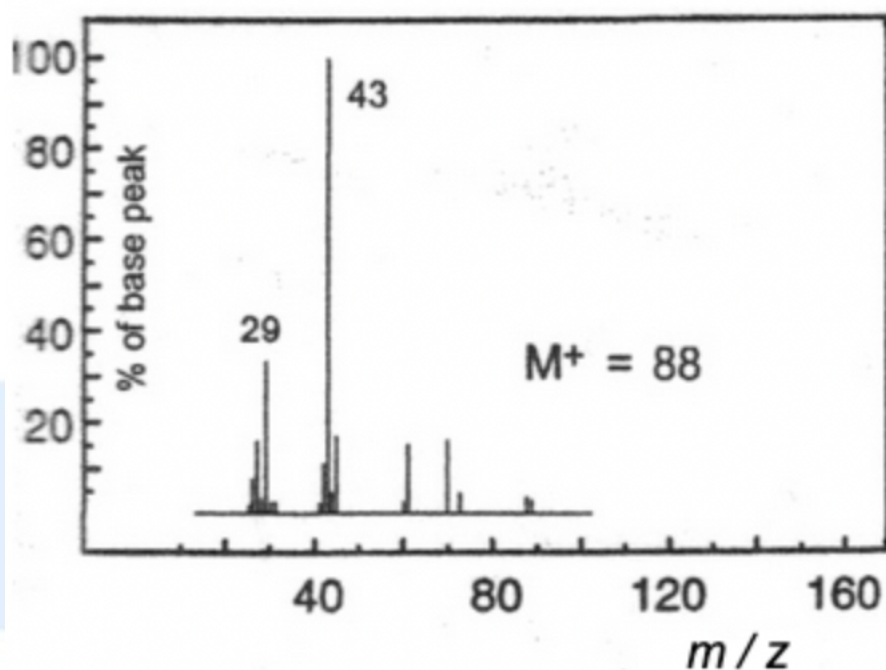
SL & HL Spectroscopic identification of organic compounds: Question 5

Identify **Compound E** from the data (a – d) given and explain how you arrived at your answer

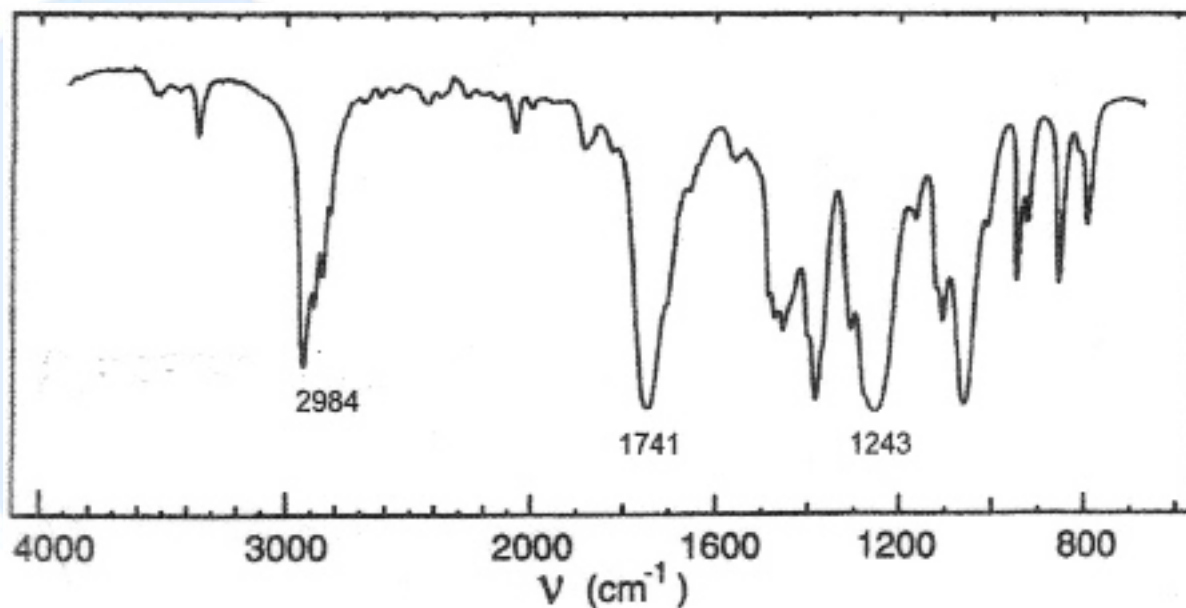
(a) Elemental analysis of Compound E

Element	Percentage by mass
Carbon	54.52
Hydrogen	9.17
Oxygen	36.31

(b) Mass spectrum of Compound E



(c) Infrared spectrum of **Compound E**



(d) Information about **Compound E** from ^1H NMR spectrum

Position of signal / δ ppm	Integration trace
1.2	3
2.0	3
4.2	2