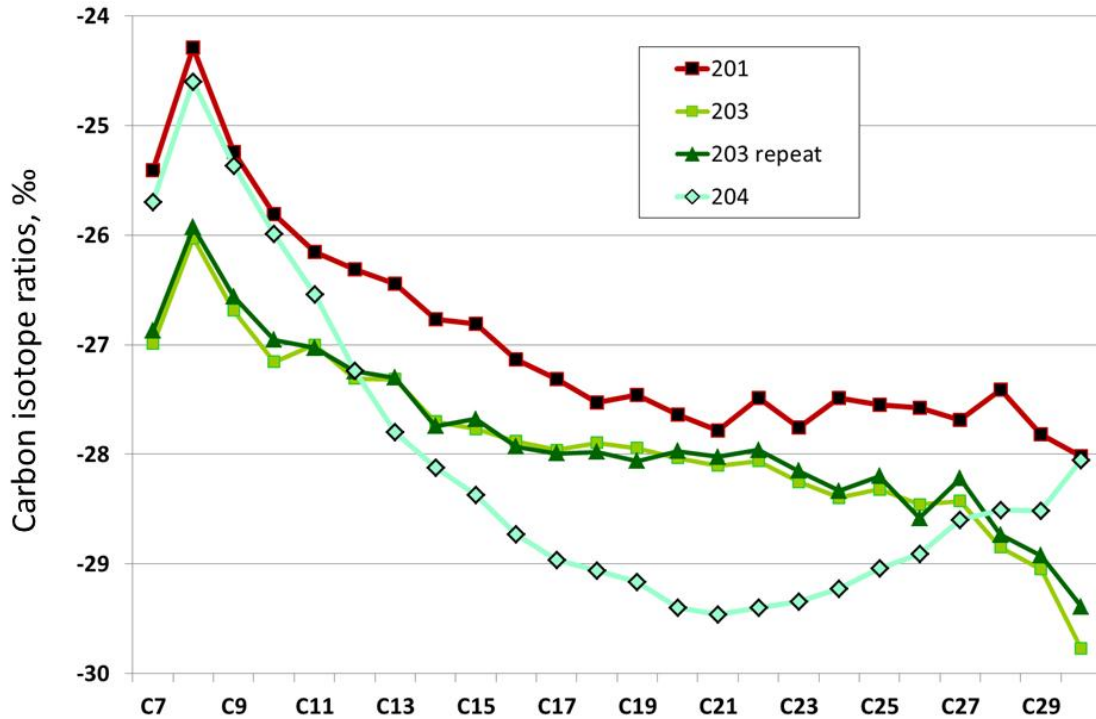


Example showing application of extended isotope analysis of n-alkanes

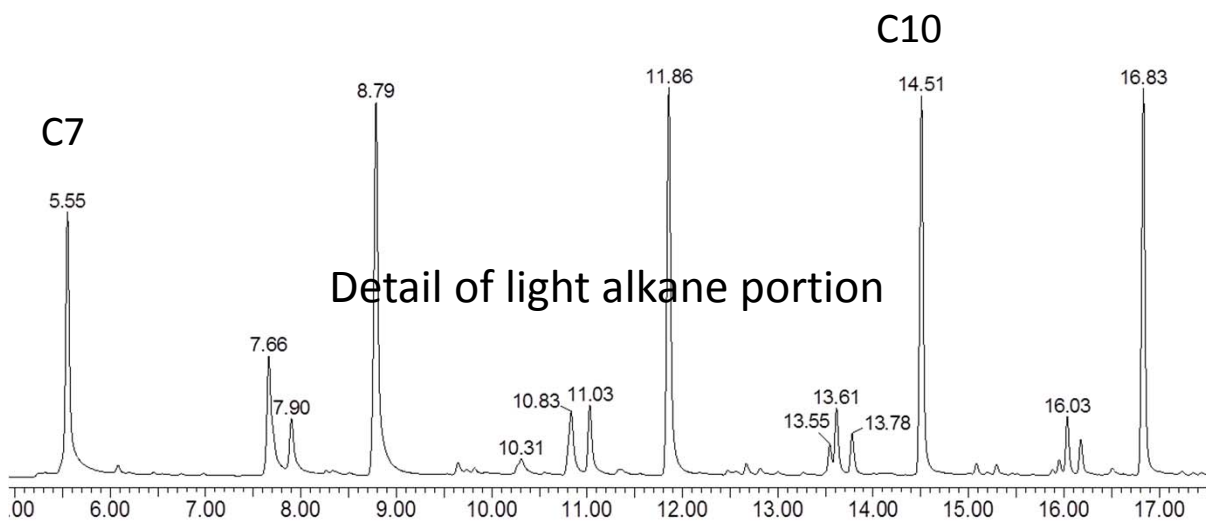
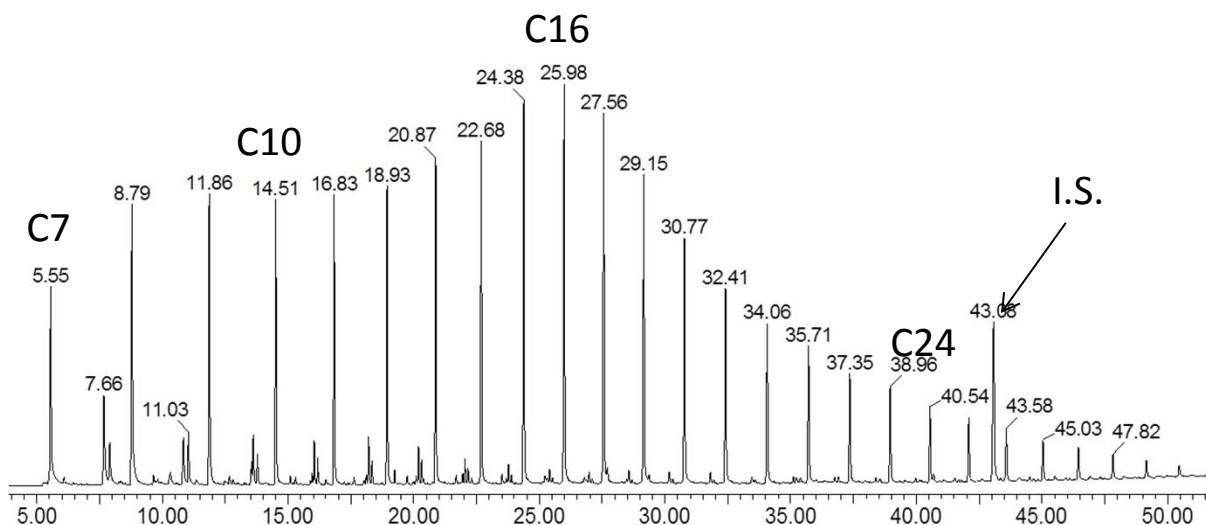
Example of a new n-alkane isotope analysis, from n-alkane fractions isolated from crude oil.



The example shows three oil samples analyzed from the same basin. Samples 201 and 204 have different isotope profiles in the C11+ range suggesting they have different oil-window sources. The light alkanes in the C7 to C10 range are very similar suggesting the two oil samples could have a deep source in common and one or both of them could be source mixtures. Sample 203 does not match either 201 or 204 and probably represents yet another source in this basin. Sample 203 was run in duplicate to test repeatability of this analysis.

Typical GC-IRMS trace of isolated alkane fraction showing C₇ to C₃₀₊ analysis range

Whole GC-IRMS trace of isolated alkane fraction



GC-IRMS retention time