Interactive comment on “Measuring long chain alkanes in diesel engine exhaust by thermal desorption PTR-MS” by M. H. Erickson et al.

Anonymous Referee #3

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I believe the manuscript should be accepted after consideration of the following comments:

- While it is clear that the PTR-MS can detect alkanes, the authors should be clearer about its ability to quantify alkanes. From the manuscript it seems that quantification is based on fragment ion signals, which are non-unique among different carbon numbers. Therefore it seems to me that at this stage, the authors can only quantify “total alkanes” but not speciated compounds, like a standard GC/MS can.

- What is the interference of cycloalkane signal on the linear alkane ions (e.g. 57, 71 etc.)?

- Minor comment Pg. 6016 line 18: Typo n>n

- Pg. 6025 line 20, "VOC mixing ration" should be "VOC mixing ratio"