

Interactive comment on “A Large Contribution of Anthropogenic Organo-Nitrates to Secondary Organic Aerosol in the Alberta Oil Sands” by Alex K. Y. Lee et al.

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Very nice work! In pondering the apparent decrease in the pON content (and relative fraction of SOA) with PCA that you report, I was reminded of another recent paper that is still in the open discussion (I think). The paper by Schwantes, et al. <https://doi.org/10.5194/acp-2018-1358> reports the formation of organic dinitrates (among other products) during the high-NO_x photooxidation of isoprene and suggests (section 5.3) a negative measurement bias in the AMS determination of these compounds (and perhaps all pON). It isn't clear to me that the methods used to determine pON are the same in both papers, but it begs the question of whether some sort of in-

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terference could be affecting the measurements of the highly oxidized oil sands SOA, perhaps leading to a lower effective CE for the more oxidized dinitrates. Perhaps this could account for the apparent decrease in the absolute and relative contribution of the nitrated products.

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2018-1177>, 2019.

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