Thank you for addressing the reviewers comments and the heavily revised manuscript. I am recommending the manuscript be published following your attention to the following minor points:

1) L14 of the abstract notes that the plume air THC was 85% CH4 and 20% CO2. Is this correct? This exceeds 100% and I wouldn't have thought to characterize CO2 as THC? Perhaps the sentence as written has me confused (but could also confuse a novice reader). Table 1 lists CO2 as 15%. I follow the logic of table 1, but the wording of the abstract is not clear. Using table 1, CH4 is 88.5% of THC and 85% of total carbon on a molar basis, correct?

Although this was clear to me when I wrote it, my re-read also was confusing, so I went back to the data and recalculated and decided for clarity to add a fourth column to Table 1 – fraction of total carbon, defined as THC+CO2+CO, and now define these clearly in the abstract, table, and text.

2) L17 of the abstract has emissions in units of M3 THC day-1. To the layperson this unit is confusing, as most are thinking in terms of a mass/unit time rather than a volume per unit time. Again, I follow the units of table 1 (far column), but the abstract units of volume/time are hard to think about. Also, the abbreviation for day-1 should probably be d-1

While these units may be standard for one community, other adjacent fields are often thinking of emissions to the atmosphere as molecules / (area x time) or some equivalent. It would be helpful to these readers if the abstract could make this connection.

We have added (in parentheses) that emissions are (27 Gg *THC* yr^{-1} based on 19.6 g $mole^{-1}$ for *THC*), and corrected to d^{-1}.

In addition, we did a thorough, line by line, careful proofread of the entire manuscript and made a number of minor improvements for clarity, as well as fixing one or two figure call outs, and added a more recent citations to the primary CH_4 loss mechanism (Zhao et al (2020)) and a more recent citation on what is seepage (Ciotoli 2020) to buttress the not recent Abrams (2005).