

## ***Interactive comment on “Redox controls on methane formation, migration and fate in shallow aquifers” by P. Humez et al.***

**Anonymous Referee #2**

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I have reviewed this manuscript quite thoroughly and find that it is in very good shape for publication as it stands. It is clean and free of typographical errors, and the figures are in very good shape. I have only one suggestion for Figures 6, 7 and 9, where SO<sub>4</sub> and DIC are given in mol/L, that they be converted to mmol/L to be consistent with other parameters and with discussion in the text. Figure 12 could use some refinement of the ordinate axis labels. Table 2 requires some attention to significant figures, particularly for nitrate, which is reported for some data to 7 sig figs., and methane with 6 for some. I have not marked up the PDF, as I had no corrections to annotate.

Overall, this is a very nice summary of an extensive data set. They have taken steps to remove unreliable data and used appropriate statistical techniques to analyze the data. This will be a valuable contribution to approaches to understand the origin of methane in shallow groundwaters.

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