

Interactive comment on “Identifying sources and controlling factors of arsenic release in saline groundwater aquifers” by C.-W. Liu et al.

Anonymous Referee #1

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Article title: Identifying sources and controlling factors of arsenic release in saline groundwater aquifers

General Comments In the manuscript a detailed study on geochemical aspect was carried out to evaluate occurrences of arsenic and its possible deposition mechanism in saline aquifer. A significant amount of work is done and a wide range of data was analyzed and presented in this study. Therefore, I consider this is a good contribution to the journal. Overall my feeling is, though a significant amount of data is presented but there is a scope to organize the context in a more comprehensive way (especially the result section). Furthermore, the writing/ grammar can be improved. Specific comments 1) Page 10575: Line 15: Figure 3 does not look very useful. Instead of relating arsenic concentration with depth and EC, I think it would be better to link with lithology
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and different ion composition (Like Figure 4). 2) In Figure 4: the lithological data can be presented more prominently, as it is very useful piece of information. 3) Page 10576: Line 25: “. . .and interaction seawater and non-saline groundwater in this region (Figure 5)” . . .from the discussion and from the figure 5 the above statement cannot be derived. 4) Page 10577: Line 25-30: High As(V) in YL6-1 and As(III) in YL6-1 was observed. Here the difference in EC was mentioned, however I feel mentioning difference in pH, redox condition would be more relevant. 5) Section 3.5: If Figure 9 represents only the calculated/simulated values, then line plot is more suitable and it can be combined with Figure 8.

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