



UNIVERSITY OF LEEDS

This is a repository copy of *Climatic controls on water-mass chemistry in a Paleocene lacustrine setting, Subei Basin, eastern China*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/212274/>

Version: Supplemental Material

Article:

Liu, Y., Yun, L., Jin, Z. et al. (7 more authors) (2024) Climatic controls on water-mass chemistry in a Paleocene lacustrine setting, Subei Basin, eastern China. Geological Society of America Bulletin. ISSN 0016-7606

<https://doi.org/10.1130/B37455.1>

© 2024 Geological Society of America. This is an author produced version of an article published in GSA Bulletin. Uploaded in accordance with the publisher's self-archiving policy.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Liu, Y., Yun, L., Jin, Z., He, X., Gao, Y., Zan, L., Hua, C., Tang, X., Zhang, R., and Poulton, S.W., 2024, Climatic controls on water-mass chemistry in a Paleocene lacustrine setting, Subei Basin, eastern China: GSA Bulletin, <https://doi.org/10.1130/B37455.1>.

Supplemental Material

Figure S1. Crossplots of Sr versus $\delta^{13}\text{C}_{\text{carb}}$ (A), Mn/Sr versus $\delta^{13}\text{C}_{\text{carb}}$ (B), Mg/Ca versus $\delta^{13}\text{C}_{\text{carb}}$ (C), and $\delta^{18}\text{O}$ versus $\delta^{13}\text{C}_{\text{carb}}$ (D).

Figure S2. A–CN–K ($\text{Al}_2\text{O}_3\text{--CaO}^*\text{+Na}_2\text{O--K}_2\text{O}$) ternary diagram of the samples from drill core QY 1. CIA—chemical index of alteration; Pl—plagioclase; Kfs—K-feldspar; Sm—smectite; Kln—kaolinite; Chl—chlorite; Ms—muscovite.

Figure S3. Crossplots of Al/Ti versus CIA (A) and Th/Sc versus CIA (B).

Figure S4. Crossplots of CaO versus Sr (A) and CaO versus Sr/Ba (B).

Table S1. Geochemical and mineralogical data for lacustrine sediments in Member II of the Paleocene Funing Formation (E_{1f_2}) from drill core QY 1 in the Subei Basin.







