

Supplemental Material

**Preservation of organic matter in nontronite against iron redox
cycling**

Qiang Zeng¹, Hailiang Dong^{1,2*}, Linduo Zhao², and Qiuyuan Huang²

¹ Key Laboratory of Biogeology and Environmental Geology, China University of
Geosciences, Beijing 100083, P. R. China

² Department of Geology and Environmental Earth Science
Miami University, Ohio 45056, USA

Authors to whom correspondence should be addressed

(dongh@cugb.edu.cn or dongh@miamioh.edu)

Revised for American Mineralogist

July 24, 2015

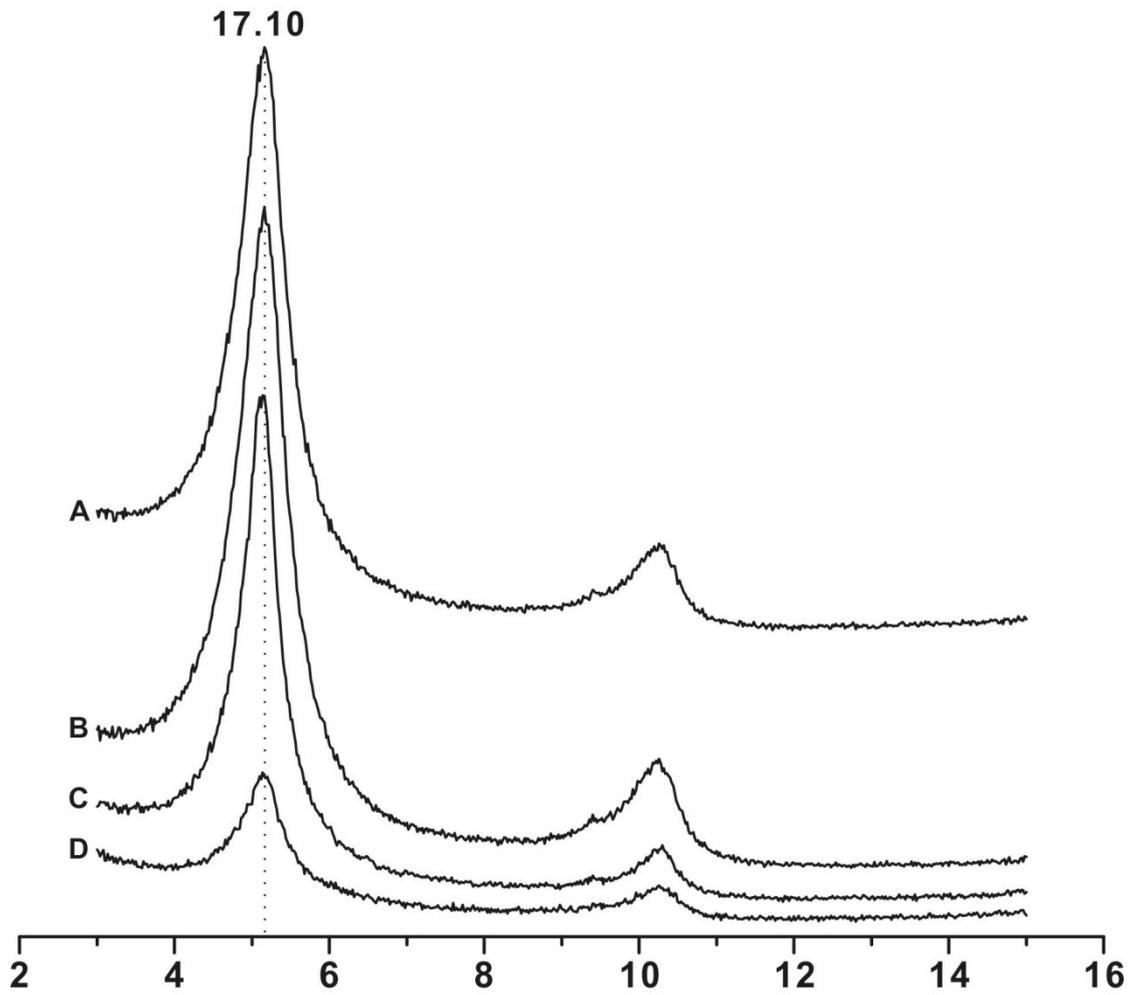
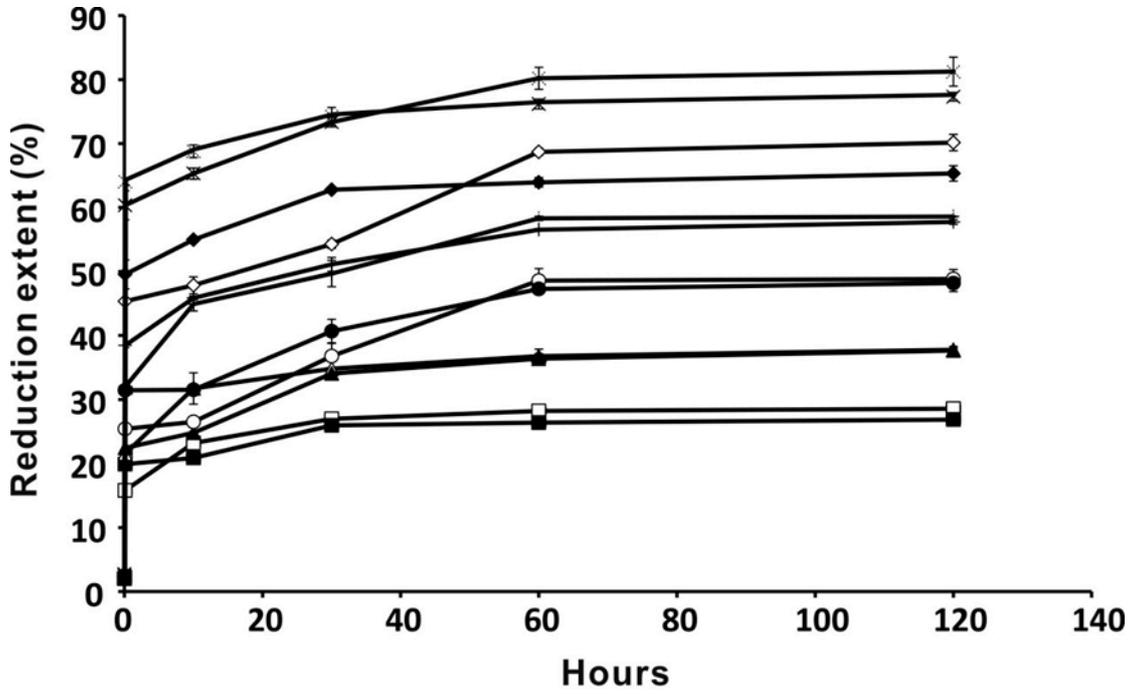


Fig. 1 XRD patterns for ethylene glycol treated samples: A) Bioreduced NAu-2 without AQDS; B) Bioreduced NAu-2 with AQDS; C) Bioreduced ALA-NAu-2 without AQDS; D) Bioreduced ALA-NAu-2 with AQDS



ALA-NAu-2	Reduction extent (%)	N Au-2	Reduction extent (%)
□ A1	28.6	■ N1	26.8
△ A2	37.8	▲ N2	37.6
○ A3	48.8	● N3	48.2
+ A4	58.6	+ N4	57.7
◇ A5	70.1	◆ N5	65.3
× A6	81.2	× N6	77.3

Fig. 2 Chemical reduction of ALA-NAu-2 and N Au-2 with different reduction extent