

Accepted Manuscript

Spatial variation and environmental assessment of soil organic carbon isotopes for tracing sources in a typical contaminated site

Qingjun Guo, Guangxu Zhu, Tongbin Chen, Jun Yang, Junxing Yang, Marc Peters, Rongfei Wei, Liyan Tian, Xiaokun Han, Jian Hu



PII: S0375-6742(16)30422-8
DOI: doi: [10.1016/j.gexplo.2016.12.009](https://doi.org/10.1016/j.gexplo.2016.12.009)
Reference: GEXPLO 5872

To appear in: *Journal of Geochemical Exploration*

Received date: 7 May 2015
Revised date: 22 July 2015
Accepted date: 7 December 2016

Please cite this article as: Qingjun Guo, Guangxu Zhu, Tongbin Chen, Jun Yang, Junxing Yang, Marc Peters, Rongfei Wei, Liyan Tian, Xiaokun Han, Jian Hu , Spatial variation and environmental assessment of soil organic carbon isotopes for tracing sources in a typical contaminated site. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Gexplo(2016), doi: [10.1016/j.gexplo.2016.12.009](https://doi.org/10.1016/j.gexplo.2016.12.009)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Spatial variation and environmental assessment
of soil organic carbon isotopes for tracing sources in a
typical contaminated site**

Qingjun Guo^{a,*}, Guangxu Zhu^{a,b}, Tongbin Chen^a, Jun Yang^a, Junxing Yang^a,
Marc Peters^a, Rongfei Wei^a, Liyan Tian^a, Xiaokun Han^a, Jian Hu^c

^aCenter for Environmental Remediation, Institute of Geographic Sciences and
Natural Resources Research, Chinese Academy of Sciences, Beijing 100101,
China

^bState Key Laboratory of Environmental Geochemistry, Institute of
Geochemistry, Chinese Academy of Sciences, Guiyang 550002, China

*Corresponding Author

Email address: guojq@igsnr.ac.cn

Fax: +86-10-64889455

Tel: +86-10-64889455

ABSTRACT

The environment of Beijing as the capital city of China is highly affected by industrial pollution. The area of the Capital Iron & Steel Factory of Beijing is a typical example for industrially contaminated sites in the Beijing area. In the present study, we collected topsoil and section samples from the Capital Iron & Steel Factory site and its surrounding area in high resolution, which were analyzed on organic carbon concentrations and carbon isotopic compositions. The results reveal both anthropogenic and natural contributions of carbon to these soils. Three profiles from the vicinity and two profiles from the area surrounding the steel company display vertical patterns in soil organic carbon concentrations and isotopic compositions that resemble more commonly observed downward gradients in soil carbon chemistry and indicate microbial carbon turnover.

Download English Version:

<https://daneshyari.com/en/article/5754563>

Download Persian Version:

<https://daneshyari.com/article/5754563>

[Daneshyari.com](https://daneshyari.com)