

# Accepted Manuscript

Influence of colloids on metal concentrations and radiogenic strontium isotopes in groundwater and oil and gas-produced waters

Thai T. Phan, J. Alexandra Hakala, Daniel J. Bain

PII: S0883-2927(18)30134-3

DOI: [10.1016/j.apgeochem.2018.05.018](https://doi.org/10.1016/j.apgeochem.2018.05.018)

Reference: AG 4095

To appear in: *Applied Geochemistry*

Received Date: 7 February 2018

Revised Date: 2 May 2018

Accepted Date: 23 May 2018

Please cite this article as: Phan, T.T., Hakala, J.A., Bain, D.J., Influence of colloids on metal concentrations and radiogenic strontium isotopes in groundwater and oil and gas-produced waters, *Applied Geochemistry* (2018), doi: 10.1016/j.apgeochem.2018.05.018.

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.



1 Influence of colloids on metal concentrations and radiogenic  
2 strontium isotopes in groundwater and oil and gas-produced waters  
3

4  
5 Thai T. Phan<sup>a-c\*</sup>, J. Alexandra Hakala<sup>a</sup>, Daniel J. Bain<sup>b</sup>  
6  
7

8 <sup>a</sup>National Energy Technology Laboratory, U.S. Department of Energy, Pittsburgh, PA 15236,  
9 USA

10 <sup>b</sup>Department of Geology and Environmental Science, University of Pittsburgh, Pittsburgh, PA  
11 15260, USA

12 <sup>c</sup>Department of Earth and Environmental Sciences, University of Waterloo, ON, N2L 3G1,  
13 Canada  
14  
15  
16  
17  
18  
19  
20

21 \*Corresponding author:

22 Thai T. Phan  
23 Department of Earth and Environmental Sciences, University of Waterloo  
24 200 University Ave. W, Ontario, N2L 3G1, Canada  
25 Email: [thai.phan@uwaterloo.ca](mailto:thai.phan@uwaterloo.ca)

Download English Version:

<https://daneshyari.com/en/article/8863068>

Download Persian Version:

<https://daneshyari.com/article/8863068>

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