



Cambridge  
Elements

Geochemical Tracers in  
Earth System Science

Reconstructing  
Precambrian  $p\text{CO}_2$   
and  $p\text{O}_2$  Using  
Paleosols

Nathan D. Sheldon,  
Ria L. Mitchell and  
Rebecca M. Dzombak



# Cambridge Elements

Elements in Geochemical Tracers in Earth System Science

edited by

Timothy Lyons

*University of California*

Alexandra Turchyn

*University of Cambridge*

Chris Reinhard

*Georgia Institute of Technology*

## RECONSTRUCTING PRECAMBRIAN $PCO_2$ AND $PO_2$ USING PALEOSOLS

Nathan D. Sheldon

*University of Michigan*

Ria L. Mitchell

*Swansea University and University of Sheffield*

Rebecca M. Dzombak

*University of Michigan*



CAMBRIDGE  
UNIVERSITY PRESS

**CAMBRIDGE**  
UNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre,  
New Delhi – 110025, India

79 Anson Road, #06–04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

[www.cambridge.org](http://www.cambridge.org)

Information on this title: [www.cambridge.org/9781108819008](http://www.cambridge.org/9781108819008)

DOI: [10.1017/9781108870962](https://doi.org/10.1017/9781108870962)

© Nathan D. Sheldon, Ria L. Mitchell and Rebecca M. Dzombak 2021

This publication is in copyright. Subject to statutory exception  
and to the provisions of relevant collective licensing agreements,  
no reproduction of any part may take place without the written  
permission of Cambridge University Press.

First published 2021

*A catalogue record for this publication is available from the British Library.*

ISBN 978-1-108-81900-8 Paperback

ISSN 2515-7027 (online)

ISSN 2515-6454 (print)

Additional resources for this publication at [www.cambridge.org/sheldon](http://www.cambridge.org/sheldon)

Cambridge University Press has no responsibility for the persistence or accuracy of  
URLs for external or third-party internet websites referred to in this publication  
and does not guarantee that any content on such websites is, or will remain,  
accurate or appropriate.