



Supplementary Materials for
**Volatile, Isotope, and Organic Analysis of Martian Fines with the Mars
Curiosity Rover**

L. A. Leshin,* P. R. Mahaffy, C. R. Webster, M. Cabane, P. Coll, P. G. Conrad, P. D. Archer Jr., S. K. Atreya, A. E. Brunner, A. Buch, J. L. Eigenbrode, G. J. Flesch, H. B. Franz, C. Freissinet, D. P. Glavin, A. C. McAdam, K. E. Miller, D. W. Ming, R. V. Morris, R. Navarro-González, P. B. Niles, T. Owen, R. O. Pepin, S. Squyres, A. Steele, J. C. Stern, R. E. Summons, D. Y. Sumner, B. Sutter, C. Szopa, S. Teinturier, M. G. Trainer, J. J. Wray, J. P. Grotzinger, MSL Science Team

*Corresponding author. E-mail: leshin@rpi.edu

Published 27 September 2013, *Science* **341**, 1238937 (2013)
DOI: 10.1126/science.1238937

This PDF file includes:

MSL Science Team Author List

Mars Science Laboratory (MSL) Science Team

Aalto University

Osku Kemppinen

Applied Physics Laboratory (APL) at Johns Hopkins University

Nathan Bridges, Jeffrey R. Johnson, Michelle Minitti

Applied Research Associates, Inc. (ARA)

David Cremers

Arizona State University (ASU)

James F. Bell III, Lauren Edgar, Jack Farmer, Austin Godber, Meenakshi Wadhwa, Danika Wellington

Ashima Research

Ian McEwan, Claire Newman, Mark Richardson

ATOS Origin

Antoine Charpentier, Laurent Peret

Australian National University (ANU)

Penelope King

Bay Area Environmental Research Institute (BAER)

Jennifer Blank

Big Head Endian LLC

Gerald Weigle

Brock University

Marie Schmidt

Brown University

Shuai Li, Ralph Milliken, Kevin Robertson, Vivian Sun

California Institute of Technology (Caltech)

Michael Baker, Christopher Edwards, Bethany Ehlmann, Kenneth Farley, Jennifer Griffes, Hayden Miller, Megan Newcombe, Cedric Pilorget, Melissa Rice, Kirsten Siebach, Katie Stack, Edward Stolper

Canadian Space Agency (CSA)

Claude Brunet, Victoria Hipkin, Richard Léveillé, Geneviève Marchand, Pablo Sobrón Sánchez

Capgemini France

Laurent Favot

Carnegie Institution of Washington

George Cody

Carnegie Mellon University

Lorenzo Flückiger, David Lees, Ara Nefian

Catholic University of America

Mildred Martin

Centre National de la Recherche Scientifique (CNRS)

Marc Gailhanou, Frances Westall, Guy Israël

Centre National d'Etudes Spatiales (CNES)

Christophe Agard, Julien Baroukh, Christophe Donny, Alain Gaboriaud, Philippe Guillemot, Vivian Lafaille, Eric Lorigny, Alexis Paillet, René Pérez, Muriel Saccoccio, Charles Yana

Centro de Astrobiología (CAB)

Carlos Armiens-Aparicio, Javier Caride Rodríguez, Isaías Carrasco Blázquez, Felipe Gómez Gómez, Javier Gómez-Elvira, Sebastian Hettrich, Alain Lepinette Malvitte, Mercedes Marín Jiménez, Jesús Martínez-Frías, Javier Martín-Soler, F. Javier Martín-Torres, Antonio Molina Jurado, Luis Mora-Sotomayor, Guillermo Muñoz Caro, Sara Navarro López, Verónica Peinado-González, Jorge Pla-García, José Antonio Rodríguez Manfredi, Julio José Romeral-Planelló, Sara Alejandra Sans Fuentes, Eduardo Sebastian Martinez, Josefina Torres Redondo, Roser Urqui-O'Callaghan, María-Paz Zorzano Mier

Chesapeake Energy

Steve Chipera

Commissariat à l'Énergie Atomique et aux Énergies Alternatives (CEA)

Jean-Luc Lacour, Patrick Mauchien, Jean-Baptiste Sirven

Concordia College

Heidi Manning

Cornell University

Alberto Fairén, Alexander Hayes, Jonathan Joseph, Robert Sullivan, Peter Thomas

CS Systemes d'Information

Audrey Dupont

Delaware State University

Angela Lundberg, Noureddine Melikechi, Alissa Mezzacappa

Denver Museum of Nature & Science

Julia DeMarines, David Grinspoon

Deutsches Zentrum für Luft- und Raumfahrt (DLR)

Günther Reitz

eINFORMe Inc. (at NASA GSFC)

Benito Prats

Finnish Meteorological Institute

Evgeny Atlaskin, Maria Genzer, Ari-Matti Harri, Harri Haukka, Henrik Kahanpää, Janne Kauhanen, Osku Kempainen, Mark Paton, Jouni Polkko, Walter Schmidt, Tero Siili

GeoResources

Cécile Fabre

Georgia Institute of Technology

Mary Beth Wilhelm

Géosciences Environnement Toulouse (GET)

Franck Poitrasson

Global Science & Technology, Inc.

Kiran Patel

Honeybee Robotics

Stephen Gorevan, Stephen Indyk, Gale Paulsen

Imperial College

Sanjeev Gupta

Indiana University Bloomington

David Bish, Juergen Schieber

Institut d'Astrophysique Spatiale (IAS)

Brigitte Gondet, Yves Langevin

Institut de Chimie des Milieux et Matériaux de Poitiers (IC2MP)

Claude Geffroy

Institut de Recherche en Astrophysique et Planétologie (IRAP), Université de Toulouse

David Baratoux, Gilles Berger, Alain Cros, Claude d'Uston, Olivier Forni, Olivier Gasnault, Jérémie Lasue, Qiu-Mei Lee, Sylvestre Maurice, Pierre-Yves Meslin, Etienne Pallier, Yann Parot, Patrick Pinet, Susanne Schröder, Mike Toplis

Institut des Sciences de la Terre (ISTerre)

Éric Lewin

inXitu

Will Brunner

Jackson State University

Ezat Heydari

Jacobs Technology

Cherie Achilles, Dorothy Oehler

Laboratoire Atmosphères, Milieux, Observations Spatiales (LATMOS)

David Coscia, Guy Israël

Laboratoire de Géologie de Lyon : Terre, Planète, Environnement (LGL-TPE)

Gilles Dromart

Laboratoire de Minéralogie et Cosmochimie du Muséum (LMCM)

François Robert, Violaine Sautter

Laboratoire de Planétologie et Géodynamique de Nantes (LPGN)

Stéphane Le Mouélic, Nicolas Mangold, Marion Nachon

Laboratoire Interuniversitaire des Systèmes Atmosphériques (LISA)

Fabien Stalport, Pascaline François, François Raulin

Lightstorm Entertainment Inc.

James Cameron

Los Alamos National Lab (LANL)

Sam Clegg, Agnès Cousin, Dorothea DeLapp, Robert Dingler, Ryan Steele Jackson, Stephen Johnstone, Nina Lanza, Cynthia Little, Tony Nelson, Roger C. Wiens, Richard B. Williams

Lunar and Planetary Institute (LPI)

Andrea Jones, Laurel Kirkland, Allan Treiman

Malin Space Science Systems (MSSS)

Burt Baker, Bruce Cantor, Michael Caplinger, Scott Davis, Brian Duston, Kenneth Edgett, Donald Fay, Craig Hardgrove, David Harker, Paul Herrera, Elsa Jensen, Megan R. Kennedy, Gillian Krezoski, Daniel Krysak, Leslie Lipkaman, Michael Malin, Elaina McCartney, Sean McNair, Brian Nixon, Liliya Posiolova, Michael Ravine, Andrew Salamon, Lee Saper, Kevin Stoiber, Kimberley Supulver, Jason Van Beek, Tessa Van Beek, Robert Zimdar

Massachusetts Institute of Technology (MIT)

Katherine Louise French, Karl Iagnemma

Max Planck Institute for Solar System Research

Fred Goesmann, Walter Goetz, Stubbe Hviid

Microtel

Micah Johnson, Matthew Lefavor, Eric Lyness

Mount Holyoke College

Elly Breves, M. Darby Dyar, Caleb Fassett

NASA Ames

David F. Blake, Thomas Bristow, David DesMarais, Laurence Edwards, Robert Haberle, Tori Hoehler, Jeff Hollingsworth, Melinda Kahre, Leslie Keely, Christopher McKay, Mary Beth Wilhelm

NASA Goddard Space Flight Center (GSFC)

Lora Bleacher, William Brinckerhoff, David Choi, Jason P. Dworkin, Melissa Floyd, James Garvin, Daniel Harpold, Andrea Jones, David K. Martin, Alexander Pavlov, Eric Raaen, Michael D. Smith, Florence Tan

NASA Headquarters

Michael Meyer, Arik Posner, Mary Voytek

NASA Jet Propulsion Laboratory (JPL)

Robert C. Anderson, Andrew Aubrey, Luther W. Beegle, Alberto Behar, Diana Blaney, David Brinza, Fred Calef, Lance Christensen, Joy A. Crisp, Lauren DeFlores, Bethany Ehlmann, Jason Feldman, Sabrina Feldman, Joel Hurowitz, Insoo Jun, Didier Keymeulen, Justin Maki, Michael Mischna, John Michael Morookian, Timothy Parker, Betina Pavri, Marcel Schoppers, Aaron Sengstacken, John J. Simmonds, Nicole Spanovich, Manuel de la Torre Juarez, Ashwin R. Vasavada, Albert Yen

NASA Johnson Space Center (JSC)

Francis Cucinotta, John H. Jones, Elizabeth Rampe

Nolan Engineering

Thomas Nolan

Oregon State University

Martin Fisk

Piezo Energy Technologies

Leon Radziemski

Planetary Science Institute

Bruce Barraclough, Steve Bender, Daniel Berman, Eldar Noe Dobrea, Robert Tokar, David Vaniman, Rebecca M. E. Williams, Aileen Yingst

Princeton University

Kevin Lewis

Retired

Timothy Cleghorn, Wesley Huntress, Gérard Manhès

Salish Kootenai College

Judy Hudgins, Timothy Olson, Noel Stewart

Search for Extraterrestrial Intelligence Institute (SETI I)

Philippe Sarrazin

Smithsonian Institution

John Grant, Edward Vicenzi, Sharon A. Wilson

Southwest Research Institute (SwRI)

Mark Bullock, Bent Ehresmann, Victoria Hamilton, Donald Hassler, Joseph Peterson, Scot Rafkin, Cary Zeitlin

Space Research Institute

Fedor Fedosov, Dmitry Golovin, Natalya Karpushkina, Alexander Kozyrev, Maxim Litvak, Alexey Malakhov, Igor Mitrofanov, Maxim Mokrousov, Sergey Nikiforov, Vasily Prokhorov, Anton Sanin, Vladislav Tretyakov, Alexey Varenikov, Andrey Vostrukhin, Ruslan Kuzmin

Space Science Institute (SSI)

Benton Clark, Michael Wolff

State University of New York (SUNY) Stony Brook

Scott McLennan

Swiss Space Office

Oliver Botta

TechSource

Darrell Drake

Texas A&M

Keri Bean, Mark Lemmon

The Open University

Susanne P. Schwenzer

United States Geological Survey (USGS) Flagstaff

Ryan B. Anderson, Kenneth Herkenhoff, Ella Mae Lee, Robert Sucharski

Universidad de Alcalá

Miguel Ángel de Pablo Hernández, Juan José Blanco Ávalos, Miguel Ramos

Universities Space Research Association (USRA)

Myung-Hee Kim, Charles Malespin, Ianik Plante

University College London (UCL)

Jan-Peter Muller

University of Alabama

Ryan Ewing

University of Arizona

William Boynton, Robert Downs, Mike Fitzgibbon, Karl Harshman, Shaunna Morrison

University of California Berkeley

William Dietrich, Onno Kortmann, Marisa Palucis

University of California Davis

Amy Williams

University of California San Diego

Günter Lugmair

University of California San Francisco

Michael A. Wilson

University of California Santa Cruz

David Rubin

University of Colorado Boulder

Bruce Jakosky

University of Copenhagen

Tonci Balic-Zunic, Jens Frydenvang, Jaqueline Kløvgaard Jensen, Kjørtan Kinch, Asmus Koefoed, Morten Bo Madsen, Susan Louise Svane Stipp

University of Guelph

Nick Boyd, John L. Campbell, Ralf Gellert, Glynis Perrett, Irina Pradler, Scott VanBommel

University of Hawai'i at Manoa

Samantha Jacob, Scott Rowland

University of Helsinki

Evgeny Atlaskin, Hannu Savijärvi

University of Kiel

Eckart Boehm, Stephan Böttcher, Sönke Burmeister, Jingnan Guo, Jan Köhler, César Martín García, Reinhold Mueller-Mellin, Robert Wimmer-Schweingruber

University of Leicester

John C. Bridges

University of Maryland

Timothy McConnochie

University of Maryland Baltimore County

Mehdi Benna

University of Maryland College Park

Hannah Bower

University of Massachusetts

Hannah Blau, Thomas Boucher, Marco Carmosino

University of Michigan Ann Arbor

Harvey Elliott, Douglas Halleaux, Nilton Rennó, Michael Wong

University of New Brunswick

Beverley Elliott, John Spray, Lucy Thompson

University of New Mexico

Suzanne Gordon, Horton Newsom, Ann Ollila, Joshua Williams

University of Queensland

Paulo Vasconcelos

University of Saskatchewan

Jennifer Bentz

University of Southern California (USC)

Kenneth Nealson, Radu Popa

University of Tennessee Knoxville

Linda C. Kah, Jeffrey Moersch, Christopher Tate

University of Texas at Austin

Mackenzie Day, Gary Kocurek

University of Washington Seattle

Bernard Hallet, Ronald Sletten

University of Western Ontario

Raymond Francis, Emily McCullough

University of Winnipeg

Ed Cloutis

Utrecht University

Inge Loes ten Kate

Vernadsky Institute

Ruslan Kuzmin

Washington University in St. Louis (WUSTL)

Raymond Arvidson, Abigail Fraeman, Daniel Scholes, Susan Slavney, Thomas Stein, Jennifer Ward

Western University

Jeffrey Berger

York University

John E. Moores