Are we closer to finding life on Mars?

Organic matter has been found on Mars in soil samples taken from 3 billion-year-old mudstone in the Gale crater by the Curiosity rover, <u>NASA</u> announced Thursday [June 7]. The rover has also detected methane in the Martian atmosphere.

The search for life outside Earth focuses on the building blocks of life as we know it, which includes organic compounds and molecules — although these can exist without life. Organic matter can be one of several things: a record detailing ancient life, a food source for life or something that exists in the place of life.

No matter its purpose, these work as "chemical clues" for researchers about Mars.

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The new <u>findings</u> are also detailed in two <u>studies</u> published Thursday in the journal Science. Together, the researchers believe these findings to be "breakthroughs in astrobiology."

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But Curiosity's data are providing a clearer and more conclusive picture of the conditions and processes on Mars — and what it may have been like on the Red Planet billions of years ago, when conditions were more suitable for life.

"With these new findings, Mars is telling us to stay the course and keep searching for evidence of life," said Thomas Zurbuchen, associate administrator for the Science Mission Directorate at NASA Headquarters. "I'm confident that our ongoing and planned missions will unlock even more breathtaking discoveries on the Red Planet."

Read full, original post: NASA's Curiosity rover finds organic matter on Mars