NASA Mars rover may have snagged 1st rock sample for return

2 September 2021, by Marcia Dunn

NASA's newest Mars rover may have successfully collected its first rock sample for return to Earth, after last month's attempt came up empty.

The Perseverance rover's chief engineer, Adam Steltzner, called it a perfect core sample.

"I've never been more happy to see a hole in a rock," he tweeted Thursday.

But NASA later said it was awaiting more photos before declaring success although the "team is confident that the sample is in the tube."

A month ago, Perseverance drilled into much softer rock, and the sample crumbled and didn't get in the titanium tube. The rover drove a half-mile to a better spot to try again.

Initial photos taken Wednesday show a sample in the tube but later images were inconclusive because of poor lighting, NASA said in a news release. The rock sample—about the thickness of a pencil—could have slipped down deeper into the tube during a series of planned vibrations, it said. More photos are planned.

Perseverance arrived in February at Mars' Jezero Crater—believed to be the home of a lush lakebed and river delta billions of years ago—in search of rocks that might hold evidence of ancient life. NASA plans to launch more spacecraft to retrieve the samples collected by Perseverance; engineers are hoping to return as many as three dozen samples in about a decade.

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