

Curiosity Collects First Rock Sample on Mars

Hi, I'm Louise Jandura, sample system chief engineer and I'm here with your Curiosity rover report.

This was a great week for Curiosity. We got to see something we've all been waiting for quite some time: sample in the scoop confirming that our first drill on Mars collected as we had expected.

This was an important event as this is the first time the drill has been used on Mars to collect sample for analysis by instruments on the rover.

We use these computer-generated images to help us visually identify how much we've collected. We were able to estimate that we collected about 14 cubic centimeters of sample, or about a tablespoon, and this matched our expectations of what we would see in the scoop when we got to this point.

Our drilling capability gives us the ability to get inside this rock. The first thing you notice about the material is that it's a different color. Gray not the reddish orange color on the surface all around us. That reddish orange color is a sign of an iron oxidation. A kind of rusting process that's occurred all around on Mars.

Since we've been at Yellowknife Bay, Curiosity has done more than a 100 MAHLI images and more than 12,000 laser shots. You can see the telltale laser grid patterns from the ChemCam in this image. Additionally, you can see a fine grain structure of this rock indicating either a mudstone or a siltstone.

The next steps for the team are to finish processing the sample with Chimera and then put small portions into the SAM and Chemin instruments for analysis of chemistry and mineralogy.

This has been your Curiosity rover report check back soon for more updates.