

Curiosity Rover Report: A Taste of Mount Sharp

Hi I'm Jennifer Trosper, the deputy project manager for the Curiosity rover and this is your Curiosity Rover Report.

We landed on Mars over one Mars year ago with the purpose of studying Mount Sharp. We've driven six miles to get to the base of this incredible mountain.

Exploring the foothills of Mount Sharp is like turning a history book page by page. As we look at each layer, we want to know what formed and deposited these layers and how are they related to each other?

We also want to understand the potential for organic preservation in each of these layers.

In preparation for drilling, we did some testing here out at the Mars yard to understand how changing some of our drill parameters could help us be more effective at drilling softer, more breakable rocks like the ones we see at Pahrump Hills.

We perform a mini drill on an adjacent rock, usually to understand the properties of the material we'll be drilling. Then we do a final drill and if we can confirm the sample won't clog our sample collection system, the next step is to transfer it to the instruments for analysis.

Since it's such an interesting location, we expect to spend several weeks here, systematically studying the rocks, layer by layer.

This has been your Curiosity Rover Report. Check back for more updates.