ChemCam marks 3,000th Martian day on Red Planet

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On Jan. 12, the Mars Curiosity rover marked 3,000 Martian days — also known as sols — on the Red Planet. In Earth time, that translates to about eight years, four months.

Developed and commanded by Laboratory scientists, ChemCam is an instrument package consisting of a laser, telescope, camera and spectrograph, which all work together to identify the chemical and mineral composition of rocks and soils. The laser, telescope and camera sit on the rover’s mast — its "forehead" — while the spectrometer is located in its body.

So what's happened in 3,000 sols?

Since landing on Mars in August 2012:

- The rover has driven nearly 15 miles.
- ChemCam has observed 3,630 unique targets.
- ChemCam fired its laser at 5/6 of those unique targets — that is, on average, one new target per Martian day.
- The laser has fired close to 855,000 shots!
- Since Curiosity touched down, approximately 84,000 human hours have been spent on operation shifts alone. That's six people working every operation day since the rover’s landing.