

Happy Birthday, Curiosity!

Transcript:

[music] My name is Florence Tan, I'm the SAM Electrical Lead Engineer, I work at Goddard Space Flight Center. SAM stands for Sample Analysis at Mars. It is an organic chemistry lab on the Curiosity rover, it is the most well-equipped chemistry lab that we've sent to Mars to date. Curiosity landed on Mars on August 5, 2012. It was born on Mars that day, and so we consider that day as its birthday. We're here at the test bed lab where SAM was built. It is an identical unit to the unit on Mars, and we use this unit to test our experiments before it is transmitted to Mars. SAM will be running some great science experiments on Mars, we will be analyzing some soil samples. To make the soil samples go down, we have to program it to vibrate at various frequencies. When we're introducing a sample into SAM, it will go through a resonance and it will sound like this. [electronic tone] To commemorate SAM's birthday and Curiosity's birthday on Mars, we decided to play a little song. If there's anyone listening on Mars on this special occasion, you will hear this. [Happy Birthday to You] It's really neat, and it's exciting! This is a first for NASA and for the world, and music brings us all together so this is fun! It's been a great year on Mars and I cannot wait to get to Mount Sharp next year. We've discovered so many new things, and there's still lots more discoveries to come. [music]