Curiosity Rover Sampling System Scoop Test

Hi, I'm Chris White, systems engineer leading the integrated chain test program and I'm here with your Curiosity Update. Today I'm standing in the MSL vehicle system test bed with a test model of Curiosity rover and we're about to do a scooping and drop off test.

So in today's test we'll bring the scoop on the end of the arm down into this tray of specially prepared sample.
We'll be taking images and identifying the target where we want to actually scoop.
Then we'll move the arm over, open up the scoop.
We'll scoop a sample of material. We'll close the scoop. We'll bring the arm back up to the front of the rover and we'll drop a very small portion onto the observation tray.

Then we'll spin the turret around and take additional images of the portion on the sample tray.
Once we've acquired those images, we'll bring the turret around again and drop off a portion into the inlet covers on the top of the rover.
The sample we need is not very big al all. In fact, it's about the size of this aspirin I'm holding.

Once that portion is dropped in, it will go into the science instruments SAN.
And when we're done with that, we'll bring the arm back out, then we'll clean everything out.
We have automatic cleaning functions that we do to clean everything out, ready for the next sample.

I'm Chris White and this has been your Curiosity Update.