Hi, I’m Anthony Ganino and this is your Building Curiosity Update.

We’re up here in the 25 foot space simulator building at JPL.

Here on the lab we often call the environmental test portion shake and bake.

We just got out of vibration testing which is the shake portion and now we’re moving onto the bake portion, which would be our thermal vacuum testing.

In order to complete these tests we have to move the rover into the chamber.

We do that with a series of lifts and lower it onto some ground support equipment that was previously installed into the chamber.

You can see beyond this plastic shield the rover is being worked on by our technicians to get it ready for thermal tests. When we get ready to start the test, we’ll remove that plastic from the door and a large field door will come in, close out the chamber, at which point we can start changing the temperature inside and pumping down the pressure to simulate Mars conditions.

We take the rover down to about negative 100 to negative 130 C, which is about negative 200 to negative 150 Fahrenheit and up to 30 or 40 C which is about 86 to 104 degrees Fahrenheit.

Over that time we also are going to be adjusting the pressure on the rover to simulate the vacuum of deep space and then taking it to about one, one hundredth of the pressure on Earth.

We only get one chance to get on Mars and drive this vehicle around, so we want to put it in the harsh environment that it’s going to see and make sure that not only do all the instruments function, but all of the temperatures that we expect to see on the vehicle are accurate to what we modeled and planned.

I’m Anthony Ganino and this has been your Building Curiosity Update.