

## NEW IMAGES FROM MARS ROVER CURIOSITY

The latest information from the Mars Curiosity rover includes some awesome views, even some selfies,. The rover is looking across Gale Crater, approaching a large dune with ripples.

Mars' Gale Crater is now being explored by NASA's Curiosity rover and the latest report shows some amazing new images of views across the crater In these images the rover is using its Navigational Cameras, which obtain a wide-angle view of the terrain, but don't shoot in colour as the rover's 34mm and 100mm MastCams do.

The basalt dunes are informally known as the Bagnold Dunes and in it Curiosity is approaching a large dune with ripples. **This dune will be a stopping point, hopefully revealing a bit about the historic volcanic activity on Mars as the dust in the dune is of volcanic origin and does not appear native to Gale Crater. Instead, it is probably dust blown in.**

This will be one of the highlights of the Curiosity mission thus far, hopefully bringing more information, building on what the Mars Exploration Rover A Spirit uncovered during the hugely successful mission in Gusev Crater from 2004 to 2011.

Here are a few details of the Curiosity mission: **Curiosity is a car-sized robotic rover exploring Gale Crater on Mars as part of NASA's Mars Science Laboratory mission. The rover's goals include investigation of the Martian climate and geology; assessment of whether the selected field site inside Gale Crater has ever offered conditions favourable for microbial life, including investigation of the role of water; and planetary habitability studies in preparation for future human exploration.**

Curiosity was launched from Cape Canaveral on November 26, 2011 aboard an MSL spacecraft and landed on Aeolis Palus in Gale Crater on Mars on August 6, 2012 The Bradbury Landing site was less than 2.4 km from the centre of the rover's touchdown target after a 563,000,000 km journey. Curiosity's design will serve as the basis for another planned Mars rover in 2020.

**Curiosity's power generator is the latest RTG generation built by Boeing and Idaho National Laboratory, called the Multi-Mission Radioisotope Thermoelectric Generator.** It is designed to produce 125 watts of electrical power from about 2,000 watts of thermal power at the start of the mission. Over a lifetime of 14 years electrical power output is expected to go down to 100 watts, as the plutonium fuel slowly decays. The power source will generate 2.5 kWh each day, four times more than the solar panels of the Mars Exploration Rovers did. The electrical output from the power generator charges two rechargeable lithium-ion batteries. This enables the power system to meet peak power demands of rover activities when the demand temporarily exceeds the generator's steady output level. The batteries have a total capacity of about 80 ampere-hours. AK, from Wikipedia Notes



The scene is certainly dried out, desiccated clay layers, laid down in the very remote past, approximately 4 billion years ago, when Mars was much warmer and wetter, with a far denser atmosphere than now.

