

Engineering Report 164.2

Engineering Report

Date: 02/23/2016 at 6p.m.

Crew Engineer Name: Louis Maller

Diesel – 22%

Propane – 58

Gasoline (5 Gallon containers for ATV) – 2 full containers

Water (trailer) measured in cm from the bottom– 42in / 42in i.e.
106.6cm/106.6cm from the bottom (full)

Water (static) measured in cm from the top – 14in / 42in i.e.
35.5cm/106.6cm from the top

Trailer to Static Pump used – 0in i.e. 0cm

Water (loft) – 14.52 gallons i.e. 55 liters

Static to Loft Pump used – 18.75 gallons i.e. 71 liters

Water Meter: 104 676.5

Atv # Oil Checked: all ATVs full

Atv # Fuel Used Gals: all ATVs not used

Atv # Tires Status: #3 tires slightly under-inflated; others seem OK

Atv # Hours Used Day: all ATVs not used

Atv # Notes and Comments: ATVs have not been used today, nothing new. We have been told the ATVs have been looked into. We will have to investigate and test them during the next EVA. ATV testing scheduled tomorrow.

Summary of Engineering activities: Loft tank filled from static tank.
Engineering check of all levels happened during the morning EVA (EVA #2)

Questions and Concerns to Mission Support:

Water:

First things first, a quite pressing matter. One crewmember took a shower today. He noticed that there was very little water pressure and that he didn't have any hot water. Any suggestions on how to improve this? It would also make dishwashing a lot more efficient!

I have stuck for today to the procedure suggested by the template we have all received for the water level. So trailer tank level is

reported from the bottom and static tank is reported from the top. The water level is measured in inches (since the ruler on site is in inches) and is reported here above in cm, as asked. I have also indicated the water volumes in liters, according to Shannon's mail saying that all measures must be metric. The trailer tank is now full, and the static tank should yield enough water for the rest of our rotation anyways.

Radios:

Good news for the radios! We'll be expecting them soon.

Rover:

The rover has been opened and we have reviewed the material in the boxes. We have noticed that there is a total of 12 batteries (including those inside the rover) and not 16 as indicated in the user's guide. Is this normal? The 4 batteries inside the rover were discharged so we changed them and are recharging the empty ones. We encountered some difficulties using it and will contact the North California Chapter of the Mars Society for some help.

Resupply and Filters:

The Phobos resupply ship will deliver filters for the water heater, we will try to change the dirty filter tomorrow, are there any specific instructions that we should be aware of, or a general description of the procedure that we might use?

HAL:

New people have been added on the HAL. Among them, only two of the crew: Camille and I. Our profiles seem to be active and we are able to connect on them.

Cheers,

Louis Maller

Crew Engineer for MDRS Supaero Crew 164