

0227-EngineeringReport

Engineering Report 164.6

Engineering Report

Date: 02/27/2016 at 6:30p.m.

Crew Engineer Name: Louis Maller

Diesel – 20%

Propane – 51%

Gasoline (5 Gallon containers for ATV) – 1 full container, one with around 6 liters (approx..) i.e. 1.58 gallons

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 – 29in / 42in i.e. 73.6cm/106.6cm from the top

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

Water (loft) – 13.2 gallons i.e. 50 liters (slight overfill, but no spill)

Static to Loft Pump used – 19 gallons i.e. 72 liters

Water Meter: 105 005.0

Atv # Oil Checked: all ATVs full

Atv # Fuel Used Gals: 3.5 gallons i.e. 13.24 liters

Atv # Tires Status: tires checked, no tire problem

Atv # Hours Used Day: ATVs used around 1h

Atv # Notes and Comments: The ATVs were used during EVA#5

ATV#1 was tested and started

ATV#2 OK

ATV#3 OK

ATV#4 OK used during the EVA, some problems for restarting

Red ATV not used

Summary of Engineering activities:

Rover:

The NorCal Rover is fully operational and has been tested outdoors around the Hab for range. It got stuck at some point and we still don't know why because it was flat terrain. Then it was brought back in by the EVA team when they came home. We will schedule further testing. The rover team agreed to let us bring any temporary modification that we could find interesting, so we're currently brainstorming ideas on how to improve on Max.

Loft tank water filter

The filter was printed in the morning and fit in in the afternoon. It resembles closely the old part, and probably is more resistant since it's a bit thicker.

Backpack:

Today our beloved Camille replaced the battery of the Backpack #1, thus fixing it (it had some battery issues today)

Questions and Concerns to Mission Support:

None. I think Mars gave up trying to best us. Engineered!

Cheers,

Louis Maller

Crew Engineer for MDRS Supaero Crew 164