Steckler Phase I LGH Life Support Old Data

Daily Oxygen Target Production for 1 Person

Oxygen (kg)
Biomass (kg)
Water (kg)

Graph showing oxygen production over 10 days.

10 Days
**Daily Oxygen Target Production for 1 Person**

<table>
<thead>
<tr>
<th>Water (kg)</th>
<th>Oxygen (kg)</th>
<th>Biomass (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.84</td>
<td></td>
<td></td>
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</tbody>
</table>

**Steckler Phase I LGH Life Support Old Data**

80 Days

80 Days
Daily Oxygen Target Production for 1 Person

Oxygen (kg)  0.84 kg
Biomass (kg) (kg)
Water (kg) (kg)

Many key Phase I measurements had to be made by hand and on a daily basis if possible.
Steckler Phase II LGH Life Support Labor

Simulated Astronaut
(i.e. 3 Students Workers)

Phase II Labor
(Students split 30 hr/week)

Michael Downing
Thomas Hillebrand
Tyler Jensen
Simulated Astronaut
(i.e. 3 Students Workers)

Phase II Labor
(Students split 30 hr/week)

Michael Downing

Planting, Harvesting, Mixing Nutrients and Checking the environmental set points etc...

Lab Inventory
Maintenance
Data Analysis
Steckler Phase II LGH Life Support Labor

Simulated Astronaut
(i.e. 3 Students Workers)

Phase II Labor
(Students split 30 hr/week)

Thomas Hillebrand

Drying and Measuring LGH
Harvest Mass
Data Processing

Tom's primary responsibilities include Data Processing.
Steckler Phase II LGH Life Support Labor

Simulated Astronaut
(i.e. 3 Students Workers)

Phase II Labor
(Students split 30 hr/week)

Tyler Jensen

Tissue and Nutrient Sampling

Data Processing

Measuring LGH Leak Rates
Steckler Phase II LGH Life Support New Sensors

Improving resolution of measurements over Phase I and increasing automation
Steckler **Phase II** LGH Life Support New Air Ducting Design

**Improved Seal**

*LGH Pressure Drop Calculation Elements*

*Phase II (Year 1)*
Steckler Phase II LGH Life Support New Air Heating Coil

Improved Humidity Control
Steckler Phase II LGH Life Support Air Distribution Improvement

Units in Inches
Sketch by: Ehab Tamimi
10/13/2011
Steckler Phase II LGH Life Support 3 More Pods
Steckler Phase II LGH Life Support BLSS Processes