**Natural Gamma Radiation Logger (NGRL) Quick Start Guide**

**Introduction**

This guide is designed to help participants use the NGRL to acquire data, load it to the laboratory information management system (LIMS), and retrieve it again. This instrument detects gamma events resulting from the decay of radioactive nuclides in the material under study.


**Measure a Sample**

1. **PREPARE CORE SECTION**
   - Wipe excess moisture/mud off core liner
   - Tape over any holes on core liner

2. Click the desktop icon to launch the NGRL Core Analyzer application.

   ![NGR Core Analyzer](image)

3. Load a section for analysis.
   Seat the section in the titanium boat. The blue end cap (“top”) should be near the NGRL door opening. Apply a foam spacer to prevent sample slippage during delivery. The barcode label is visible, ready to be scanned.

   ![Sample Information](image)

4. Click **SCAN**.
   A sample information dialog displays. Pressing **Cancel** closes this panel and returns to the main display.
5. Scan section barcode label (make sure cursor is in Text ID box, A/W label irrelevant). Check to be sure all sample information has populated the windows properly. If the experiment is run with incorrect sample information the section will need to be rescanned.

6. Enter sample length observed and operator initials. Round the sample length to the nearest whole cm. Be careful to observe the actual length of the material in the core liner, not just the end cap.

7. Click **Run the Experiment**.
   This starts the automated measurement: boat will be homed, moved to measurement position one, and the measurement will commence.

8. When the measurement is complete, the titanium boat will return to original load position. If the measurement needs to be aborted press the **ABORT SCAN** button seen on the main display.

9. Update the instrument log sheet.

### Load the Results

**ALL DATA** is stored locally in `C:\data\ngr`.

To upload acquired data to LIMS.

1. Click the desktop icon to launch MegaUploadaTron (MUT). The application window displays with a list of the data files ready to be uploaded.

   ![MegaUploadaTron](image)

   If program is already running, locate icon on taskbar.

2. Click the check-box next to **Automatic Upload**.

3. Click **Upload**.

   *If errors occur, consult with technical staff for clarification and resolution.*

### Data Review

To obtain a tabular view of the data, browse to LIMS Reports at [http://web.ship.iopd.tamu.edu/LORE/](http://web.ship.iopd.tamu.edu/LORE/)

<table>
<thead>
<tr>
<th>Action</th>
<th>Expected result</th>
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<tbody>
<tr>
<td>1. Launch either or both of these data review systems to confirm that the data has loaded: <a href="http://web.ship.iopd.tamu.edu/LORE/">http://web.ship.iopd.tamu.edu/LORE/</a> <a href="http://web.ship.iopd.tamu.edu/tasapps/limspeak">http://web.ship.iopd.tamu.edu/tasapps/limspeak</a></td>
<td>Browser window will display <strong>LIMS Reports</strong> or Limspeak, respectively. Request assistance as-needed—additional guidance and documentation is available for these systems.</td>
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<tr>
<td>2. Follow the on-screen prompts to supply data filters for Expedition, Site, Hole, etc.</td>
<td>Data will be displayed in tabular, graphical forms, respectively.</td>
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</table>

### Versioning

v.361P approved DJH 2016 Oct 10; V2.2 de Loach, 2016 April 10
v2.1 Barnes, Cobb, Peng 2014 Jan 23
v2 Houpt Hastedt Herrmann Evans Van Rensberg Rumford Crowder Fackler 2014 Jan 21