# NGR Quick Start Guide



## Introduction

The Natural Gamma Ray Logger (NGRL) measures the amount of natural gamma radiation within whole-round core sections. See 'NGRL User Guide' and ' Technical Note 26: Physical Properties handbook' for additional details.

## Procedures

### • Preparing the Instrument

1. Double-click the **MUT** icon on the desktop (Figure 1a) and login using ship credentials. For more information on data uploading see the "Uploading Data to LIMS" section below.
2. Double-click the **IMS** icon (Figure 1b). IMS initializes the instrument and checks the movement of the track. Once initialized, the logger is ready to measure the first section.


*Figure 1. (a) MUT Icon. (b) IMS Icon.*

### • Preparing Sections

1. Wipe off excess moisture and/or mud from the core liner.
2. Tape any drill holes, when applicable.

Note: All core sections entering the NGR must be completely dry. Any moisture or liquid present will DAMAGE the instrument.

### • Making a Measurement

Note: If you would like to change measurement parameters, please contact the PP technician.

1. Place section in the core tray. Make sure the section is oriented blue endcap towards the instrument, and is placed against the top of the metal boat (Figure 2).

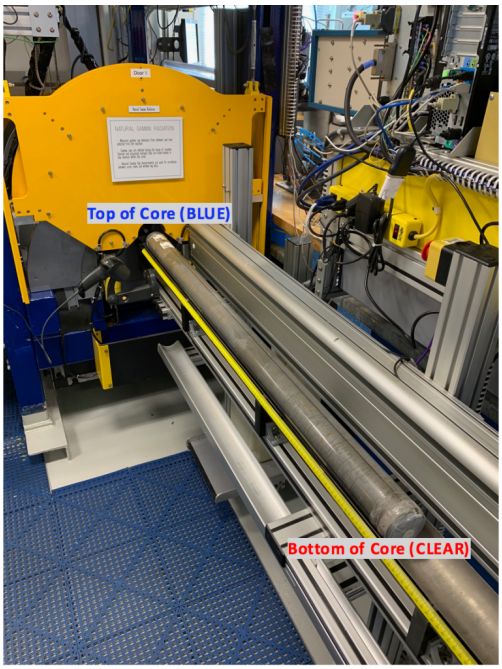


*Figure 2. Correct core position.*

2. Click **Start**. The **Section Information** screen is displayed (Figure 3).

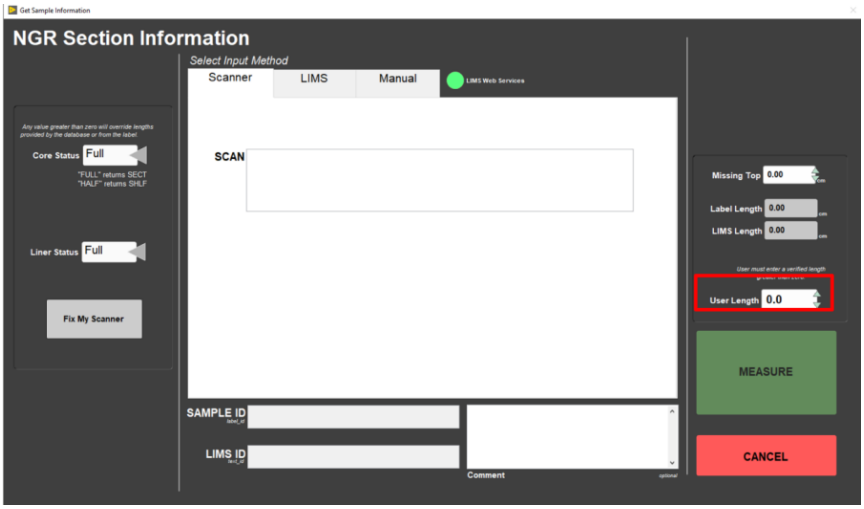


*Figure 3. NGR Section Information screen. **User Length** box is marked in the red square.*

3. Place the cursor in the **SCAN** field and scan the section label. **SAMPLE ID** and **LIMS ID** automatically fills. This ID tag contains information on expedition, site, hole, core, section number and length.

Additional entry field options are the **LIMS** and **MANUAL** tabs.

4. Enter sample length into **User Length** text box. Round down to the nearest centimeter.

5. Double-click **MEASURE**.

6. The boat moves to the first measurement position, and begins measurements. Once finished, if selected, the boat moves to the second position, and begins measurements. The typical measurement rate is 300 seconds per position. Real time graphs are displayed during acquisition (Figure 4). The graphs display the counts for each detector at each position, also the full spectra for each detector.

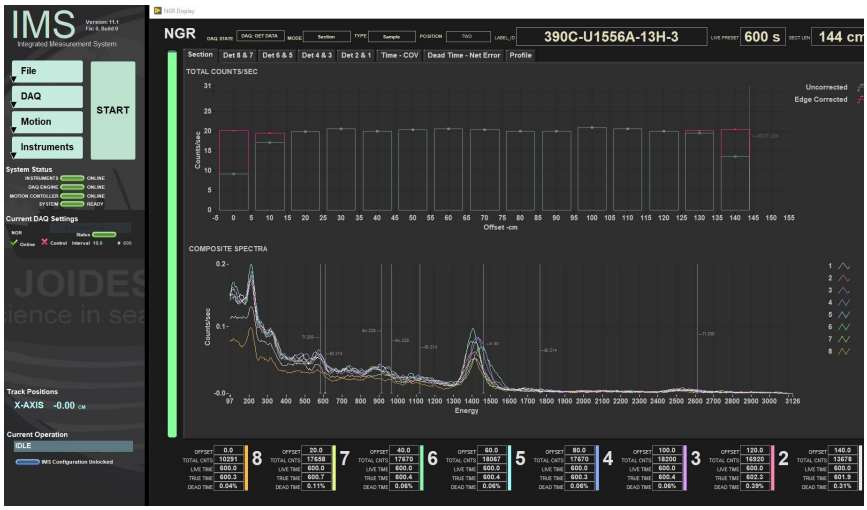


*Figure 4. NGR real-time graphs.*

7. Once the measurement is complete, the boat returns to the load position.

8. All instrument data are stored in **C:\DATA\IN**.

9. **MUT** is used to upload data to the **LIMS** database. See section "Uploading Data to LIMS" for more information.

10. Once uploaded, data is available to view on **LORE** and **LIVE**. If data is not instantly visible, please contact the PP technician.

# Uploading Data to LIMS

1. Click the **MUT** Icon. Log in using database credentials.
2. Once activated, the list of files from the **C:\DATA\IN** directory is displayed. Files are marked ready for upload by a green check mark (Figure 5).

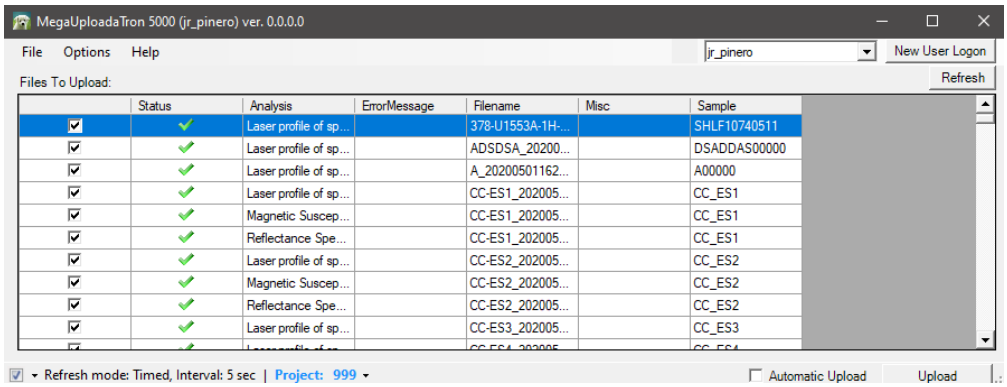


*Figure 5. Main* **MUT** *screen*

3. To manually upload files, check each file individually and clip **upload**. To automatically upload files, click on the **Automatic Upload** checkbox.

4. If files are marked by a purple question mark or red and white X icons, please contact a technician.
   Purple question mark: Cannot identify the file.

   Red and white X icons: Contains file errors.

5. Upon upload, data is moved to **C:\DATA\Archive**. If upload is unsuccessful, data is automatically moved to **C:\DATA\Error**. Please contact the PP technician is this occurs.

# Credits

This document originated from the web page "NGR Quick Start Guide (IMS-378P)" by Ty Cobb on Exp 368X. Credits for subsequent changes to this document are given in the page history.

All improvements to the Quick Start Guides and User Guides are a communal effort, with honorable mention to the group of LOs, ALOs, and technicians who have helped.

# Archived Versions

- NGRQuickStartGuide_v368X.pdf
- NGR Quick Start Guide 2020 (*.pdf)
- LMUG-NGRQuickStartGuide v2020: An exported PDF version of this wiki page as of 2020-10-28.