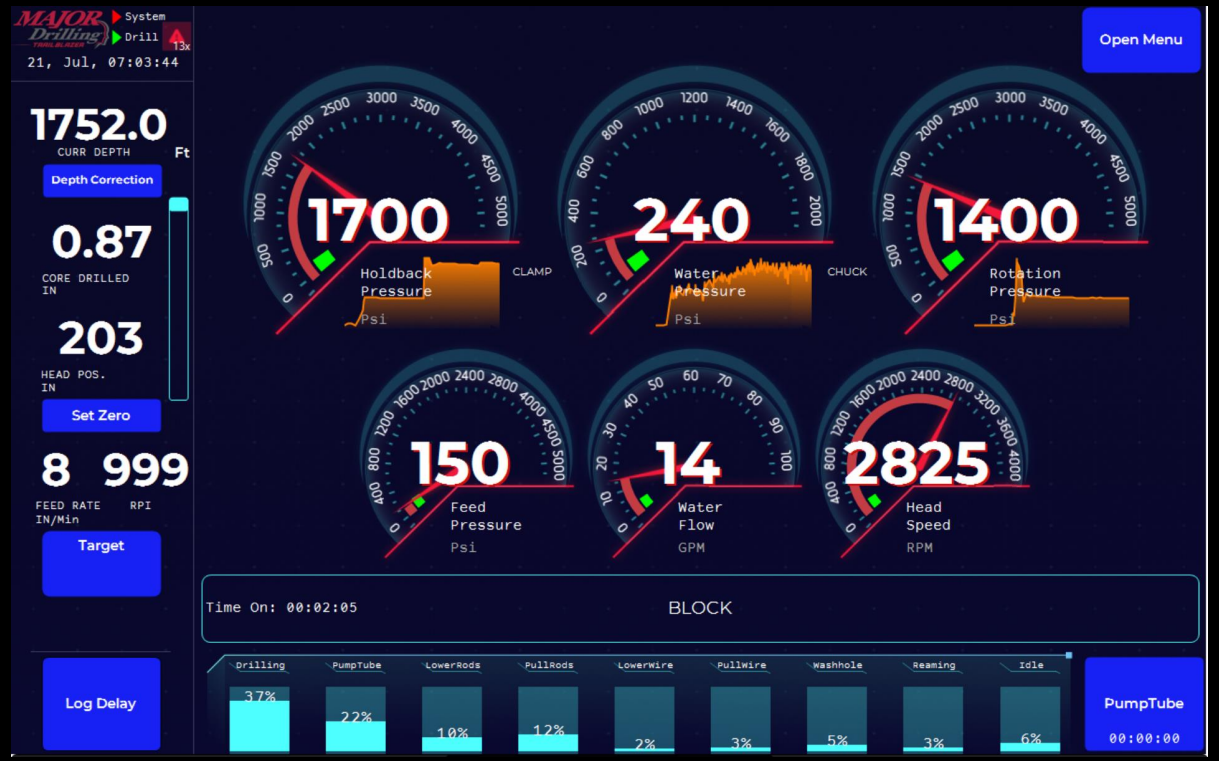
Trailblazer Analytics Driller Training

By Major Drilling

2024



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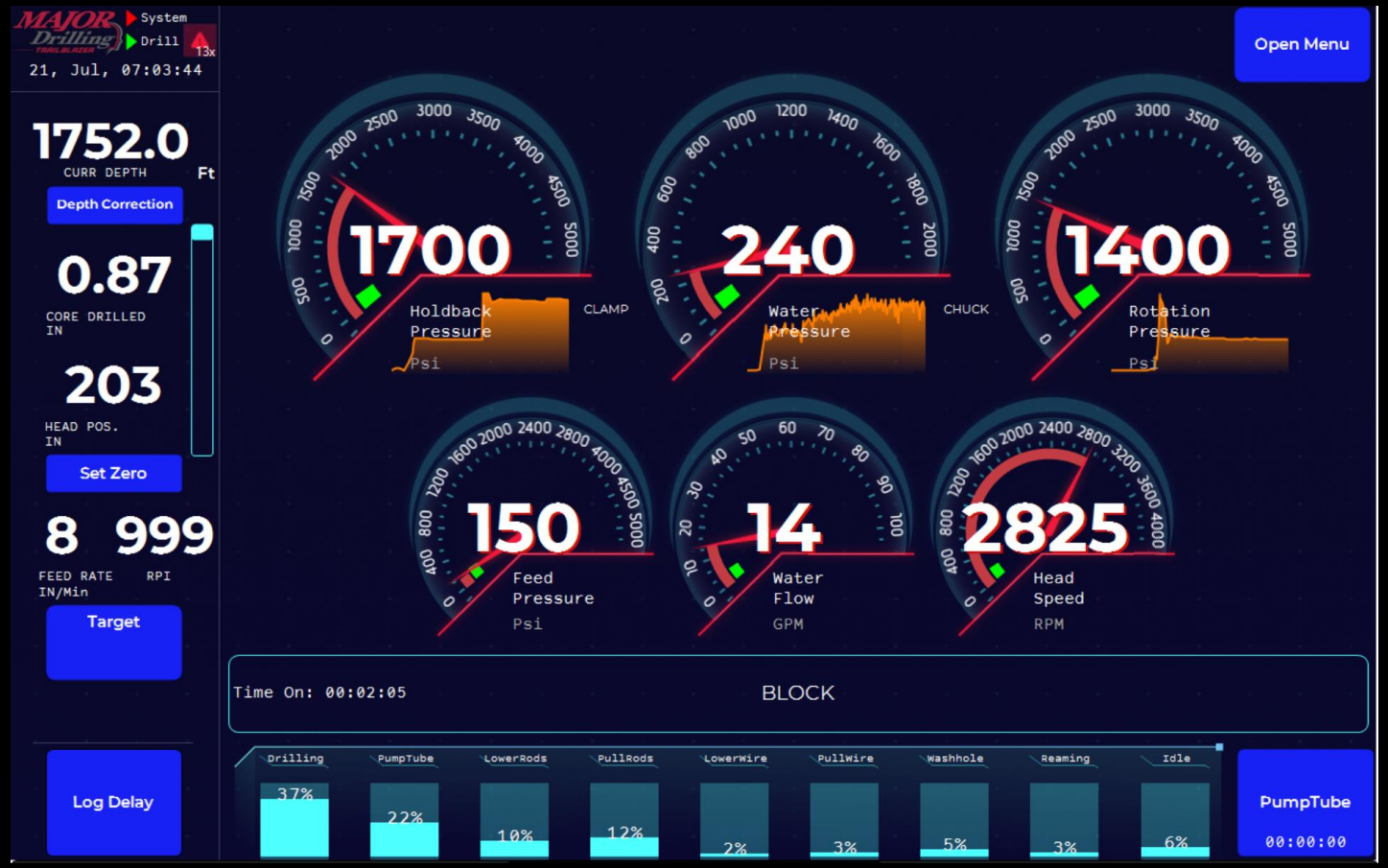
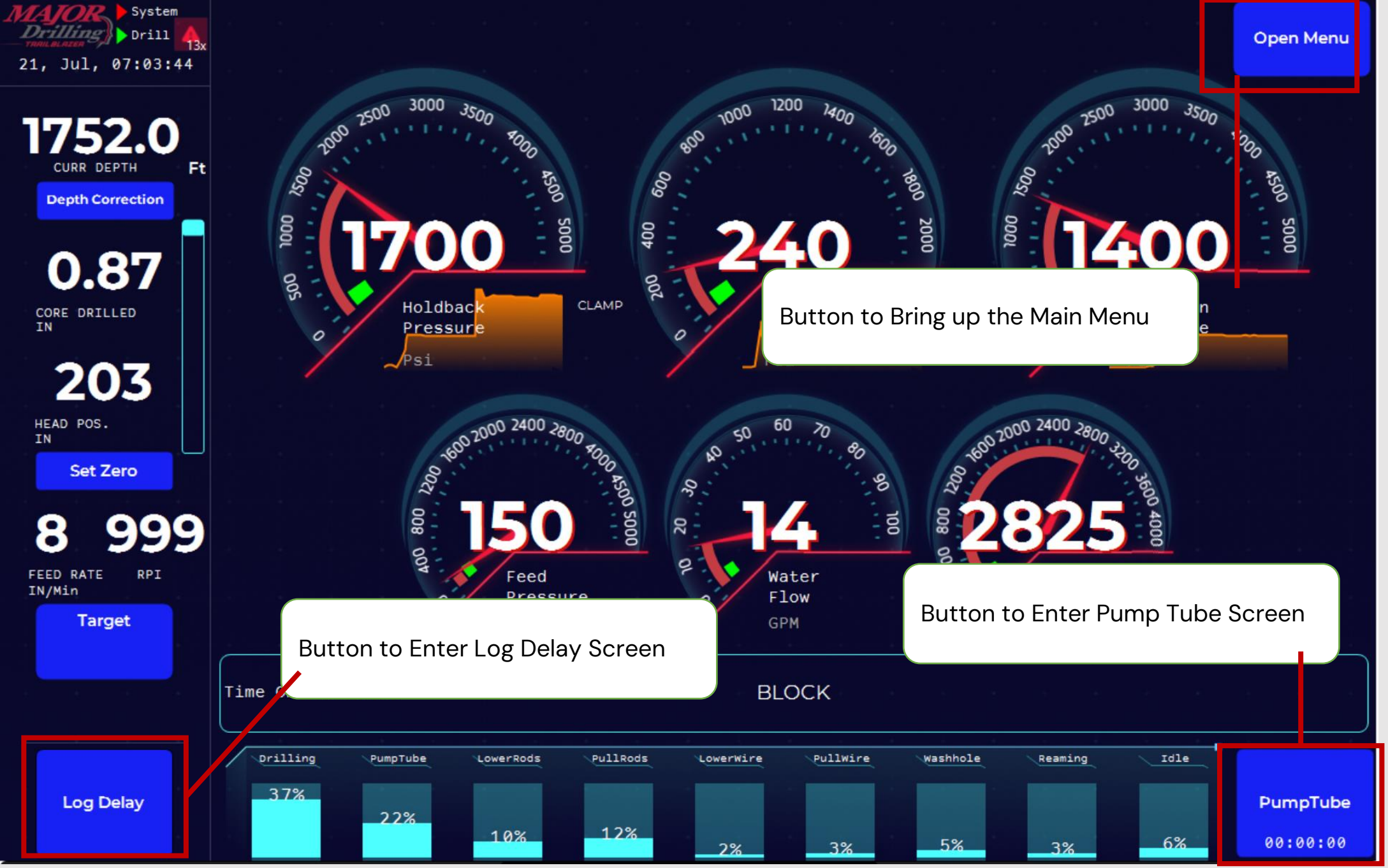
Active Drilling Screen



Operation of Drill

The active drilling screen will display gauges for the primary functions of the drill so the operator can easily see what the drill is doing to obtain the best drilling parameters.

The gauges will show the current value and a green “sweet spot” operating range for the operator to attain. This dynamic “sweet spot” operating range will be based on the values recorded during “best case” historical drilling data. The operator can use this information to adjust the drills controls to maintain the “sweet spot” operating values.
- 15/06- SS currently dis



Navigation

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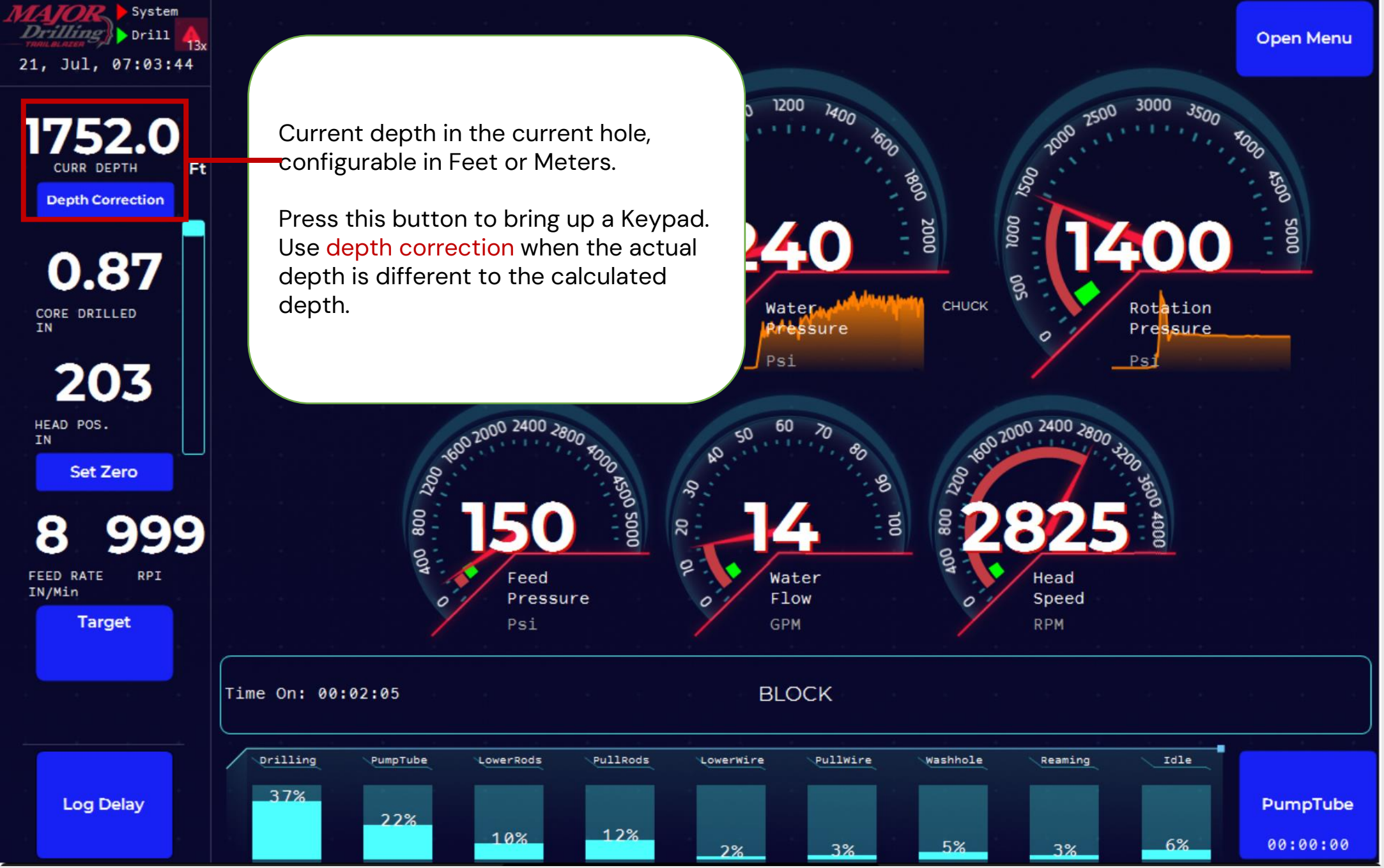
Skip Active Drilling

Depth Correction



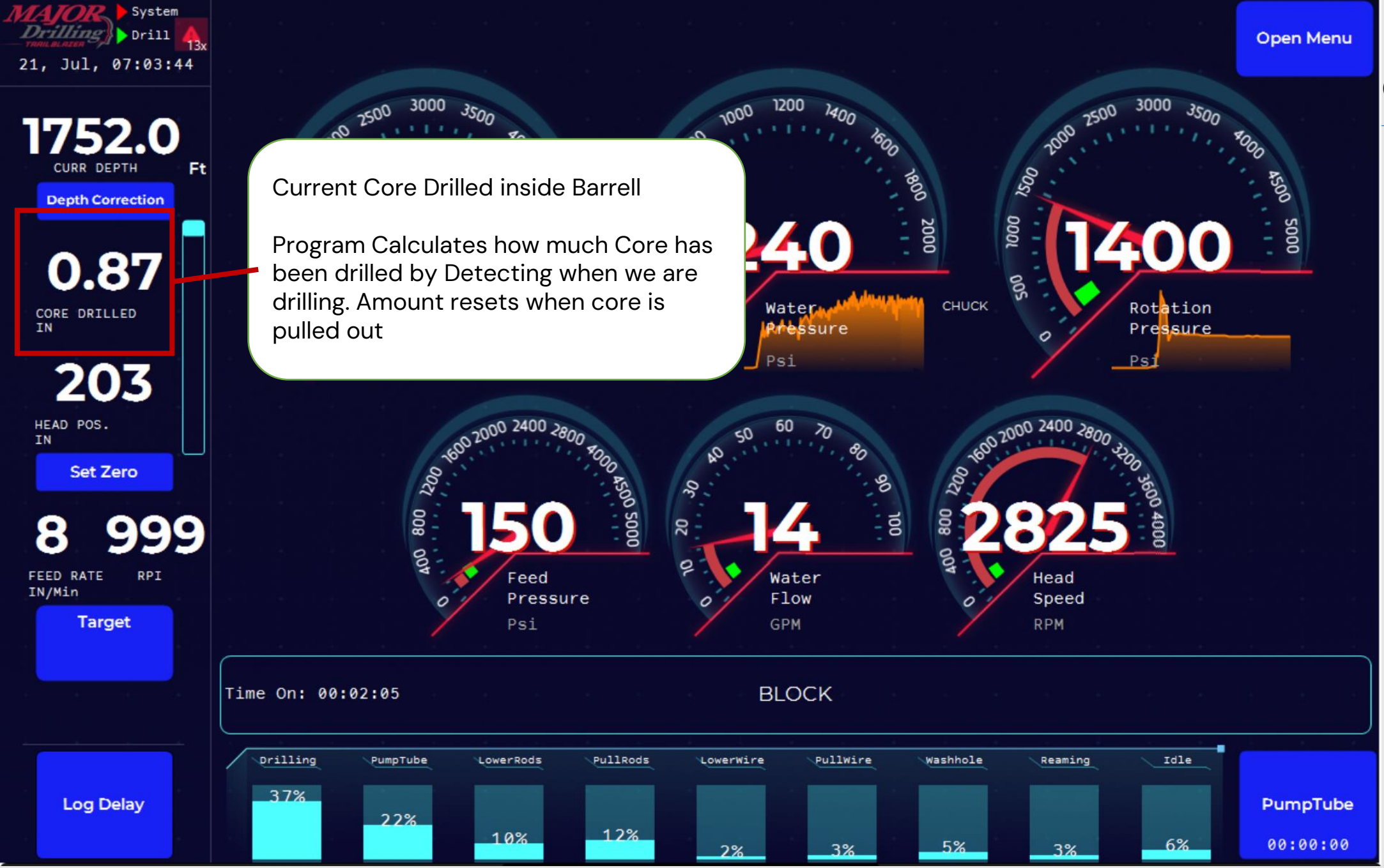
Current depth in the current hole, configurable in Feet or Meters.

Press this button to bring up a Keypad. Use depth correction when the actual depth is different to the calculated depth.

Next

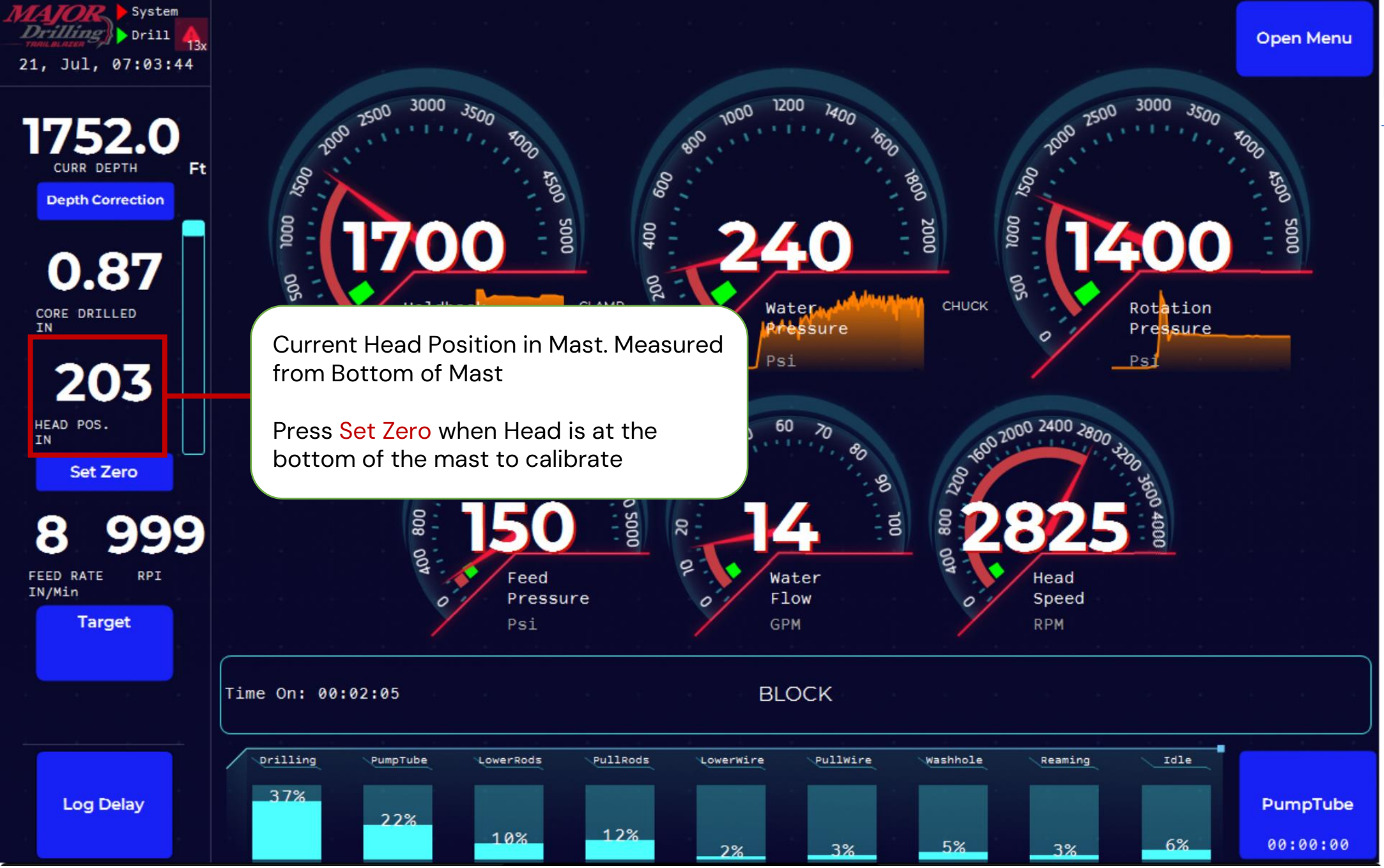
Skip Active Drilling

Core Drilled Display



Next

Skip Active Drilling



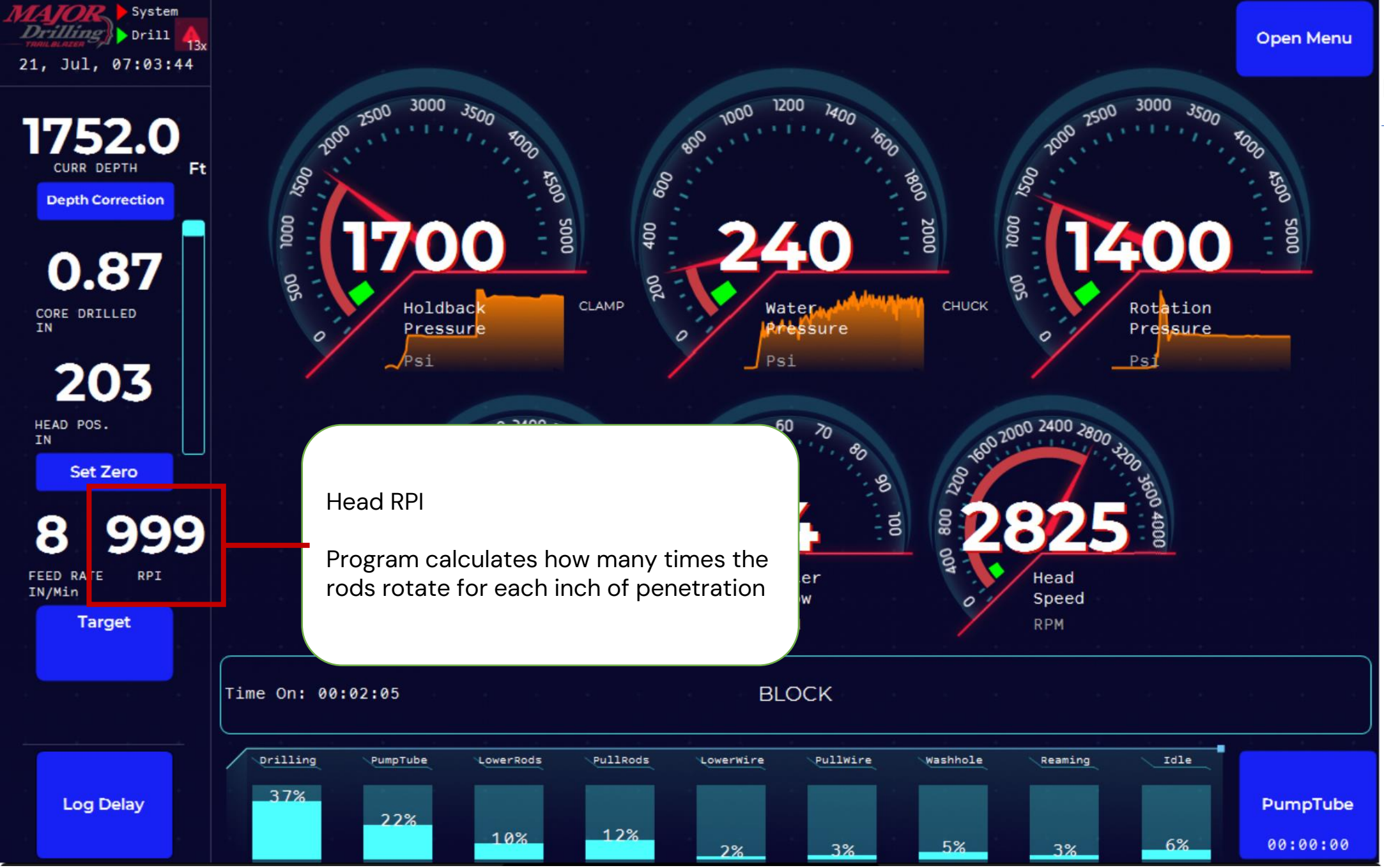
Current Head Position in Mast. Measured from Bottom of Mast

Press Set Zero when Head is at the bottom of the mast to calibrate

Head Position

Next

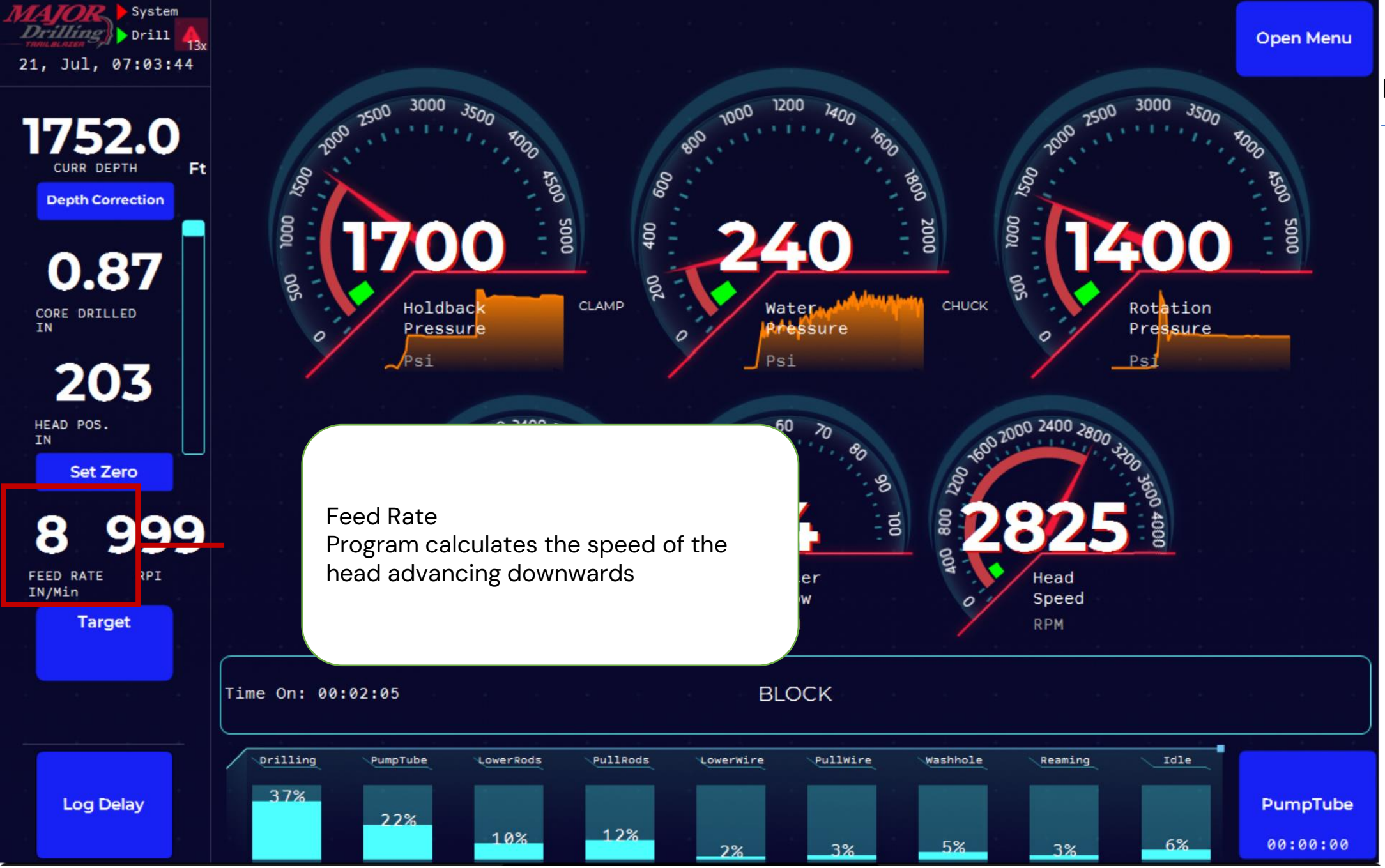
Skip Active Drilling



Head Position

Next

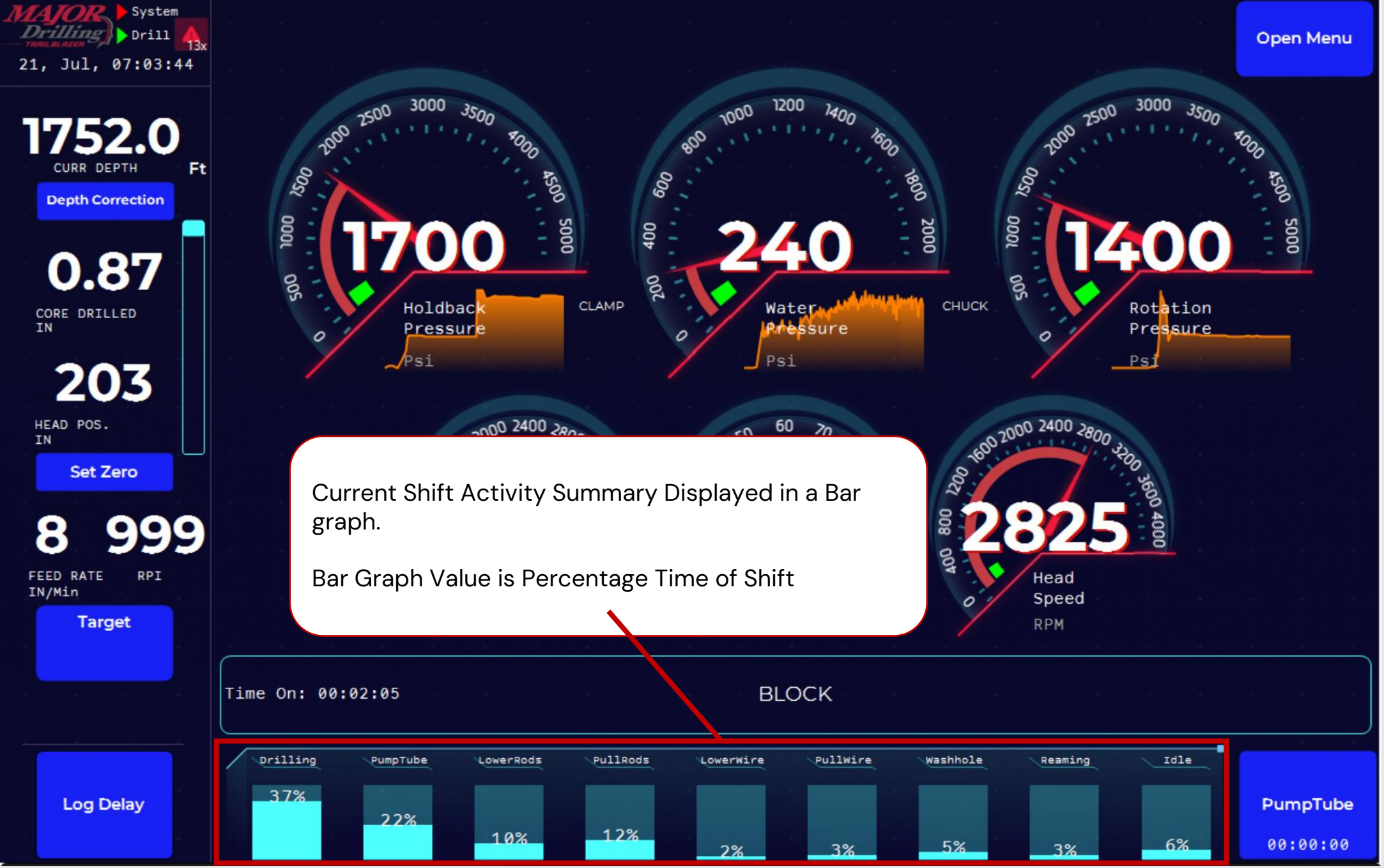
Skip Active Drilling



Feed Rate

Next

Skip Active Drilling



Activity Statistics

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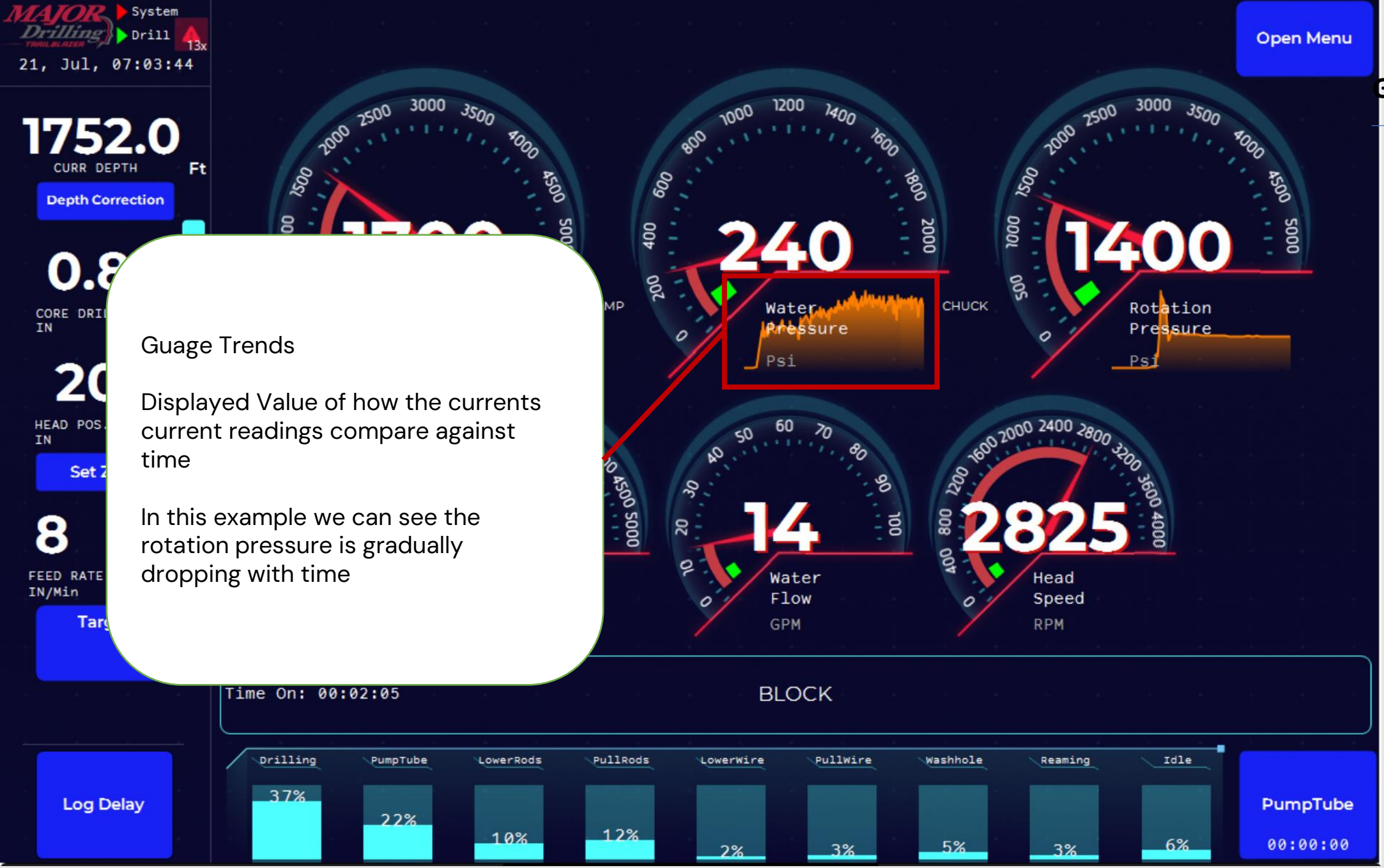
Skip Active Drilling

Guage Trend Display



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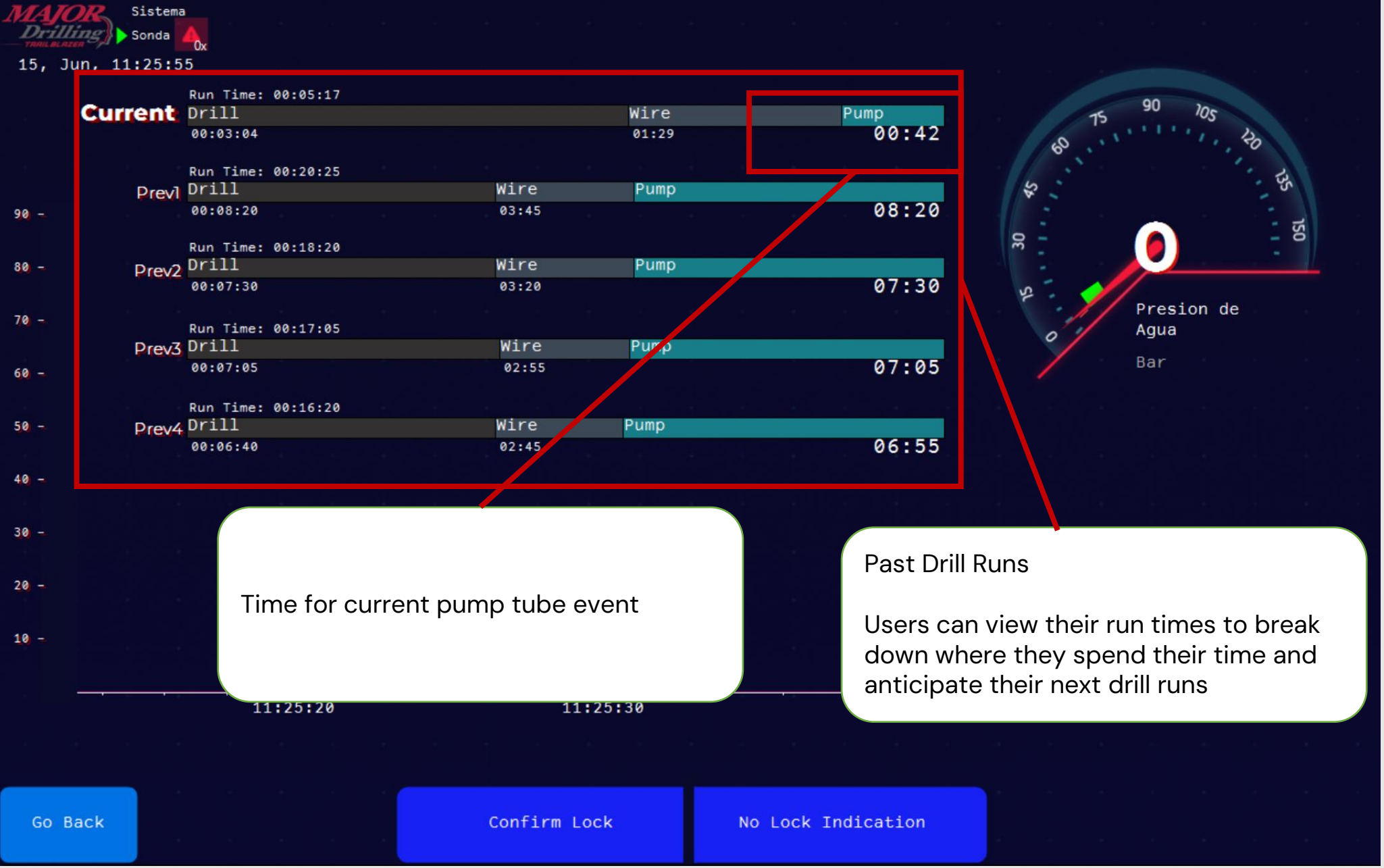
Skip Active Drilling

Pump Tube

the real-time Pump Pressure enhanced Display.

The graph represents pressure over time for pump tube with the Record of pressure and time of last pump tube event.

Pump Tube Statistics



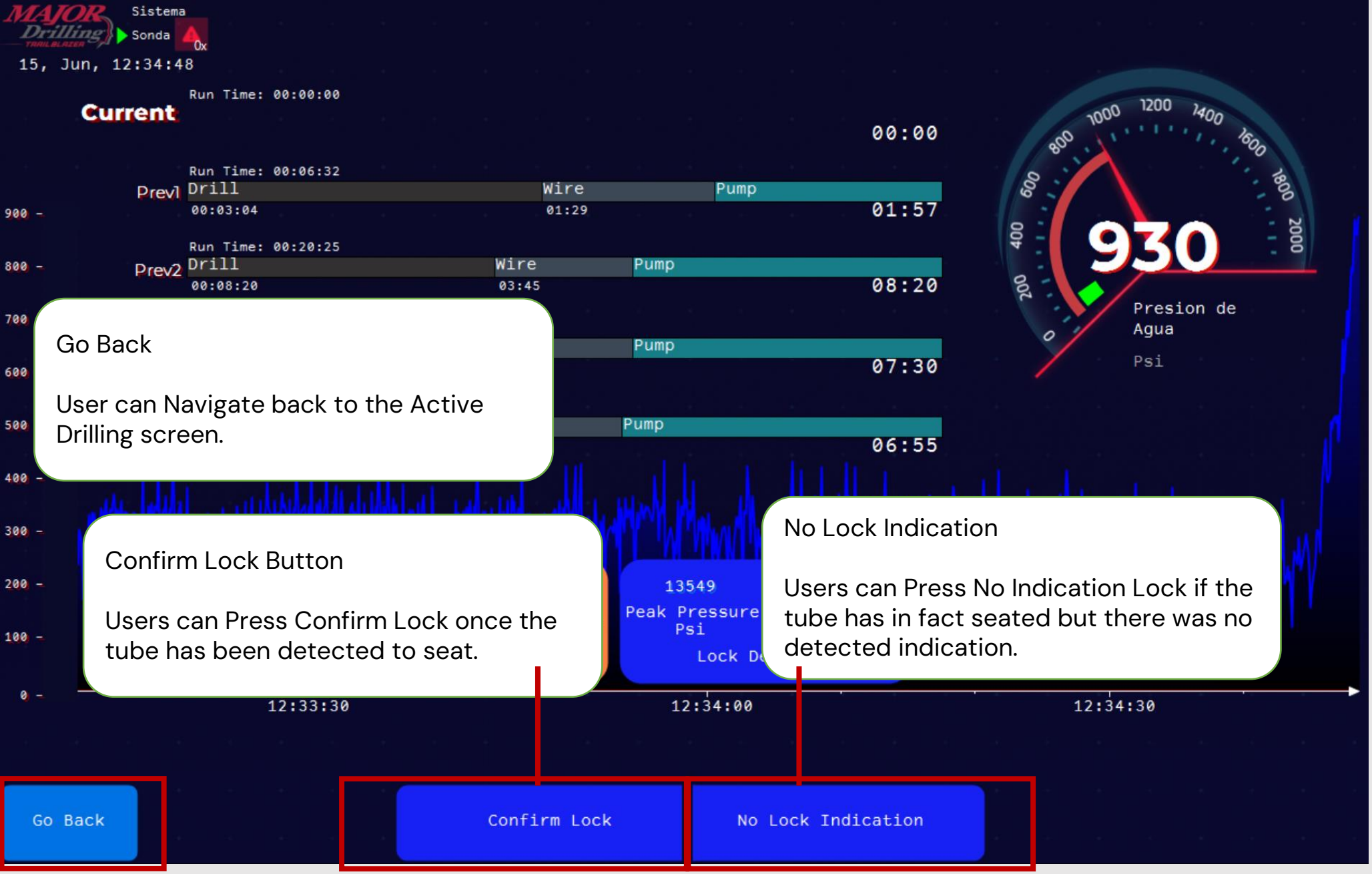
Next

Skip Pump Tube

Tube Lock Detection

Next

Skip Pump Tube



Go Back

User can Navigate back to the Active Drilling screen.

Confirm Lock Button

Users can Press Confirm Lock once the tube has been detected to seat.

No Lock Indication

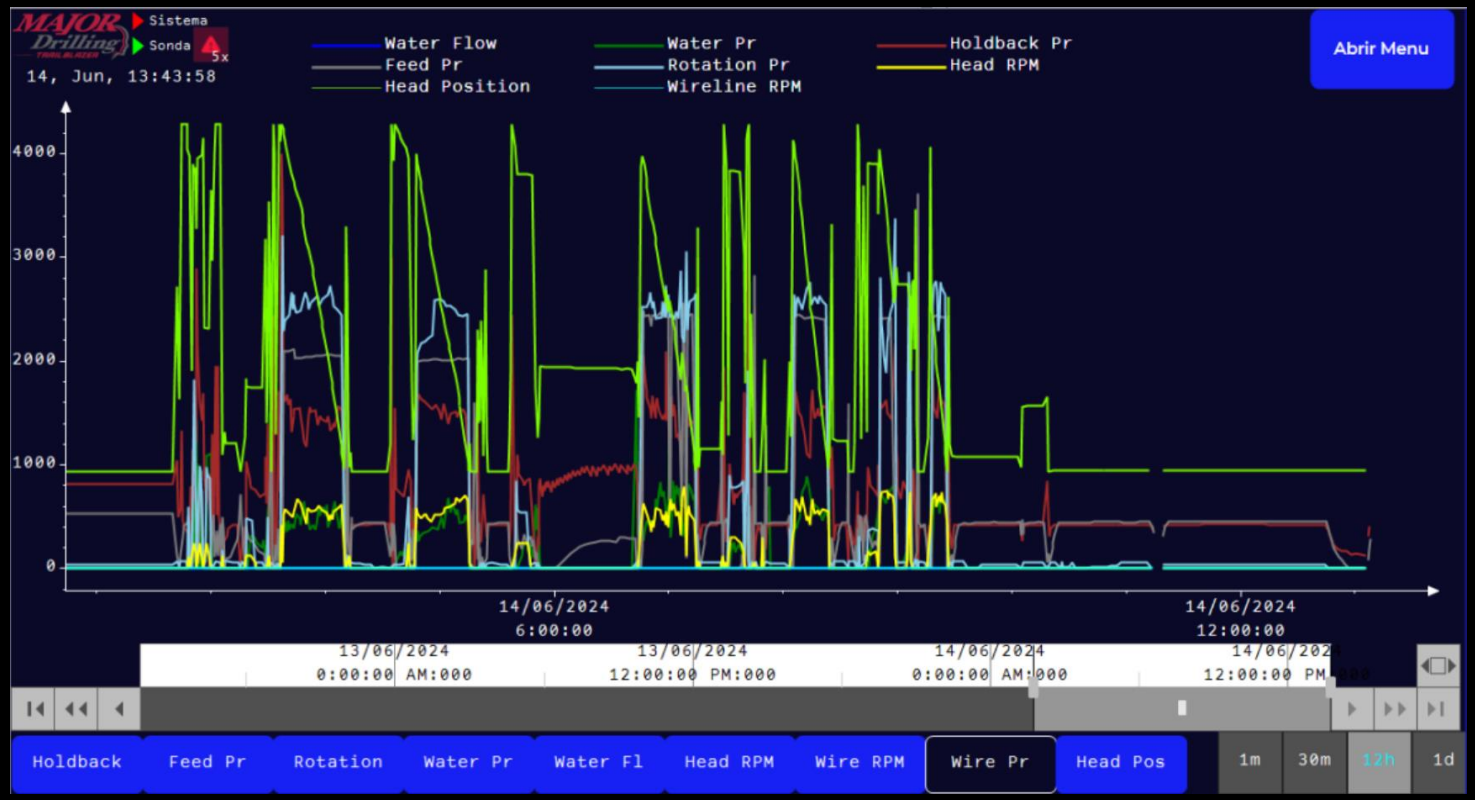
Users can Press No Indication Lock if the tube has in fact seated but there was no detected indication.

User Inputs

Next

Skip Pump Tube

Statistics

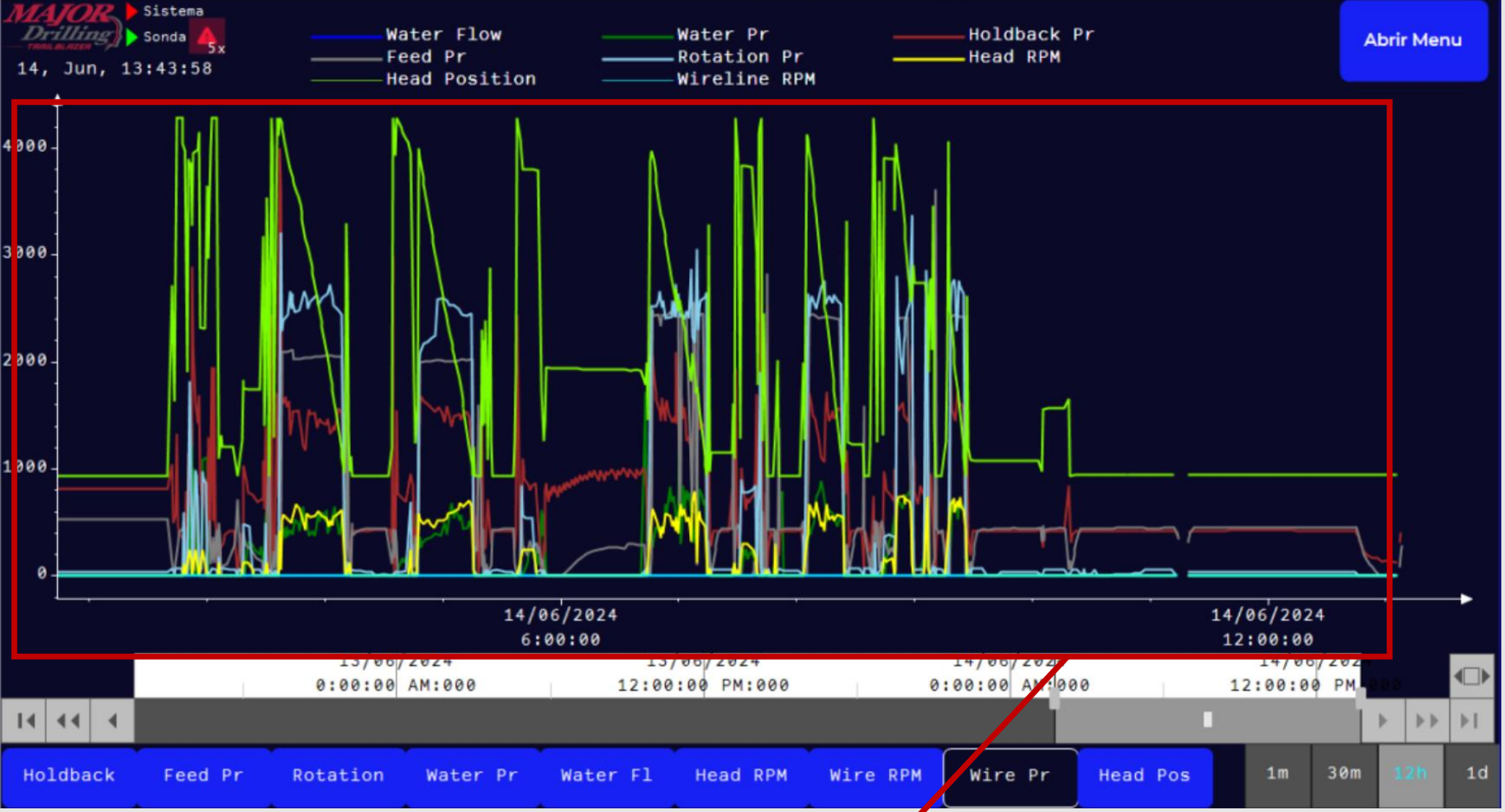


View System Activities

Users can use this screen to view historical data of the drill

More statistics coming in the next few months

Statistics – Day View



Line Graph displaying Rig Measurements over time

Next

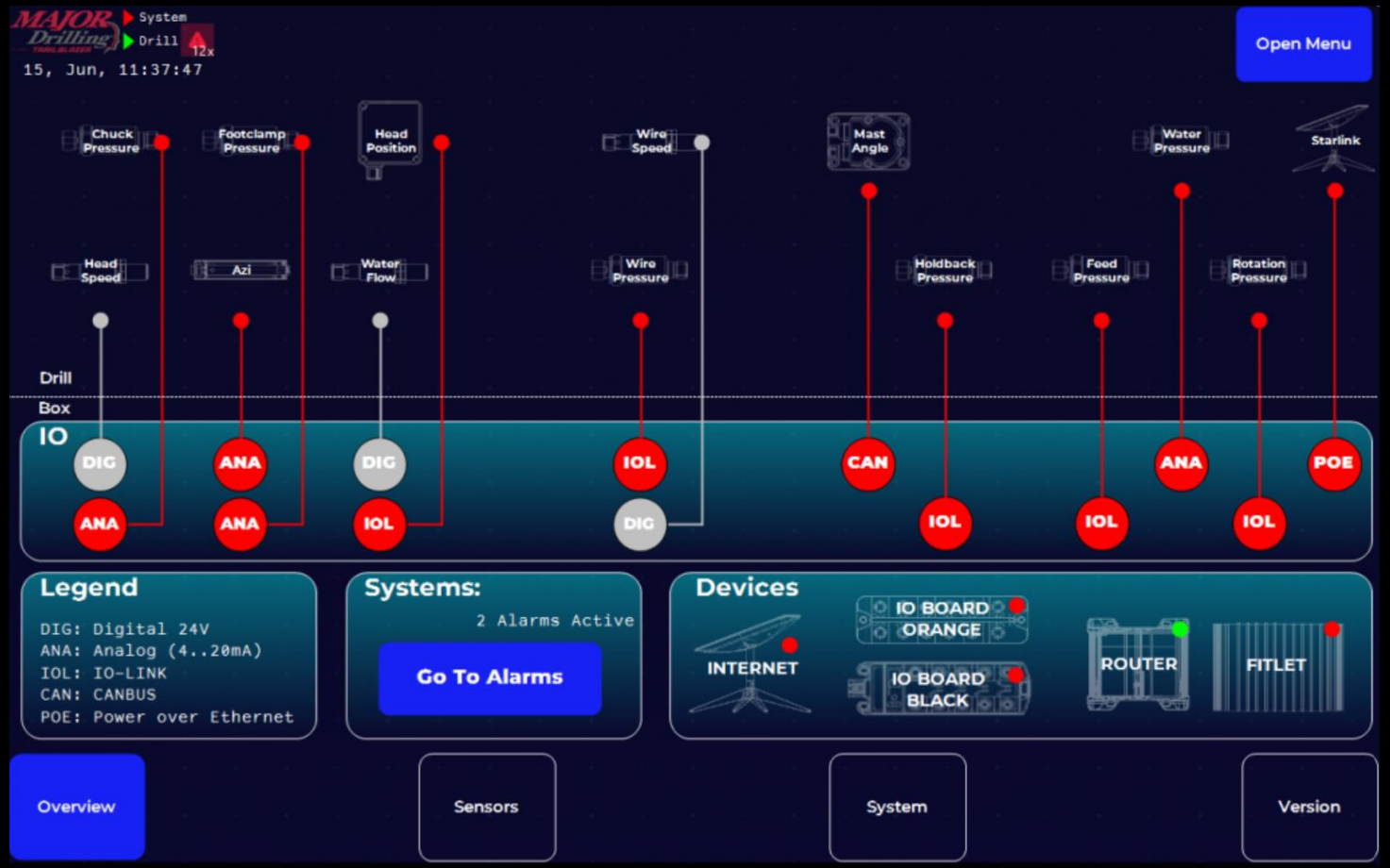
Skip Statistics

Day View Display

Next

Skip Statistics

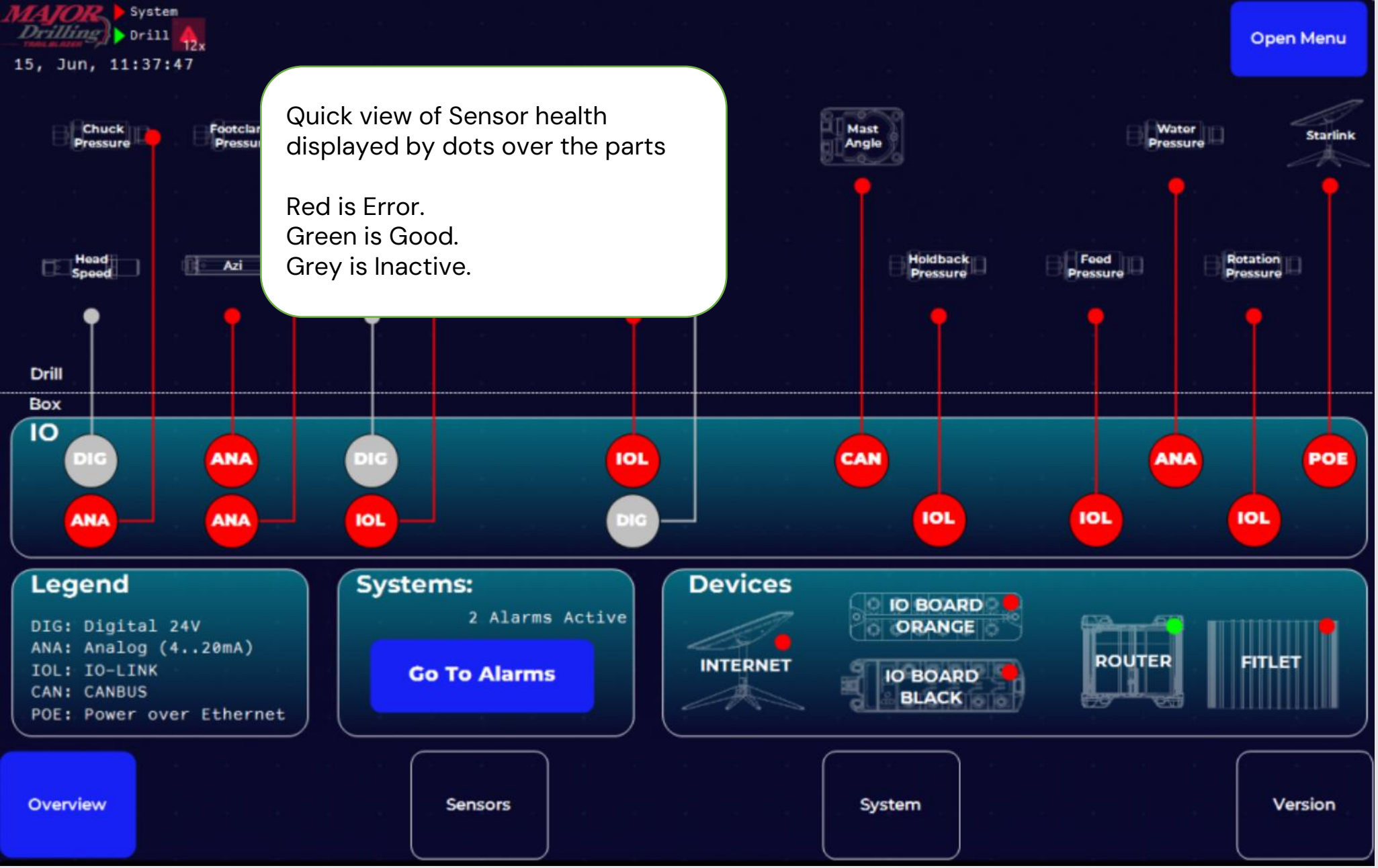
Diagnostics



Diagnostics to keep the system ticking

Users can use this screen to diagnose problems with the system

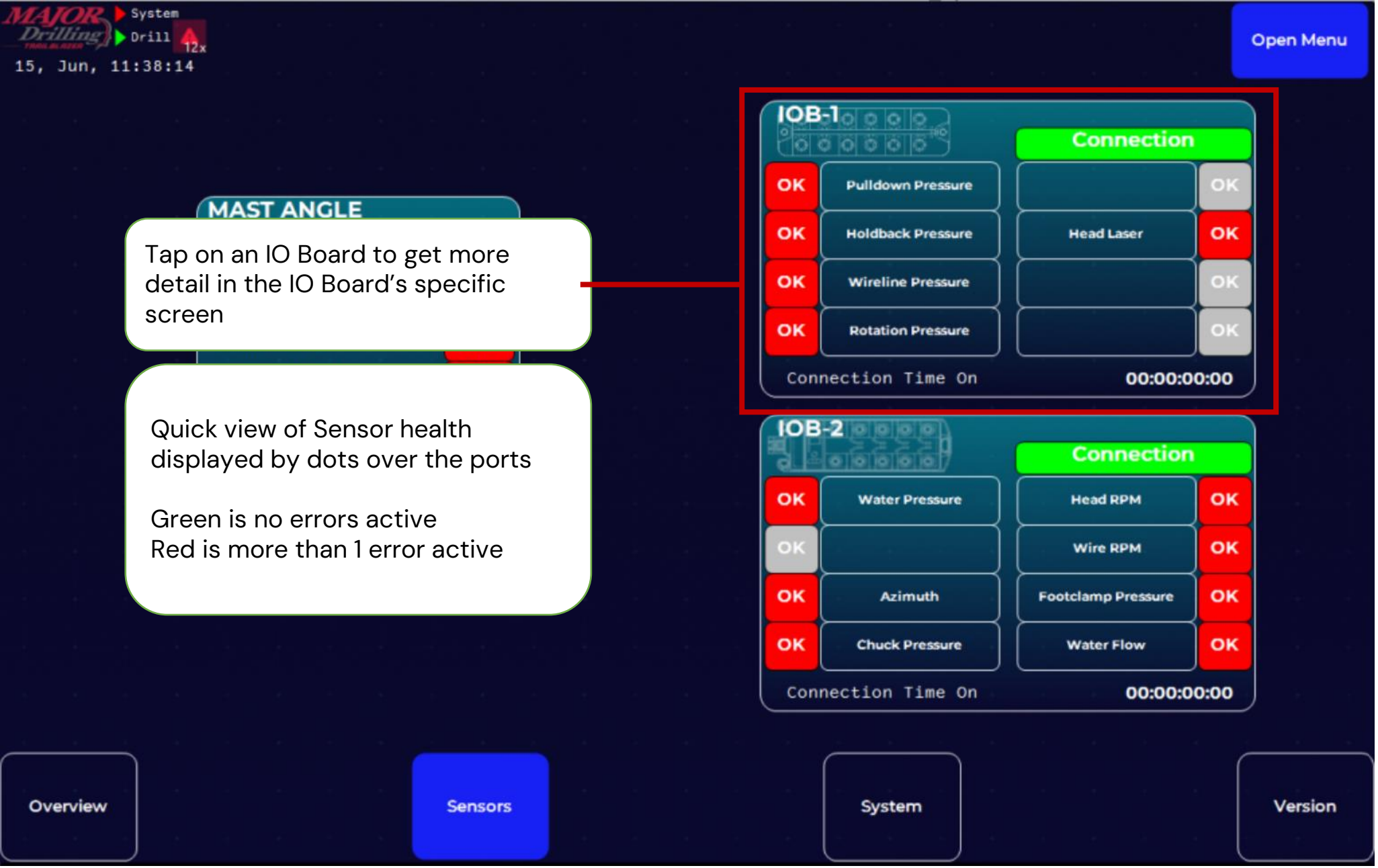
Diagnostics - Overview



Next

Skip Diagnostics

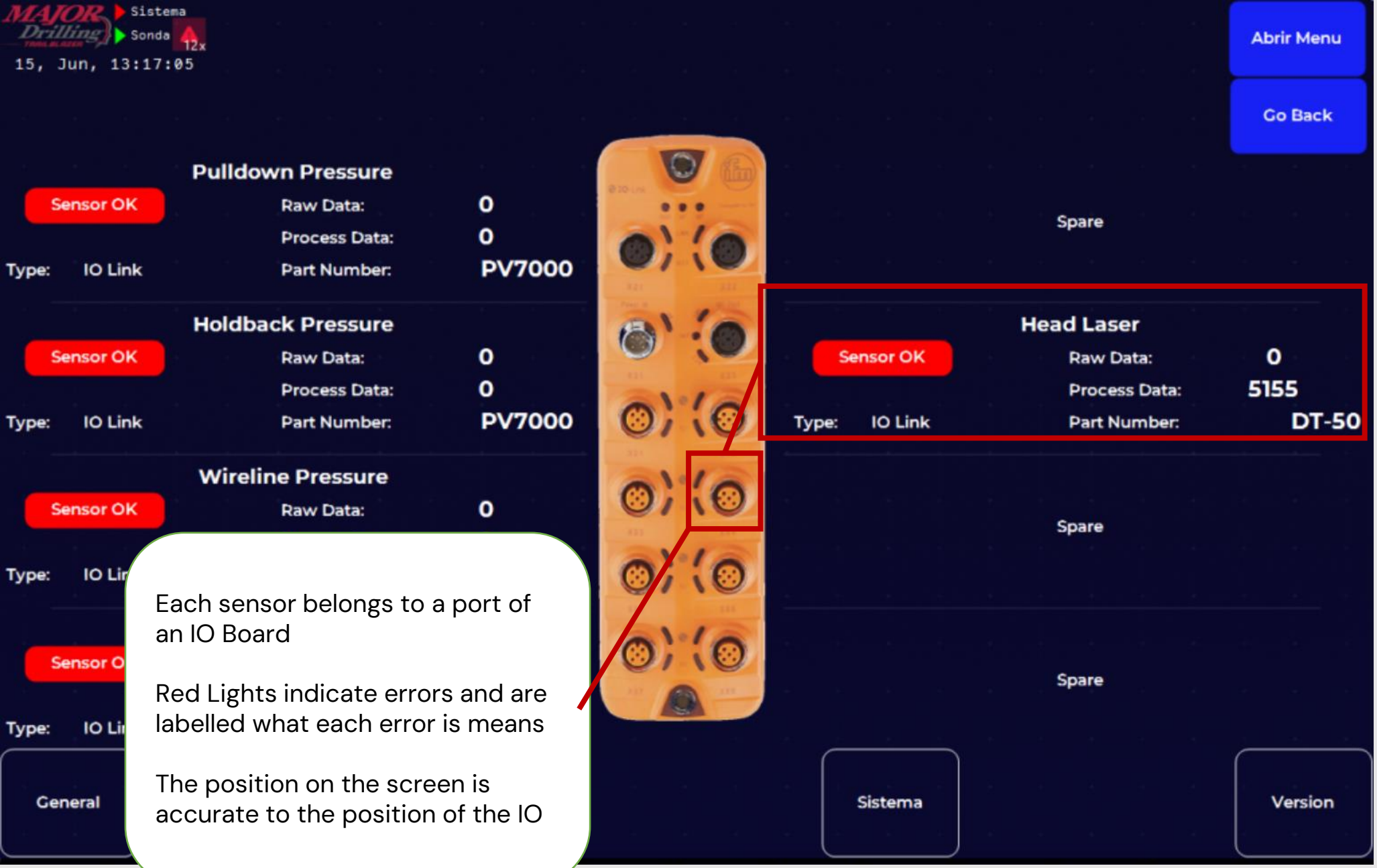
Diagnostics - Overview



Next

Skip Diagnostics

Diagnostics – IO Board



Each sensor belongs to a port of an IO Board

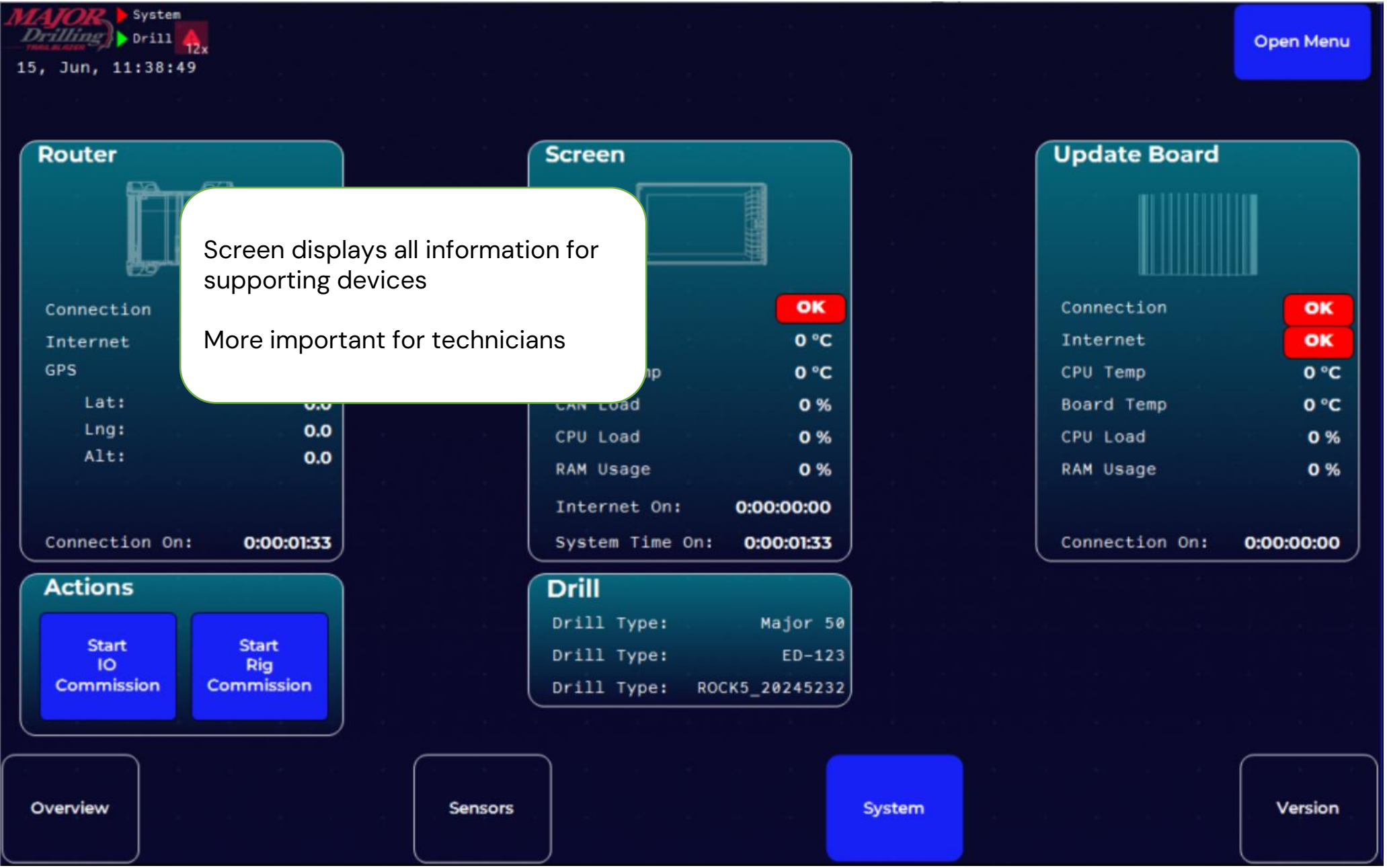
Red Lights indicate errors and are labelled what each error is means

The position on the screen is accurate to the position of the IO

Next

Skip Diagnostics

Diagnostics – IO Board



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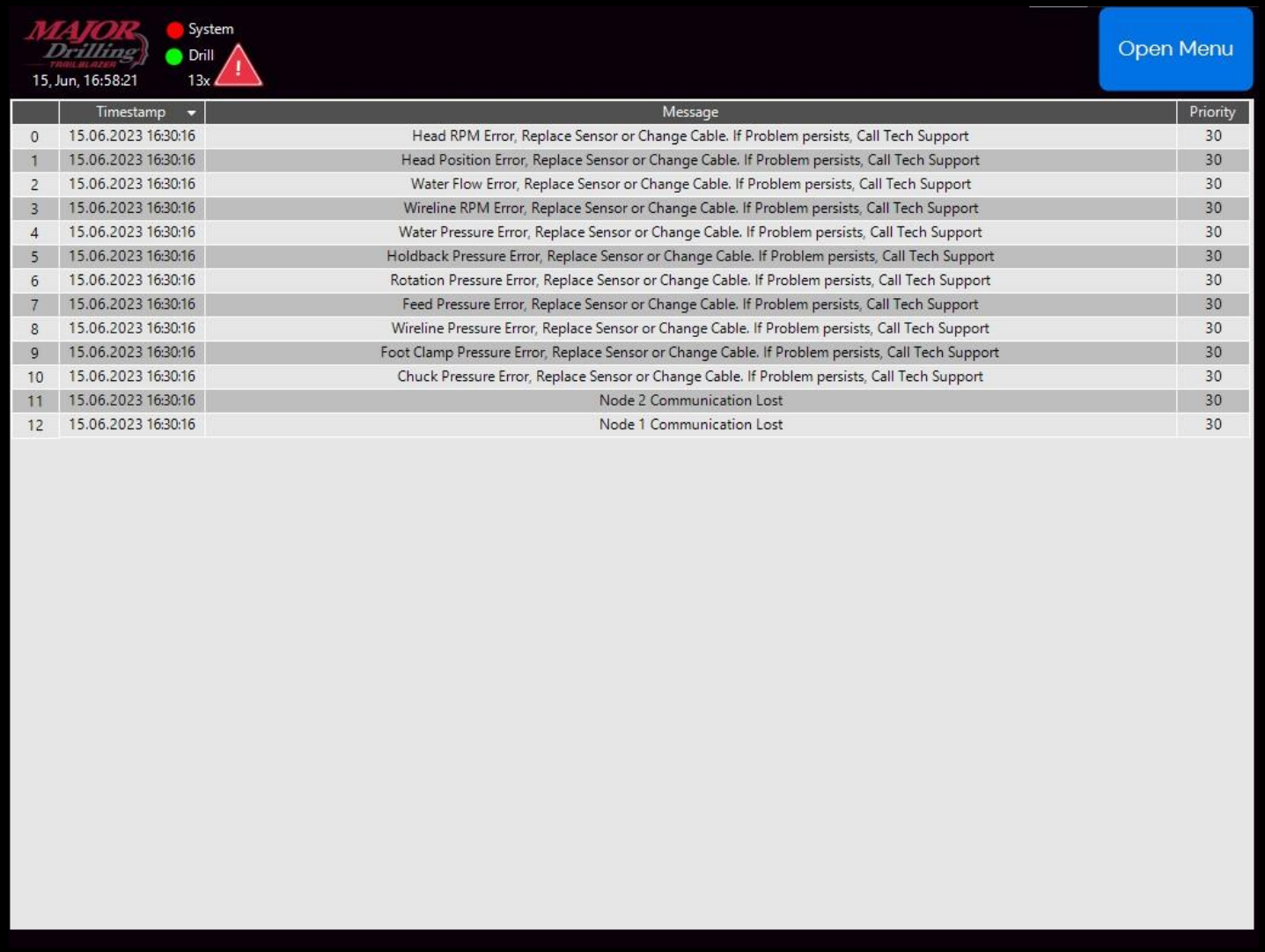
Skip Diagnostics

Alerts



	Timestamp	Message	Priority
0	15.06.2023 16:30:16	Head RPM Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
1	15.06.2023 16:30:16	Head Position Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
2	15.06.2023 16:30:16	Water Flow Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
3	15.06.2023 16:30:16	Wireline RPM Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
4	15.06.2023 16:30:16	Water Pressure Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
5	15.06.2023 16:30:16	Holdback Pressure Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
6	15.06.2023 16:30:16	Rotation Pressure Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
7	15.06.2023 16:30:16	Feed Pressure Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
8	15.06.2023 16:30:16	Wireline Pressure Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
9	15.06.2023 16:30:16	Foot Clamp Pressure Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
10	15.06.2023 16:30:16	Chuck Pressure Error, Replace Sensor or Change Cable. If Problem persists, Call Tech Support	30
11	15.06.2023 16:30:16	Node 2 Communication Lost	30
12	15.06.2023 16:30:16	Node 1 Communication Lost	30

Active Alerts

When the system detects errors, we use this screen to display each error and corrective actions to solve the problem