GEOGUIDE CCL
Casing Collar Locator

GENERAL SPECS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool Size Range</td>
<td>1 1/8 - 3 1/2 in</td>
</tr>
<tr>
<td>Temperature</td>
<td>350°F - 177°C</td>
</tr>
<tr>
<td>Pressure</td>
<td>15,000 - 20,000 psi</td>
</tr>
<tr>
<td>Tool Diameter</td>
<td>1 1/8 - 3 1/2 in</td>
</tr>
<tr>
<td>Tool Length</td>
<td>18.5 - 19.36 in</td>
</tr>
<tr>
<td>Tool Weight</td>
<td>12.1 - 36 lbs</td>
</tr>
</tbody>
</table>

Specifications are subject to change based on well profile. Contact your Gyrodata representative for details. Updated May 2018. Copyright ©2012 Gyrodata, Inc.

COMBINABILITY

- GeoGuide GR Scintillation Gamma Ray
- GeoGuide Temp Temperature
- GeoGuide CBL Radial Cement Bond Log
- GeoGuide MTD Magnetic Thickness Detector
- GeoGuide MFC Multi-Finger Caliper
- MicroGuide High Density Tortuosity Log
- GyroGuide Real-Time or Memory Gyro Surveying

Tool combinability dependent on application and tool configuration. Tool selection enables data correlation of depth, formation, tortuosity, or tool orientation and to pin-point anomalies in the well.

GyroGuide’s GeoGuide CCL services provide depth correlation of a cased hole for accurate depth control. As the tool passes the collar, coiled sensors detect magnetic field changes causing an electrical location signal to be transmitted either in real-time or to memory storage. It seamlessly integrates with Gyrodata’s extensive logging and surveying services. Additionally, Gyrodata provides expert data interpretation for even the most complex situations.

DESIGN + PERFORMANCE

- Utilizes a coiled sensor and permanent magnets that, when passing the collar, induce an electric voltage caused by the change in strength of the magnetic field, this signal is then transmitted for recording
- When combined with gamma ray logs, the CCL provides depth correlation between open hole logs and cased hole logs
- Ruggedized design applicable for perforating or plug and packer setting operations
- Runs in real-time mode on e-line or memory mode via battery storage, depending on tool configuration

MARKET + APPLICATIONS

- Completions & Production
- Cased Hole Operations
- Depth Determination & Correlation
- Confirmation of Perforation Depths & Intervals
- Depth Correlation for Plug & Packer Setting
- Identification of Casing Damage Location Assistance