

EverReady Magnetic Ranging™

The Most Versatile and Cost-Effective Intercept Solution

READY TO INTERCEPT WHEN YOU ARE

Gunnar Energy's EverReady Magnetic Ranging™ service is available on short notice to tackle the most difficult of wellbore positioning challenges.

EverReady Magnetic Ranging makes use of the sensor data from the customers chosen MWD service provider to collect all the information that is needed to calculate the distance and direction between wellbores. Since EverReady Magnetic Ranging is **non-vendor specific**, there is no costly downtime associated with equipment mobilization or one site field engineer requirements. All data is processed remotely, assuring **seamless integration into any operation**, both offshore and on land.

VERSATILE AND COST EFFECTIVE

EverReady Magnetic Ranging™ is the **most versatile and cost-effective solution currently available on the market today**. The proprietary algorithm provides for this flexibility and encourages cost control in the following ways:

- Eliminates the need for specialized hardware and associated equipment by **pairing seamlessly with virtually all industry standard MWD or wireline steering systems**
- **Remotely operated** and available to service projects in any geographical region worldwide
- **Eliminates the need for costly and time-consuming wireline runs** associated with other ranging systems
- Provides easily actionable reports that include an automatically generated well plan designed to either intersect or avoid the target well
- **Reduces personnel on-site** thereby reducing cost and

UNMATCHED ACCURACY

No similar service offering competes with the accuracy and precision of Gunnar's EverReady Magnetic Ranging System. Using third party wireline and MWD steering tools, the EverReady system was most recently used to identify, approach, contact and mill into a 93-year-old cased wellbore. Upon completion of the milling, the work string was inserted into the milled opening and run to 2500 ft. to bottom to complete the plug and abandonment of the target well.

Previously considered impossible, **the EverReady system is the first no access MWD style ranging system to accomplish the milling and re-entry of a target wellbore**. This feat of precision and accuracy has now set the standard upon which all other similar systems will be judged.

FIT FOR PURPOSE APPLICATIONS

Wellbore Intercept

- Relief Well Intercept and Dynamic Kill
- Plug and Abandonment Intercept
- Open Hole Re-entry Below a Fish

Relative Wellbore Spacing

- Collision Avoidance
- Wellbore Twinning
- Casing Top/Top of Stump Identification



GENERAL SPECIFICATIONS

DISTANCE TO TARGET ACCURACY	± 5% of distance to target
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DIRECTION TO TARGET ACCURACY	± 3°
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DATA COLLECTION	Industry standard MWD or wireline steering tool
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DETECTION RANGE	Dependent on size and weight of the casing. Typically >30 ft.
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FORMATION/ENVIRONMENTAL EFFECTS	None
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ANCILLARY EQUIPMENT REQUIREMENTS	None
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RANGING INTERPRETATION AND REPORTING	Can be performed on-site, but remote processing and reporting is recommended
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