



### Casing to Casing

- Restricted Entry/Exit positions
- Gravel formation
- Intersect Casing direction or along the borehole

### Environmental

- If hole cleaning or formation conditions require a lower annular pressure (monitored by Pressure While Drilling) than has been estimated over the length of the bore, it can be significantly reduced by drilling from both sides.

### Torque & Drag Relief

- For various reasons, there are instances where it appears impossible to punch out. In some situations a relief bore from the opposite side can relieve the push and torque values allowing completion of the hole.

While 'Casing to Casing' intersects generated the first opportunity to successfully prove intersect techniques and technologies. Prime Horizontal was the pioneer of this technology.

We have now completed over 100 successful intersects using multiple magnetic sources for guidance.

Each source gives us additional capabilities to ensure a first time success.

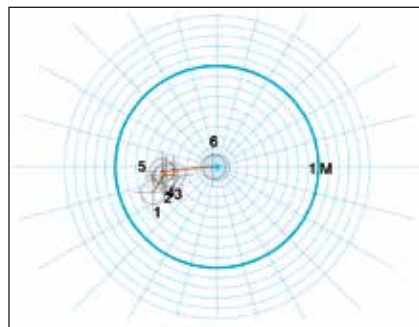
**Longest Intersect:** 3935m with 14" product pipe.

**Shortest Intersect:** 350 m.

**Largest Intersect:** 1100m with 48" product pipe.

**Drilling elevation Intersect:** 690m

**Smallest product pipe diameter:** 4"



Intercept vector plot

### AM & RM subs accuracy

RM & AM Subs	2 7/8" OD—9 1/2" OD
RM & AM Accuracy	5cm at <3m depending on S/N Ratio

### Various Magnetic Sources

#### ParaTrack-2 Axial Magnet sub

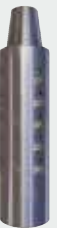


The AM sub is generally utilised in soft formation/ jetting. Where tracking systems enables a close proximity for the first range as distance is limited to 5m.

Applications include close spaced boreholes, freeze drilling, & tunneling projects.

AM Final Approach Up to 5m

#### ParaTrack-2 Rotating Magnet sub

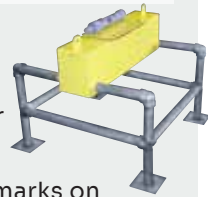


The RM sub is generally utilised in harder formations & longer crossings & where the surface tracking systems are limited. Ideal for long crossings under a large body of water or obstruction, where coil or beacon cannot be utilised.

RM Initial Approach Up to 70m

#### Benchmark

The Benchmark is used for under river Intersects by deploying 3 Benchmarks on the riverbed over the drill line.



Stand Footprint: 915mm x 915mm

Box: 1041mm x 203mm x 280mm

Weight: 125kg

Materials: Non mag stainless steel

Omni-directional acoustical actuator

Op time per actuation: 15mins

30 day reserve to first actuation

Signal strength accuracy: to -50m

160 hour operating time reserve

100m water depth maximum.



Benchmark in use