

Sonde Advice

Please Note:- Pipe and soil conditions can affect the sonde signal therefore it is advised to have a set of sondes at hand so if one doesn't work you can try the others.

If the soil is wet or the shingle/concrete packed around the pipe has an iron content it will affect the 33kHz sonde signal so for this example an 8kHz sonde would be a better sonde to use.

If the pipe is cast iron then the 512Hz sonde would be the one to use as the lower frequency will not attach itself to the cast iron pipe.

A transmitting sonde produces a field distribution which is not simply cylindrical as with a line, but is roughly sausage shaped in the direction of the core. As a sonde is approached with a horizontal aerial, a rising signal will be detected as it comes within range. This will then fall off again to null, so giving the impression that it has been passed. But if the traverse is continued, the signal will rise again to a much higher level, the peak of which is above the sonde. It will then fall to null again, followed by a small rise, and then fade away. The small peaks either side of the nulls may therefore mislead the unwary; it is essential to find the higher peak between the two nulls to pinpoint the sonde position. The reason for the two nulls is that the field reverses its direction through the aerial core at each end of the traverse, as the illustration shows; at the point of reversal the field crosses the core at right-angles, so there is no signal (null) at these points. The distance between the nulls increases with depth of the sonde. A vertical aerial, however, will produce a single null over the sonde but this null will exist anywhere along a line extending to both sides of the pipe.

