

# Ask the Expert

A discussion on sludge.

## Craig Hutchinson

Job Title: **Product Support Manager**

Experience: **22 years**



### What is your favorite Pulsar Measurement product and why?

Ultra 3 and dB6 our bread-and-butter combination. Because they are simple and do what they say on the tin.

They are like the 'mini cooper' of the car world – the 'Mini Cooper of the Ultrasonic world' if you like!

### What do you think the most valuable feature is on the Sludge Finder 2?

The product is designed to stop water companies from overspilling into local water sources. This prevents them from them from being fined hundreds of thousands of pounds from killing local wildlife for hazardous and untreated sludge being unintentionally leaked.

The Sludge Finder 2 enables efficiency of the site to be able to tanker away sludge rather than water – sometimes valves are opened up too early, as the level of the sludge is not known. The Sludge Finder 2 allows the process to build up a blanket and is pumped through at the desired density – effectively a self-fulfilling process.

The automation of the process allows for handheld devices (sludge judges) to be replaced and the whole blanket detection process is a lot cleaner! It also allows for site engineers and

managers to be freed up to be able to look after other things. Process automation enables tank monitoring and alarms to be set off when the levels are high, so no one needs to be there checking levels 24/7!

### What do you think the best benefit is to sites after the Sludge Finder 2 system is installed?

Maximizes the sludge process and using the sludge to be able to produce methane to create energy for the site to run on, which ultimately increases profitability – bio-resources is I think what they call it now!

### Are there any hidden capabilities on the Sludge Finder 2 that you think people miss or don't take advantage of?

A lot of people do not know that you can put an additional ultrasonic transducer on it, allowing you to monitor level on a separate relay.

The unit has a liquid crystal display so you can look at the sludge profile on screen! It can be tricky on these traveling bridges with laptops, trying to balance everything and especially because it is always raining!

### Do you have any funny stories of an Sludge Finder 2 being installed?

I dropped my laptop in a sludge tank once! I was working on a traveling bridge at a UK water company and there was a nasty gust of wind and I just heard this massive splash, I turned around and it was my laptop! Every time I visited the site after that the engineer would present me with a rubber ring to prevent any more accidents!

### What ever happened to the laptop?

I guess it is still in the bottom of a sludge tank somewhere! We never did get it back.

### Do you have any tips or tricks for customers to get the most out of their Sludge Finder 2 system?

The best thing customers can do to help us help them is to take echo profiles when things start going wrong. If they look at the profile screen, take photos, and send them to us as and when these problems are occurring, we have a better chance of helping them resolve it.

It is also crucial to have the system installed correctly. Things like having it installed on the wrong side of the

travelling bridge can lead to a lot of complications.

### How can the Sludge Finder 2 help customers outside of the Water Industry?

Sludge Finder 2 has been designed for settlement tanks. But it is an instrument that is looking to spot a significant change in density, so if you have a settlement tank with a significant change in density the instrument will work!

Generally the Sludge Finder 2 is appropriate in any part of the process where there is sludge that needs moving around. There are settlement tanks in chemical plants, power

plants, paper mills, lagoons, mining operations, and loads more.

We did an application in Italy on sand retention basins at a power plant to save engineers a 3 hour drive up a mountain just to check sand levels in these basins!

### What special features does the Sludge Finder 2 have that customers won't find anywhere else?

The Sludge Finder 2 can connect to radios – often you cannot get wiring to applications because they are almost always on bridges. This helps customers to save on wiring and installation costs – people were

worried about security to begin with, but we found that these have worked well.

Not a lot of systems have an integrated radio system. With other systems you must buy a separate radio system and 'bolt' it to the side, but with ours it is built-in.

The dual-point measurement is a good one too!

A lot of other systems I see in the field, customers rarely get any support with the products – whereas we are always available for support whether it be on the phone or on site!

## More Information

Sludge Finder 2 & Viper  
Transducer: [https://  
pulsarmeasurement.com/  
sludge-finder-2.html](https://pulsarmeasurement.com/sludge-finder-2.html)



## Delivering the Measure of Possibility

Pulsar Measurement offers worldwide professional support for all of our products, and our network of global partners all offer full support and training. Our facilities in Malvern, UK and Largo, USA are home to technical support teams who are always available to answer your call or attend your site when required. Our global presence, with direct offices in the UK, USA, Canada, and Malaysia, allows us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

By taking a step forward in echo processing technology, Pulsar Measurement addresses applications previously thought to be beyond the scope of ultrasonic measurement. This technology improves signal processing at the transducer head which has made it possible to increase resistance to electrical noise, enabling the transducer to 'zone in' on the true echo.

For more information, please visit our website:

[www.pulsarmeasurement.com](http://www.pulsarmeasurement.com)



INFO@PULSARMEASUREMENT.COM

*Pulsar Measurement is a trading name of Pulsar Process Measurement, Ltd.*

*Copyright © 2020 Pulsar Measurement  
Registered Address: 1 Chamberlain Square CS, Birmingham B3 3AX  
Registered No.: 3345604 England & Wales*

#### United States

11451 Belcher Road South  
Largo, FL 33773

+1 888-473-9546

#### Canada

16456 Sixsmith Drive  
Long Sault, Ont. K0C 1P0

+1 855-300-9151

#### United Kingdom

Cardinal Building, Enigma  
Commercial Centre  
Sandy's Road, Malvern WR14 1JJ

+44 (0) 1684 891371

Rev 1.0