



● Ben Volk [REDACTED]  
To: Dwight Smith, Sierra Vly Groundwater Management District, Ferguson, Tracey  
Cc: Michael Kelley

🖨️ Fri, Jan 7 at 10:22 AM ★

Dwight, Jenny, and Tracey,

Yes, I think the data logger and pulse output that comes standard with the Seametrics AG3000 may be useful in the future. The data logger would capture hourly or daily usage rather than just monthly. In the future, if the District decided to install a SCADA system, the AG3000 could be used to transmit flow data (via radio or cell phone) whereas the DuraMag would not have that option. The Seametrics data logger could be used to download flow data to a laptop with an optional cable.

The standard battery power provided by Seametrics will last 2-years with the data logger set to take readings every 16 minutes. Then all the meter reader would need is a cable and a laptop to download the data. The sample rate can be adjusted in the field using the meter interface (no cable or laptop required). Of course, a lower sample rate would extend the battery life. If a monthly meter reading was somehow missed, the data logger would have stored the information so the reading could be obtained at a later date.

In the future, if the District decided to add telemetry, we would just need to get DC power to the meter, pick up the pulse output, and transmit that back to the SCADA system with a radio or cell phone system. A small step-down transformer could be used to pick up power at the pump panel and convert from AC to DC. Some of the sites may already have 110 Volt AC power available, but most are currently equipped with 3 phase 480 volt power.

The McCrometer DuraMag meters could be retrofitted with a data logger and output options, but they would need to be removed and returned to the factory. The costs of retro-fitting the meters would probably be almost as much as just purchasing a new meter with those options.

I hope this helps in the purchase decision.

Ben



● Ben Volk [REDACTED]  
To: Dwight Smith, Sierra Vly Groundwater Management District, Tracey Ferguson  
Cc: Michael Kelley

🖨️ Mon, Jan 3 at 12:27 PM ★

Hi Dwight, Jenny, and Tracey,

Michael Kelley and I looked over the specs, and the McCrometer DuraMag vs. Seametrics AG3000 are comparable. They have the similar levels of accuracy, stainless steel sensors, epoxy coated steel tube and flange, and grounding rings.

I think you would be justified in going with the McCrometer DuraMag quote that is \$1227.65 more than the Seametrics quote since the bids came from the same vendor and the District has primarily standardized on McCrometer Meters.

The other main item is the DuraMag comes with no output or data logger and the Seametrics AG3000 comes with a data logger and pulse output. As a result, the AG3000 could be used to transmit flow data via a SCADA system (radio or cell phone) in the future whereas the DuraMag would not have that option. The Seametrics data logger could also be used to download flow data to a laptop with an optional cable. This seemed like a sensitive issue with the farmers.

Please let me know if you have any questions,

Thanks and Happy New Year!

Ben

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