



Checking the Integrity of the Probe

The filters in your phx21™ are designed to protect your pump and restrictors from contaminants. Contaminants can also sneak into your phx21 through even the smallest holes in your probe and probe hose. Use the following Methods to protect your probe.

Method 1: Block the Probe Tip (Check-Daily)

1. With the phx21 running, place your thumb over the probe tip. The pump should quickly stop. Remove your thumb. Restart the pump, test complete.
2. If the unit does not stop, the pump is still drawing a “sample” through a leak in your probe.
3. Go to Method 3 to quickly locate the leak.

Method 2: Probe vs. Inlet Flow Rates (Check-Weekly or Max PPL)

1. Use flow meter assembly (LDAR# 1735) to measure the flow at your probe tip.
2. Use your flow meter assembly to measure the flow at your probe port.
3. If the probe port flow is greater than the probe tip flow, you have a leak.
4. Go to Method 3 to quickly locate the leak.



Method 3: Pin-Point the Leak (Check-When probe port flow > probe tip flow)

ATTENTION: Before beginning test, make sure this is within site safety parameters.

1. Add a 5-foot piece of tubing to your probe tip. This is to avoid drawing a contaminated sample.
2. Without causing a spark, depress the button on a BIC lighter to release a flow of butane.
Caution: DO NOT strike a flame with the lighter.
3. Direct the Butane along the length of the probe hose and at the joints of your probe while watching the PDA connected to the phx21.
4. Move the lighter slowly. If there is a leak, it will be drawn through the breach, into the phx21 and will register a PPM reading in a matter of seconds.
5. If you detect a PPM reading, isolate the leak. If the probe hose is leaking replace it. If the probe is leaking, report an issue.