Display Basics - Analog Meter

An analog meter, sometimes called a direct read, or manual water meter, has rotating dials and a flow gauge. This is a traditional type of water meter used to measure water consumption. Here's a breakdown of its components:

Analog meters have multiple dials (often six or seven), each representing different unit measurements of water. These dials look like small clock faces, and they rotate as water flows through the meter. Inside is a turbine, which in turn rotates the red needle, and ultimately the dials on the meter face. Unfortunately, the dials are usually not labeled to clearly indicate what unit they measure (e.g., ones, tens, hundreds, thousands of gallons) but there are alternate ways to determine the read. The cumulative reading from all the dials gives the total water usage.





Basic Information - Analog Meter

The flow gauge (or low-flow indicator) is a small spinning device on the face of the meter that shows if water is flowing through the system at any given time. This dial can have different colors or shapes depending on the type of meter, but will always appear as a circular shape or a triangle. I will show examples in the following slides. The movement of water through the meter is directly proportional to the amount of water used.

The flow gauge moves when water is flowing, even if the flow is minimal (like a small leak). The flow gauge aids in leak detections as the gauge should not be moving if all sources of water are turned off.





Potential Leaks- Analog Meter

If you see the Flow Gauge spinning after you have shut all water off, this indicated a potential leak. Check to see if you have any faucets turned on inside, hose bibs turned on outside, or any noticeable puddles of water around your property or in your residence. If you have repaired your leak and want to see if the meter indicates that, check the flow gauge. If it shows no movement for at least a minute, your repair has likely been successful.

Note: This Flow Gauge is a red triangle. -

Some districts offer Leak Adjustments when a leak is discovered and repaired by the customer. Please reach out to Customer Service to inquire about this. Contact information will be on the final slide.





How to Read – Analog Meter #1

The read you see on your bill is gathered by Meter Technicians in the field. The read taken to calculate your bill is interpreted from the dials you see on the right. Depending on what district you are in, we bill based on different number positions.

Here is a simple way to find the number position on Analog meters: first we need to look at the dials on the outer ring of the – meter. A full rotation of the red needle around this meter will total 10 gallons used. This will cause the Tens position to rotate. Notice how the only rating digit is the black-panel 5. That tells us the 5 is the Tens position.

Ones = 0, **Tens** = 5, **Hundreds** = 7, **Thousands** = 6, **Ten-Thousands** = 7, **Hundred-Thousands** = 5, **Millions** = 1

Billing Read from Hundreds position = 15767 Billing Read from Thousands position = 1576





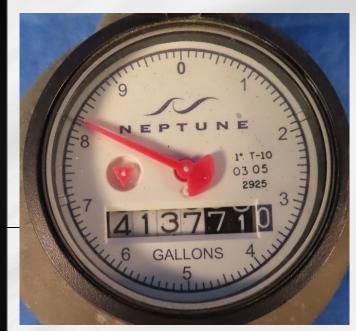
How to Read – Analog Meter #2

To obtain an accurate reading, we need to find the Ones position again. Typically, the numbers on the white-panels will begin from the Thousands position, but that is not always the case. Do not assume that if a meter is the same size, the read would be calculated the same. It is always best to look at the outer ring and determine which position is rotating. This is crucial and will affect Billing if read incorrectly.

Ones = 0, Tens = 1, Hundreds = 7, Thousands = 7, Ten-Thousands = 3, Hundred-Thousands = 1, Millions = 4

Billing Read from Hundreds position = 41377 Billing Read from Thousands position = 4137





How to Read – Analog Meter #3

This meter's outer ring indicates that a whole revolution is not 10 gallons like the previous meters, but 100. This means this meter can calculate down to a Hundredths of a gallon, instead of a Tenth. To obtain an accurate reading, we need to find the correct billing position. The Hundreds position should be the only one starting to rotate in the photo to the right, which is the 6.

Note: Notice how the two digits to the right of the 6 are stationary. Many meters are already preset to cause the number aligned with the values of the outer ring to be the first number able to rotate, but that is not always the case.

Ones = 0, **Tens** = 0, **Hundreds** = 6, **Thousands** = 9, **Ten-Thousands** = 9, **Hundred-Thousands** = 2, **Millions** = 7

Billing Read from Hundreds position = 572996 Billing Read from Thousands position = 57299





Customer Service Contact - Analog Meter

For Billing inquiries, please contact Customer Service at: customerservice@crossroadsus.com



Thank you for reading. Have a great day!