

Use of TDScan Low/High in Fertilizer Applications

A. Simple determination of when fertilizer is present in a "Fertigation" line using TDScan Low

Step 1: Determine the TDS value of your "Fertigation" make-up water prior to addition of Fertilizer by dipping the TDScan Low tester into a sample and note the reading when it stabilizes.

Step 2: As your water runs through your "Fertigation" line, take samples from the line on a frequent basis, dip the [TDScan Low](#) into the sample and note that reading when it stabilizes. When just water is coming through, the TDS value will be near or within $\pm 10\%$, depending on contaminants in the line, of the value found in Step 1. Once fertilizer is present in the line, the value from your sample will increase dramatically above the value found in Step 1. The amount of increase will vary from fertilizer type and concentration. The important thing to note is when a sudden rise occurs in the TDS value.

B. Accurate determination of fertilizer concentrations

Note: Choose the [TDScan Low](#) if the TDS of the fertilizer concentrations plus the make-up water is expected to be below 1990 ppm. Choose the TDScan Low if the TDS of the fertilizer concentration plus the make-up water is between 1.00 to 10.00 ppt.

i. Accurate determination of Fertilizer Concentration using TDScan Low

Step 1: Make a calibration standard using your fertilizer and make-up water by dissolving 1 gram of fertilizer in 1 liter of water. This makes a 1000 ppm (1000 mg/L) standard.

Step 2: Calibrate your TDScan Low by dipping it into standard and adjusting trimmer so it reads 1000 ppm.

Step 3: Dip the TDScan Low into your fertilizer mixture and read the concentration on the display.

ii. Accurate determination of Fertilizer Concentration using TDScan High

Step 1: Make a calibration standard using your fertilizer and make-up water by dissolving 5 grams of fertilizer in 1 liter of water. This makes a 5 ppt (5 g/L) standard.

Step 2: Calibrate your [TDScan High](#) by dipping it into standard and adjusting trimmer so it reads 5 ppt.

Step 3: Dip the TDScan High into your fertilizer mixture and read the concentration on the display.