



2015 Guardian Results Okmulgee, OK

Corn was planted in soil with an organic matter of 1.6 and a CEC of 6.5 in April with 35 units of UAN applied with the herbicide at the planter in a broadcast application. On May 3rd, 115 units of 30-0-0w3S with 1.75 pints of Guardian-DL 31-0-0 was side dressed.

Average rainfall for the Okmulgee, OK area in May is 3-5 inches. Actual rainfall during the month of May was 18 inches.

June 3 soil samples were taken both 0-6 inches and 6-18 inches deep. Both samples were submitted to Midwest Labs in Omaha, NE to test for nitrogen remaining in the soil due to unusually heavy rainfall in May.

Results

Samples tested for nitrate nitrogen

Sample Depth	Nitrate N	Actual N Available for Plants
0-6	10 ppm	18 lbs.
6-18	4 ppm	14 lbs.

Same samples tested for ammonium nitrogen

Sample Depth	Ammonium N	Actual N Available for Plants
0-6	60 ppm	108 lbs.
6-18	1 ppm	3.5 lbs.

As a result of using Guardian-DL 31-0-0 with the side-dressed nitrogen, the nitrogen remained in the root zone and was still available to be taken up by the plant as opposed to being leached through the soil and no additional nitrogen needed to be applied. It also shows the need to test for both nitrate and ammonium forms of nitrogen when performing in-season nitrogen tests.