

# Irrigation Efficiency and Nitrogen Loading to the Ground Water

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## Laboratory Analysis

The laboratory need to be instructed to analyze the water samples for nitrogen and chloride content and report the results in mg/l or ppm. The nitrogen analysis needs to be only for nitrate and not total nitrogen. By the time all forms of nitrogen have reached below the root zone, they have be convert to the nitrate form by soil bacteria. The cost of nitrate analysis is around \$5 per soil sample. Chloride and soil moisture analysis cost around \$10 per soil sample. The soil samples sent to the laboratory need to be analyzed for moisture content (% moisture on a weight basis), and nitrogen and chloride content usually reported in ppm on a weight basis. The analysis will usually be accomplished using a [autoanalyzer](#). [Click here](#) for a list of laboratories that can do the analysis.