



Laboratories, Inc.

Duane Schlieman, Agronomy Services

New Ulm, MN

Nevada, IA

Bismarck, ND

December 2009

Newsletter

MVTL News & Updates

Looking into 2010

MVTL Fertility Seminar

February 24th & 25th. We're planning to expand this year's agenda to help accommodate additional interests. A preview will be sent out within the next few weeks.

MVTL Web 2010

New for 2010: We expect to have our web-site updated and new modifications in place before spring. We plan to introduce these new features at the MVTL Fertility Seminar in February.

Soil Sampling Depth vs. Fertility Levels

Reviewing the newsletter from this past spring, sampling depth/consistency has continued to draw more attention due to its potential impact on soil nutrient levels and field histories. Keep in mind soil moisture, **soil type**, residue, compaction, tillage, and general special variability influence the consistency of our cores. In conventional management systems, limited data suggests about a 33% decrease in primary plant nutrients in the 4-8" depths compared to 0-4" depths, and a 50% decrease in the 6-12" depths compared to 0-6" depths. Placing specific values (ppm's) to these types of variability is not realistic and although these percentage estimates may be real, they are very general. Just like managing fertility zones via Precision Ag, we work to identify nutrient trends versus over-analyzing the exact nutrient values. Sampling depth can present its own set of variables, and fortunately, most consultants and agronomists understand the need for consistency whether it's technique, field conditions, or time of year.

Cost of soil testing

What does \$10.00 get you these days? An MVTL soil test report. The cost for soil testing analysis has remained stable through some dramatic commodity price changes and rising input costs. **Soil testing has proven to be a great investment** for producers year in and year out.

Soil-type, drainage, moisture, temperature are four critical components to crop production, and management is the catalyst. Successful managers place a high priority on fertility management and understand comprehensive soil testing is necessary to build their history profile. Tillage, compaction, seed selection, insect & disease management, weed control, and crop rotation are all important factors in building a complete nutrient management plan.

The soil testing fees to grid an 80-acre field is an estimated \$300.00. With that information in hand, you have the opportunity to make a well-informed decision when it comes to managing the fertilizer applications designated for those acres—often \$15-\$20,000. Regardless of all the modern day advantages we have at our fingertips, the time you take to identify and reduce limitations is as fundamentally sound today as it was 20 years ago. Low Risk-High Return.



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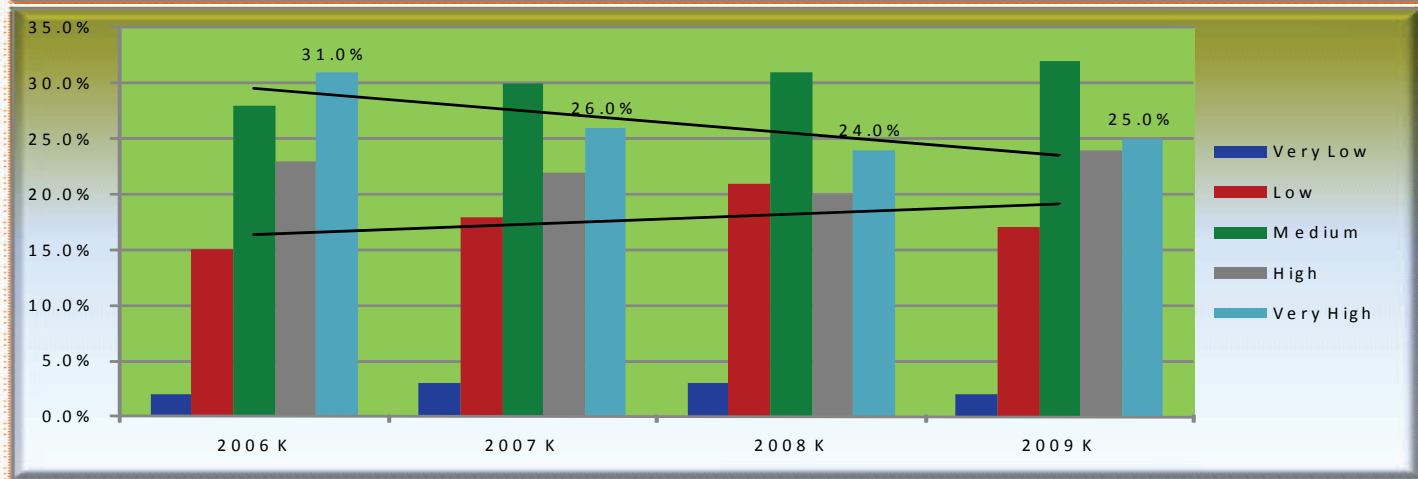
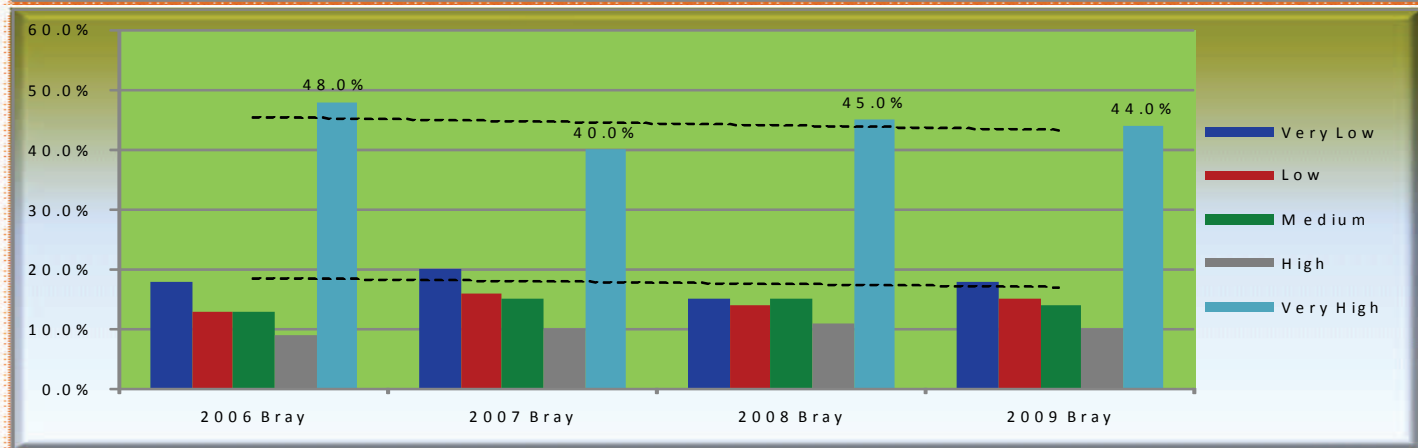
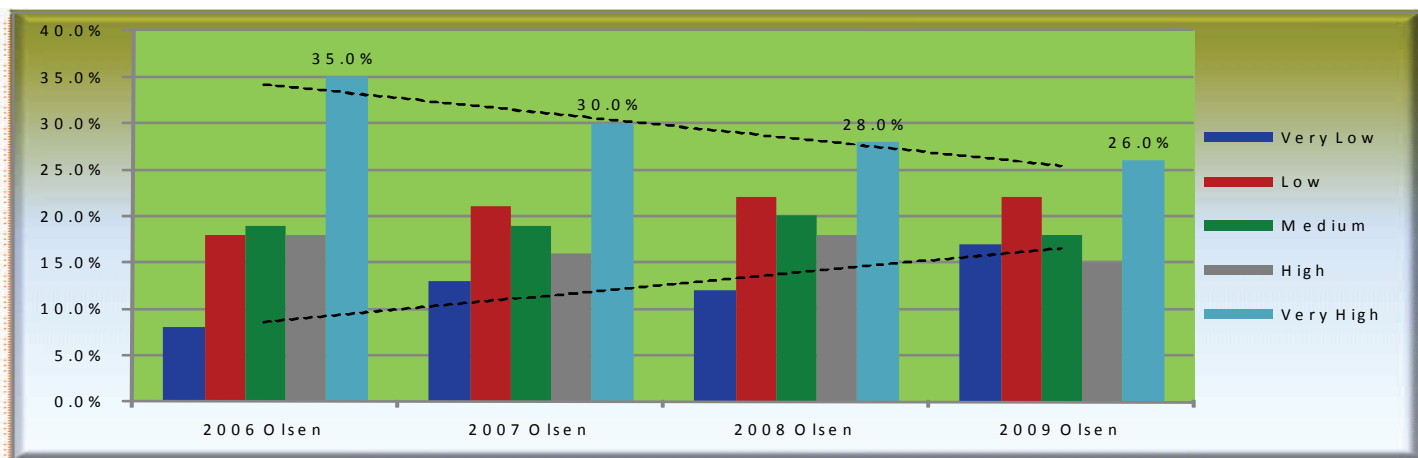
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MVTL Data Trends

Phosphorus and Potassium

The graphs below displays the percent of soils that fall into each soil nutrient bracket (very low, low, medium, high, very high) by year, 2006 to 2009. Overall, the percent of soils testing “very high” are trending lower, specifically, the Olsen-P and Potassium (K).





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Miscellaneous Soil Facts

Location Location Location

Defining soil

“**soil**” - (i) The unconsolidated mineral or organic material on the immediate surface of the Earth that serves as a natural medium for the growth of land plants.” (Soil Science Society of America).

“**dirt**” - Soil out of place

(What's the difference between dirt and soil? Location, Location, Location!)

Soil Facts (Soil Science, Sydney Harper, 1996)

- Soil is often the bottom of the food chain. Soil feeds plants ... plants feed animals.
- Soil is a “non-renewable” natural resource.
- Soil is used to adsorb wastes.
- About 1 acre of soil is needed to produce food for one person.
- Soil is a living system.
- Each year, 15 tons of dry soil per acre pass through earthworms.
- 50% of soil is water and air.
- Soil contains 0.01% of the earth's water.
- An acre of corn gives off 4,000 gallons of water a day in evaporation.
- Soil contains 5,000 to 7,000 different species of bacteria in each gram.
- There are an estimate 70,000 types of soil in the United States.
- 42 centuries ago, the Chinese use soil maps to determine taxes.

Soil Humor

Why did the chicken cross the road, roll in the dirt, and cross the road again? Because he was a dirty, double-crosser.

*Have a Merry Christmas
And A Happy New Year!
...MVTL Soil Lab*