

# What is High Soil Test P?

<p>Depends on information Source</p>	<p><i>Some Manitoba Sources</i></p> <ul style="list-style-type: none"><li>•Soil Test lab manual</li><li>•Technical Review Committee</li><li>•Manitoba Phosphorus Expert Committee</li><li>•Livestock Manure and Mortalities Management Regulation</li><li>•Soil Fertility Guide</li><li>•Farm Practices Guidelines</li></ul>
<p>Agronomic vs Environmental P levels</p>	<p>How does a municipal council determine what environmental levels are?</p>

# TRC Reports and High P

“Soil phosphorus concentrations in excess of 40 lbs/acre (20 ppm) using the Olsen method are considered to be high according to the soil fertility guide.” P. 19

“Repeated yearly applications of manure at rates that exceed crop requirements for P may result in a buildup in soil test P.”

Daly Feeders TRC Report February 11, 2005, RM of Daly

“Phosphorus concentrations in excess of 40 lb/acre using the Olsen method are considered to be high.

Thirteen of the fields had phosphorus concentrations in excess of 40 lbs/acre this range.” p. 16

“Repeated yearly application of manure at rates that exceed requirements for P may result in a buildup of soil test P. In such instances, manure application rates should be calculated based on the P content of the manure and crop requirement P.” p.16

Deerboine Colony TRC Report December 23, 2005 – RM of Daly

“Phosphate concentrations in excess of 40 lbs/acre are considered to be high. Phosphate concentrations should continue to be monitored over time. If the amount of phosphate exceeds the soil test recommendations by 250% or more, calculate an application rate based on phosphate instead of nitrogen.” p. 6

Wilf Rogers TRC Report September 2003, RM of Archie

# TRC and Soil Test P

- “The Manure Management Fact Sheet – a Working Guide to Manure Management Planning (Manitoba Agriculture, Food, and Rural Initiatives) suggests applying phosphorus to only what a crop can use if soil test concentrations reach more than 2.5 times higher than crop needs.” p. 18

TRC Report July 5, 2004 Adrien Grenier, RM of Piney

“These results provide some indications as to the suitability of the identified land parcels for manure application. It should be noted, however, that soil test results can vary dramatically from year to year due to soil variability, weather or management.” p. 18

TRC Report September 18, 2006, Hock ‘N’ Ham, RM of Albert

“The information provided by the proponent was evaluated against the proposed regulatory amendment to assess whether the operation has sufficient suitable and available to implement an appropriate manure management plan over the short term. The proposal satisfies Manitoba Conservation’s concerns in this respect.

TRC Report Hock ‘N’ Ham, September 18, 2006 RM of Albert

# TRC and Soil Test P

- “Phosphate (P205) concentrations (0-6”) ranged from 83 lb/acre (NW35-5-28W) to greater than 138 lb/ac (SE1/4 35-5-28W, N1/2 36-5-28W and SW 2-6-28W) Phosphate (P205) concentrations in excess of 40 lb/ac are considered to be high. Phosphate concentrations should continue to be monitored over time.” p. 4

TRCR May 2003, Hock ‘N’ Ham, RM of Albert

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## AgVise Soil Test Manual

		lbs P <sub>2</sub> O <sub>5</sub> /acre
Very Low	1-3 ppm	4.6 - 13.8
Low	4-7 ppm	18.4 – 32.2
Medium	8-11 ppm	36.8 – 50.6
High	12-15 ppm	55.2 – 69.0
Very High	>15 ppm	> 69 lbs

# Manitoba's Phosphorus Regulation

- **<60ppm**  
(0 – 276 lbs P<sub>2</sub>O<sub>5</sub> /acre)      No management response required  
(manure application based on Nitrogen)
- **60ppm – 119 ppm**  
(276 lbs – 547.4 lbs P<sub>2</sub>O<sub>5</sub> /acre)      2 x crop removal rate of P is permitted
- **120ppm – 180 ppm**  
permitted  
(547.4 lbs – 828 lbs P<sub>2</sub>O<sub>5</sub> /acre)      1 x crop removal rate of P is

# Soil Testing for Available Phosphate ( $P_2O_5$ )

