

Soil Tests

Soluble Nutrient Extraction	Units	Desired Levels	May 2011 Baseline	May 2012	
				Control	Experimental
Calcium	Lbs/Acre	2100	149.3	139.7	210.7
Magnesium	Lbs/Acre	300	13.7	15.0	25.0
Ca/Mg	Ratio	7:1	11:1	9:1	8.3:1
Phosphorus	Lbs/Acre	150	18.0	25.7	20.3
Potassium	Lbs/Acre	150	21.0	27.7	31.3
Ammonium Acetate & Bray 2					
Calcium	Lbs/Acre	4500	1010.0	1200.0	1551.0
Magnesium	Lbs/Acre	500	103.7	123.0	182.3
Phosphorus	Lbs/Acre	350	152.0	163.3	192.3
Potassium	Lbs/Acre	350	165.3	266.0	279.0
FIA					
Nitrate N	Lbs/Acre	70	5.3	12.0	21.3
Water Soluble Tests					
Sulfate S	Lbs/Acre	40	31.0	28.3	29.3
Sodium	ppm	60	18.7	14.0	14.3
pH		6.6	17.1	5.7	5.9
Conductivity	umhos/cm	200	100.0	133.3	200.0
Organic Matter	%	5	5.2	6.2	6.8
Percent Base Saturation					
CEC		15	4.6	5.6	6.7
%Potassium	%	4.5	5.3	7.1	6.0
%Calcium	%	78	60.8	59.4	64.6
%Magnesium	%	11	10.4	10.2	12.7
%Hydrogen	%	5	21.7	22.2	15.7
%Sodium	%	1.5	1.8	1.1	0.9
Ca/Mg	Ratio	7:1	6:1	6:1	5:1
SMP					
Buffer pH		6.8	6.9	6.4	6.4
Trace Elements					
Boron	ppm	6	0.4	0.4	0.6
Zinc	ppm	10	1.1	1.9	2.5
Copper	ppm	8	3.1	3.7	4.0
Iron	ppm	80	85.3	166.7	81.7

Table 1: Mean soil nutrient analysis values for all fields in 2011 and control versus experimental in 2012. All soil analyses performed by Lancaster Agricultural Products.