

University of Minnesota Soil Testing Laboratory

Agricultural Liming Material Analysis Report

Name: Annette Cederberg - American Crystal Sugar Company **Date:** 8/17/2010
Address: 101 North Third Street
City, State, Zip: Moorhead, MN 56549 **Job #:** L025 10-11

Sample Name	% Passing 8 Mesh	% Passing 20 Mesh	% Passing 60 Mesh	FI ¹	CCE ² %	ENP ³ %	Moisture ⁴ %	LBS. ENP/Ton
Crookston	100.0	100.0	100.0	100.0	74.8	74.8	21.8	1170
Moorhead	100.0	99.8	99.3	99.6	76.2	75.9	26.1	1122
East Grand Forks	100.0	99.9	99.4	99.7	78.0	77.8	27.9	1121
Hillsboro	99.9	99.7	98.9	99.4	66.0	65.6	30.5	912

¹ Fineness Index (FI) is an expression that takes into account the fact that large particles are less effective in neutralizing soil than small particles. [For example, particles larger than 8 mesh do not contribute to the ALM's neutralizing ability and particles smaller than 60 mesh are rated as completely effective].

² Calcium Carbonate Equivalent (CCE) indicates the neutralizing value of the material as compared to Calcium Carbonate which has a value of 100 percent. The higher the percentage, the more effective the material.

³ The Effective Neutralizing Power (ENP) provides a single value which can be used in comparing quality of different liming materials. It is based on a combination of the particle size distribution and the TNP, expressed as a percent. [ENP = FI/100 X TNP]

⁴ Expressed on a dry weight basis.

*Information submitted electronically
on 8/23/2010.*

1902 Dudley Ave.
St. Paul, MN 55108
612-625-3101