

## POLK COUNTY LIME QUARRY

### Location and History

The Polk County Lime Quarry is located on 50 acres at the borders of section 3 and 10 of Alden Township. The quarry was purchased in the early 1950's. The primary reason for the Polk County Lime Quarry was for a source of Ag Lime for the farming industry. Ag Lime is the cornerstone of all good fertility programs. Regulating the soil pH gives one of the highest impacts and lowest cost practices. Acidic soils can reduce crop yield, reduce nutrient availability, and effect herbicide performance.

Limestone is a sedimentary rock that forms from the accumulation of shell, coral, algal and fecal debris. When these animals died their shell and skeletal debris accumulated as sediment and formed a limestone deposit. It is composed primarily of calcium carbonate (CaCO<sub>3</sub>) deposited approximately 450-500 million years ago. The Polk County Lime Quarry is the only outcropping limestone deposit in the county, commonly referred to as the Neumann Limestone Deposit.



In the early years the lime quarry was part of the Agricultural Extension and later was departmentalized as an Enterprise Fund within the county. Early financial reports show that the lime quarry was a very lucrative business, making a profit of almost \$48,000 in 1954. Profits continued until 1958 when fire destroyed the plant and the equipment, reserves were used to rebuild and purchase new equipment. As the quarry became profitable again, money was used from the Reserve Account to supplement the county's General Fund, as is still the practice today. In 1959 and 1960,

\$20,000 & \$12,300 respectively was transfer to the general fund. This money was used to supplement the building fund for the Center Building in Balsam Lake.

About 80% of our current total sales are from Ag lime (54%) and Class-5 road gravel (26%). The remainder of sales comes from selling graded-sized rock and slag (which is a by-product of crushing limestone). In 2011 and 2012 we had record breaking Ag lime sales of 50,000 ton and 58,000 ton respectively, breaking the old record of 44,000 ton in 2008.

We see between 3,500 and 4,500 trucks cross our scale per year, with an average of 18 to 19



ton per load. This amount to 60,000 to 90,000 tons of product sold each year.

### **Economic Importance to Polk County**

The Polk County Lime Quarry is a valuable asset to the county. It is the only outcropping of good quality Dolomitic limestone from Hwy 64 north to Lake Superior. Based on existing sales volume, we need to crush about ½ to 1 acre per year, which gives about 42 years of lime reserves.

Most of the agriculture in Polk County is located within a 20 miles radius of the quarry. Looking at this 20 mile radius, only the area around Clear Lake and Farmington would be serviced at the same cost for trucking. The nearest limestone quarries are located at Downing, about 35 miles south east of the quarry and Bryan Rock near Bayport, MN. Other quarries may be in the area, but do not produce high quality lime. Based on today's transportation cost, that is a 33% increase in the cost of lime. For the average producer this amounts to \$1,000 to \$2,000 more per year of added costs.

We produce a good quality Ag lime, with a CaCO<sub>3</sub> averaging 83-90%. The CaCO<sub>3</sub> determines the quality of limestone and the size after crushing determines the index of 50-59 or 60-69.

As an Enterprise Fund of the county, the quarry contributes profit to the Polk County General Fund. Since 2001 they have contributed over a million dollars to the general fund. Each year, the quarry collects between \$6,000 and \$9,000 of sales tax, of which some goes directly to the county.

The quarry is staffed by 3 full-time employees, crushing year-round to meet the demand for agricultural lime and crushed limestone. Although Ag lime is sold throughout the winter, when conditions allow for better field spreading, the quarry is open year round as there is always a demand for limestone and other products.

The quarry does not own any trucks to haul products for customers. It is a facility that sells product to anyone who drives to the quarry. Customers include farmers, contractors, landscapers, townships, villages and residents of western Wisconsin and across the border.

### **Mission**

**TO SERVE THE FARMERS, CONTRACTORS, MUNICIPALITIES, COUNTY DEPARTMENTS AND PUBLIC BY PRODUCING AND SELLING LIME AND LIME PRODUCTS.**