

Looking Beyond the Mountain

The world's largest and oldest producer of the refractory and ceramic additive kyanite scans the horizon for new business opportunities as it continues its visionary reclamation work.

Less than an hour's drive from the historic village of Appomattox, the mineral kyanite is mined and processed high atop Willis Mountain in Buckingham County, Virginia. In fact, the company that now mines the Willis deposit got its start only 60 years after Robert E. Lee surrendered his confederate forces to Ulysses S. Grant at the Court House in Appomattox. In the decades since, four generations of the Dixon family have led Kyanite Mining Corporation into new markets, with an eye on the legacy they'll leave to future generations.

Kyanite, a rare mineral that starts out as an elongated blue crystal, is primarily used as a raw material in the manufacture of heat resistant industrial ceramics known as refractories. Refractory products line (and protect) the furnaces that turn iron into steel and sand into glass. Kyanite (especially in its pre-heated form known as Mullite) is also used extensively in both ferrous and non-ferrous foundries. The additives are highly effective as high temperature sands for casting molds, and in fine mesh form, are a critical ingredient in many mold sprays to facilitate the removal of metal castings.

Kyanite Mining Corporation conducts business on a global scale from its Dillwyn, Virginia headquarters. From offices on the second floor of a building constructed of kyanite quartzite, President and CEO Gene Dixon, Jr. and his son Guy, Vice President and General Manager, reflect on the family business and its evolution.

"My dad and grandfather bought the original Baker mine at a bankruptcy auction on the court house steps back in 1948," says Gene. "Baker Mountain was active from the 1920s until the 1970s. Now, the land has been transformed to a wildlife habitat. We've won both state and national environmental stewardship awards for the work we've done there."

"In the earliest days — before my time — our mining equipment consisted of sledgehammers, wheelbarrows and mules," says Gene. "By the 1940s, we were mining about 300 tons of ore a month. Now, we have two active quarries and six processing plants, all in central Virginia. Our around-the-clock operation has the capacity to produce over 150,000 tons of commercial grade kyanite concentrate every year."

Gene always knew he wanted to be a part of the family business. "My first job, in the early 1950s, was helping to push rocks into the crusher," he recalls. "As I continued to work in various jobs around the company, it was a lot of fun — and as I worked my way up the company, the 'toys' got bigger."

Even as mining activity has increased over the years, there's a lot of kyanite yet to be pried from those central Virginia peaks. "One of the first questions our big industrial customers ask when they come to visit us here is 'how much kyanite we have left'," says Gene. "I then ask them to look out the window so they can see for themselves. We've barely taken the top off of it – and we've been at it here for almost 50 years. In the 300 core samples we've done, we have never reached the 'bottom' of the kyanite."

That abundant product supply instills confidence among customers and prospective customers, and it also means the family legacy can continue for generations to come, says Guy. Now 32, he jokes that his first job at the company was "staying out of everyone's way." He recalls his determination to work in the family business from an early age, and he began on that path when he was barely 15 years old. "Dad threw me out of the truck one summer day as we were driving by one of our construction crews. It just so happens that these me were laying the foundation for our most modern and efficient plant, and I was there for 3 months helping them do it." After getting a degree from Dartmouth College, Guy worked as for the Boston-based strategy consultant firm, Bain & Company. That job gave him the opportunity to work with a variety of companies in a range of different industries. Those experiences, he says, prepared him to handle the business side of KMC and to help to bring it into the age of technology and customer service.

"Getting my son involved in the business was a significant milestone," says Gene. "He's brought the same work ethic, energy and vision to the business that his grandfather had. (Gene Dixon, Sr., died when Guy was 2.) "Guy has brought us into the 21st century." The younger Mr. Dixon's contributions to the company include the construction of an entirely new quality control facility that incorporates high tech equipment, and expanded research and product development capabilities. The quality and consistency of every batch of kyanite and mullite is monitored with state-of-the-art x-ray equipment by the company's engineers and technicians.

Guy has also spearheaded the company's foray into new markets, most especially the investment casting side of the foundry industry. "As more traditional industrial uses of our raw materials diminish and move overseas, we are continually looking for ways to fill that gap," he says. "We are always interested in the innovative ways our customers want to use our products. Investment casting, for example, is an industry that offers massive growth opportunities for us."

Another exciting development that is in the works is a building material that can be used to make fireproof separation walls for multi-family housing and office buildings. "It has the capability of withstanding 3,000 degree temperatures for three hours, and has good load bearing and soundproofing properties," Guy explains.

Under Guy's watch, the company has expanded its longstanding commitment to environmental issues. "The average American requires over 40,000 pounds of newly mined minerals every year," he says. "Producing these minerals is an important part of the world economy, but it has to be done in a responsible manner. Today's mining

industry has to manage the world's resources wisely, and I am proud of what my family's company has accomplished in that regard." In addition to purchasing state of the art pollution control equipment and implementing resource recovery practices, KMC under Guy Dixon's direction works to either use or sell as much of our extracted material as they can. "And", says Guy, "when I see that our reclaimed areas are now habitats for white tail deer, bob-white quail, turkey, rabbits and hawks, I know we are doing the right thing."

As an employer, environmental steward and community contributor, Kyanite Mining Corporation enjoys a positive reputation in central Virginia, where its leaders and employees live, work and play. "To us, the ultimate measure of success is whether you can grow, change, operate in a safe and environmentally sound way and compete globally over a long span of time, and still be well thought of at home," says Guy. "That is the legacy our company is inspired to continue." And it is a legacy that those two famous generals that met at Appomattox Court House so long ago might also be proud of.