GEOTAB SUCCESS STORIES

Minerals Technologies — Achieving Top Productivity with Telematics

The Challenge: Accurately Measuring Productivity

Accurately tracking fleet productivity is difficult without an automated process of capturing and reporting data. This is particularly the case if the operation has a lot of moving parts as Minerals Technologies does. The surface mining company located in South Dakota has a fleet that is about as mixed use and varied as could be imagined — everything from over-the-road trucks to earth-moving equipment, including a loader, bulldozer, and scrapers.

Monitoring productivity to ensure that monthly productivity goals were being met was a priority for Minerals Technologies, whose fleet of over-the-road trucks typically travel across state lines. Fleet Manager Rodney Raber was keeping track of the trucks' highway miles with daily paper reports, however this was time-consuming.

Industry:
Surface Mining

Based in:
Belle Fourche, South Dakota

Types of Vehicles:
Over-the-Road Trucks, Service Trucks, Tractors, Earth-Moving Equipment

Fleet Size:
66

At the same time, he also needed a system in place to keep track of the productivity of employees operating the company's earth-moving equipment — the machines used in the surface mining operations. Each employee operator has clearly defined productivity goals, which are used to calculate raises and bonuses.

Providing employees with a timely accounting of their productivity targets, which is crucial in helping them reach their goals, was difficult without an automated, real-time system in place.

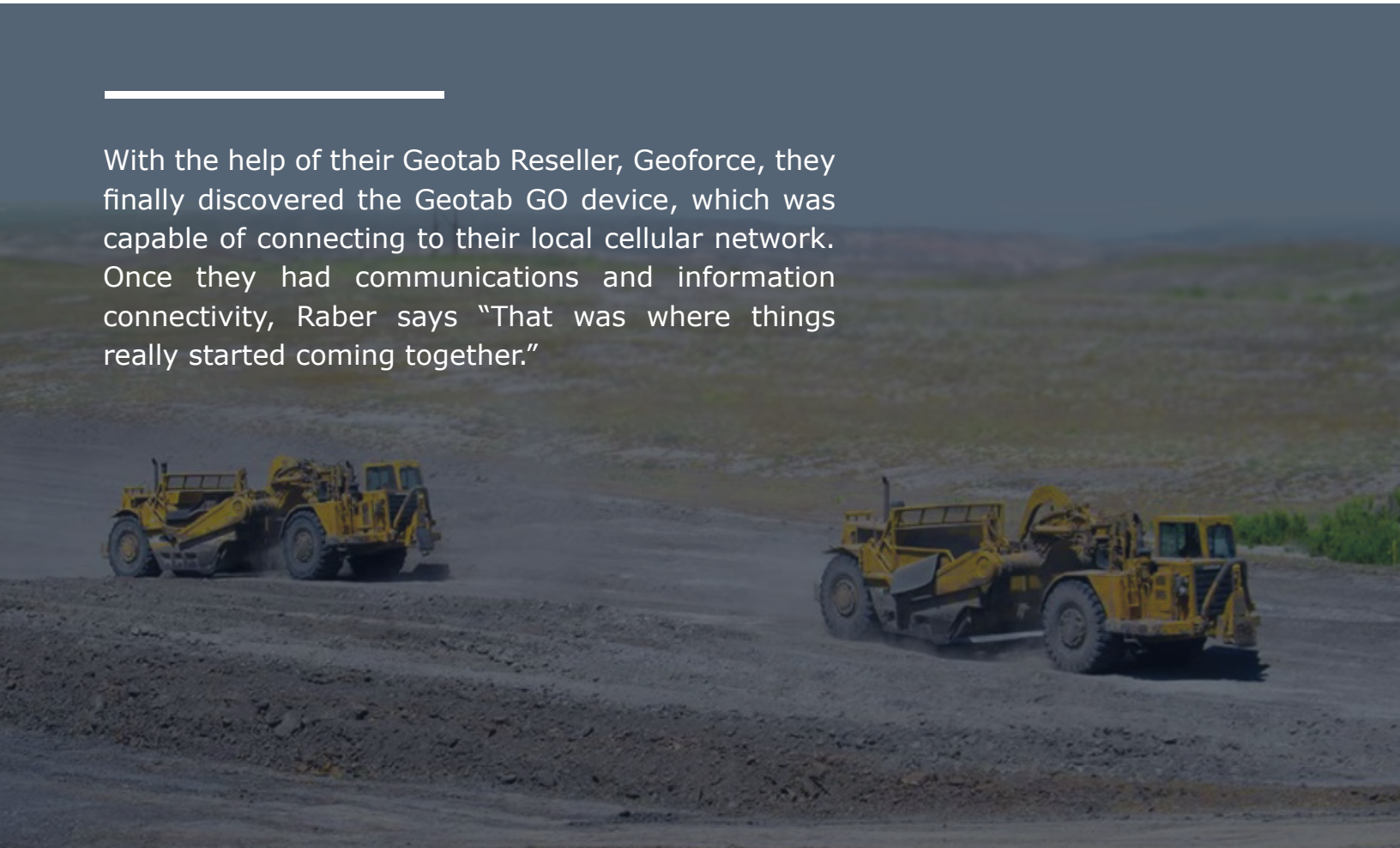
The answer for both tracking fleet miles and employee productivity was clear, says Mr. Raber — automation.

The Solution: Staying Connected

The conditions of the mining operation, which covers more than 60 miles and is broken up into smaller pockets, presented some big challenges for getting connected. Minerals Technologies needed telematics devices that had strong, reliable cellular connections. This proved difficult to find at first.

"Cellular devices that can cover that big of an area was almost impossible to find," explains Raber. "We tried many, many different units and different companies, and they all said they'd work but none of them worked."

With the help of their Geotab Reseller, Geoforce, they finally discovered the Geotab GO device, which was capable of connecting to their local cellular network. Once they had communications and information connectivity, Raber says "That was where things really started coming together."



A second challenge for Minerals Technologies was finding a way to best measure the cycle times for the scrapers, dozers, and haul wagons. Through a close collaboration with the Geotab solutions engineer and Reseller, including a consultation in the field, they customized the data collection process and reporting. By combining data from a driver's toggle switch and transmission lock data, they were able to accurately measure loading, drop off, and dumping times and compare them to targets.

The Geotab solution has also provided flexibility to develop reports and dashboards specific to different user groups. Reports are generated daily at set times so employees can view their performance at the end of the day.

"When I started looking into Geotab, I never anticipated the ease that I could be able to capture this information, pulling right off the telematics devices," he says. "The capabilities in the Excel spreadsheets were just awesome. They have supported me very well on helping me to develop some of these charts and reports that are being generated now."

Benefits of the Geotab Solution:

- Reliable device connectivity
- Access to real-time data
- Customization and reporting flexibility
- Outstanding customer support

The Results: Seeing Productivity

The result has been even better than expected. Thanks to the Geotab solution, Fleet Manager Rodney Raber and the Minerals Technologies leadership team are getting a full picture of the mining operation's daily productivity. Since the data is collected automatically, Raber can focus on other priorities rather than spending time putting reports together.

Employees now know exactly where they stand at the end of their shift. The company has installed TV screens in the shop and, as operators come in after their 12-hour shift, they can see the real-time data gathered during the recent shift. Displaying performance trends encourages operators to be the best they can be.

The ability to accurately track productivity translates directly to the bottom line. Management can see exactly where improvements are needed and take action. The telematics implementation is still ongoing, but all of the primary earth-moving equipment has been equipped with telematics and are providing daily reports. With greater insights on productivity, Minerals Technologies is equipped to further optimize their operations and continue to be a leader in mining and reclamation.

About the Reseller: Geoforce

Founded in 2007 with the simple belief that "field operations don't have to be chaotic," Geoforce is one of the world's leading providers of asset tracking solutions for field equipment (both powered and non-powered) and vehicles. With deployments on 6 continents and over 70 countries worldwide, Geoforce's asset tracking solutions include proprietary devices and devices from best of breed technology partners like Geotab.Geoforce has expertise in mixed fleets (those needing to track vehicles AND equipment together) and those desiring high levels of post-sale service and support, including installation and hands-on training for Geotab solutions.

Like Geotab, Geoforce places a major emphasis on developing long-term customer relationships through exemplary level service and support. That philosophy is reflected in Geoforce's organizational structure, which includes dedicated post-sale account managers, account service representatives, field service installation technicians, and help desk service. Some of the largest companies in the world rely on Geoforce to help manage their fleets of field equipment and vehicles.

From the Fleet Manager

"If you don't track the information, then you can't do anything to really improve your performance."

— Rodney Raber, Fleet Manager, Minerals Technologies