

Shell Albian Sands: Maintenance on the move

Increasing truck availability, driving significant production gain with cost savings

Situation

Shell Albian Sands launched the Mobile Maintenance Excellence Initiative (MMEI) in partnership with Hitachi Consulting, Caterpillar and Finning. The goal of the program was an ambitious double-digit increase in truck availability.

The shovel-and-truck operation at Shell Albian's Muskeg River Mine runs 24/7, 365 days a year. High truck availability is a key to achieving production at, or near the mine's design capacity of 155,000 barrels of bitumen per day.

Approach and delivery

Shell Albian Sands invited Caterpillar and Finning (the world's largest Caterpillar equipment dealer) to participate in MMEI. Finning supplies Shell Albian Sands with heavy equipment as well as mechanics to perform on-site maintenance and repair. About 200 Finning employees work at the Muskeg River Mine alongside the roughly 1,300 employed there by Shell Albian Sands.

MMEI team members from Shell Albian Sands, Finning and Caterpillar gathered weekly with Hitachi Consulting to shape the improvement initiative; clearly define and document the improved processes and the respective roles and responsibilities for Finning and Shell Albian Sands personnel; review project progress and assign new action items to remove barriers and move MMEI forward. Once the maintenance

"This is the most successful project at this site in a number of years."

Vice President of Operations
Oil Sands

"With this level of performance, we will be the envy of the Oil Sands on the floor."

Vice President of Finning

process was redesigned, Hitachi Consulting worked with the MMEI team to customize the management control and reporting system (MCRS®). Today their MCRS® drives timely, coordinated decision making and ensures that people at each level of authority have ready access to critical data as well as the power to influence the results for which they are accountable.

Results

Truck availability increased to 83% and sustained at that level, improving the mine's production potential. Also, operating costs were trimmed more than \$30M. Mean time between truck stoppages increased from 42 to 72 hours. Preventive maintenance completion rate improved from 52% to 100%.

About Hitachi Consulting

Hitachi Consulting is the global solutions and professional services organization within Hitachi Ltd., a global innovation leader in industrial and information technology solutions and an early pioneer of the Internet of Things. Hitachi Consulting is a business integrator for the IoT era and a catalyst for digital transformation. Using our deep domain knowledge, we collaborate with clients to help them innovate faster, maximize operational efficiency and realize measurable, sustainable business and societal value. As a consulting-led solutions company, we can help you leverage data as a strategic asset to drive competitive differentiation, customer loyalty and growth. To learn more, visit www.hitachiconsulting.com.

"Bottom line, if you put the right people together in a framework that lets them all have a part of the solution, you can get great results."

Thomas Zengerly
Shell Canada's VP for Heavy Oil
Operations