

SURFCLEANER “STRIKES GOLD” WITH MANDALAY RESOURCES MINING DEAL



“Initially I thought it looked too good to be true, but after testing first-hand and seeing it was able to collect and separate oil with almost zero water content”.

Foreman Mining Construction
Mandalay Resources



Water treatment pioneer Surfcleaner has secured a deal with Mandalay Resources to install its technology at the Björkdal gold mine in north Sweden.

The Björkdal gold mine has been operational since 1988. It was acquired by Mandalay Resources in 2014, which later completed a transition suspending the open pit and solely operating the underground mine. The target was to eliminate the associated open pit costs and take advantage of processing higher margin underground Aurora zone and stockpiled ore. Approximately 75% of the mill feed is attributed to the underground operation and the remaining 25% from the stockpiled material.

Underground mining is accomplished by long-hole stoping using a combination of contractors and owner-operated mobile fleet. Access is via dual ramps from the open pit. The processing plant includes: multiple crushers, a ball mill and rod mill, a gravity circuit, and a flotation circuit. Four separate gravity and flotation gold concentrates are produced and sold to smelters in Sweden and Germany.

Mandalay Resources Mining Construction’s Foreman said:

“I came across Surfcleaner’s technology online. Initially I thought it looked too good to be true, but after testing first-hand and seeing it was able to collect and separate oil with almost zero water content, I knew it would be a great product for our mine. Within the last five days the first Surfcleaner system has recovered more than 400 litres of pure oil from the pumping area where it is situated. Previously we used band skimmers, but they always collected a lot of water with the oil. With every cubic metre there was around 50% oil and 50% water.

With the Surfcleaner system, each cubic metre contains just 2-3% water. It’s a massive difference, and it is making the entire process of managing wastewater much easier ensuring we operate well within national mining industry regulations. In addition, we have found the Surfcleaner system easy to use and maintain, while greatly improving the overall air quality and the working environment for team members.”

The metals and mining industry alone contributes to approximately 8% of the global carbon footprint

While coal and gas extraction will decline in a low-carbon future, the mining sector is forecasting significant growth due to mega trends including urbanization, connectivity, electrification and shifts in technology – which all demand higher material intensities. In addition, a rise in new technologies supporting the energy transition - including solar PV, wind power, electrolyzers, Battery Energy Storage Systems (BESS), electric vehicles and semi-conductors - also require a wider range of materials.



Equipment: SCO 1000
Separation capacity: 1,000 l/h
Systems installed:
2023: 2 units