An Expensive and Technically Challenging Problem

- Ground Engaging Tools (GETs) lost in ore stock piles need to be identified and removed before further processing.
- Traditional geophysical methods have limitations regarding investigation depth, object discrimination, and survey speed.
- Gap EOD's UltraTEM system overcomes these issues and enables efficient and positive identification of stockpile GET to greater depths than other technologies (thus allowing greater lifts).
- This new method has been tested and proven successful during production surveys in challenging environments.

UltraTEM System Components

- **Gap GeoPak MLTX-200 transmitter and TXC-1 controller.** The MLTX is a battery or generator powered transmitter rated up to 200 Amperes and is housed in a rugged case. The TXC is used to control the base frequency and duty cycle.
- **The UltraTEM receiver** consists of a series of three-component receiver coils that interface with the data acquisition (DAQ) system. The DAQ can handle up to 45 channels, but the exact configuration is optimized for each project. The receivers and GPS system are installed on a purpose-built non-metallic fibreglass cart.
- Both DAQ and TXC are synchronized with the 1PPS signal from a GPS timing card.
- **The DC10LV custom petrol generator** (LV = low voltage) with 10 kVa power output is capable of supplying up to 170 Amps to the MLTX transmitter. Or, the system can use a power-supply connected to a 3-phase diesel generator.
- In Deep-Search mode, UltraTEM surveys occur inside a **fixed wire loop** that can be any dimension up to a limit dictated by generator output capabilities.

Capabilities and Performance

- Distinguish closely spaced individual targets
- Accurate details on object position & depth
- Auditable digital recording of all data
- Quick deployment of 2- or 3-person teams
- Imaging depth: >3.5 m in magnetite stockpile
- Daily coverage: up to 7,500 m²; 22,500 m³

GapEOD.com
GapEOD offers a range of high resolution imaging solutions for mining, UXO clearance, and environmental industries. Our services are based on several innovative geophysical technologies, including the UltraTEM system and high-definition magnetics, both of which have been developed by Gap Geophysics Australia and its subsidiary companies.

As an industry-leading technology developer, we design highly customized solutions to maximize project results. This targeted approach includes project-specific hardware design, software and processing solutions, and technology transfer. We often work with other specialized partner companies to offer integrated solutions. Talk to us to discuss the options.