## MINE READER



Modern mining uses new technology, methods and procedures to safely extract strategic metals from the earth. With new mining methods come new terms that define what strategic metals mining is all about. Here are a few words and phrases commonly used during the development of a project:

 ASSAY – to test ores or minerals by chemical or other methods for the purpose of determining the amount of valuable metals contained.



- COPPER CATHODE an electrochemically deposited rectangular plate of pure copper refined from copper-rich solutions obtained from oxide copper deposits.
- CORE SAMPLE a cylindrical section of rock drilled from the earth used to determine the geologic and chemical properties of a formation or mineral deposit.



 DEPOSIT – a naturally occurring body of ore containing a concentration of useful minerals.

- ENVIRONMENTAL BASELINE STUDY —
  a multi-disciplinary site study conducted
  prior to beginning project development
  that determines the current status of
  conditions on a site and identifies
  potential environmental vulnerabilities.
- HYDROMETALLURGY part of the field of extractive metallurgy involving the use of chemistry for the recovery of metals from ores, concentrates, and recycled or residual materials.
- ORE any natural combination of valuable minerals amenable to profitable extraction of the contained specific mineral commodities.



- PREFEASIBILITY STUDY (PFS) a systematic study analyzing the siting, environment, operation and economic issues facing future project options, defining specific details of a project before environmental and regulatory review.
- RECLAMATION the restoration of land and environmental values to a mine site after the minerals are extracted.
- WASTE ROCK the mineral wastes produced during mine development that must be removed to reach the desired minerals.

For additional modern mining terms and definitions please visit the "Education" section on our website at www.twin-metals.com.

The Twin Metals Minnesota "Mine Reader" is a biweekly source of information about its proposed underground copper, nickel, platinum, palladium and gold (strategic metals) mining project in northern Minnesota.