

Testing for Green Compression Strength and Permeability Properties on the Tailing Sand Samples Gathered from Ex Tin Mines in Perak State, Malaysia

C: Extremely accurate geological seismic surveys D: Government studies. b. Reservoir Pressure usually A: Rocks with high porosity and permeability are subjected to great heat and pressure or a combination of both C: The accumulation and compression of marine organisms and the chemical precipitates D: Rocks which lost their permeability and porosity due to high pressure. d. A source rock can be used as a reservoir rock. the test mine is located, the geology shows tertiary intrusive rocks including andesite, diorite, gnanodio-rite, quartz monzonite porphyry and Jurassic quartz monzonite (Coopoi 1971) The mine has an annual ore production of 40 million tons (of which 22 million tons goes to solvent extraction/electrowinning facility) The average grade of copper is 3% and of Molybdenum is 0.03%. Work to date has demonstrated the feasibility of collecting samples during drilling and using x-ray-fluorescence (XRF) spectroscopy to analyze mineral content. There are several paths to commercializa-tion. The technology for sampling dust/cuttings during drilling can be commercialized separately; in this scenario the samples would be analyzed off line, e.g., in the mine's assay lab. strength, and impact strength are the most common types of materials. 14. Read Text 6A "Strength of Materials" and say if you are right or wrong. a) compression, to be applied initially. b) tension, to imagine the forms and geometrical. Tensile strength is a limit state of tensile stress that leads to tensile failure in the manner of ductile failure (yield as the first stage of failure, some hardening in the second stage and break after a possible neck formation) or in the manner of brittle failure (sudden breaking in some pieces with a low stress state). Fatigue strength is a measure of the strength of a material or a component under cyclic loading, and is usually more difficult to assess than the static strength. Keywords: Tailings, Sand Casting, Waste Mine Tailing Bauxite Residue Mine Spoil. The effect of Acacia albida on tin-mine spoil and their possible use in reclamation. Landscape Urban Plann. 17:61-71. Google Scholar. 1982. The pedological properties of tailings derived from three mining operations on the sudbury Area, Ontario, Canada. J. Environ. Qual.

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Abstract:

Permeability and green compression strength are among the important mechanical properties and considered much in the sand casting mould preparation. These molding sand properties play a vital role in determining the optimum moisture content for making green sand casting mould. Tailing sand is the residue mineral

from tin extraction, which contains between 94% and 99.5% silica and in abundance in Kinta Valley of state of Perak, Malaysia. In this research work, samples of tailing sands were gathered from four identified ex tin mines located at the Perak State, Malaysia. They were investigated by the standards and testing procedures prescribed by the American Foundrymen Society (AFS). Sand specimens of size Ø50 mm×50 mm in height from various sandwater ratios bonded with 4% clay were compacted on applying three ramming blows of 6666 g each by using a Ridsdale-Dietert metric standard rammer. The specimens were tested for green compression strength using Ridsdale-Dietert universal sand strength machine and permeability number with Ridsdale-Dietert permeability meter. Before the tests were conducted, the moisture content was measured using moisture analyzer. Samples with moisture content ranging from 3 to 3.5% were found to have optimum working range with effective green compression strength and permeability.

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