



### Treatment of Nickel-Cobalt Laterites

#### Ore Characterization and Process Implications

- Idealized Orebody Profile
- Real Orebodies
- Metallurgical Implications

#### Commercial Treatment Processes

- Pressure Acid Leaching
- Reduction Roast-Ammonia Leach (Caron) Process
- Smelting Processes
- Ferronickel and Matte Smelting
- Nickel Pig Iron Smelting

#### Processes Under Development

- Heap Leaching
- Atmospheric Agitated Tank Leaching
  - Sulphuric Acid Leaching
  - Chloride Leaching
  - Nitric Acid Leaching
- Segregation Roasting

#### Previously Proposed Processes

- Sulphation Roast
- Republic Steel Process
- Aqueous Chlorination Process

#### Laterite Project Development

- Project Development Program
- Scoping Phase
- Prefeasibility Phase
- Final Feasibility Phase
- Pilot Plants
- Environmental Aspects

#### Case Histories

- Moa Bay PAL
- Coral Bay (Rio Tuba) PAL
- Yabulu Reduction Roast-Ammonia Leach
- Cero Motoso Ferronickel Smelting
- PT Inco Matte Smelting