The Huntress mining company was tasked with conducting a preliminary economic assessment of the potential copper-gold-moly deposit in Dowager Island, British Columbia by interpreting the size, shape and grade of the mineralized zone.

**Information Provided**
- Drill hole dataset
  - 5km x 5km claim block
  - 36 drill hole information & 2 trenches
  - Geological contour map
  - UTM location
  - 5km x 5km claim block
  - 36 drill hole information & 2 trenches
  - Geological contour map
  - UTM location

**Project Location**
- Dowager Island is located 350km NW of Vancouver island, BC.
- Closest community: Bella Bella, 30km NE from Dowager Island.

**Project Layout**

**Scope of Work**

**Open Pit**
- Mine life: 10 years
- Production rate: 8000 t/d
- Tonnage: 27 million tonnes
- Pit slope angle: 45°

**Underground Mine**
- Mine life: 75 years
- Mining method: Post pillar cut and fill
- Tonnage: 211 million tonnes

**Mill Design**
- Feed Rate: 330 tph
- Concentrate: Copper & Molybdenum
- Grade: 2.16 wt% Cu, 0.23 wt% Moly
- Concentrate grade: 30% Cu & 55% Molybdenum
- Cu recovery: 90%
- Mo recovery: 70%

**Reclamation & Closure**
- Wet cover for tailings
- Open pit filled with waste rock, placed under a dry cover and revegetated
- Lime treatment plant will treat water throughout life of the mine
- Amend haul roads with pulverized limestone

**Project Schedule**

**Economics**
- Net Present Value (NPV): 57 million
- Internal Rate of Return (IRR): 16 %
- Payback period: 8 years
- Metal price: Copper- $5,000/t, Gold- $35/g, Molybdenum- $15,000/t

**Reference**