

FACULTY OF ENGINEERING

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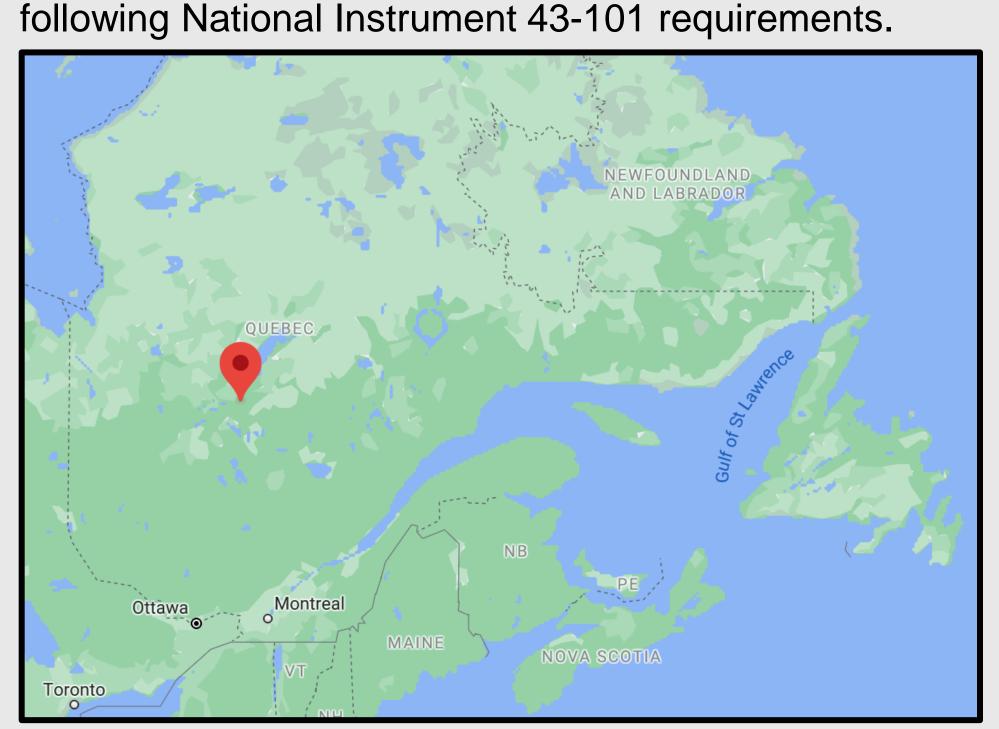


Department of Civil and Resource Engineering

Seaboard Gold Project

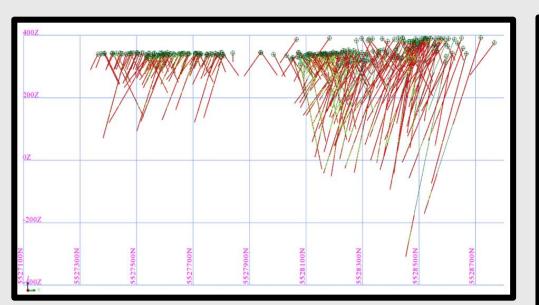
Introduction:

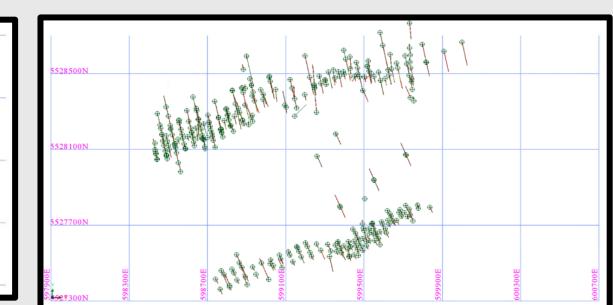
The Seaboard Gold Project is located in central Quebec, Canada. Following Quebec's Mining Act, a mineral claim was granted to Seaboard Gold (Company) for 300 ha of land and the exploration program identified gold mineralization with traces of silver, copper, iron, and arsenic. The study was executed by the Company's technical team in accordance with Senior Design Project II at Dalhousie University



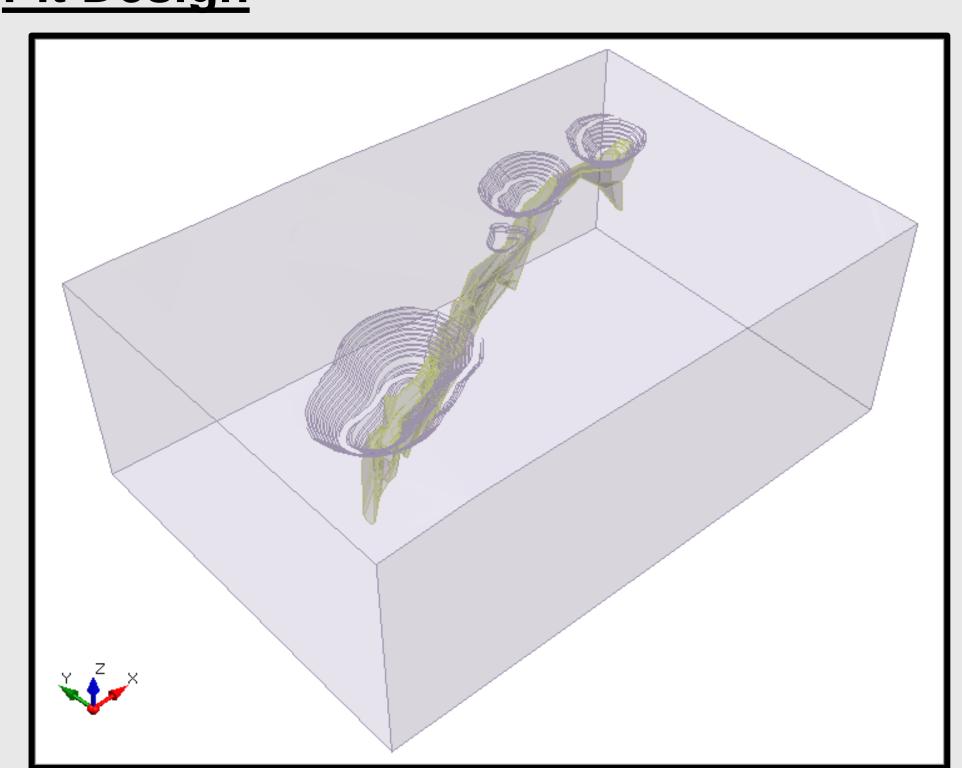
Overview:

- Seaboard Gold is a vein hosted open pit gold project.
- Mineralization located in the 297 to 393m elevation range (above sea level).
- Geological data has been provided from 335 diamond drillholes, each with an average of 10 grade samples.
- A complete feasibility study has been conducted to assess the economic viability of the project.
- The projected mine life is 18 years at a 2:1 stripping ratio and a total ore production of 700,000 tonnes per year with an average grade of 2.08 g/t gold.
- Figures below show diamond drill hole locations and orientations (Looking East Left, Plan Right)

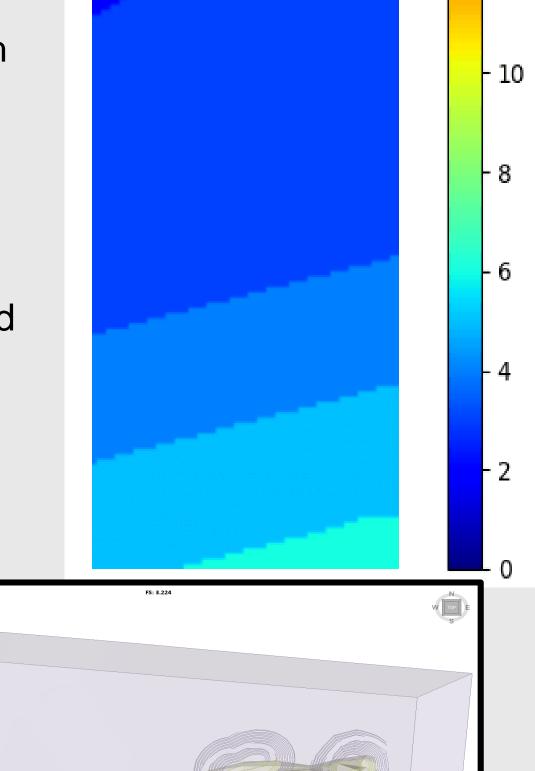




Pit Design



- 4 pits in total ranging from smallest to biggest, North to South
- Pit has been designed with 10m benches
- Ramp 24m wide at 17% grade
- Total ore
- Total waste
- Cut-off grade of 0.6 g/t gold

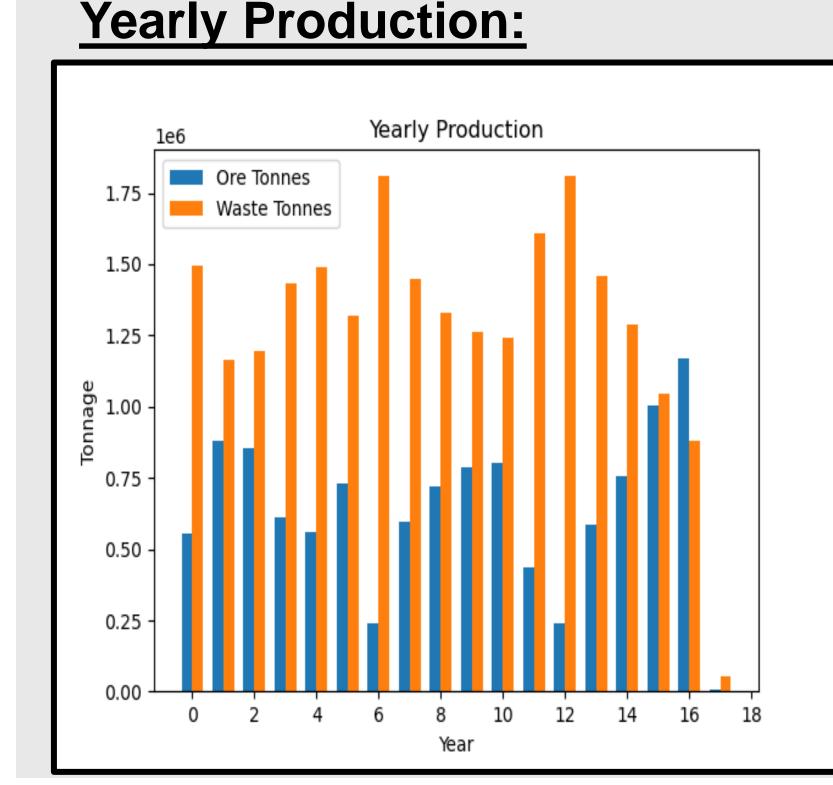


Year 0

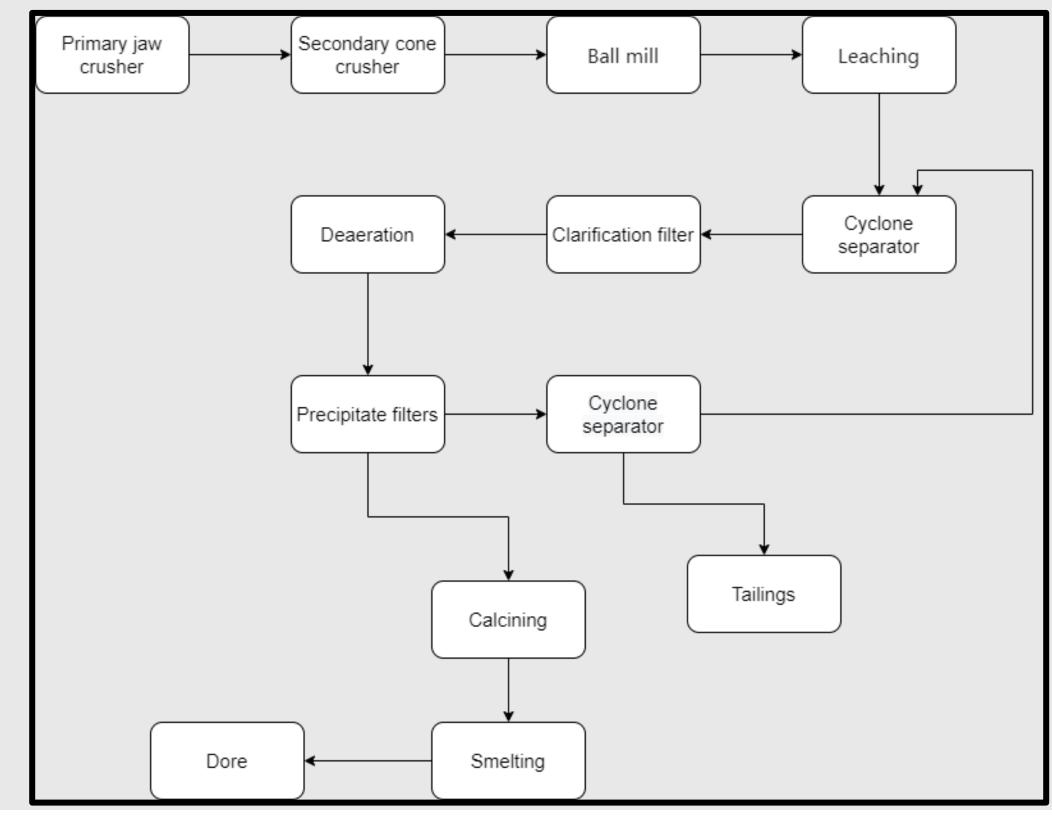
Slope Stability Analysis:

- The stability of the designed pits was assessed using Slide3 from RocScience
- Though several rock types were present on the site, the model consisted of only diorite and quartz because the geology around the pit was dominated by those two material types.
- The minimum safety factor calculated for the pits was 3.1
- The surface that results in the minimum factor of safety is shown in pink (right)
- A kinematic analysis was completed using Dips but no failures

were generated



Processing Plant Workflow:



Major Equipment Selection:

Equipment	Typical Model	Description	Units
Haul Truck	Cat 777	Payload - 98 t	11
Excavator/Shov el	Cat 6015B	Bucket - 14.7 t	2
Prod. Drill	Sandvik Ranger DX900i S5	Prod. Cap - 1.9 Mt	2

Economics:

Operating Costs					
Cost Description		Annual Cost (\$/year)			
Mining		9,132,704.50			
Processing Plant		5,773,589.64			
Site Services		1,507,122.65			
General & Administrative		3,990,000.00			
Reclamation & Closure		625,000.00			
Subtotal:	\$	21,028,416.79			

Units	Value
	\$
CAD	249,443,809.42
	\$
CAD	118,250,707.18
%	59.81
%	34.75
	CAD CAD %

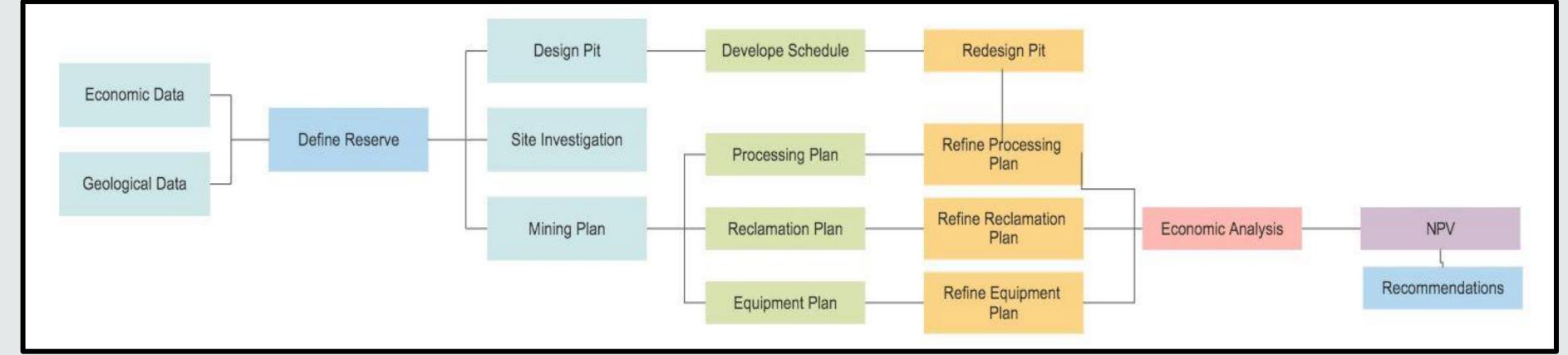
Conclusion and Recommendations:

- Overall, the project is projected to return a net present value of \$118 million at an 8% discount rate (based on \$1700/oz gold price).
- Internal Rate of Return after tax is projected 35%
- Production planned on average to be 2.1 million tonnes per year with an 18-year mine life.
- Average grade of 2.08 g/t has been realized with a cut-off grade of 0.6 g/t.

References:

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Design Process:



Sustainability Policy:

Seaboard Gold Mining Corporation aims to not only meet but to exceed environmental and socio-economic standards set by the government and others in the industry. Health and safety of employees is a core value for Seaboard Gold Mining Corporation and is strongly considered by company management. The Seaboard Gold Mining Corporation is committed to responsible mining which focuses on respecting and enriching the environment and communities in project areas. The company is committed to transparency and encourages feedback from any stakeholders or employees.