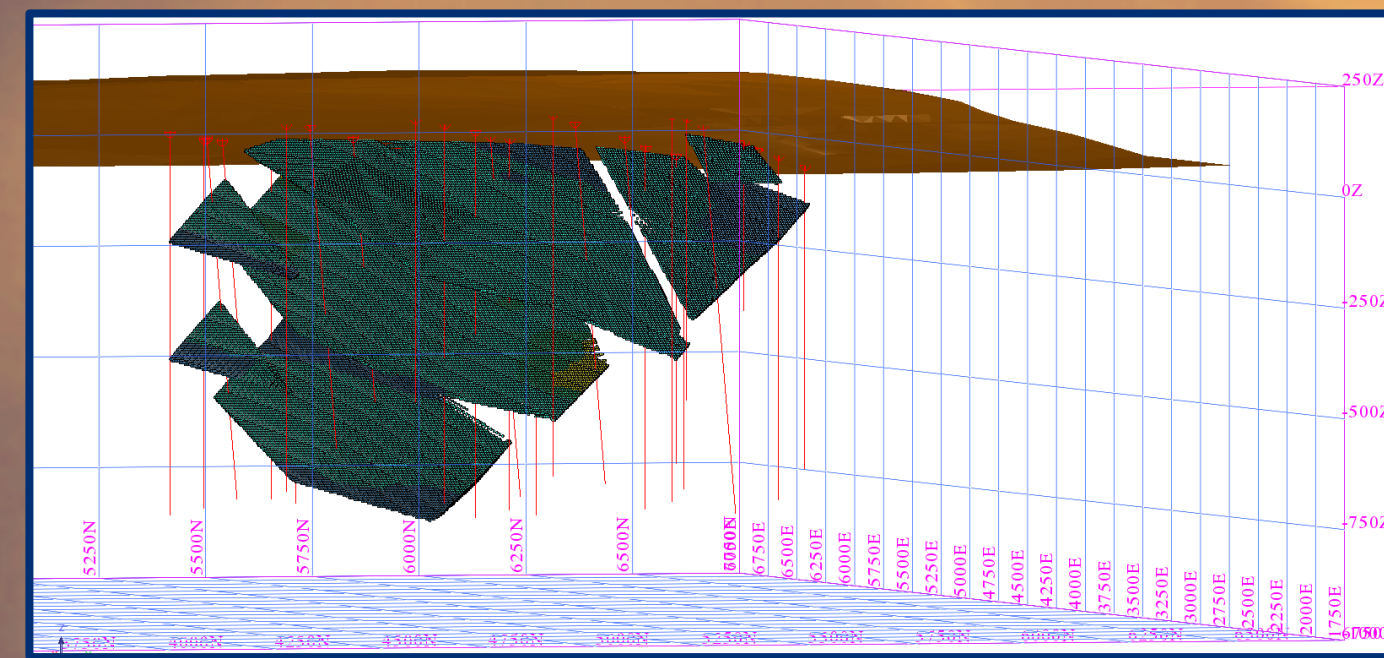


### Exploration



Geological exploration for the purpose of mine feasibility is the first step in the life cycle of every mine. Before proper resource and reserve estimates can be calculated, a thorough comprehension of site geology must be established.

Within the 5 km square Xebec project exploration claim, 30 exploration diamond drillholes and 3 trenches were assayed for economic mineralization. Economic concentrations of gold, uraninite (UO<sub>2</sub>) and monazite (YPO<sub>4</sub>) mineralization was discovered within three quartz-pebble conglomerate units. A preliminary block model for the deposit was generated using GEOVIA Surpac software, yielding a preliminary geologic reserve.



### Engineering & Design

Following exploration, immense research must be conducted to evaluate the economic viability of the project, throughout all phases of mine life. Extensive consultation with local communities and First Nations members is required to establish an adequate social license to operate. Mine design must be in compliance with all applicable Federal and Provincial legislation and regulations. Other design considerations include structural stability, ventilation, operational requirements, water inflow.

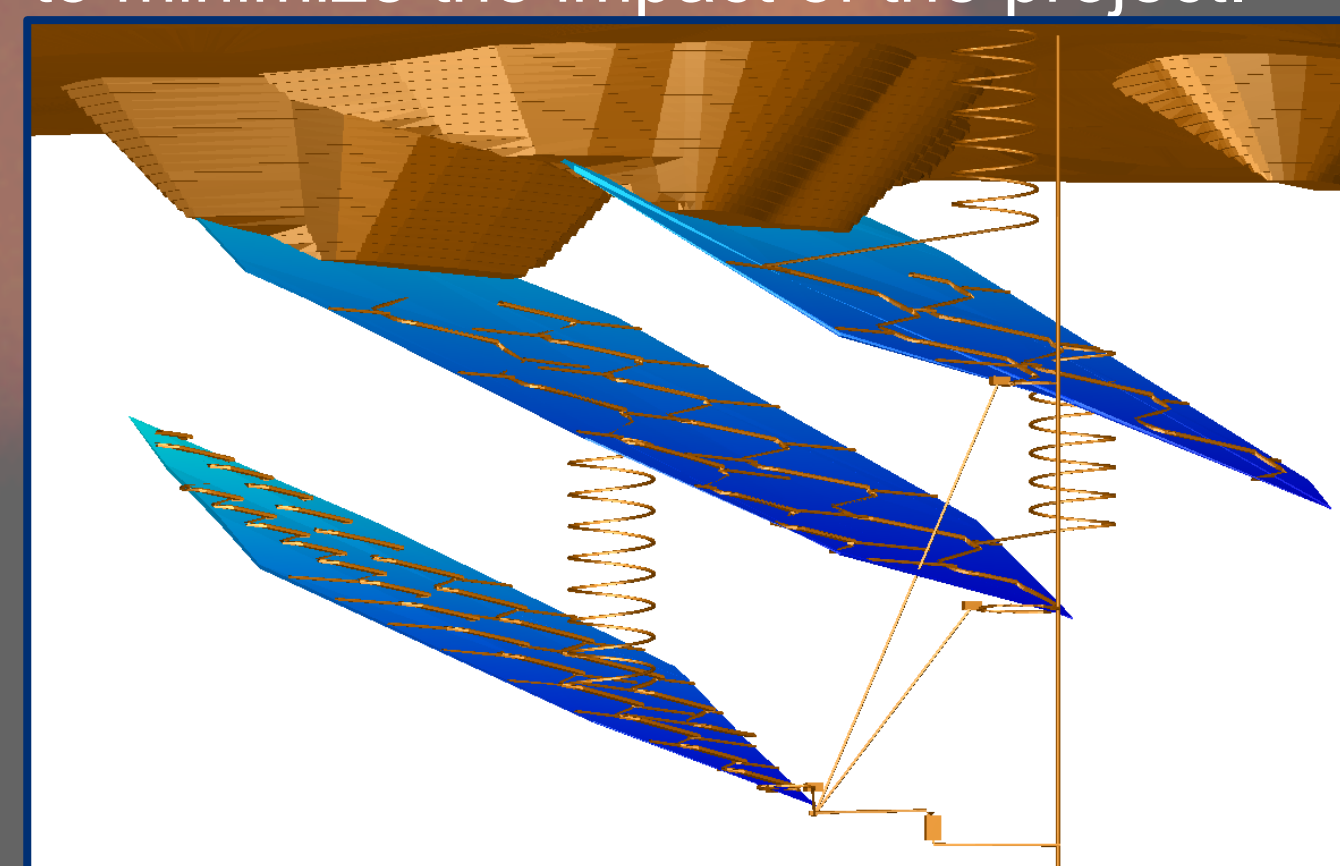
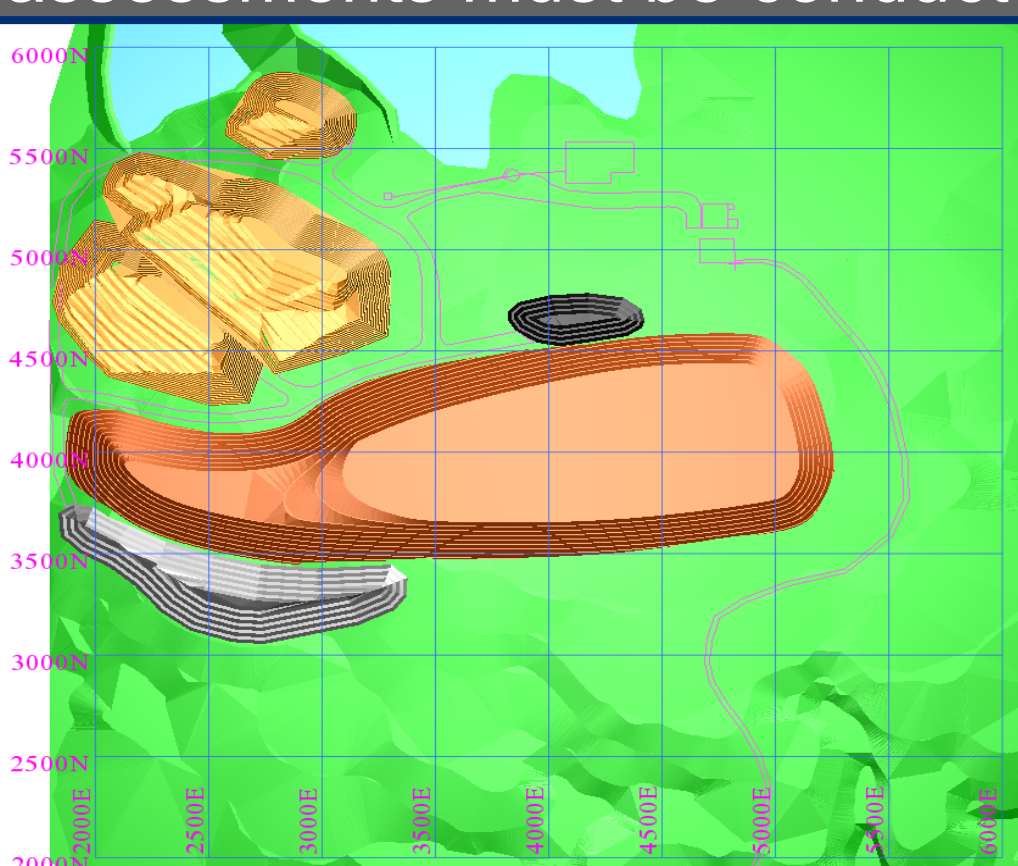
The Xebec project mineral reserve is 21.1 M tonnes grading 5.39 g/t Au, 0.18% UO<sub>2</sub> and 0.09% YPO<sub>4</sub>. Using the reserve, conservative commodity prices and financial analysis, project viability was confirmed, incorporating a NPV of \$167 M at a 15% interest rate, 40% IRR and 9 year payback.

### Development & Construction



Before mining can take place, key pieces of infrastructure are required to support operations. Essential pieces of mine infrastructure include mineral processing plants, equipment warehouses, hoist headframes, mine shafts and ramps, maintenance shops, site offices and much more. Before production can begin, the .

Required permits and licenses must be obtained before construction and development can begin. In order to obtain these, proper environmental assessments must be conducted in order to minimize the impact of the project.



### Production



Once all required mine infrastructure is established, the mine will enter into production phase. The production phase is when the mine is actively operating, moving material and producing a saleable product. All mines follow pre-determined production rates and schedules that are carefully calculated to maximize operational efficiency.

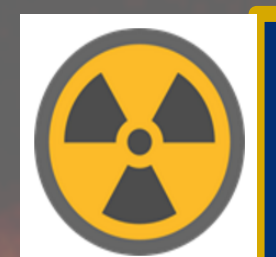
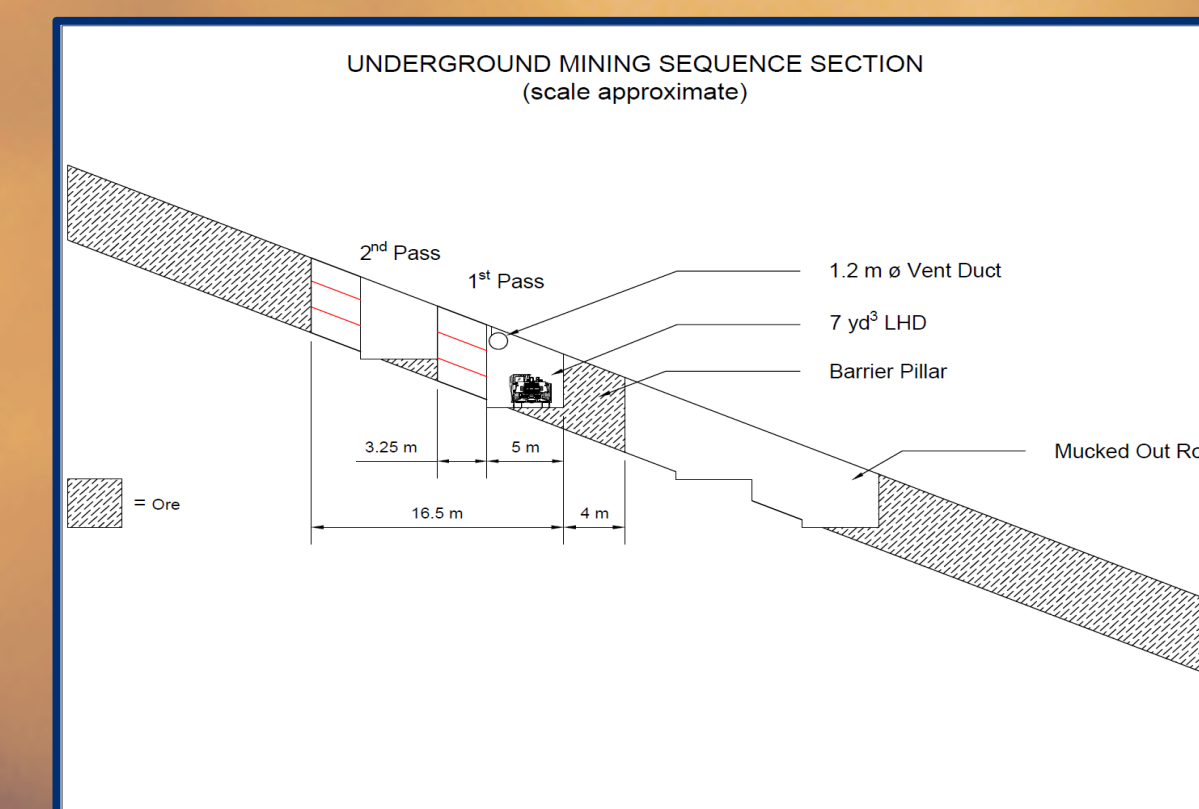
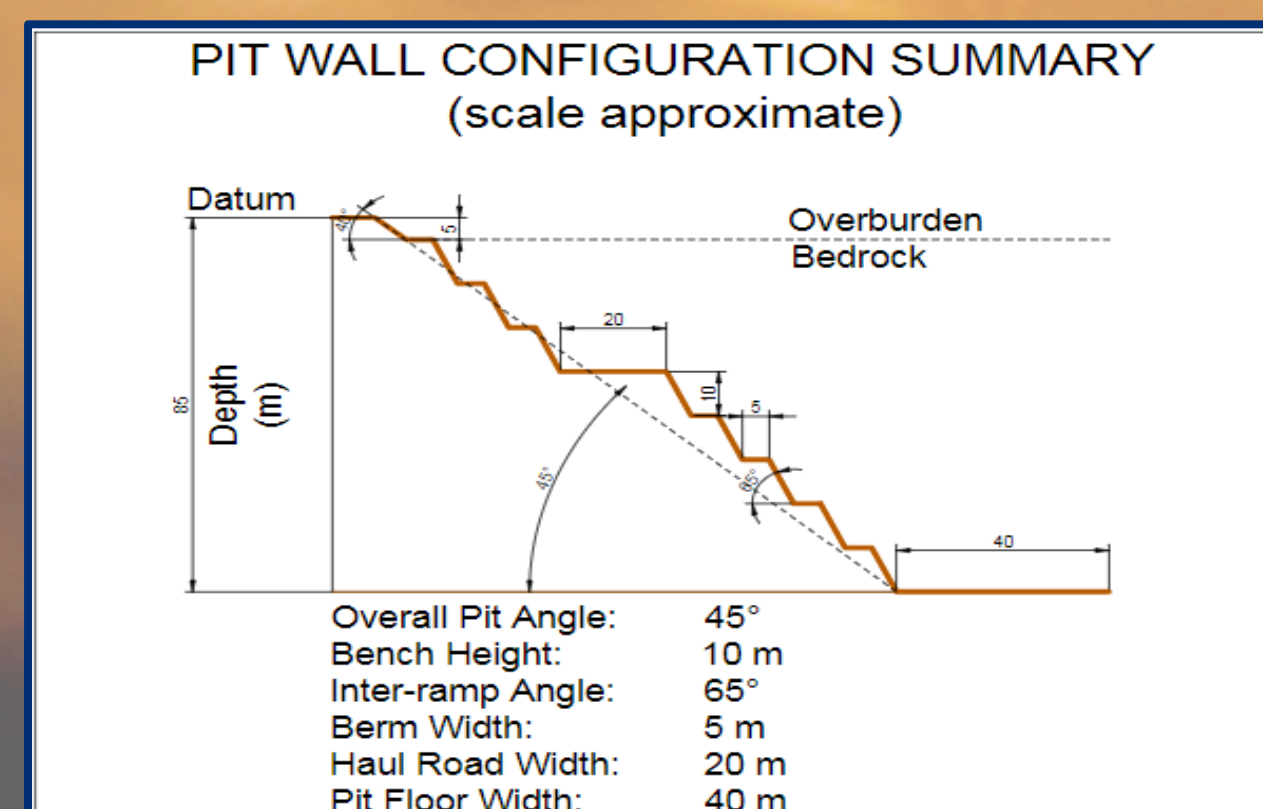
The Xebec project will produce 4000 tonnes per day of ore at an average stripping ratio of 20:1, yielding 84,000 tonnes of total material per day. Surface and underground operations will function for 13 and 11 years, respectfully, with a 2 year transition period.



### Mining Methods



The proposed mining methods for the Xebec project include both surface and underground operations. The ore economically available at the surface will be extracted using conventional open pit, truck and shovel mining operations, while the underground resource will be mined using a variation of step room and pillar mining method.

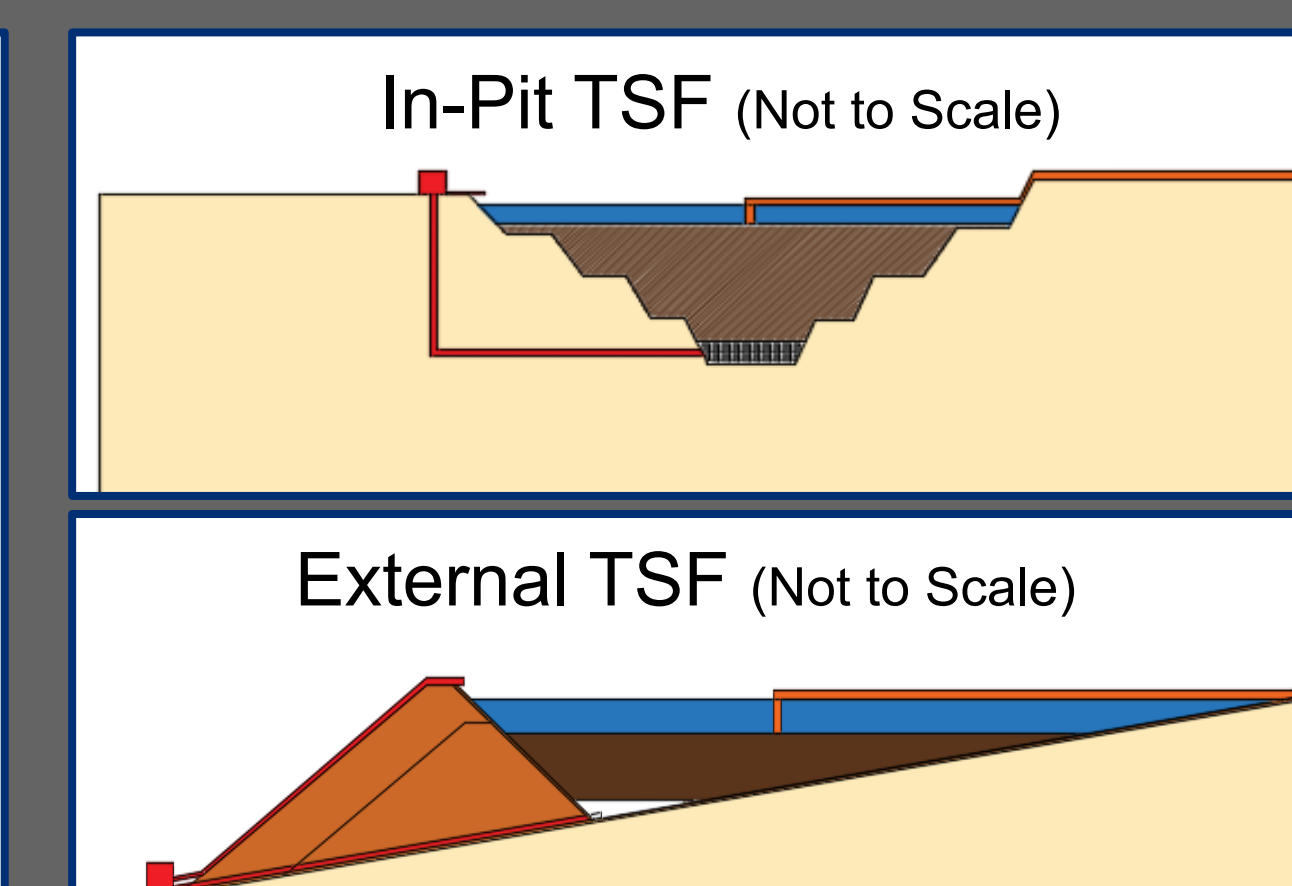
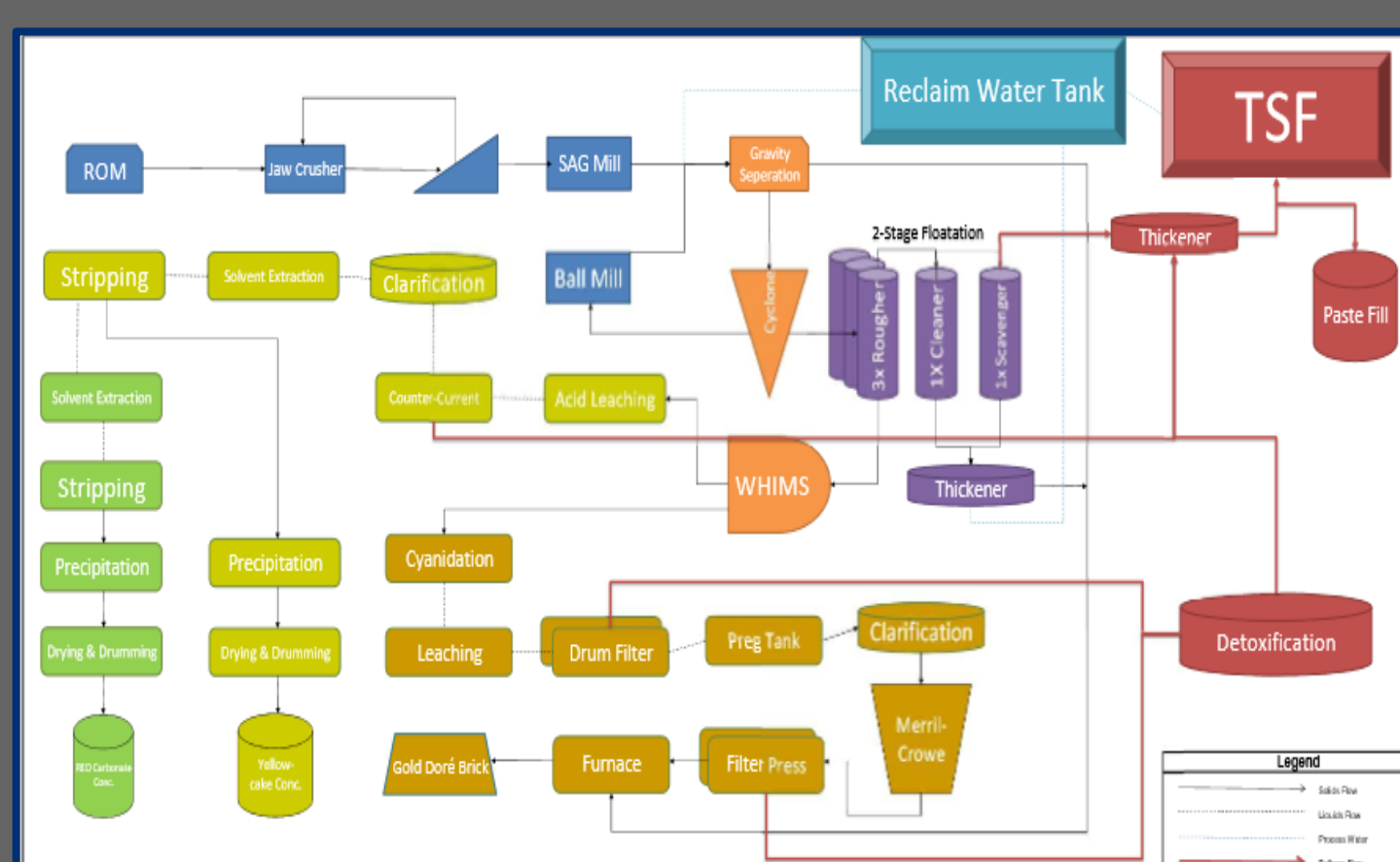


### Mineral Processing

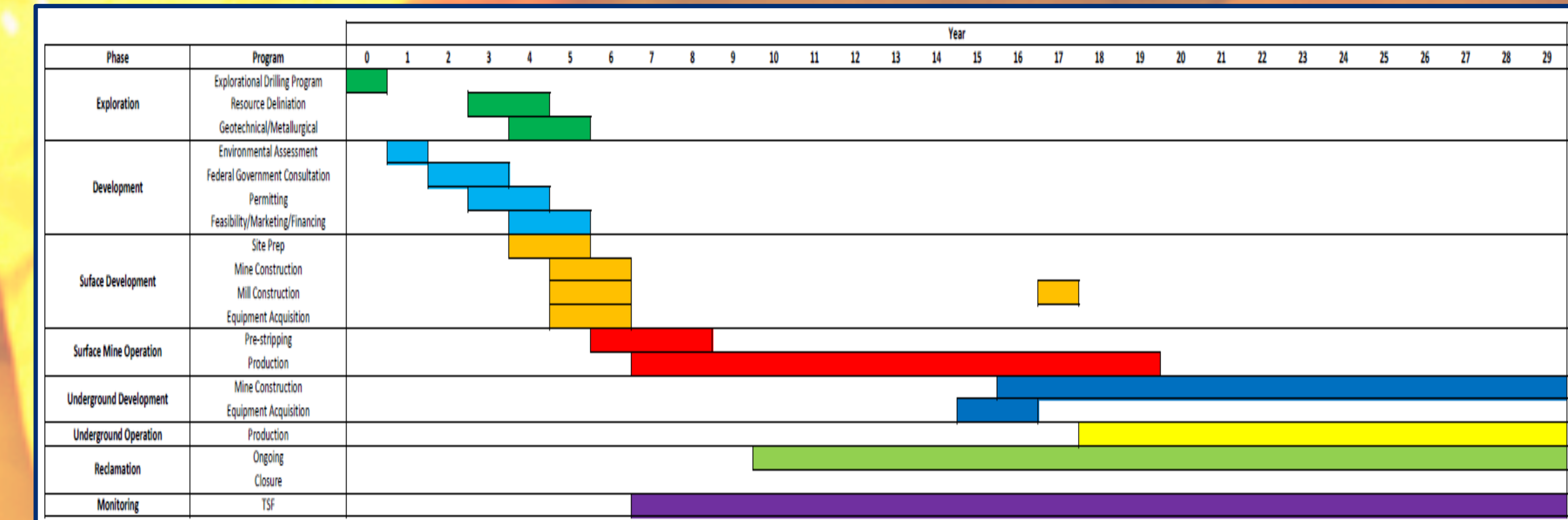


Following ore extraction from the surface and subsequent underground mining operations, ore is transferred to a surface mill for mineral processing and concentration of final products. Size reduction and control, enrichment and upgrading processes are utilized to yield metals in their purest form. Mineral processing circuits are optimized to yield the highest possible recovery with acceptable concentrate grades.

Run of mine ore is subjected to comminution for size reduction and liberation of the contained metals. Sulfide floatation is exercised to isolate pyrite and arsenopyrite from the feed, while gravity separation, free gold floatation and cyanidation is exercised to maximize overall gold recovery. Magnetic separation is utilized to concentrate monazite and uraninite minerals, later subjected to acid leaching. Final products consist of 25 kg gold doré bricks, and yellowcake uranium (U<sub>3</sub>O<sub>8</sub>) and yttrium-carbonate concentrates in 205 L steel drums, respectively.



### Project Schedule



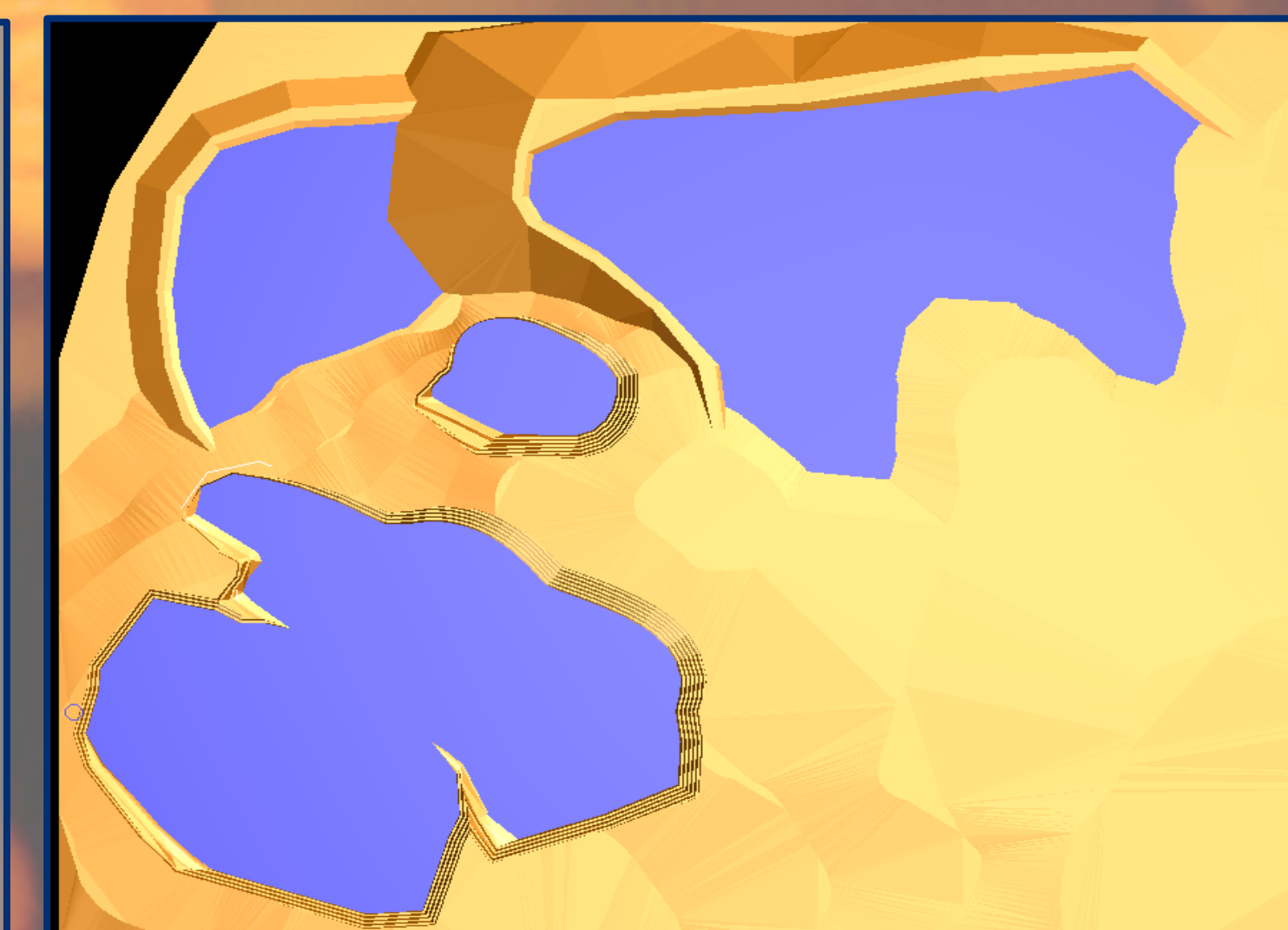
### Closure & Reclamation

The open pits will continue to be dewatered until underground mining ceases, but will be prepped for closure prior to the end of mining. All buildings on site will be decommissioned and either salvaged or sold.

The Xebec project mine site will be reclaimed to support both natural ecosystems and recreational use. The remaining open pits will be allowed to flood with groundwater, forming new lakes. The upper slopes of the pits will be re-contoured to allow for egress to and from the lakes.

Tailings facilities will be left with a sufficient water head to ensure no radon emissions or oxidation of sulphide minerals occurs. Due to the use of a downstream design dam and an open pit for tailings storage, long term stability of the facilities are not a concern.

Non-acid generating material will be piled to the south of the open pits. After mining ceases the storage facilities will be re-contoured to look more natural and re-vegetated along with other previously cleared areas - returning the land to a useful, habitat supporting site.



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