



# BELL CREEK GOLD MINE

CASE STUDY

[polydeck.com](http://polydeck.com)



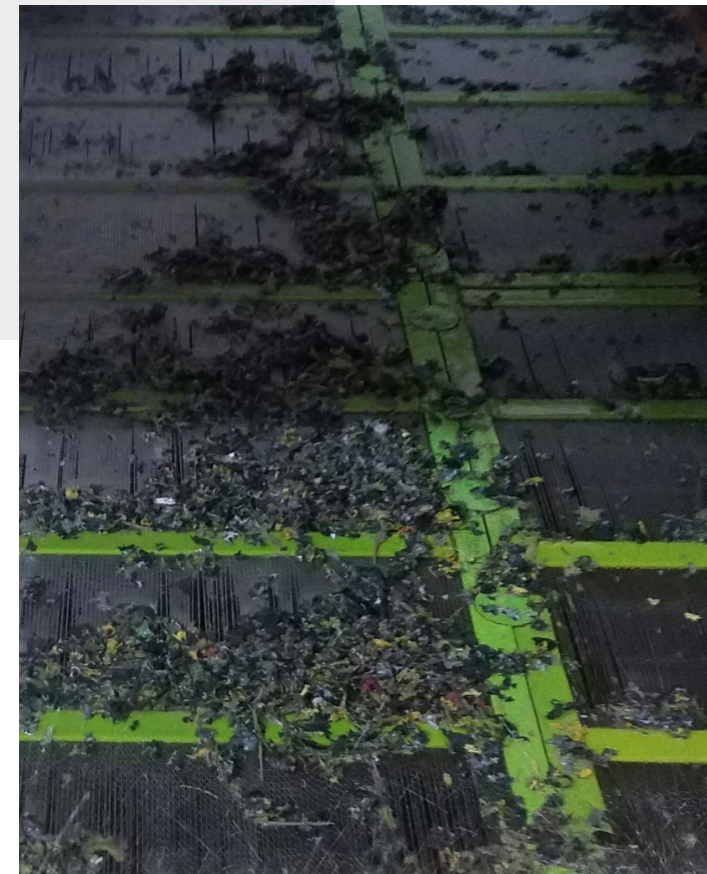
# CHALLENGE

Tahoe Resources' Bell Creek gold mine and processing facility in Ontario was experiencing severe blinding on trash circuit screens due to fibrous blasting material residue causing:

- Increased downtime for cleaning screens manually.
- Poor dewatering reducing throughput and increasing energy consumption.
- Need for secondary screen.

## OPERATING CONDITIONS

- **Feed:**  
~75% feed rate of 225 MTPH
- **Specific Gravity of solids in feed:**  
2.8.
- **Feed Rate:**  
650 cubic meters per hour of slurry
- **At full flow the total slurry to dewater:**  
171,730 GPH (2862.1 GPM)





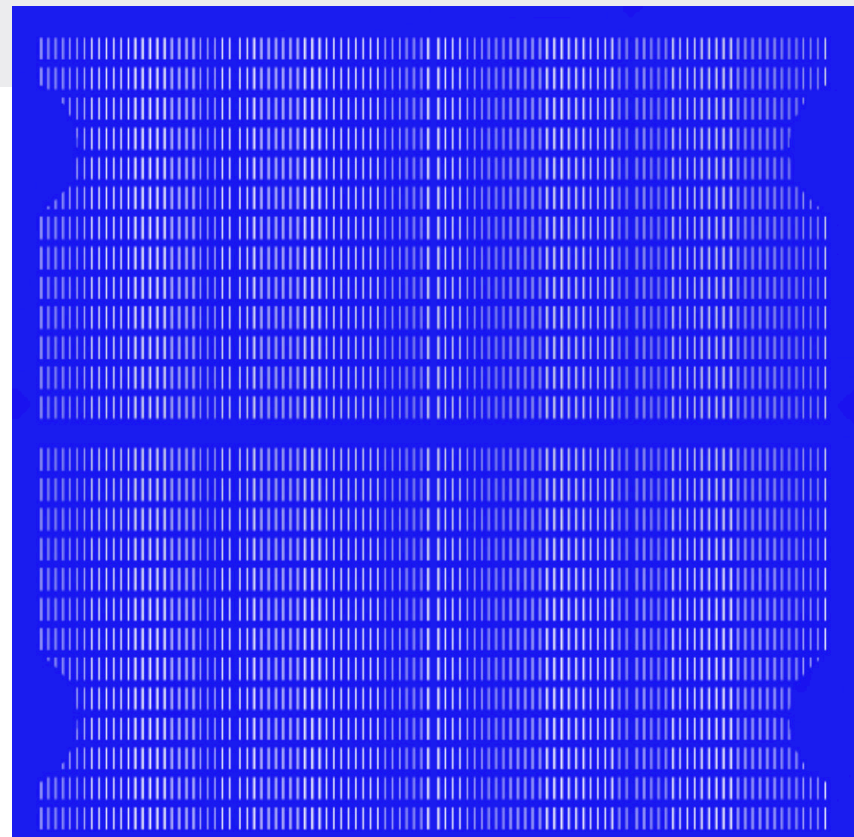
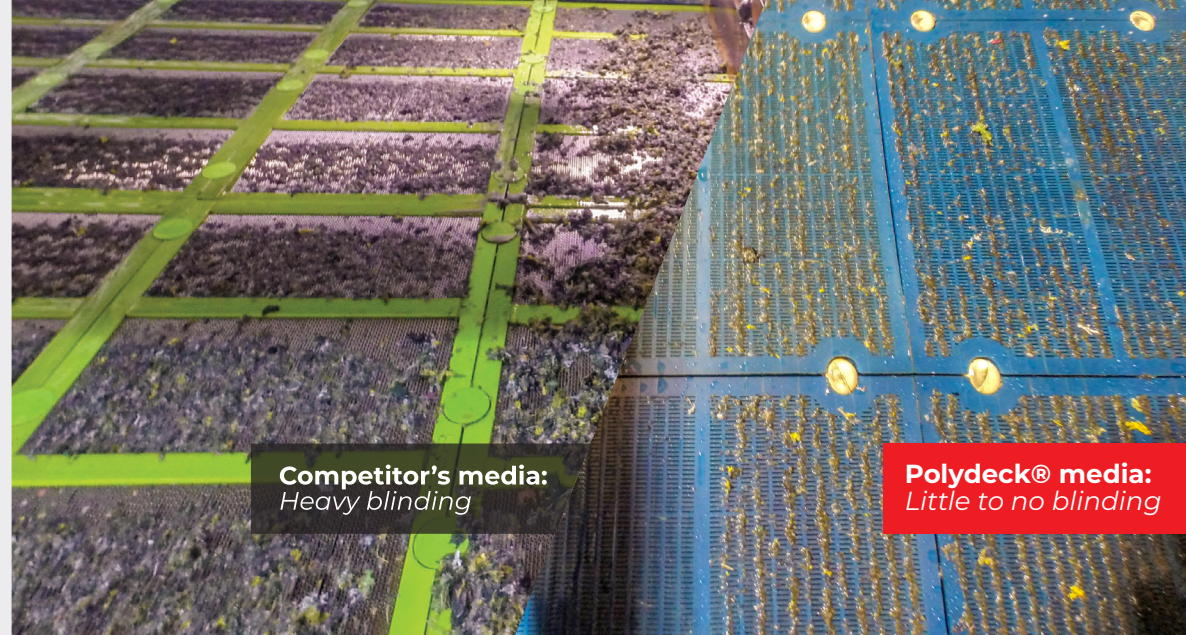


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# SOLUTION

Polydeck screening experts John Griffith and Perry Miller visited the plant several times examining the issues and gathering data to formulate a solution.

- Two custom screen panel designs were commissioned to specifically address these issues.
- The new Polydex® 1' x 1' slotted screen panels were installed in rows 1-4.
- The new Polydex® 1' x 1' VR screen panels were installed in rows 5-6.
- Competitor panels were left installed on the remaining 6 rows of the screen for comparison.





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## RESULTS

After 3 months of testing,  
Polydex® panels:

- Exhibited excellent dewatering results with little water proceeding past the last row of Polydeck panels.
- Effectively resisted blinding reducing the amount of screening time and labor lost cleaning the panels.
- Increased throughput by 32%
- Increased drain rate (GPM) by more than 2.5X
- Doubled capacity of the screen

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Increased drainage with Polydeck panels has allowed the bypass of the secondary trash screen. This provides savings in maintenance time, energy consumption, and process water. This is a critical path for our operations.

Polydeck has provided excellent customer service and has worked closely with us to solve our screening issues.

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**Nick Muskovac**  
Metallurgical Technician  
Tahoe Resources

