

SEG 2022 Conference: Minerals For Our Future

Want to Make an Impact? Become a Production Geologist

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Recruiting employees with fresh skill sets and diverse perspectives is one of the greatest emerging opportunities to improve the geosciences in the mining industry. Unfortunately, many American geologists are unaware that a career in mining is even an option in the USA. The subset of young geologists that are interested in the mining industry are more likely to be exposed to exploration than mining through their academic mentors and student research projects. Among both seasoned geoscience professionals and fresh graduates, there is a lack of awareness of how important and rewarding careers in production geology can be. This presentation offers an inside look at the day-to-day life of a production geologist at Hecla Greens Creek's world class underground Ag-Au-Zn-Pb mine. Real photos, scenarios, analytical data, models, and maps are discussed to show how geologists at mines use their passion for science to make immediate positive impacts on their companies and communities. Production geologists do ore control: the highest impact step in the downstream processing of ore and environmental remediation of waste. The mapping, sampling, and insights of production geologists continuously improve a mine's geologic model. These geologic models drive the cost optimization of mining and frame the hypotheses for continued resource exploration. Additionally, as crucial liaisons between miners and managers, production geologists make an outsized business impact as safety advocates and project coordinators. Mining's greatest impacts on society are at the point of extraction. The challenges of being a mine geologist at Greens Creek illustrate why members of SEG should promote and discuss careers in production geology on an equal footing as those in academia or exploration. As an industry and a science, we will better capitalize on emerging opportunities if we attract smart people to the roles where they can make the greatest impact.