

# Proven Performance Without the Environmental Impact in the Underground Mining Industry

BioLube RD was given an opportunity to go head to head with a petroleum competitor in a study completed by the Montana School of Mines, in Butte, MT from 10/17-3/18. Mining companies need good lubricating oils, but they also need good environmental practices to sustain their mining operations. Not only did BioBlend prove that there was no lack of performance when choosing the sustainable, environmentally responsible product, but the BioLube RD outperformed the conventional oil in several areas.

Here are the case study results for further proof of the above:

Two identical jackleg drills were donated to the case study by F&H Mining Company. These drills were base lined by F&H and turned over to the school for evaluation under the supervision of long time miner, consultant and instructor Larry Hoffman. The drills were run by students under Larry's supervision for 5 months. The second drill utilized what is considered to be the best conventional oil on the market and has been used by multiple regional mines for many years.

Note: BioBlend was not involved in the case study in any way, other than to supply the oil.



Pictured above: (Left) Jackleg drill using BioLube RD (Right) Jackleg drill using conventional oil.

## Upon Completion the following observations & conclusions were made:

- Pictures of the drills showed obvious rust and oxidation with conventional oil, yet this did not exist on the drill utilizing the BioBlend product
- In the oil mist study, not only was the volume less, but it clearly indicated that it was significantly safer for the BioBlend oil mist to be in the atmosphere
- Oil consumption thru the Joy football type lubricator was substantially less (lubricator at one quarter vs 3 quarters open)
- Independent wear analysis on the drills was performed at the end of the test period. All the most common wear points were checked. Piston, Chuck Nut Rifle Nut, Automatic Valve, Valve Chest, Cylinder, Cylinder lining and Pawl. All wear points were found to be virtually the same
- The instructor's notes clearly back all the data points provided here and his evaluation is also available upon request



“BioBlend creates high-performance products that are synergistic with the environment and make economical sense. We call this **eSyn**”

  
**eSyn**™ is  
environmental  
**Synergy**