## Mining History Association Annual Conference, June 6-10, 2018 Deadwood-Lead, South Dakota

## A Brief History of Black Hills Gold Mining

The Black Hills gold rush began with the Custer Expedition of 1874. As Lt. Col. Custer led 1000 men through the Black Hills, two miners attached to the troop uncovered small quantities of gold near present day Custer, South Dakota. As word spread, the rush began. Prospectors flocked to the southern Black Hills, looking for their share of gold. But the diggings proved meager, and the mining men soon started looking for better locations.

From Custer, the fortune hunters moved north, establishing the towns of Hills City, Sheridan, and Pactola. At each place, flecks of gold appeared in their pans, but never the bonanza they sought. For all practical purposes, the Black Hills gold rush could have ended then and there. Poor returns stymied many earlier gold rushes.

But everything changed when the prospectors stumbled upon Deadwood and Whitewood Creeks in the northern Black Hills. Each spade of earth uncovered a fortune in gold, at least for those who arrived early and staked the first claims. By early 1876, miners had claimed all of the valuable land in Deadwood Gulch, but many more men poured into the new gold camp of Deadwood. While placer gold proved abundant, most good prospectors knew that it came from somewhere else, generally from quartz outcroppings. While some people rushed to the placer diggings, others looked for the quartz that originally held the gold.

The greatest day in Black Hills mining history came on April 9, 1876, when Fred and Moses Manuel, Hank Harney and Alex Engh staked a claim around a gold bearing outcropping near present day Lead. They named their mine the Homestake, and they had located the most important discovery in the Black Hills. It was from this vein that the placer gold in Deadwood and Whitewood creeks had eroded, and it would be from here that men would produce 41 million ounces of gold over the next 125 years. Such a vast undertaking required capital, and early on, three California bonanza kings, George Hearst, J.B. Haggin, and Lloyd Tevis, bought the mine and made a fortune.

All prospectors and miners hoped to find another "Homestake," so they continued to look. But the Homestake vein was unique in the Black Hills. It was free-milling ore. The quartz did not hold the gold very tightly. Workers could recover much of the gold through crushing and mercury amalgamation.

Gold did exist elsewhere in the Black Hills, but it could not be recovered with the

traditional methods. In these cases, the gold was chemically bound to the rock, and very difficult to remove. Known as refractory ore, it required new processes for recovery. Without those, the Homestake was the only major gold mine in the Hills.

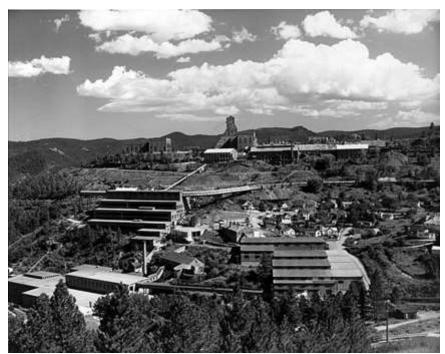
New processes did eventually come along. By 1890, mining men adopted chlorination and smelting, two methods that could capture gold from refractory ore. With these innovations, new mines opened, especially in the Bald Mountain and Ruby Basin mining districts, southwest of Lead and Deadwood. Then by 1900, the cyanide process was refined, and more mines sprang to life, while others expanded.

In the early 20<sup>th</sup> century, thousands of men worked in the Black Hills extracting gold. The government, however, had fixed the price of gold at \$20.67 per ounce in the 19<sup>th</sup> century, and did not change it for years. Gold mine after gold mine closed during World War I as the price of labor and supplies escalated, but the price of gold did not. Only the Homestake managed to endure.

When the Great Depression swept across the nation, Roosevelt raised the price of gold to \$35 per ounce, hoping it would help with the country's recovery. While the nation remained in the Depression, the gold industry boomed. The Homestake hired workers and expanded, and other mines in the Hills opened. But what the government gives, it can take away. With World War II, the federal government classified gold mining as a non-essential industry, and ordered all gold mines closed. As men and their families moved away, mining towns in the Black Hills suffered. Even after the war ended and gold mining was again permitted, mining companies struggled. Gold remained frozen at \$35 per ounce, and the mines had a hard time competing for labor during the nation's post-war prosperity. Only the mighty Homestake could continue, while all other mines closed.

When President Nixon freed gold from government control, the price floated with the world market. Prosperity seemed assured as gold topped \$800 an ounce in the early 1980s. A new gold rush swept the Black Hills. The Homestake expanded operations, and long abandoned mines became attractive to promoters and investors. New mining companies opened, using open pits and heap leaching. At least five open-pit mines began operating, including the Wharf and the Gilt Edge. Since those heady times, gold's price has fluctuated up and down, and most mines closed, either because they ran out of gold ore, or lower gold prices prevented a profitable return. Even the Homestake succumbed to dwindling returns when it ceased operations in 2001. Only the Wharf remains in operation.

The underground workings of the Homestake Mine are now home to Sanford Underground Research Facility.



The historic Homestake Mine and ore processing plants made Lead, South Dakota famous (photo ca1980). The mine closed in 2001. The processing plant buildings have since been removed and the area reclaimed. The Yates Shaft on the hilltop is used to access Sanford Underground Research Facility.