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A SUMMARY OF MONTANA MINERAL EXPLORATION POTENTIAL

(A paper to accompany testimony before the 62nd Montana Legislature Jobs Listening Session on January 8th, 2011).

Montana is nicknamed “the treasure state” and the state motto is “oro y plata” (gold and silver) for good reason. The state is very well endowed with a variety of important mineral deposit types.

- The most important metal deposits include copper, molybdenum, gold, silver, platinum, and palladium.
- Other significant metal deposits include lead, zinc, cobalt, and rare earth elements.
- Industrial minerals deposits are also very significant. These include talc, limestone, garnet, sand and gravel, and dimension stone.

A number of these Montana deposits are quite unique.

- The Stillwater Mine is the only domestic producer of platinum and palladium. These metals have a variety of uses, including in catalytic converters to reduce automobile emissions.
- Rare earth metals are used in a variety of alternative energy sources, including wind turbines and hybrid and electric vehicles. China has recently reduced rare earth exports, and there is a projected world-wide shortage for these metals.
- Montana’s talc is some of the highest quality in the world.
- Montana’s limestone is some of the purest in the country.

Despite this stellar mineral wealth, exploration has been declining the past 20 years, as shown on the below bar graph. This has been largely due to two factors, as also documented by the graph.

1. In the early 1990’s permitting became much more difficult. Suddenly, permits for new large mines required lengthy Environmental Impact Statements that took 7-10 years to complete and cost millions of dollars. Numerous appeals of the permits by anti mining groups became the norm. A number of large exploration companies closed their Montana offices.
2. In late 1998, the I-137 “cyanide ban” passed. This took the wind out of the sails from what remained of the Montana exploration community. Most Montana explorationists either got out of the business, or began working in more favorable areas (like Nevada).

For reference, Nevada and Alaska spent \$111 and \$169 million, respectively, on exploration in 2009. Montana spent approximately \$3 million.

Simply put, there will be more exploration, and as a consequence more mines developed in Montana if the regulatory and legal hurdles are lowered to reasonable heights. We can develop the state’s mineral wealth in an environmentally responsible manner.

NUMBER OF EXPLORATION PROJECTS IN MONTANA (Source: Montana Bureau of Mines and Geology)

