

ECONOMIC VALUE

The economic value of the offered mineral interests is ultimately based on production of oil, gas and/or mineral products. Because there are currently no products in production, economic potential can only be described by typical oil and gas wildcat acreage costs, and the value of a typical mineral deposit companies would be willing to look for.

Mineral interest value, as regards to oil and gas potential, can be based on an industry scenario for evaluating wildcat leasing costs. Typical oil and gas rights in the west are leased from the federal government, state lands, Indians or private fee ownership. The majority of land is federal, which can be leased for a minimum of \$1.50 per acre yearly rental for the first five years and \$2.00 per acre after that until production begins or the 10-year term expires. Once a lease is producing, you must pay a royalty of 12.5 percent of the value or the amount of production removed or sold from the lease. If a lease were taken to term the total acreage cost would be \$17.50 per acre.

These federal lands are offered in a competitive oral auction where the minimum bid to open is \$2.00 per acre plus the first years rental. Total lease term costs therefore would be \$19.50 per acre. Competitive interest in acreage often takes bonuses from \$2.00 to \$5.00 per acre for wildcat plays and developed prospects can command \$25.00 to \$50.00 per acre. Typical prospect generators acquire acreage at the low end, develop the play and sell interest for the higher acreage prices requiring a drilling commitment. Based on these discussions it would seem reasonable to assume that purchasing deeded mineral interests, with no expiration term or royalty burden, could command at least \$15.00 per acre for potential oil and gas acreage.

Mineral interest value is more difficult to predict because historical cost information for acquiring acreage is not available. The usual corporate framework for meeting commercial development is a project value over \$100 million.

The labor cost to stake a lode mineral claim 600 feet by 1500 feet (~20.66 acres), with the annual assessment fee of \$100 per claim or site to the BLM, puts mineral lease values over \$5 per acre. There is also a \$10.00 nonrefundable service charge to record each new location and an affidavit of annual assessment work (per claim/site) of \$5.00. All total, just fees to the government to maintain a claim for 5 years would be \$20.81 per acre.

The maximum size of a placer claim is 20 acres per locator. Placer claims will cost the same to maintain as the lode claims.

95% of the volcanogenic massive sulfide deposits found worldwide are smaller than 3 million tons. These deposits are big exploration risks, but produce considerable rewards. Several of the big deposits found in the past have been company makers. The value of the mineral found in these deposits is around \$200 per ton. The exploration interest would be to find a ¼ by ¼ mine site containing some 20 million tons, with a potential worth of \$4 billion dollars. Surprisingly these underground deposits have a small environmental footprint or impact and could feasibly be operated in current times. Several positive aspects are obvious as a result of owning deeded mineral interest. The large acreage position available would be an attractive position to own when looking for this needle in the haystack.

CONCLUSION

Mineral interests in the Tierra Amarilla Grant unquestionably have the potential for future economic value, should exploration commence. Oil & gas, and/or metallic mineral potential is present but has had little, if any, past exploration history. I believe that untested conceptual frontiers exist for developing oil and gas drilling prospects, selectively mineable stratiform mineral deposits in Proterozoic sedimentary rocks and paleoplacer gold deposits in the Tierra Amarilla Grant. The complexity of the rocks, and the large mineral ownership available (195,000 acres), creates