Data Submitted (UTC 11): 6/7/2023 3:52:52 PM First name: Julian Last name: Michaels Organization:

Title:

Comments: The Michaels Family, owners of "Hells Gate Lodge" for the past ~30 years, at 21597 US-85, strongly oppose exploration for gold or other metals in the northern Black Hills. As homeowners within a few hundred yards of Solitario's proposed Downpour well testing, we worry about the impact to our drinking water and to the hydrologic system of Spearfish Creek. The proposed test wells create direct pathways for groundwater contamination to our shallow drinking water well, less than one mile away. Our well is not in the South Dakota DENR Well Database, as it was likely drilled before 1975. The home was built in 1930 so the well is likely to be 20-30m total vertical depth. Any surface contamination at the drill sites will flow downhill into the Deadhorse Gulch, which has a direct pathway to our home and water well. Spearfish Creek is another hundred yards downstream, threatening the town of Spearfish's drinking water and all recreation through Spearfish Canyon. Any contamination to the aquifer via drilled test wells will likely also contaminate our drinking water since Solitario plans to drill wells 400-500m deep. The elevation of the drill site is roughly 1850m above sea level while our cabin sits at roughly 1725m above sea level, a difference of only 125m. If our well is 30m deep, which is the average depth of water wells in the area, Solitario's test wells will absolutely drill through the water-bearing zone where we draw our drinking water. We would like to have a conversation with the USFS and Solitario Zinc Corp. about how they intend to minimize the impact to our area and our drinking water. We would also strongly mining in the area of the Downpour prospect, as well as other places in the Northern Black Hills.

Recreational opportunities have increased over the past decade all over the Northern Black Hills and we challenge the USFS to do a cost-benefit analysis of the increased tourism and recreation, arguably much less damaging to the landscape and environment, to the prospect of a new gold mine in the area.

Julian Michaels, M.S. Geologist 315-825-1036 julianmichaels4@gmail.com