Further development of the Chidliak diamond resource, Nunavut, Canada

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The Chidliak kimberlite province is located on the Hall Peninsula, southern Baffin Island, Nunavut. Seventy-four kimberlites were discovered between 2008 and 2014. A resource development program completed in 2015 defined an Inferred Resource with a US$1,694 million in-ground value for the CH-6 kimberlite pipe (4.64 Mt at 2.45 ct/t and US$149 per carat), plus a further Inferred Resource with US$484 million in-ground value for the CH-7 kimberlite pipe (4.99 Mt at 0.85 ct/t and US$114 per carat). An independent Preliminary Economic Assessment completed in 2016 shows a Phase-1 (i.e., initial) 10-year mine life based on open pit mining of the CH-6 and CH-7 resources, with very attractive economics (after tax NPV (7.5%) of C$471M, a 29.8% IRR, a two year payback, and a 72% operating margin). Work in 2017 focused on resource expansion at the CH-6 kimberlite and has confirmed that the high-grade CH-6 kimberlite extends from surface to 540 metres below surface (mbs), an additional 280 m below the depth of the current CH-6 Inferred Resource. The CH-6 kimberlite remains open below 540 mbs, the current limit of drilling. Peregrine has also targeted six other pipes at Chidliak for future resource development activities (CH-1, CH-31, CH-44, CH-45, CH-46 and CH-28), in support of a potential Phase-2 extension of mine life.

The advancement of Chidliak toward a development-ready project in Nunavut has many facets, with considered attention to geological and geophysical attributes playing a pivotal early role. The Peregrine team has pioneered several innovative methods to unlock resource potential at Chidliak. The size distribution(s) of commercial-sized diamonds obtained by mini-bulk or bulk sampling of kimberlites CH-1, CH-6, CH-7 and CH-28 has been integrated with microdiamond data in an innovative format that permits transparent benchmarking relative to known diamond producers and other advanced diamond projects. We demonstrate that most Chidliak pipes have a coarse diamond size distribution and speculate that this uncommon characteristic has a causal relationship to the high proportion of attractive commercial diamonds that occur in bulk samples from Chidliak kimberlites.