

# THE NORTHERN MINER

THE GLOBAL  
MINING  
NEWSPAPER

www.northernminer.com

AUGUST 17-23, 2009 VOL. 95, NO. 26 • SINCE 1915

## More kimberlites for Peregrine at Chidliak

BY TRISH SAYWELL

**Peregrine Diamonds** (PGD-T, PGDIF-O) has found four more kimberlite bodies — three of them exposed at surface — on its 9,800-sq.-km Chidliak property on Baffin Island in Nunavut.

The four kimberlite discoveries bring the total to six new bodies since the start of the summer exploration season on July 3 — two unearthed by drilling and four by prospecting and mapping.

Kimberlites CH-7, CH-8 and CH-9 were discovered at surface while prospecting geophysical anomalies, and CH-6 was found by drilling.

Samples collected from these discoveries will be processed this fall for microdiamonds to determine their diamond potential.

“The latest news gives me considerable comfort that Peregrine is on track to demonstrating a major diamond kimberlite field at Chidliak,” John Kaiser wrote in the Aug. 6 edition of his newsletter *Daily Bottom-Fish Action Report*.

The CH-6 kimberlite is about 12 km northwest of the CH-1 kimberlite. It was found by drilling three holes at the southwestern edge of a geophysical anomaly with an estimated surface expression of 1 to 2 hectares.

The drill core suggests that CH-6 has an upper volcanoclastic unit that extends to a depth of about 70 metres, a primary pyroclastic unit that is present below a depth of about 70 metres to at least 250 metres, and a magmatic unit intersected in one drill hole that may represent a peripheral phase. All three lithologies have mantle xenoliths (eclogite, garnet lherzolite and garnet harzburgite) up to 20 centimetres and abundant mantle-derived garnets.

CH-6 is represented by a geophysical anomaly that is a magnetic low, whereas the other eight kimberlites currently known at Chidliak are represented by

magnetic high anomalies.

“CH-6 looks very ‘juicy’ and, best of all, the ‘abundant’ xenoliths range up to 20 centimetres in size. That is huge,” Kaiser noted. “Mantle xenoliths are important because they represent material from the diamond stability field which has not yet been torn apart and mixed into the kimberlite magma, a process which dilutes the ultimate diamond grade of the kimberlite.”

The more mantle xenoliths there are in a kimberlite, he explained, the better chance there is of a high grade. Kaiser also noted that the intersections and description of CH-6 “gets one thinking of Diavik’s A154-South pipe minus the quarter-carat core-embedded diamond.”

Peregrine discovered the CH-7 kimberlite while prospecting a geophysical anomaly with an estimated surface area of 1.4 hectares (defined by airborne geophysics). CH-7 is roughly 2 km southwest of CH-1. In the centre of the anomaly, the field crew discovered a kimberlite outcrop measuring about 65 by 10 metres. The kimberlite is described as being magmatic with abundant olivine macrocrysts, mantle xenoliths and indicator minerals including pyrope garnet, ilmenite and chrome diopside.

The CH-8 kimberlite is about 1.5 km west of CH-7 and was discovered when kimberlite cobbles and boulders were found at the southern edge of a geophysical anomaly with an estimated surface area of 1 hectare. The surface material is described as weathered magmatic kimberlite.

The CH-9 kimberlite is 7 km west of CH-1. The field crew discovered magmatic kimberlite over an area interpreted as outcrop/subcrop measuring about 5 by 25 metres. The kimberlite exposure lies just west of a circular magnetic anomaly with an estimated surface area of 1 hectare.

In addition to the discovery of the four new kimberlites, Peregrine has completed two more drill holes at CH-1 and collected more than 850 indicator mineral samples. Peregrine says CH-1 may consist of several pipes and has started to collect a 50-tonne mini-bulk sample of kimberlite from surface exposure at CH-1.

“We have good reason to believe that the 50-tonne mini-bulk sample will confirm expectations that CH-1 contains high-grade kimberlite with high-value diamonds and today’s announcement about CH-6 gives us new reason to hope for spectacular results in the fall,” Kaiser wrote in his newsletter.

The junior is planning to process a minimum of 200 kg of drill core and surface material for microdiamonds by caustic fusion from each kimberlite discovered this summer and expects to receive the first microdiamond results this quarter. The 50-tonne mini-bulk sample from CH-1 is scheduled to be processed early in the fourth quarter.

Peregrine’s 2009 exploration program is fully funded by **BHP Billiton** (BHP-N, BLT-L). Last November, BHP Billiton exercised its earn-in rights and will spend \$22.3 million in exploration for a 51% interest in the property.

“We don’t of course yet know if any of the new kimberlites contain a meaningful quantity of diamonds, but the distribution certainly supports the idea that we are dealing with a field of kimberlites within the main regional anomaly at Chidliak (there are three),” Kaiser wrote. “This is the scenario that has attracted BHP Billiton, which has made Chidliak its number one diamond exploration project.”

At presstime, Peregrine shares traded at 79¢ apiece in a 52-week trading range of 17-87¢. Peregrine has 81.3 million shares outstanding.