Zenyatta Ventures – University of Toronto confirm concrete strength improvement with Albany graphite.

Zenyatta Ventures Ltd. {TSX.V: ZEN}

Announced preliminary research findings from the University of Toronto, that confirm significant improvements in the compressive and flexural strength of cement when graphene products are combined with the cement.

Including graphene in quantities of as little as 0.02% increased the compressive strength of cured cement paste by up to 39%, according to the research.



Zenyatta Ventures Ltd. {TSX.V: ZEN} is pleased to announce preliminary research findings from University of Toronto that point to significant improvements in the compressive and flexural strength of cement when graphene products derived from Albany Graphite are combined with the cement.

It has been determined that by including graphene in quantities of as little as 0.02% increased the compressive strength of cured cement paste by up to 39%, according to research conducted by Professor Daman Panesar and her team at University of Toronto's Department of Civil & Mineral Engineering.

With the recent collapse of a major bridge in Italy still fresh in the memory, and the cause possibly being attributed to a weakness in the cement, this research comes at an opportune time for Zenyatta.

"These encouraging preliminary results strengthen the business case for using graphene in concrete," **said Dr. Francis Dubé, Zenyatta's Co-Chief Executive Officer and Head of Business Development**. *"With such a low graphene loading, Zenyatta may now be able to pursue the ready-mix concrete market which is much larger than the significantly smaller volume Ultra-High Performance concrete market."*

The ready-mix concrete market is estimated at US$500 Billion per year.

Adding any of the three graphene materials improved both the

compressive and flexural strength at 3, 14 and 28 days, by varying degrees. At the 28-day mark, the inclusion of graphene materials improved compressive and flexural strength by a maximum of 39% (for 0.02% graphene) and 84% (for 0.04% reduced graphene oxide), respectively, compared to the control cement paste.