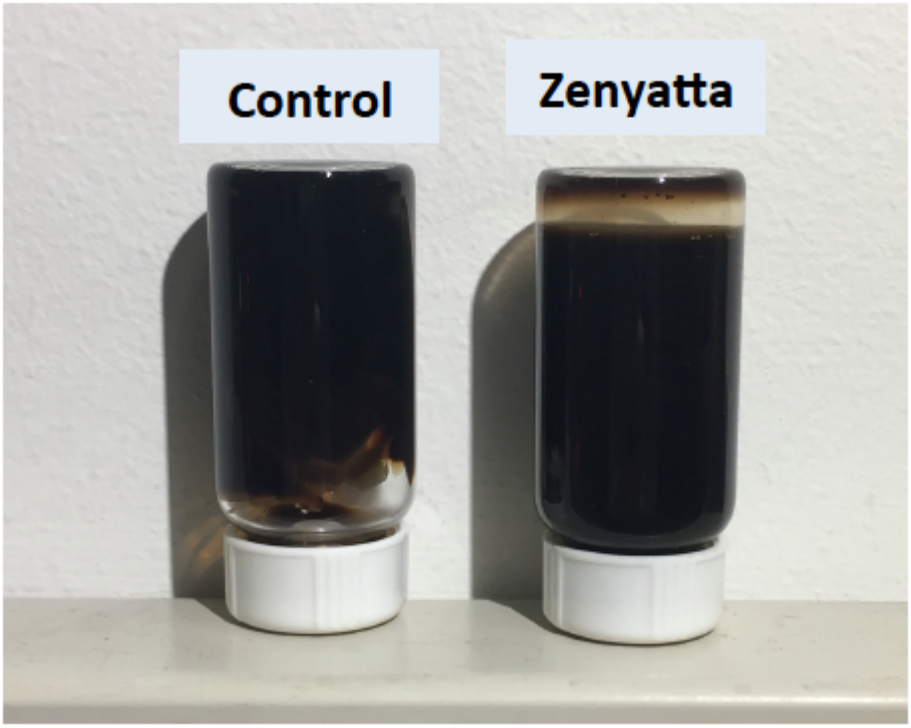
Zenyatta’s Albany graphite positive tested by Tokyo Tech

Zenyatta Ventures {TSX.V: ZEN} have received back positive test results from a sample of their Albany pure graphite sent to be processed at the Tokyo Institute of Technology in Japan.



Zenyatta’s Albany graphite tested by Tokyo Tech

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Mr. Aubrey Eveleigh reports

TOKYO TECH IDENTIFIES KEY REASONS FOR THE EASE & HIGH-YIELD CONVERSION OF ZENYATTA'S ALBANY GRAPHITE TO GRAPHENE

Testing results from the Tokyo Institute of Technology in Japan have identified key reasons for the ease and high-yield conversion of Zenyatta Ventures Ltd.'s Albany graphite to graphene.

Research at Tokyo Technology provides exciting feedback on Zenyatta graphene.

One of the greatest challenges for commercializing graphene in various applications, since its discovery at the University of Manchester, is how to produce high-quality material, on a large scale at low cost, in a consistent manner.

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Dr. Yoshihiko Arao, assistant professor in the department of chemical engineering at Tokyo Tech, stated: *"Zenyatta's high-purity graphite material was tested by our scientific team on mechanical conversion to graphene and discovered it converted much easier and with higher yields of graphene than our reference material. We have tested many types of natural graphite but found Zenyatta's graphite material to have better exfoliation performance and produce better graphene particles than the reference material. We believe that this is an extraordinary, unique material and we would like to carry out further collaborative work with Zenyatta on graphene applications."*

Research by Dr. Arao and professor Dr. Masatoshi Kubouchi at Tokyo Tech has shown the following significant test results:

- D-spacing measurements of Zenyatta carbon material is relatively larger compared with three other commercially available high-purity graphite samples. D-spacing is unique to all crystals and described as the distance between two (graphene) atomic layers or interlayer spacing. The Albany graphite also exhibited some turbostratic structure or natural irregular stacking.
- Importantly, these factors have contributed to the ease of conversion and greater yield of high-quality graphene from Albany graphite. This can be attributed to the unusual geologic mode of formation (igneous hydrothermal process) which accounts for the superior purity, crystallinity and overall quality of the graphite found in this unique deposit.
- Graphene exfoliated from Albany graphite showed the highest aspect ratio with an average thickness of 1.43 nanometres or one to four graphene layers. Also, the optical absorbance of the Zenyatta graphene dispersion was two to 10 times better than the other three tested reference samples which demonstrate concentrated graphene dispersion can be obtained.
- This further confirms the reason for success on graphene development initiatives, especially in composites, from other collaborators in the United Kingdom, Canada, United States and Israel. Tokyo Tech has established that Zenyatta’s graphite converts (exfoliates) easily to graphene, producing mono-layer to tri-layer material, has excellent dispersion properties, and is highly suitable for many graphene and graphene-oxide applications.

Aubrey Eveleigh, president and chief executive officer for Zenyatta, stated: *“The obstacle to widespread use of graphene since discovery is the high manufacturing cost. A lower-cost and disruptive approach is to use high-purity natural graphite, like Albany material, as the starting point to get easier and higher yields of graphene in an environmentally friendly manner. We are eager to start another phase of testing at a world-class facility like Tokyo Tech using our high-purity graphite material for various innovative graphene applications.”*

Zenyatta Ventures continues to develop its large and unique Albany graphite deposit in Ontario, Canada. The company’s highly crystalline graphite deposit is situated 30 kilometres north of the Trans-Canada Highway, power line and natural gas pipeline near the communities of Constance Lake First Nation and Hearst. A rail line is located 30 km away with an all-weather road approximately 10 km from the graphite deposit. The world trend is to develop products for technological applications that need extraordinary performance using ultrahigh-purity graphite powder and graphene at an affordable cost.

Aubrey Eveleigh, PGeo, president and CEO for Zenyatta, is a qualified person for the purposes of National Instrument 43-101 and has reviewed, prepared and supervised the preparation of the technical information in this news release.

We seek Safe Harbor.