

Talga Commences Graphene Pilot Plant Processing in Germany

- Pilot plant processing of trial mined graphite ore underway at Rudolstadt
- High quality Graphene produced for commercial evaluation
- Commissioning tests achieve graphite concentrate grades 98-99%C
- Scale of ore feed successfully increased from previous stages

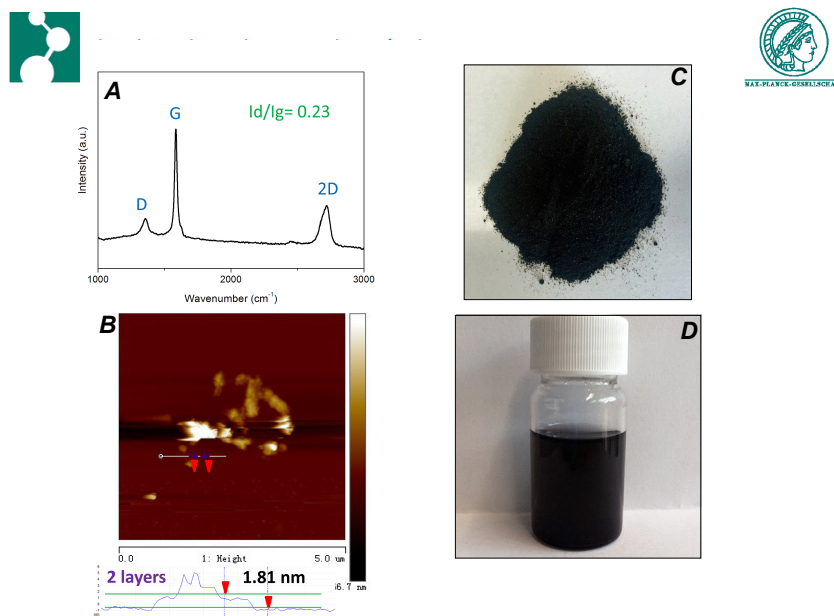
Advanced materials company, Talga Resources Ltd (ASX: TLG or Talga), is pleased to advise that pilot plant processing of the Company's trial mined graphite ore has commenced at its Rudolstadt site in Germany. This follows commissioning of the equipment with world-class technical partner, Technische Universität Dresden (TU-Dresden), who have been optimising Talga's processing flowsheet for the progressively scaled pilot phases.

Excellent performance has been demonstrated during Phase 1 pilot commissioning tests, with Talga's graphene output producing both graphene powders and stable graphene dispersions. Measurements by TU-Dresden and the Max Planck Institute for Polymer Research confirm the graphene is high quality and suitable for targeted applications (Fig 1).

Additionally, the ultra-fine highly crystalline graphite particles produced by Talga's process have excellent characteristics for large volume material applications thanks to liberation and recovery stages that do not mill (micronise) the material. Concentrate grades of highly crystalline, graphitic carbon have been measured to 98.9%C by TU-Dresden thermogravimetric tests (Fig 2). Recoveries have been recorded up to 93% of non-milled ultrafine graphite (90% <20 micron).

Graphene, nano and micro graphite is now being further characterised by Talga's other German research partner at the Friedrich Schiller University in Jena for product specification purposes before delivery to Talga's current end users.

Fig 1: A-B) Raman Spectra & Atomic Force Microscopy of Talga graphene C) Graphene powder D) Graphene dispersion



The figure consists of two panels. Panel A is a scanning electron micrograph (SEM) showing the morphology of the sample, which appears as a collection of small, irregular, dark, flake-like particles. A scale bar in the bottom left corner indicates 10 μm. Technical data for the SEM image is provided in a table below the image:

10 μm	EDF = 1.00 kV	Signal A = Holes	Time Spent = 6	Sample E =
	Pressure = 0.000 μm	PSI Coe = 200 V	Time Spent = 02:25	Pressure = 02:25
	Area Size = 0.000 μm	Calculated B = 30 V	Time Spent = 02:25	High Value =
	Mag = 700 X	Signal B = 1.00 kV	Time Spent = 12:00	
	Mag = 700 X	Signal C = 1.00 kV		

Panel B is a thermogravimetric analysis (TGA) curve showing the weight loss of the sample as a function of temperature. The y-axis represents weight in mg, with a scale bar indicating 5 mg. The x-axis represents temperature in °C, ranging from 100 to 1000. The curve shows a significant weight loss starting around 700°C, reaching a plateau around 800°C. The final weight loss is indicated as 96.893% (4.044 mg). The curve is labeled with 'SLHF BG - 25-1000 - HNF50' and 'SP5-AD55a, H5-AD55a'. The logo 'cf aed' is visible in the top right corner.

Talga has successfully completed its planned trial mining program in Sweden for 2015. Mined graphite ore blocks have been transported to the Company's leased Rudolstadt facility to supply the pilot plant with at least 12 months feed. Additional ore mining is already permitted for 2016 to feed future upscaled versions of the pilot plant.

The Phase 1 plant is a significant new test-bed from over a years laboratory and desktop-scale work with multiple Universities and commercial metallurgists. In contrast to laboratory scale efforts, at this more advanced stage process performance is subject to many factors including optimising components for full scale development or making specific products for customer applications. As the larger Phase 2 plant comes online, more steady state production with selected product specifications is expected to provide meaningful throughput and yield data to be announced. It is common commercial practice not to publish specific data, images and flowsheets where it would compromise the IP in pending patents.

"We are glad to be officially underway with our pilot processing operations and pleased to have made initial progress at Dresden in the heart of one of the most innovative technology districts in the world. End user imperatives for larger scale samples have driven some of the development timeframes, but the process works as expected on what is now a significantly larger graphite feed input."

For further information, visit www.talgaresources.com or contact:

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