



ARDIDEN

31 July 2015

JUNE 2015 QUARTERLY ACTIVITIES REPORT

Ardiden confirms potential for high quality jumbo and large flake graphite at emerging Canadian flake graphite project – successful maiden drilling and metallurgical test work program completed

June Quarter Highlights

- **Successful drilling and metallurgical test work completed at 100% owned Manitouwadge Flake Graphite Project in Ontario, Canada.**
- **Maiden diamond drilling program completed, confirming the continuity of previously identified outcropping graphite at depth.**
- **Metallurgical test work indicates 80% of graphite is jumbo (>300 microns) and large flake (>180 microns) graphite which places the project at the top end of global graphite peers. Larger flake sizes yield significantly higher prices per tonne than medium and fine flake graphite and is expected to be in demand for use in new technologies such as lithium ion batteries, electric vehicles, home and industrial storage.**
- **Jumbo flake graphite can be beneficiated using low cost gravity and flotation to 95.6% purity.**
- **Purification test work indicates ultra high purity graphite (>99.95%) can be produced from Manitouwadge graphite using the caustic bake process. This grade is comparable to synthetic graphite that can trade for US\$10,000/ tonne and is potentially a US\$13bn market.**
- **Graphene testwork undertaken by Adelaide University indicates that the graphite can produce outstanding quality graphene that is comparable to that of synthetic graphene.**
- **The excellent flake distribution and purity levels indicates that Manitouwadge graphite has potential to achieve a premium price product with multiple end use markets. The project demonstrates the potential for a low capex shallow surface mining operation extracting high-value jumbo and large flake graphite.**
- **Discussions held with numerous parties to progress potential growth and acquisition opportunities in graphite and related technologies such as graphene.**

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Manitouwadge Jumbo Flake Graphite Project, Canada

Key Project Attributes:

- Ardiden owns 100% of the 3,400Ha graphite project in Ontario, Canada
- Maiden 833 m drilling program completed April 2015 (see Figure 1 below):
 - *Confirmation that extensive outcropping graphite extends at depth*
 - *Graphite grades comparable to other deposits in Ontario being developed by TSX-listed companies such as Zenyatta Ventures and Northern Graphite*
 - *Majority of graphite is premium-priced jumbo/large flake size*
 - *Simple, low-cost gravity and flotation beneficiation yields 95.6% purity for jumbo flake*
 - *Ultra high purity graphite of >99.95% produced using caustic bake process*
- Graphene testwork has confirmed that graphene can be extracted from Manitouwadge graphite using rapid and scalable extraction techniques
- Located in an established mining province, with good access to infrastructure and local contractors and suppliers.

The project contains 6 anomalies of up to 1.5km in length with extensive zones of outcropping graphite. Metallurgical testwork undertaken on samples taken from the drill program indicates that a significant proportion of the graphite is large or jumbo flake size, which is expected to be in high demand due to its use in new technologies (refer ADV Investor Presentation lodged with ASX on 18 June 2015).



Figure 1 : Drill rig completing maiden drill program

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Figure 2: Jumbo and large flake graphite present in drill core from maiden drilling program

Metallurgical testwork on graphite from drill core indicates that simple, low cost gravity and flotation beneficiation techniques can result in graphite purity levels of up to 95.6% for jumbo flake and 94.0% for large flake. Additional caustic bake purification can increase the grade to >99.95% which is comparable to synthetic graphite.

The Company received a petrographic report undertaken on drill core from the Manitouwage maiden drilling campaign, providing visual evidence of the presence of jumbo and super-jumbo flake graphite. The sample shown in Figure 3 below was taken from MG-02 which also reported some of the higher assay grades from the drilling program.

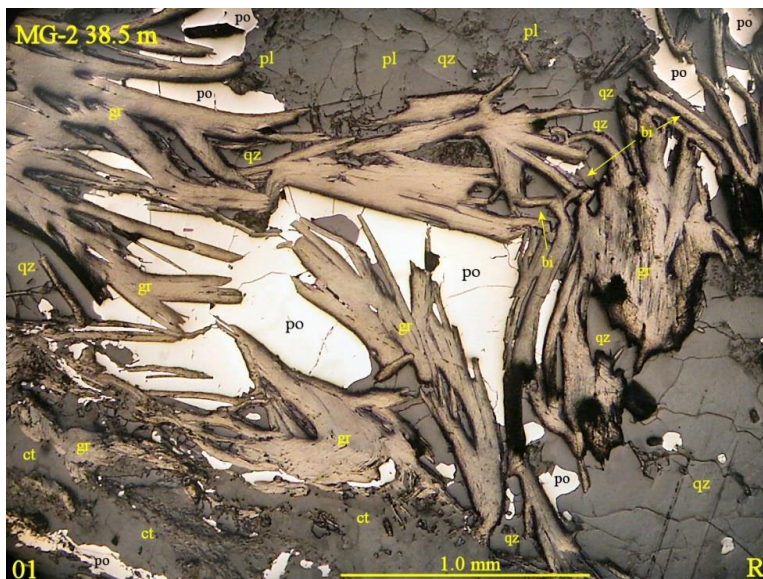


Figure 3: Graphite flakes from Manitouwage measuring 1mm (1,000 microns) in length, which is classified as super-jumbo size.

Thin section in reflected light showing in situ graphite flake size. Source: Vancouver Petrographics (MG-02 at 38.5m)

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Analysis indicated that up to 80% of graphite was jumbo and large flake size (see figure 4 below) which compares favourably to global peers.

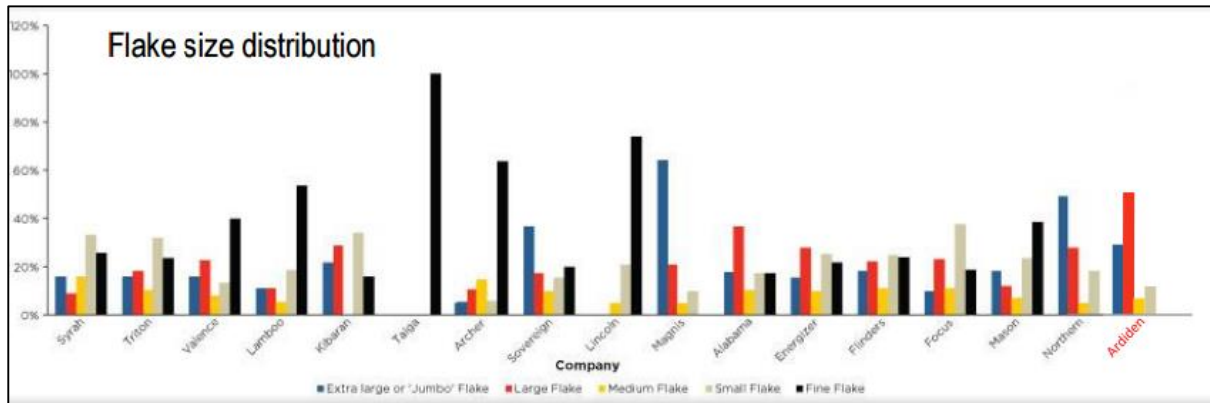


Figure 4: Flake size distribution indicating Ardiden has high % of jumbo and large flake compared to ASX and TSX peers

The demand for graphite (and graphene) is being driven upwards by green technology – lithium ion batteries used in electric car batteries, home and industrial storage, smart phones and tablets. This is reflected in the forecasts for larger flake sizes as seen in Figure 5 below.

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|------------------|------|------|------|------|------|------|------|------|------|------|
| Jumbo | 3365 | 2135 | 1577 | 1726 | 1884 | 1676 | 1555 | 2596 | 3573 | 6175 |
| Large | 2514 | 1595 | 1178 | 1192 | 976 | 996 | 684 | 811 | 947 | 1165 |
| Medium | 2138 | 1514 | 1025 | 991 | 959 | 867 | 521 | 500 | 508 | 517 |
| Small | 1375 | 1089 | 855 | 874 | 806 | 784 | 476 | 481 | 487 | 493 |
| Very Fine | 930 | 689 | 505 | 524 | 509 | 493 | 342 | 347 | 353 | 359 |

Figure 5: US\$/tonne forecasts by flake size. Source: Stormcrow, Industrial Minerals Experts

The California-based electric car manufacturer, Tesla, has recently unveiled plans to launch a home storage battery – Powerwall – later in 2015. Tesla is building a US\$5bn gigafactory in Nevada to produce batteries and has said it will aim to source raw materials locally in North America where possible to reduce its environmental footprint – the Manitouwadge Project is located in close proximity to Tesla representing an exciting potential opportunity for Ardiden.

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Graphene

Graphene is a single layer 2-D carbon atom arranged in hexagonal patterns. Graphene has a number of extraordinary properties including exceptional strength (over 100 times stronger than steel), 10 times better electricity conductivity than copper, highly translucent (only 2.4% of light absorbed) and is the thinnest (one atom thick) and lightest material (1m² weighs 0.77mg) known to man.

During the quarter, Ardiden announced highly promising initial results from graphite characterisation and graphene exfoliation undertaken by the University of Adelaide on drill core from its flagship Manitouwadge Graphite Project in Ontario, Canada.

The results represent a potential breakthrough development for the emerging Manitouwadge Project, confirming the potential to extract high quality graphene from core sourced from a recent drill program using various methods.

Graphene sells for a substantial premium to conventional graphite because of its exceptional properties as the lightest and strongest known material on earth, as well as its ability to conduct heat and electricity better than any other known substance. Graphene has a growing number of high-technology potential usages and applications worldwide including super-capacitors, conductive inks, biomedical, paints, sporting goods, plastics, 3D printing inks, alloys, energy storage and concrete/civil materials.

The graphite tested was sourced from the Company's recent drill program (completed in March 2015) at Manitouwadge. The graphite was a representative sample sourced from Hole MG-02 at 36m depth.

Testing confirmed graphene could be extracted using a number of different extraction methods (see Figure 6 below).

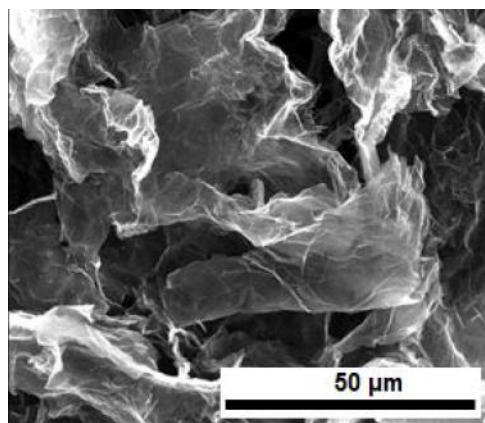


Figure 6: Graphene extracted from Ardiden's Manitouwadge graphite

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The graphene produced from electrochemical and thermal exfoliation showed low structural defects, which is considered to be important for application in advanced storage technologies such as batteries and super-capacitors. Raman spectroscopy was used to measure the quality of the graphene. A key measure is based on an indication of the defects (D band) compared to the G band (graphitic structure) and presence of 2D peak confirming single or few graphitic layers (see Figure 7 below)

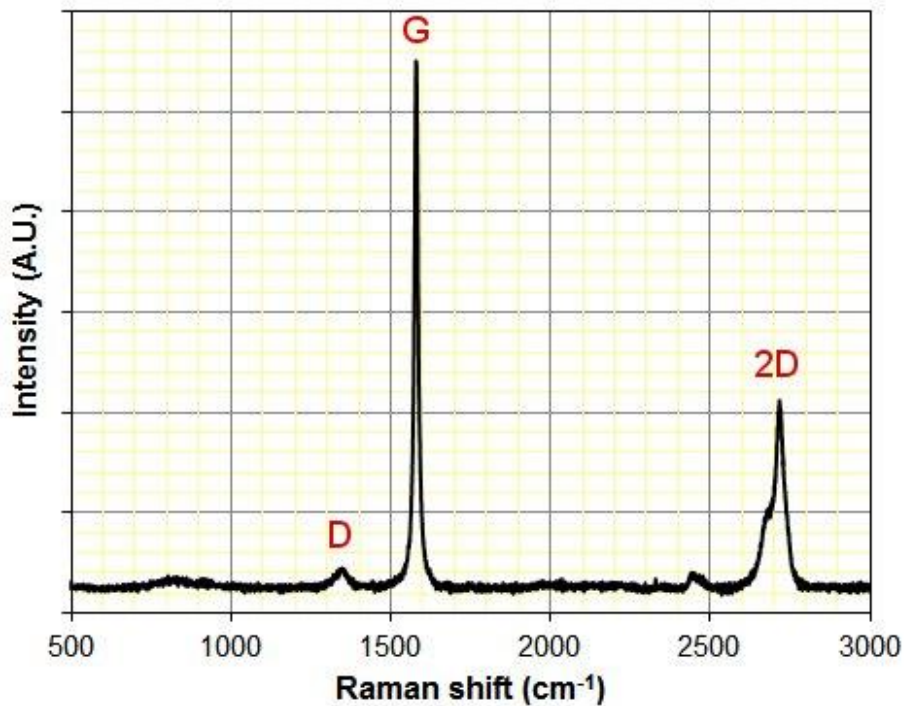


Figure 7: Characterization of quality of graphene extracted using the electrochemical method using Raman spectroscopy confirming high quality by low D;G ratio and 2D peak

The development of graphene research and the graphene market is being undertaken globally at a rapid pace with substantial investments being made in both commercializing the production of graphene and also the potential applications of graphene.

The lightweight nature, strength and conductivity properties of graphene lend it to usage in a number of multi-billion dollar end markets.

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Tenement Holdings

Ardiden wishes to provide the following information in relation to additional information required by Listing Rule 5.3.3 Mining tenements held at the end of the June 2015 Quarter and their location.

| Mining Interest ID | Location | Project | Interest |
|---------------------------|---|----------------|-----------------|
| 4268932 | Olie Lake Area | Manitouwadge | 100% |
| 4268933 | Olie Lake Area | Manitouwadge | 100% |
| 4268935 | Olie Lake Area | Manitouwadge | 100% |
| 4268936 | Olie Lake Area | Manitouwadge | 100% |
| 4268952 | Olie Lake Area | Manitouwadge | 100% |
| 4268953 | Olie Lake Area | Manitouwadge | 100% |
| 4268975 | Olie Lake Area | Manitouwadge | 100% |
| 4268976 | Olie Lake Area | Manitouwadge | 100% |
| 4269015 | Olie Lake Area | Manitouwadge | 100% |
| 4269016 | Olie Lake Area | Manitouwadge | 100% |
| 4268977 | Ramsay Wright | Manitouwadge | 100% |
| 4268934 | Thomas Lake Area | Manitouwadge | 100% |
| 4268978 | Thomas Lake Area | Manitouwadge | 100% |
| 4268979 | Thomas Lake Area | Manitouwadge | 100% |
| SKP KPD #7 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |
| IUP-OP #21 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |
| IUP-OP #22 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |
| IUP-OP #23 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |
| IUP-OP #24 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |
| IUP-OP #25 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |
| IUP-OP #26 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |
| IUP-OP #27 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |
| IUP-OP #28 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |
| IUP-OP #29 | West Belitung, Belitung Island, Indonesia | Yinchen | 30%* |

* Ardiden signed definitive documentation to acquire 60% of Yinchen project interest in a jointly owned vehicle with Metacorp / Tennant.

Competent Person Statement

The information in this report has been reviewed by Dr Dennis Arne who is a Registered Professional Geoscientist of the Australian Institute of Geoscientists, and a Professional Geoscientist registered in the province of British Columbia, Canada. Dr Arne is a Principal Consultant to CSA Global, has more than five years relevant exploration experience, and qualifies as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Arne consents to the inclusion of the information in this report in the form and context in which it appears.

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