29 January 2016

ASX Code: ADV

DECEMBER 2015 QUARTERLY ACTIVITIES REPORT

Pivotal quarter for Ardiden with agreement to acquire advanced lithium project in Canada and significant new graphite discovery at Manitouwadge Flake Graphite Project

---

Highlights

- **Agreement to acquire 100% of Seymour Lake Lithium Project, located in Ontario, Canada, which contains high quality outcropping spodumene pegmatities (with potential for high value by-products/ credits including significant tantalum and berrylium.**

- **Seymour Lake has had extensive historical drilling indicating the following attributes:**
  - *Mineralisation hosted in extensive outcropping spodumene-bearing pegmatite structures;*
  - *Widths of up to 26m of lithium mineralisation intersected in historical drilling;*
  - *Over 4,000m of drilling completed at the property to date with significant historical lithium intersections including grades of up to 2.386% Li_2O and widths of up to 26.13m.*

- **Drilling applications and drill plans for Seymour Lake Lithium Project submitted with approvals expected during February 2016, clearing the way for drilling to commence immediately. An experienced local drilling company has been contracted to provide drilling services.**

- **Highly successful drilling program completed at 100%-owned Manitouwadge Flake Graphite Project in Ontario, resulting in the discovery of the highly prospective Silver Star North prospect.**

- **Silver Star North has shown potential for high-value jumbo flake graphite (defined as graphite with a flake size of +300 microns) – with exceptional flake sizes of up to 4,200 microns in recorded in petrographic reports.**

- **Accelerated development program underway at Manitouwadge, with metallurgical work underway on graphite from Silver Star North and planning in progress for a drill program to establish a maiden JORC resource.**

- **Heavily oversubscribed SPP completed raising $1M (with excess subscriptions returned) with the majority of funds raised still available at 31 December 2015 for further exploration of Seymour Lake Lithium and Silver Star North Graphite projects. The SPP was strongly supported by existing shareholders and by leading global financial services group Sanlam.**

Ardiden Limited
Suite 6, 295 Rokeby Road
Subiaco WA 6008

Tel: +61 (0) 8 6555 2950
Fax: +61 (0) 8 9321 3102
info@ardiden.com.au

www.ardiden.com.au

- **Additional cash received from Option Exercise subsequent to Quarter-end, together with anticipated Reasearch & Development (R&D) refunds expected to further bolster cash position to underpin ongoing exploration activities.**

The December 2015 Quarter was an extremely active and highly productive period for Ardiden (ASX: ADV), with the Company undertaking significant exploration and development activities across its growing portfolio of strategic and energy metal-related commodity projects in the leading mining jurisdiction of Ontario, Canada.

The Company was successful in negotiating an agreement to acquire 100% of the advanced Seymour Lake Lithium Project (with over 4,000m of drilling indicating potential for a high quality lithium project with tantalum and berrylium credits/by-products).

In addition, Ardiden undertook a highly successful drill program at its Manitouwadge Graphite Project which resulted in the discovery of the Silver Star North prospect. Silver Star North has graphitic gneiss intercepts of over 40m, Cg grades of up to 14% and most significantly shows flake sizes with jumbo and super jumbo size characteristics, including flakes with up to 4,200 microns in width. ** ASX Release 5 January 2016*

Seymour Lake Lithium Project

During the Quarter, Ardiden negotiated (and subsequent to quarter end on 6 January 2016) entered into an option agreement to acquire 100% of the advanced **Seymour Lake Lithium Project** in Ontario, Canada, providing it with a highly complementary growth opportunity in one of the world's fastest growing commodity sectors.

The Seymour Lake Project, which is located near the town of Armstrong in Ontario, comprises five patented mining claims covering an area of 912 Ha. The Project has over 4,000m of historical diamond drilling which has confirmed the presence of extensive spodumene mineralisation (a host rock to lithium).

The proposed acquisition is consistent with Ardiden's strategy of acquiring commodity projects with exposure to structural and transformational change and outstanding market fundamentals, such as graphite and lithium, in Tier-1 mining jurisdictions. Together with its existing Manitouwadge Graphite Project, this acquisition positions Ardiden as a potential North American supplier of both of the key ingredients in the manufacture of lithium-ion batteries.

Seymour Lake is a lithium-beryllium-tantalum site located within the Caribou Lake Greenstone Belt, 230km north-northeast of Thunder Bay, Ontario, Canada. The claim group is located on an all-weather, year-round, two-lane, main haulage road and the project has excellent proximity (10km) to existing rail sidings on the main CN rail line, and close proximity to a major power grid provided by Ontario Power Generation which is planning a 85MW hydro-electric project 8km from the project.

The project is ideally located approximately 3 hours by road from Thunder Bay (see Figure 1 below), a leading mining jurisdiction in Ontario with key local infrastructure including a skilled mining workforce and excellent local logistics infrastructure. It has strong potential to provide high quality product to service growing North American demand and export markets. The city of Thunder Bay is a mining, rail, port and infrastructure hub which is less than 100km from the US border and has existing port facilities which can also access the Atlantic and service European markets. Thunder Bay is also the main support hub for Ardiden's existing Manitouwadge Jumbo Flake Graphite Project, creating excellent synergies for the Company.

Figure 1: Location of Seymour Lake Project (230km north-northeast of Thunder Bay)

The project was originally identified for its tantalum prospectivity in the 1950s and has common geological features with the Tanco mine in Manitoba, which is Canada's only operating tantalum mine. The Seymour Lake Project has been subject to two main drill programs – a 1,865m program in 2002 and a 2,365m program in 2009. These programs confirmed the tantalum prospectivity but also identified significant high grade zones of lithium and beryllium. To date, the Project has identified two key lithium-bearing zones, North Aubry and South Aubry.

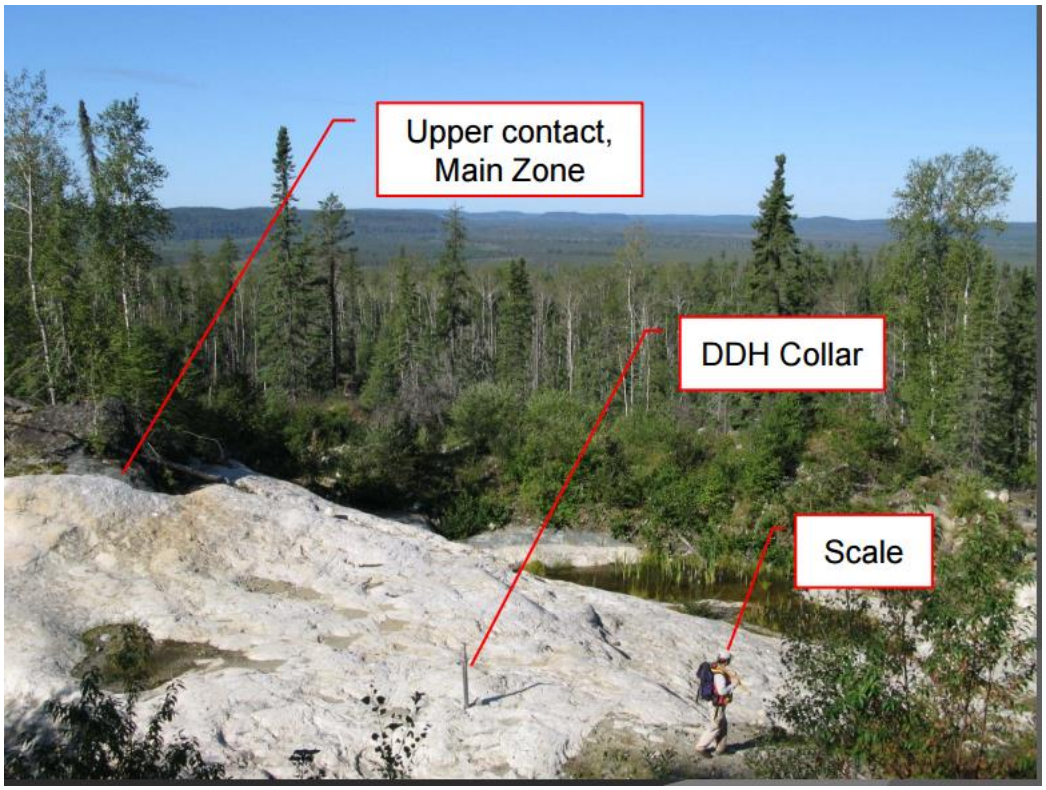

Figure 2: North Aubry – Looking Southwest showing outcropping upper contact of main zone

Figure 9-1: North Aubry Pegmatite Mineralogy

(A – abundant, large, pale green spodumene, parallel to hammer, in quartz-albite core, B – concentrated pocket of "cubic" black tantalite and blue apatite near Na-K feldspar transition, note dime for scale; C – very large pale green beryl, approximately 0.3 x 0.4 m)

Figure 3: North Aubry: Spodumene, Tantalite and Beryl in outcrop

Key features of the Seymour Lake Project include:

- The Main Zone of spodumene has been intersected at North Aubry over an area of approximately 200m x 250m and is up to 26m in thickness (averages 11.52m thick @ 1.467% Li_2O). The Main Zone is open to the north and to the east. The highly prospective South Aubry zone is also located several hundred metres to the south.
- The Main Zone is underlain by at least three more stacked and open horizons of lithium mineralisation at relatively shallow depth that carry similar lithium grades (with significant Be and Ta).
- Soil sampling and litho-geochemical sampling indicate that there is a very good possibility of discovering significant extensions to the known occurrences (to the north of North Aubry; to the west and south-east of South Aubry), as well as the possibility of discovering new zones, especially to the east (Pye showing area) and south (Lookout Hill).
- Excellent access to infrastructure (road, rail, power, potential hydro), all within 10km.
- Location of the main zone at surface near top of large hill provides open pit and/or ramp access.
- The prices of lithium, tantalum and beryllium are all predicted to increase: Li (electric vehicles, electric storage), Ta (loss of conflict supply and primary producer closure), and Be (nuclear fuel alloys, US military armour applications).

The market for lithium-dependent products including lithium-ion batteries (for which lithium is used as the cathode) for the battery storage market (for utilities, business, households and electric vehicles) is expected to experience transformational growth over the next decade.

High-grade historical assay results from the Seymour Lake Project include:

- ***2.081% Li_2O over 16.90m***
- ***1.584% Li_2O over 26.13m***
- ***2.386% Li_2O over 9.20m***
- ***1.735% Li_2O over 14.25m***
- ***1.325% Li2O over 23.85m including 2.059% Li2O over 9.00m and 2.232% Li2O over 3.04m***
- ***1.837% Li_2O over 11.80m***
- ***2.212% Li_20 over 5.70m***
- ***2.100% Li2O over 6.75m***
- ***1.475% Li2O over 17.72m including 1.937% Li2O over 12.97m***
- ***In addition, Tantalum and Beryllium grades of up to 1,180ppm (Ta2O5) and 1,270ppm (BeO) respectively were intersected***

Drill-hole locations for North and South Aubry are shown in Figures 4 to 7 below (further drill data details are set out ÁSX announcement dated 6 January 2016).

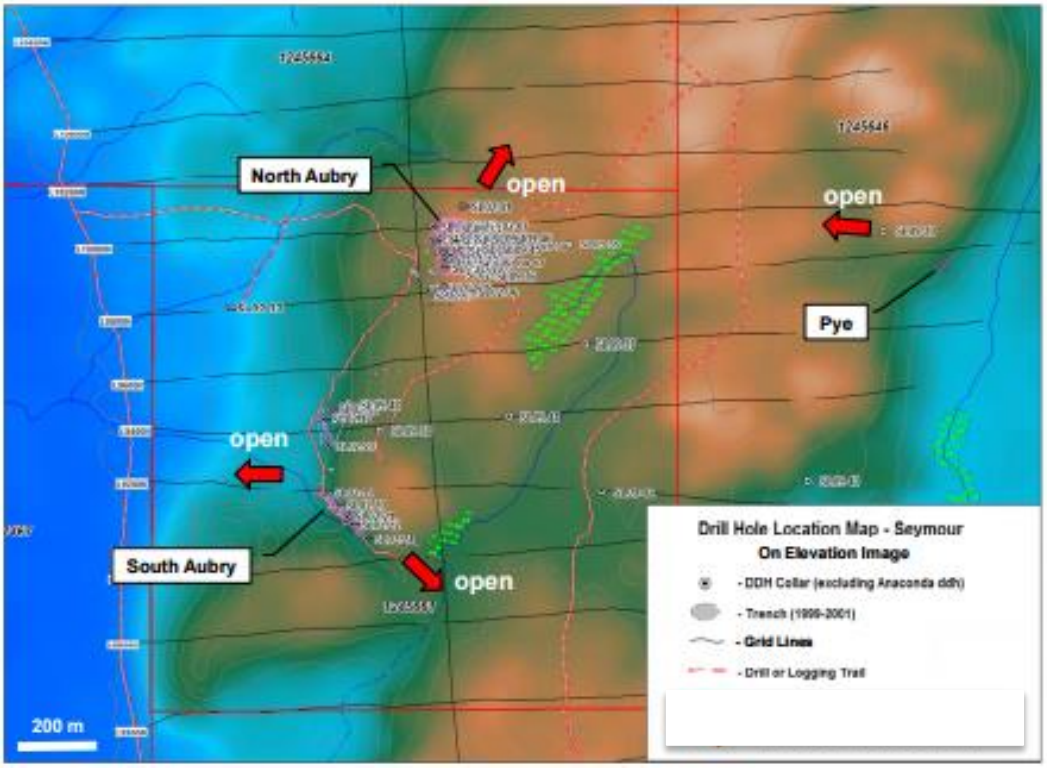

Figure 4: Location of North Aubry and South Aubry Drill holes

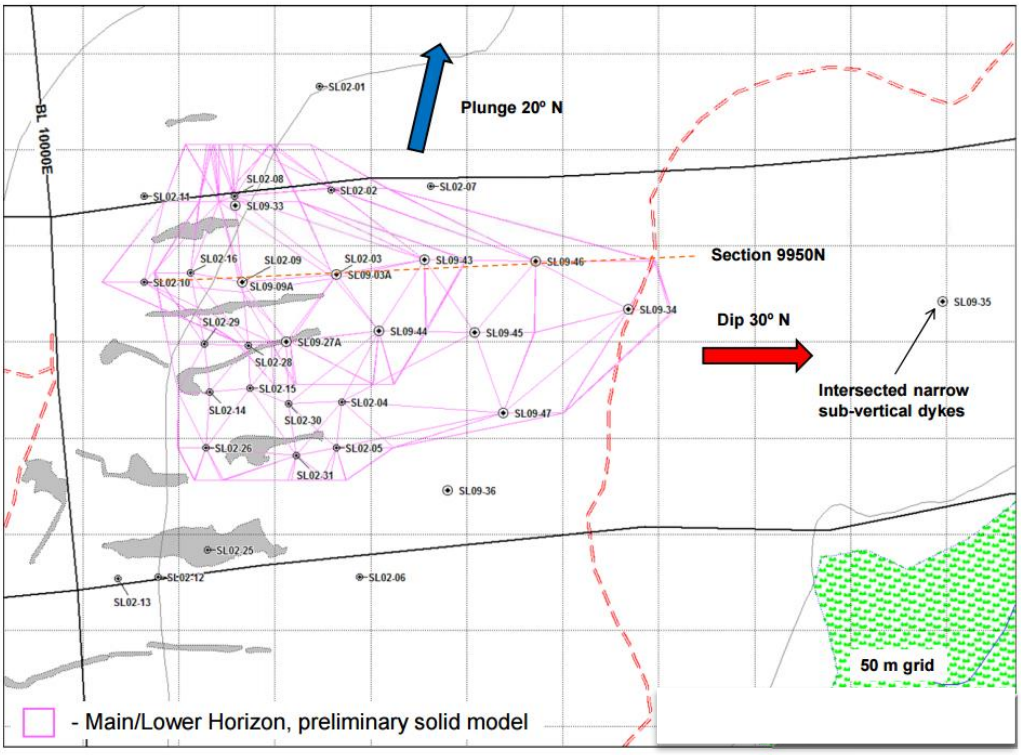

Figure 5: North Aubry Showing, Drill Location Map

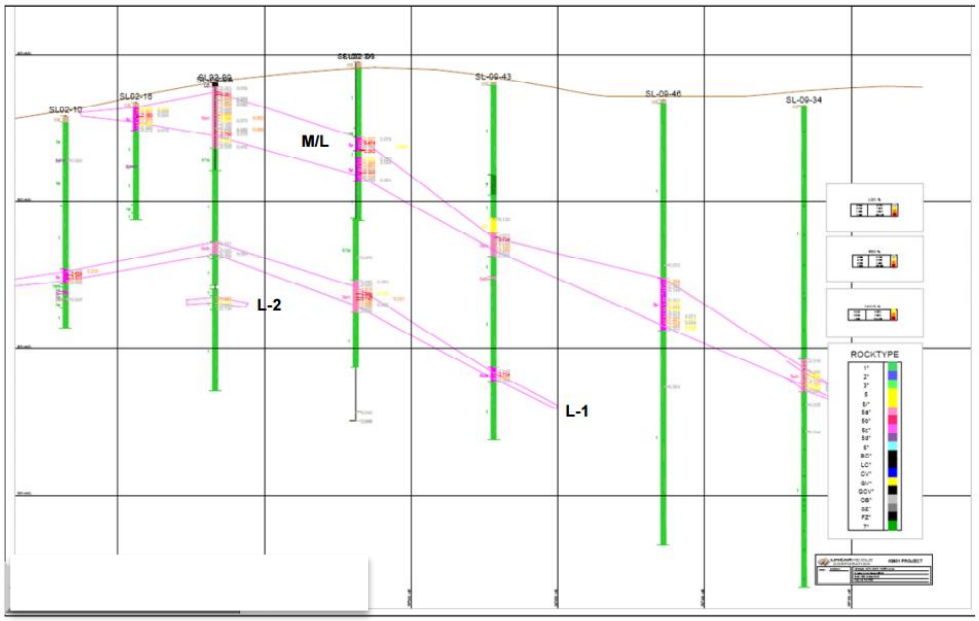

Figure 6: Section 9950 N, North Aubry Showing showing Main and Lower zones (Note: M/L = Main/ Lower Horizon,
L-1 = Lower – 1 Horizon, L-2= Lower – 2 Horizon)

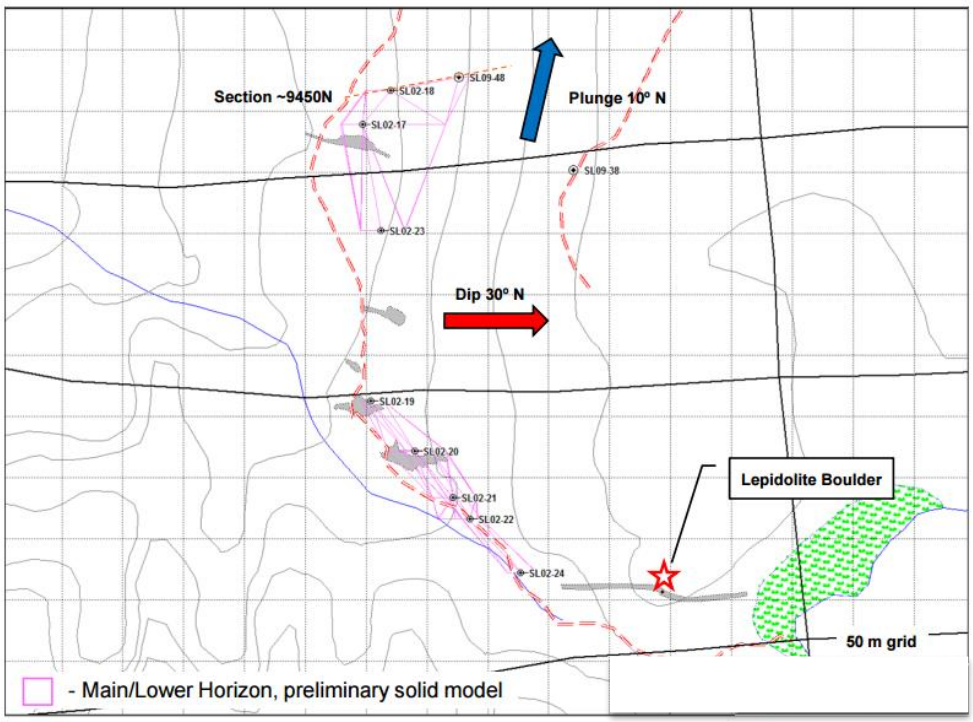

Figure 7: South Aubry Showing, Drill Location Map

Deal Terms

Key deal terms for the option agreement (in CAD*) to acquire 100% of the Seymour Lake Project include:

1. An exclusivity/holding deposit of C$75,000 to be paid on signing of the agreement (which amount has been paid) to commence a 150-day option and due diligence period;
2. C$75,000 plus C$250,000 in ADV equity (at the 20-day VWAP prior to this announcement) to be paid at the end of a 150-day due diligence period to keep option on foot;
3. Following the due diligence period if Ardiden wishes to continue the option, the vendor will be paid in quarterly instalments of C$25,000 per quarter to a total of a further C$350,000;
4. A further C$250,000 of Ardiden shares (at the 20 day VWAP prior to this announcement) will be issued at the completion of the option agreement (or no later than 24 months from execution of option) for a total compensation of C$1,000,000 to finalise the transfer of 100% of Seymour Lake;
5. Ardiden reserves both the right to accelerate all payments or withdraw from the option agreement at any time. The vendor will retain 100% of the Seymour Lake rights should Ardiden fail to complete any requirements of the option agreement; and
6. The property has an existing 3% net smelter royalty (NSR) held by an independent third party. The vendor maintains the option to purchase or buy back from the third party a 1.5% NSR for payment of C$1,000,000.

Manitouwadge Graphite Project (100% owned)

Ardiden successfully completed the final 2015 drilling program at its flagship 100%-owned **Manitouwadge Graphite Project** in Ontario, Canada, with preliminary results identifying the Silver Star North prospect as a priority focus for resource definition and further significantly upgrading the potential scale and quality of the overall project.

The Manitouwadge Project is located in the Thunder Bay District, a leading mining jurisdiction in Ontario with key infrastructure including a skilled mining workforce, excellent infrastructure (including a rail line 10km from tenements) and sealed and logging roads providing good access to site. The project has excellent potential to provide high quality product to service growing North American graphite demand. The city of Thunder Bay is a mining, rail, port and infrastructure hub which is less than 100km from the US border and has existing port facilities which can also access the Atlantic and service European markets.

The goal of the current drill program was to assess and prioritise key targets for further drilling in 2016, with the aim of defining a maiden JORC compliant resource on the most prospective parts of the project. The program was a resounding success, with all objectives achieved, and results often exceeding initial expectation.

The Silver Star North Project has provided outstanding results to date, and will now become the initial target for delineating a maiden JORC compliant resource. Silver Star North represents less than 5 per cent of the EM anomaly strike length identified at Manitouwadge, highlighting the immense potential of the landholding. Ardiden intends to complete the next phase of drilling using existing cash reserves.

Exploration completed to date has confirmed high quality graphite coincident with strong EM anomalies along 10km of the potential 19.3km strike length identified using EM surveys. The remaining 9.3km of EM strike length was not tested in the current program and, remains highly prospective for additional discoveries during 2016 field programs.

Previous metallurgical testing taken from drill core at the Thomas Lake Road Prospect confirmed that up to 80% of the graphite is jumbo or large flake in size, and low cost gravity

and flotation beneficiation produces graphite product of 96.8% Cg for jumbo flake and 96.8% Cg for large flake. Further metallurgical testwork will now be undertaken on drill core from the current program to confirm that high proportions of recoverable jumbo and large flake graphite are present at Silver Star North as indicated in petrographical studies completed in the current quarter.

The results from the final 2015 drilling program are highly encouraging and have significantly enhanced and continue to support the potential of the Manitouwadge Project to be developed into a supplier of the rapidly growing large and jumbo flake graphite markets.

The market for graphite dependent products including lithium ion batteries (in which graphite is used as the anode) for the battery storage market (for utilities, business, households and electric vehicles) is expected to experience transformational growth over the next decade. Other growth markets for high quality graphite include expandable graphite, nuclear grade graphite and graphene / graphene oxide which all demand significant market premiums.

Silver Star North Prospect

A previous geophysical review undertaken by CSA Global identified Silver Star North as an area of potential graphite prospectivity, however no known previous exploration had been undertaken in this area.

The main part of the Silver Star North EM12 target is a complex, broad >800m long zone at the eastern end of a 3km trend that contains a mix of thick and thin dyke responses, some with strong in-phase responses in the VCA coils (thin conductive dyke type responses).

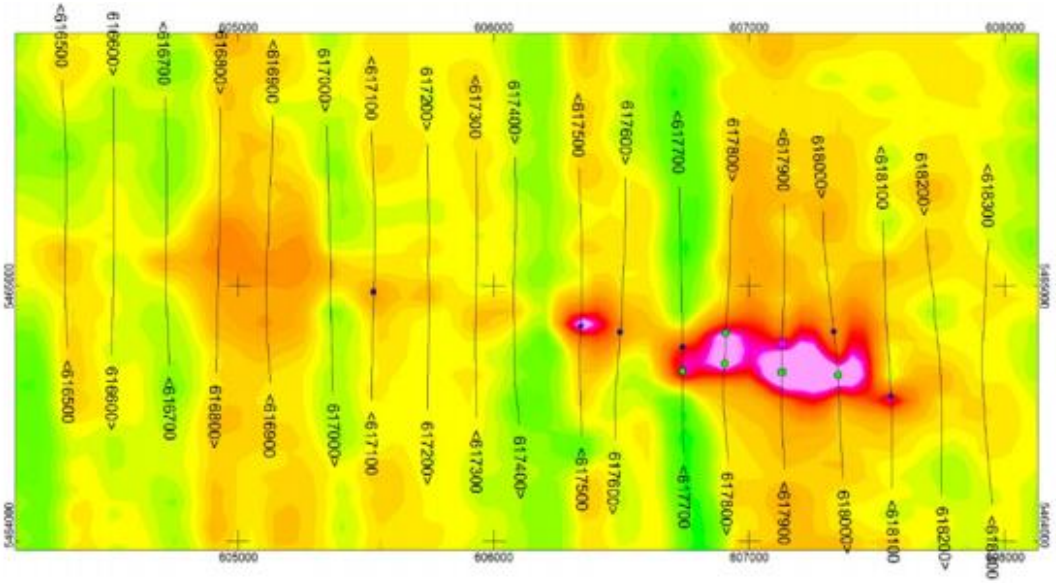

Figure 8: Silver Star North: Target EM12 image of 900Hz VCA in-phase response with OGS anomaly picks

Drilling undertaken along strike with the EM anomaly on Silver Star North has identified a graphitic gneiss with widths up to 41.6m (30m true width) and super jumbo flake graphite presence confirmed. The drilling targeted the central zone of the EM anomaly and remains open along strike and at depth.

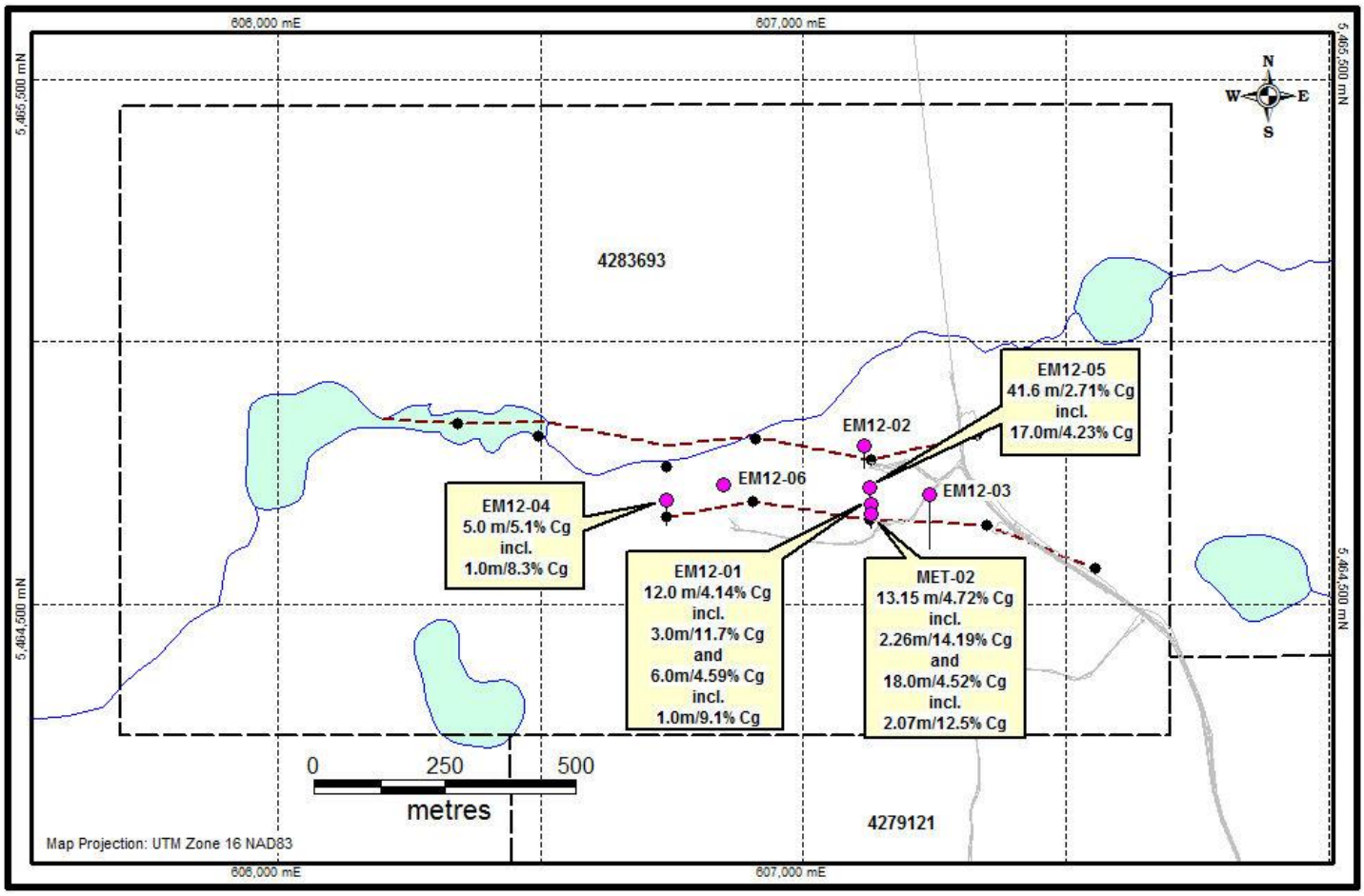

Figure 9: Silver Star North with drill holes and grades noted

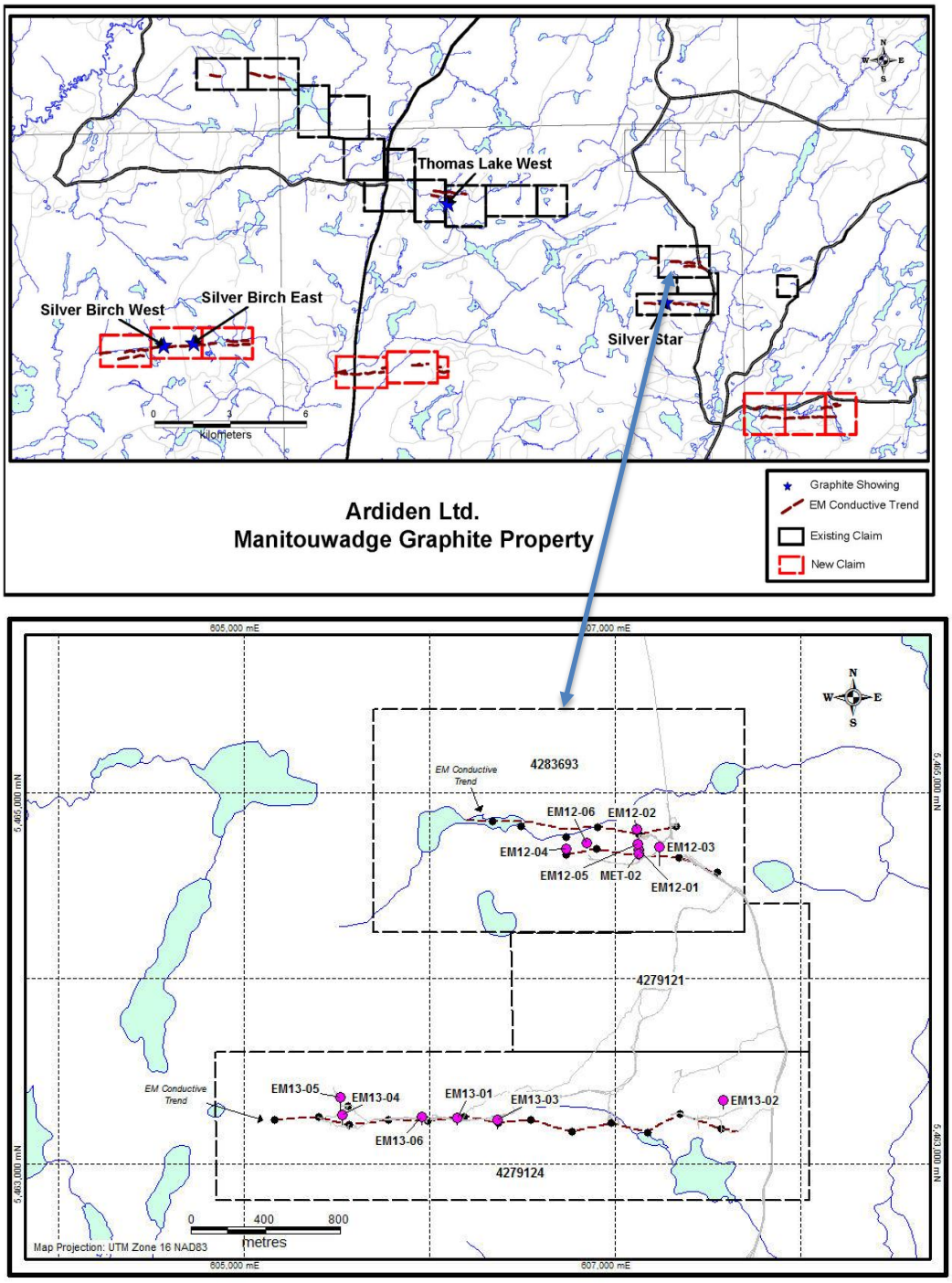

Figure 10: Manitouwadge Graphite Project showing 19km of EM anomalies (in red in upper diagram)) with graphite prospectivity. Silver Star North (EM12) prospect is shown as one of the Eastern EM anomalies

Testing of core from EM 12-05 (from Silver Star North) by Vancouver Petrographics indicates the occurrence of jumbo (>300 microns) and super jumbo (> 500 microns) flake graphite, with maximum flakes sizes up to 4,200 microns identified (see Figure 4 showing drill core from EM 12-05 indicating flake sizes of 4,200 and 3,300 microns respectively). Jumbo and Super jumbo flake sizes attract a significant premium per tonne to fine and medium flake graphite.

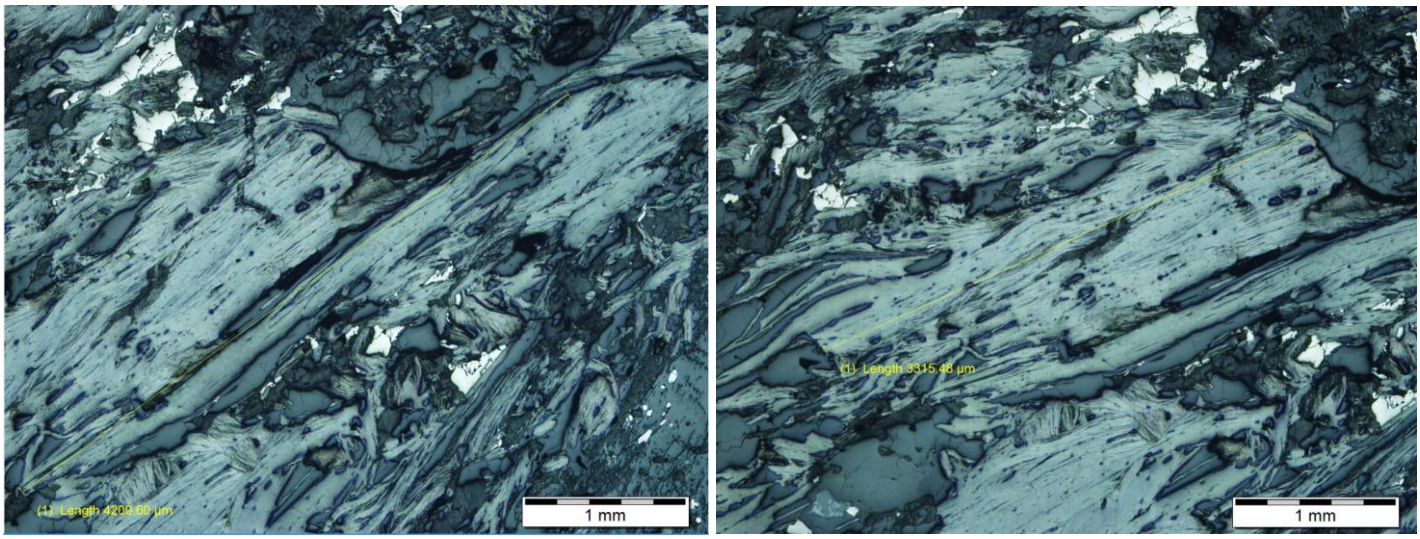

Figure 11: Petrographic slices from EM 12-05 – Flake size of 4,209 micron on left and 3,315 micron on right. Super jumbo graphite is defined as graphite with a flake size of >500 microns. (Source: Vancouver Petrographics)

Figure 12: Graphite core from drilling at Manitouwadge graphite project in Ontario, Canada (Hole EM 12-05 at Silver Star Prospect)

High grade assay results from the Silver Star North project include:

- ***MET-02 – 13.15m at 4.72% Cg (including 2.26m at 14.19% Cg)***
- ***MET-02 – 18.0m at 4.52% Cg (including 2.07m at 12.5% Cg)***
- ***EM 12-01 – 12.0m at 4.14% Cg (including 3.0m at 11.7% Cg)***
- ***EM 12-01 – 6.0m at 4.59% Cg (including 1.0m at 9.1% Cg)***
- ***EM 12-04 – 5.0m at 5.1% Cg (including 1.0m at 8.3% Cg)***
- ***EM 12-05 – 41.6m at 2.71% Cg - includes 17m at 4.23% Cg (including 3m at 12.65% Cg)***

Further details are set out in ASX announcement dated 5 January 2016.

A key focus of a future drilling program will be to determine the extent and potential source of the exceptionally high grade intercepts recorded in MET-02, EM 12-01 and EM 12-05.

The assays returned to date indicate comparable or better grades than other similar North American graphite projects (see Table 1 below).

Company Name	Symbol (TSX)	Project	Location	Mkt Cap ($Am)	Resources (m tonnes) Measured & Indicated	Grade (Cg %)	Resources (m tonnes) Inferred	Grade (Cg%)
Zenyatta Ventures	ZEN.V	Albany	Ontario, Canada	50	25.1	3.89%	20.1	2.20%
Alabama Graphite	ALP.V	Coosa	Alabama, USA	20	78.5	2.39%	79.4	2.56%
Northern Graphite	NGC.V	Bissett Creek	Ontario, Canada	11	69.8	1.74%	24	1.65%

Table 1: comparison table for North American graphite Companies indicating resource, grade and market cap as at 31 December 2015

Other Graphitic Zones at Manitouwadge

In addition to the outstanding results at Silver Star North, assays from exploratory drilling at Thomas Lake and Silver Star South present additional opportunity for further development into resource status.

A 150kg surface sample was sourced from Thomas Lake during the Northern summer which graded 11.4% Cg. In addition, grab samples at Silver Birch and Silver Star South grading up to 16.8% Cg and 11.8% Cg respectively were sourced during the October 2015 ground sampling program. The most south-eastern EM anomalies and central southern anomalies have not been tested during the current program and are expected to be tested during 2016.

Metallurgical Test Work

The Company has received initial positive feedback from leading Canadian laboratory, Process Research ORTECH Inc ("PRO") which was contracted to undertake further beneficiation test work on graphite sourced from a surface bulk sample at the Manitouwadge Project. The surface sample was sourced from the Thomas Lake prospect and had a head grade of 11.4% Cg.

PRO was successful in using low-cost flotation and gravity beneficiation (see flow sheet in Figure 1 below) to achieve graphite grades of 96.8% for the jumbo flake graphite and 96.8% for large flake. These grades are at the top end when compared with global peers.

Importantly, this is a significant improvement on the initial metallurgical testwork conducted in May 2015. From a market perspective, the higher purity improves the potential sale price for raw product, and also provides a higher-grade starting point (and hence lower marginal processing cost) for further purification of the product to >99.95%, which the Company successfully achieved in July 2015 with the proven caustic bake method.

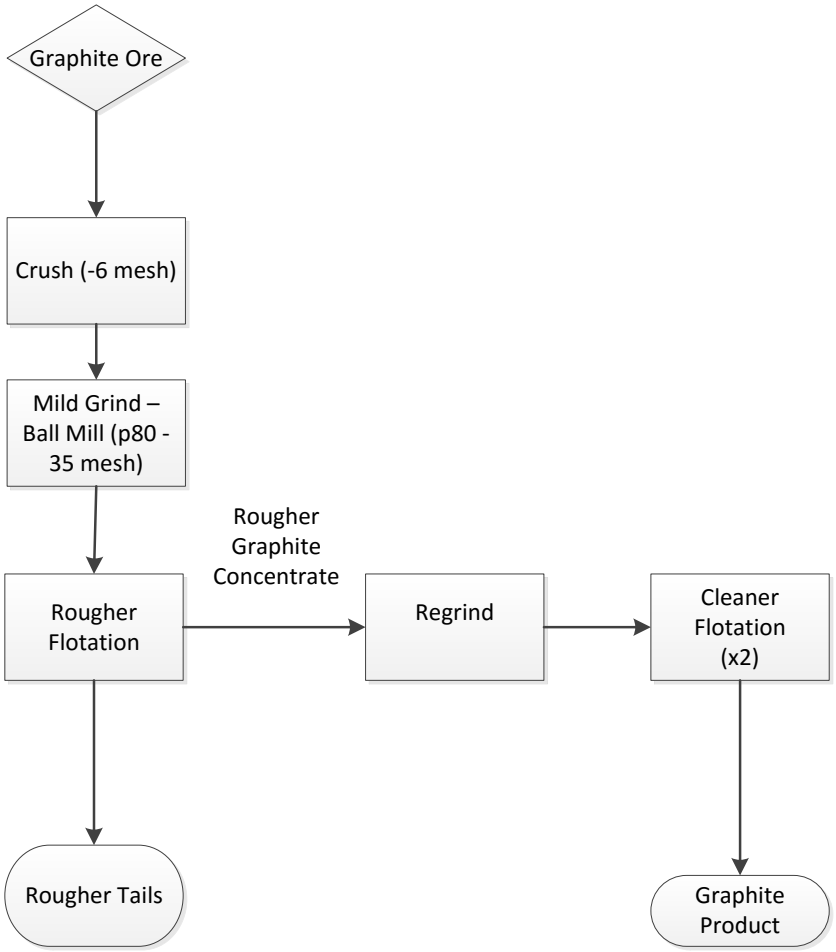

Figure 13: Process Flow Sheet used by Process Research Ortech Inc to test Manitouwadge graphite

The results and grades achieved for various flake sizes are set out in Table 2 below:

Size Fraction (Mesh)	Cum. Passing	Cum. Retained	C, Graphitic
	%	%	%
+30	97.95	2.05	97.40
-30 to +50	76.37	23.63	96.80
-50 to +70	52.74	47.26	96.80
-70 to +100	35.62	64.38	94.80
-100 to +140	23.46	76.54	95.20
-140 to +200	14.90	85.10	93.90
-200	0.00	100.00	77.60

Table 2: Screen analysis and C graphitic analysis

As part of recent testing a 150kg bulk sample (grading 11.4%) was taken from the outcrop at the existing known graphite showing at Thomas Lake (1.2km EM conductor) and surface samples were taken from the Silver Star showing (2.6km EM conductor grading up to 11.8%) and the Silver Birch showing (5.6km EM conductor grading up to 13.6%) – see figure 14 below.

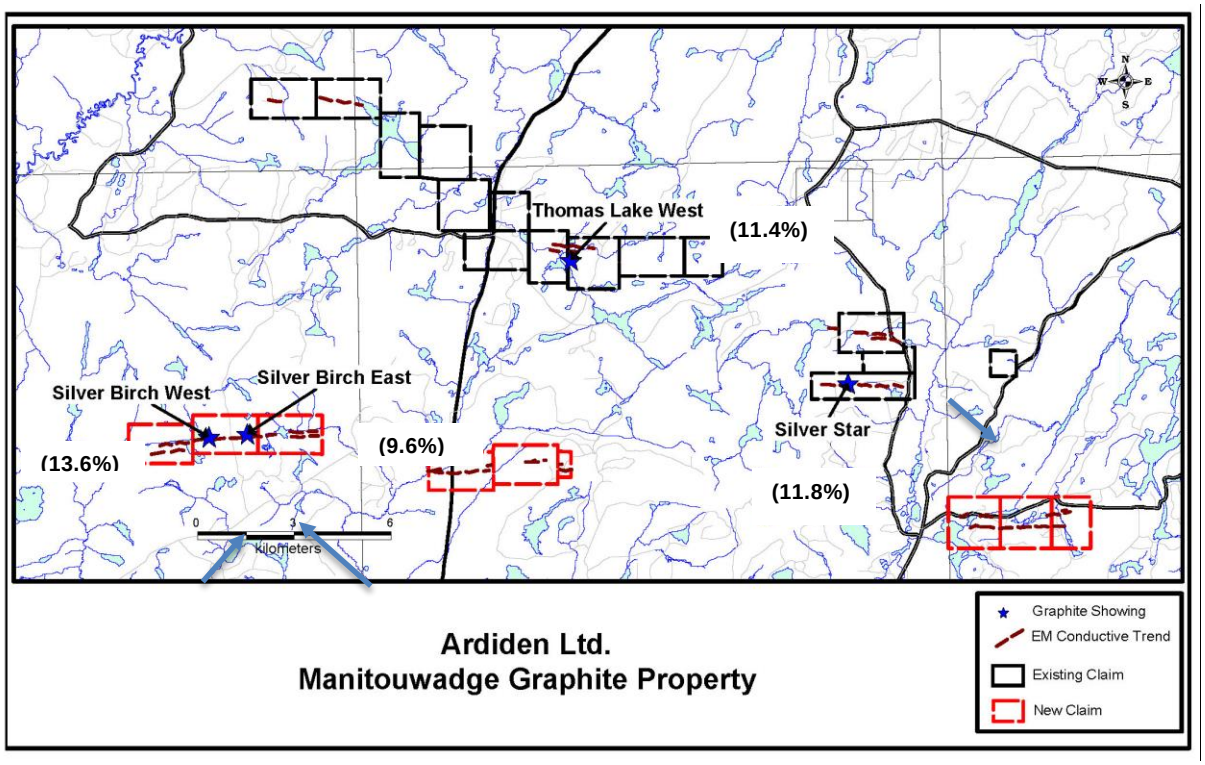

Figure 14: Maniotouwadge graphite project showing 19kms of EM anomalies (in red) with graphite prospectivity and maximum grades from surface sampling achieved at each of the Thomas Lake, Silver Star and Silver Birch graphite showings. Surface samples are not necessarily representative.

Expandable Graphite

On 5 October 2015, Ardiden announced that it had successfully produced expandable graphite from Manitouwadge graphite.

The testing was undertaken by a leading Canadian testing facility which confirmed that the graphite is amenable to conversion to high value expandable graphite (see figure 15 below).

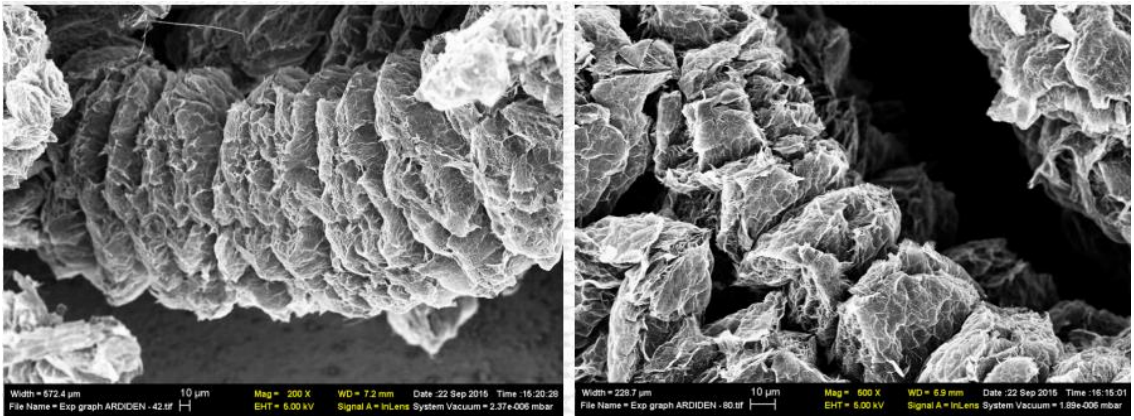

Figure 15: Expanded Manitouwadge graphite. Note accordion-like structure that originates from the expansion of just one flake of graphite.

The confirmation that Manitouwadge graphite is able to be expanded reaffirms Ardiden's strategy to date which has been to undertake metallurgical tests at multiple facilities in North America, Asia and Australia on graphite sourced from a surface bulk sample and drilling undertaken in 2015. Given the end user markets for graphite are specific to customer needs it is vital that multiple end user products can be produced efficiently. To date the met testing has confirmed the following characteristics:

1) Graphite has a large proportion of jumbo and large flake graphite (up to 80%)
2) Amenable to low cost gravity and flotation beneficiation work yielding grades of 96.8% for jumbo and large flake.
3) Testwork has also shown that the graphite can be purified to >99.95% purity by using proven caustic bake purification methods.
4) Expandable graphite can be produced
5) Graphene and Graphene Oxide can be produced at a quality equivalent to synthetic graphene

The high quality of the Manitouwadge graphite makes it amenable to multiple end uses and allows for improvement of the raw product with value add processing. The in situ flake sizes are the largest and most valuable flake size of graphite, and are expected to be in high demand by new technologies such as lithium ion batteries for use in the rapidly growing electric vehicle and home/industrial battery storage markets.

CORPORATE

During the quarter a Share Purchase Plan was offered to existing shareholders and supported by a $500,000 commitment from Sanlam. Sanlam is a leading global financial services group with $20 billion in assets under management and administration for 30,000 clients. It has some 400 employees spanning 23 international offices.

$1m was raised under the plan (and placement to Sanlam) which was heavily oversubscribed and subject to scalebacks.

As at the date of this quarterly report (31 December 2015) and following the November / December drill program, the company had $550,000 cash and no debt. Subsequent to quarter end funds of $175,000 have been received from option exercise. A Research and Development refund of approximately $100,000 is also currently anticipated to be received in February/ March 2016.

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 December 2015 Quarter and their location.

Mining Interest ID	Location	Project	Interest
4274285	Everest Lake Area	Manitouwadge	100%
4274286	Everest Lake Area	Manitouwadge	100%
4274287	Everest Lake Area	Manitouwadge	100%
4271613	Flanders Lake Area	Manitouwadge	100%
4271624	Flanders Lake Area	Manitouwadge	100%
4279125	Flanders Lake Area	Manitouwadge	100%
4279611	Flanders Lake Area	Manitouwadge	100%
4274282	Olie Lake Area	Manitouwadge	100%
4274283	Olie Lake Area	Manitouwadge	100%
4274284	Olie Lake Area	Manitouwadge	100%
4279101	Olie Lake Area	Manitouwadge	100%
4279121	Olie Lake Area	Manitouwadge	100%
4279124	Olie Lake Area	Manitouwadge	100%
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 Metalcorp / Tennant.

Competent Person Statement

The information in this report has been reviewed by Mr Paul Nielsen who is a member of the Association of Professional Geoscientists of Ontario. *Mr Nielsen 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". Mr Nielsen consents to the inclusion of the information in this report in the form and context in which it appears.

ENDS