Albany Graphite Corp. Publishes Mineral Resource Estimate for Globally Unique Igneous Graphite Deposit

written by Raj Shah | July 26, 2023

July 26, 2023 (Source) – **Zentek Ltd.** ("**Zentek**" or the "**Company**") (NASDAQ:ZTEK)(TSX-V:ZEN), an intellectual property development and commercialization company, is pleased to announce an updated Mineral Resource estimate for the Albany Graphite Project located north of Lake Superior and southwest of James Bay in Northeastern Ontario, which is owned by Zentek's wholly-owned subsidiary Albany Graphite Corp. ("**AGC**").

Overview of the Updated Mineral Resource Estimate

AGC engaged SLR Consulting (Canada) Ltd. ("**SLR**") to update the Mineral Resource estimate that was previously disclosed in the *Technical Report on The Preliminary Economic* Assessment *of the Albany Graphite Project, Northern Ontario, Canada* prepared for the Company by Roscoe Postle Associates Inc. dated July 9, 2015 (the "**2015 PEA**"). An updated Mineral Resource estimate is a requirement for AGC to list on a Canadian exchange.

Mineral Resources of graphite are contained within two vertical pipes spaced approximately 250 m apart. The East Pipe is approximately 300 m long in the NW-SE direction by 50 m wide by 600 m deep. A halo (overprint) of lower grade mineralization occurs around the East Pipe for a collective width of 150 m in the NE-SW direction. The West Pipe is approximately 300 m long in the NE-SW direction by 175 m wide by 500 m deep. Both pipes are cut by 10 m to 60 m thick barren sills located approximately

200 m to 300 m below topographic surface.

SLR estimated Mineral Resources for the Albany Graphite Project using drill hole data available as of April 30, 2023. The Mineral Resource estimate is based on a potential combined Open Pit ("**OP**") and Underground ("**UG**") mining scenario using a price per tonne of purified graphite of US$8,000. The Mineral Resource estimate is based on a potential combined open pit and underground mining scenario, split by the barren sills. SLR estimates Indicated Mineral Resources to total 22.9 million tonnes ("**Mt**") at an average grade of 4.1% graphitic carbon ("**Cg**"), containing 933,000 tonnes of Cg. In addition, Inferred Mineral Resources are estimated to total 13.1 Mt at an average grade of 2.9% Cg, containing 375,000 tonnes of Cg. Inferred Mineral Resources include 3.4 Mt OP resources at an average grade of 2.5% Cg, containing 87,000 tonnes of Cg constrained by a Whittle pit shell, and 9.7 Mt of UG resources below the pit shell at an average grade of 3.0% Cg, containing 288,000 tonnes of Cg. In order to demonstrate Reasonable Prospects of Eventual Economic Extraction ("**RPEEE**"), OP Mineral Resources were reported within an optimized Whittle pit shell at a cut-off grade of 1.22% Cg and UG Mineral Resources were reported within underground resource reporting shapes, satisfying the minimum mining size and continuity criteria, and using a cut-off grade of 1.76% Cg.

Table 1 – Mineral Resource Estimates for the Albany Graphite Project as of April 30, 2023

	Cut-off Grade (% Cg)	**Tonnage (Mt)**	**Grade (% Cg)**	**Contained Graphitic Carbon (t Cg)**
OP				
Indicated	1.22	22.9	4.07	933,000

	Cut-off Grade (% Cg)	Tonnage (Mt)	Grade (% Cg)	Contained Graphitic Carbon (t Cg)
Inferred	1.22	3.4	2.55	87,000
UG				
Indicated				
Inferred	1.76	9.7	2.98	288,000
Total Indicated	**1.22**	**22.9**	**4.07**	**933,000**
Total Inferred	**Variable**	**13.1**	**2.87**	**375,000**

Notes:

1. CIM (2014) definitions were followed for Mineral Resources.
2. Cg – graphitic carbon
3. Mineral Resources are estimated using a long-term price of US$8,000 per tonne Cg, and an exchange rate of US$0.75= C$1.00.
4. Bulk density is 2.62 t/m^3 and 2.61 t/m^3 for West Pipe domains 20 and 21, respectively, and 2.59 t/m^3 and 2.63 t/m^3 for East Pipe domains 10 and 14, respectively.
5. Open pit Mineral Resources are constrained by a pit-shell generated in Whittle software above a cut-off grade of 1.22% Cg.
6. Underground Mineral Resources are constrained within underground reporting shapes to demonstrate Reasonable Prospects for Eventual Economic Extraction and reported above a cut-off grade of 1.76% Cg.
7. Numbers may not add due to rounding.

Data Verification

The data used in this estimate is supported by industry standard Quality Assurance and Quality Control ("**QA/QC**") procedures, such as the insertion of certified standards and blanks into the sample stream and the utilization of certified independent analytical laboratories for all assays. No significant QA/QC issues were identified during the data review.

The data used to support the estimate was reviewed and verified by Katharine Masun, M.Sc., MSA, P.Geo. (Principal Geologist at SLR) and Marie-Christine Gosselin, P.Geo. (Project Geologist at SLR). SLR compared the original laboratory data certificates to the assay database and no material errors were observed.

Ms. Gosselin visited the Albany Graphite Project on March 12, 2023. The site visit included a review of drill core and verification of the bulk sample drill hole locations.

Resource Estimation Details

The Albany Graphite Project drill hole database includes 65 diamond core holes totaling 26,284 metres. In 2023, SLR incorporated additional drilling information from after the November 15, 2013, database cut-off date of the previous estimate.

Drill hole cross sections and plan views were interpreted to construct three-dimensional wireframe models of the pipes using the descriptive logs and halo mineralization using a nominal cut-off of 0.4% Cg. Halo mineralization was included as part of the wireframe representing the West Pipe. Assay intervals were composited to two metre lengths. Grades were estimated using ordinary kriging. Resources were classified as Indicated or Inferred based on drill hole spacing and the apparent continuity of mineralization. Indicated Resources are confined within those parts of the pipes located above the barren sills. All material below the sills or within the halo mineralization is classified

as Inferred and only material located within the preliminary pit shell generated in Whittle software is classified as Indicated.

Mineral Resources are based on drill results available to April 30, 2023.

Density was assigned based on lithology with no changes from the previous estimate.

A NI 43-101 technical report documenting the Mineral Resource estimate will be filed on SEDAR within 45 days.

Qualified Persons

The Mineral Resources for Albany Graphite Project disclosed in this news release have been estimated by Ms. Katharine Masun, M.Sc., MSA, P.Geo., and Ms. Marie-Christine Gosselin, P.Geo., both employees of SLR and independent of Zentek. By virtue of their education and relevant experience, Ms. Masun and Ms. Gosselin are “Qualified Persons” for the purpose of National Instrument 43-101. The Mineral Resources have been classified in accordance with CIM Definition Standards for Mineral Resources and Mineral Reserves (2014). The QPs have read and approved the contents of this press release as it pertains to the disclosed Mineral Resource estimate.

Mr. Peter Wood, P.Eng., P.Geo., Vice President of Development of AGC, a “Qualified Person” under NI 43-101, has reviewed the technical information contained in this news release.

The Qualified Persons have verified the information disclosed herein and are not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

Overview of the Albany Graphite Project

The Albany Graphite Project, an igneous-hosted fluid-derived graphite deposit located in Claim Block 4F, comprised of 521 mining claims (461 single-cell claims and 60 boundary-cell claims) is at an advanced exploration stage. The project is located west of the communities of Constance Lake First Nation ("**CLFN**") and Hearst, Ontario, within 30 km of the Trans-Canada Highway, close to established infrastructure including roads, rail, power transmission lines, and a natural gas pipeline.

Due to its unique formation, Albany Graphite exhibits high thermal stability and corrosion resistance, as per Ballard Power's testing reported in the Company's August 12,2015, news release. Phase 4 testing by Ballard Power concluded that Albany Graphite could compete with synthetic graphite in fuel cells as per the Company's news release on March 29, 2016.

The electrical resistivity of graphite is one of the most useful characteristics of graphite and the Albany Graphite exhibited excellent resistivity of 0.0034 ohm-centimeters. These results are comparable to high-purity synthetic graphite and registers at the top end of the range as reported in the Company's October 3, 2013, news release.

Project environmental baseline studies were initiated in 2019.

Management expects that material from this project could outperform natural graphite in electric vehicle battery and other applications and match the performance of higher quality synthetic graphite. It will also combine the carbon production footprint of natural graphite, which is considerably lower than that of synthetic graphite, with the higher performance envelope of synthetic graphite. Finally, it will help satisfy North American domestic content requirements under critical mineral support programs such as the Inflation Reduction Act and the Defense Production Act.

CLFN is led by elected Chief Rick Allen. In March 2021, Zentek and CLFN signed an Implementation Agreement (the "**IA**"). The IA sets out the governance, roles, responsibilities, and activities for establishing the partnership structure to advance the development of the Albany Graphite Project and the relationship with CLFN, including establishing a shared governance committee structure for identified areas of mutual interest relating to the development of the Albany Graphite Project. The IA also creates a working committee drawn from members of CLFN and the Company to engage around matters related to project development, including considerations such as environmental assessment, provincial and federal government liaison, community benefits, traditional knowledge, informed consent, economic development, jobs, human capital, and ultimately, the impact of the development of the Albany Graphite Project.

Brian Bosse, CEO of AGC stated "We are pleased to announce the updated Mineral Resource estimate after transferring the Albany Graphite Project to AGC. I would like to personally thank Constance Lake First Nation Land Management staff who joined SLR's site visit in March 2023. Based on graphite market projections, SLR has used a long-term price estimate to US$8,000 per tonne, which is a slight increase from the US$7,500 pricing in the 2015 PEA. We are excited to advance the project in conjunction with Constance Lake First Nation."

Non-Brokered Private Placement Update

Further to the Company's press release dated April 24, 2023, AGC is currently accepting subscriptions to its non-brokered private placement financing (the "**Offering**"). The Offering is comprised of subscription receipts (each, a "**Subscription Receipt**") of AGC to be issued at a price of $1.00 per Subscription Receipt. Each Subscription Receipt will automatically convert into one common share in the capital of AGC and one-half of one common share

purchase warrant upon the satisfaction or waiver of all conditions precedent to a transaction that would result in a listing on a recognized Canadian stock exchange (the "**Release Conditions**"). Each whole warrant will be exercisable for one common share at a price of $1.20 for a period of (2) years, provided that in the event that the closing price of the underlying common shares trading on a recognized Canadian stock exchange exceeds $3.00 for ten consecutive trading days, the expiry of the Warrants may be accelerated to a date that is 30 days following the issuance of a press release providing notice of such acceleration.

Funds raised pursuant to the Offering shall be held in escrow pending satisfaction of the Release Conditions, at which time such funds would be released to AGC, which intends to use the net proceeds of the Offering to (i) continue the engagement with the Constance Lake First Nation; (ii) continue environmental baseline and other studies in preparation for project analysis; and (iii) complete an updated technical report in respect of the Albany Graphite Project. Completion of the Offering is subject to the receipt of all applicable corporate and regulatory approvals including, the approval from the TSX Venture Exchange. All securities issued in connection with the Offering will be subject to applicable resale rules in accordance with applicable securities legislation.

For more information on the Offering or interest in participating, contact Brian Bosse via bbosse@albanygraphite.com.

The securities referred to in this news release have not been, nor will they be, registered under the United States Securities Act of 1933, as amended, and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons absent U.S. registration or an applicable exemption from

the U.S. registration requirements. This release does not constitute an offer for sale of, nor a solicitation for offers to buy, any securities in the United States. Any public offering of securities in the United States must be made by means of a prospectus containing detailed information about the issuer and its management, as well as financial statements.

About Zentek:

Zentek is an ISO 13485:2016 certified graphene technology company, focused on the research, development and commercialization of graphene-based novel products seeking to give the Company's commercial partners a competitive advantage by making their products better, safer, and greener.

Zentek's patented technology platform ZenGUARD™, is shown to have 99% anti-microbial activity and to significantly increase the bacterial and viral filtration efficiency of both surgical masks and HVAC (heating, ventilation, and air conditioning) systems. Zentek's ZenGUARD™ production facility is in Guelph, Ontario. Zentek's patent pending ZenARMOR™ technology platform is focused on corrosion protection applications.

For further information about Zentek:

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To find out more about Zentek Ltd., please visit our website at www.Zentek.com. A copy of this news release and all material documents in respect of the Company may be obtained on ZEN's

SEDAR profile at http://www.sedar.com/.

About AGC:

AGC owns 100% of the Albany Graphite Project which is located 30 km north of the Trans-Canada Highway.

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Forward-Looking Statements

This news release contains forward-looking statements. Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Although Zentek believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. Zentek disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.

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SOURCE: Zentek Ltd.