

**NEWS RELEASE** March 13, 2023

Trading Symbols: TSX-V: DEX

www.almadexminerals.com

# Almadex Files Technical Report for the Logan Zinc/Silver Project, Yukon Territory, Canada

VANCOUVER, B.C. Almadex Minerals Ltd. ("Almadex" or the "Company") (TSX-V: "DEX") is pleased to provide notice that a National Instrument 43-101 technical report ("NI 43-101" or "Technical Report") has been filed with Canadian securities regulators to support the updated mineral resource estimate ("MRE") with respect to the Logan Zinc/Silver project ("Logan", or the "Project") located in Yukon Territory, Canada.

## **Highlights:**

- Indicated Mineral Resource of 2.6 million tonnes grading 5.1% zinc and 23.1 g/t silver;
- Inferred Mineral Resource of 16.9 million tonnes grading 4.3% zinc and 18.2 g/t silver:
- At-surface high grade zone; amenable to open pit mining;
- Potential for resource expansion at depth and along strike.

The Logan Project is located 108 km northwest of Watson Lake in south central Yukon. The Project consists of 156 contiguous guartz mining claims located in the Watson Lake Mining District, covering over 3,200 hectares. The Project is located on the traditional territory of the Ross River Dena Council and Liard First Nation, 38 km north of the Alaska Highway.

The Logan deposit consists of fracture and vein hosted zinc-silver mineralization within a granitic intrusion. The Main Zone occurs along an 8,000m long NE-trending fault-related structure. The Main Zone is tabular, dips 70 degrees to the NW, extends for 1,100m along strike, varies from 50m to 150m in width, and has been traced to depths of 275m and remains open. The mineralization is up to 90 metres thick in relatively gentle terrain and minimal overburden, making it potentially attractive for open pit mining. Recent drill core re-analysis indicated potentially economically significant values of the critical metal indium (In), not historically assayed for, averaging 35 parts-per-million (ppm) In and up to 273 ppm In. Indium is integral to solar panel manufacturing and a key input in semiconductors and many materials needed for advanced vehicle manufacturing.

The Mineral Resource Estimate (MRE) and NSR cut-off sensitivities are presented in Table 1 and Table 2, respectively.

Table 1 - Logan Project Open Pit Constrained Mineral Resource Estimate

Classification	Zn Cutoff (%)	Tonnes	Zn (%)	Ag (g/t)	Zn (Mlb)	Ag (Moz)
Indicated	1.6	2,620,000	5.1	23.1	294	1.94
Inferred	1.6	16.930.000	4.3	18.2	1622	9.98

#### Notes:

1. Mr. Mike Dufresne, P.Geol., P.Geol of APEX Geoscience Ltd., who is deemed a qualified person as defined by NI 43-101 is responsible for the completion of the updated mineral resource estimation, with an effective date

- of January 17, 2023.
- 2. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 3. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- 4. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could potentially be upgraded to an Indicated Mineral Resource with continued exploration.
- The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.
- 6. The cut-off grade of 1.6% Zn is based on metal prices of US\$1.30/lb Zn and US\$19/oz Ag and 0.77 US\$ per C\$, with process recoveries of 95% Zn and 80% Ag.
- 7. The constraining pit optimization parameters assumed C\$3.50/t mineralized and waste material mining cost, 45° pit slopes and a process + G&A cost of C\$35/t, using a 1.5 revenue factor that equates with metal price assumptions of US\$1.95/lb Zn, US\$28.50/Oz Ag and 0.77 US\$ per C\$.
- 8. The effective date of the Mineral Resources Estimate is January 17, 2023.

Table 2 - Logan Property Open Pit Constrained Mineral Resource Estimate Sensitivity

Classification	Zn Cutoff (%)	Tonnes	Zn (%)	Ag (g/t)	Zn (Mlb)	Ag (Moz)
Indicated	0.5	2,780,000	4.8	21.5	298	1.96
	1.0	2,700,000	5.0	22.5	296	1.96
	1.6	2,620,000	5.1	23.1	294	1.94
	2.0	2,520,000	5.2	23.5	290	1.91
	3.0	2,060,000	5.8	26.1	264	1.73
	4.0	1,490,000	6.7	29.7	220	1.42
Inferred	0.5	36,640,000	2.4	10.7	2046	13.20
	1.0	25,680,000	3.2	14.1	1864	11.84
	1.6	16,930,000	4.3	18.2	1622	9.98
	2.0	13,960,000	4.9	20.3	1505	9.13
	3.0	10,020,000	5.8	23.5	1292	7.56
	4.0	6,800,000	7.0	26.3	1045	5.73

### **Mineral Resource Estimation Methodology**

Modeling was conducted in the Universal Transverse Mercator (UTM) coordinate space relative to the North American Datum (NAD) 1983, and UTM zone 9N. The mineral resource block model utilized a block size of 6 m (X) x 6 m (Y) x 6 m (Z) to honour the mineralization wireframes. The percentage of the volume of each block below the bare earth surface, below the modeled waste overburden surface and within each mineralization domain was calculated using the 3D geological models and a 3D surface model. For the open pit optimisation, block values were diluted. The MRE is reported as undiluted with an effective date of January 17, 2023.

The Logan Property drillhole database consists of 58 drill holes that intersected the interpreted mineralization wireframes. The zinc and silver assays were composited to 2-meter composites lengths and the estimation utilized 2,651 composited samples. A total of 1.2% of the total drilled meters inside the interpreted mineralization wireframes were not sampled, assumed to be waste, and assigned a nominal waste value of half the detection limit of modern assay methods (0.0005 % Zn, 0.3429 g/t Ag).

Zinc and silver estimation was completed using Ordinary Kriging. The search ellipsoid size used to estimate the Zn and Ag grades was defined by the modelled variograms. Block grade estimation employed locally varying anisotropy, which uses different rotation angles to define the principal directions of the variogram model and search ellipsoid on a per-block basis. Blocks within estimation domains are assigned rotation angles using a modelled 3D mineralization trend surface wireframe, which allows structural complexities to

be reproduced in the estimated block model. The number of variogram structures, contributions of each structure, and their ranges are set per estimation domain and do not vary within the estimation domain.

A total of 201 bulk density samples are available from the Logan Property drillhole database. APEX personnel performed exploratory data analysis of the bulk density samples available and the density was assigned for each domain in the Logan Property. The density of the deposits ranged from 2.63 g/cm3 to 2.66 g/cm3. The non-mineralized zones were assigned density based on lithological unit. The modeled overburden was assigned a density of 1.8 g/cm and the remaining country rock was assigned a density of 2.57 g/cm3.

The unconstrained resource block model was subjected to several open pit optimization scenarios to establish that the Logan Project has the potential for future economic extraction. Blocks partially outside the mineralized wireframes were diluted with a nominal waste value of 0.0005 % Zn and 0.3429 g/t Ag based on the volume of the block outside of the mineralized wireframes. The process + G&A cost of C\$NSR cutoff of \$35/t is used to determine potential mill feed and is approximately equivalent to a 1.6 % Zn cutoff grade. Mr. Dufresne considers the parameters reasonable to constrain the mineral resource estimate and establish that the Logan Project has the potential for future economic extraction. The overall strip ratio for the Logan Property Open Pit is approximately 5.3:1.

There are no other known factors or issues known by the QP that materially affect the MRE other than normal risks faced by mining projects. The Logan Project is subject to the same types of risks that large base metal projects experience at an early stage of development in Canada. The nature of the risks relating to the Project will change as the Project evolves and more information becomes available. The Company has engaged experienced management and specialized consultants to identify, manage and mitigate those risks.

#### **QAQC**

The historical zinc and lead analyses which underpin the MRE were carried out at Bondar Clegg and ALS Chemex Laboratories at North Vancouver, British Columbia. Preparation of samples for assaying is assumed to have involved standard crushing, grinding and pulverization to produce pulps for assaying via hot aqua-regia and analysis via atomic absorption.

The QP's conducted re-assaying of select mineralized intervals (approximately 5% of the drill database) and collected a suite of samples for specific gravity (density) determination to verify the historic drilling results. In total 232 verification samples were collected from representative mineralized intercepts geographically separated across the deposit (including 15% QA/QC duplicate, standard and blank samples) comprising 231 metres of half drill core from three separate holes from the 1986, 1987 and 1998 historical drill campaigns. Replicate samples were submitted for analysis to ALS Canada Ltd. ("ALS") at their Whitehorse, YT (sample preparation) and Vancouver (ICP-MS), B.C. facilities. ALS is an ISO-IEC 17025:2017 and ISO 9001:2015 accredited geoanalytical laboratory and is independent of the Almadex and the QP. Drill core samples were subject to crushing at a minimum of 70% passing 2 mm, followed by pulverizing of a 250-gram split to 85% passing 75 microns. A 0.1-gram sample pulp was then subject to multi-element ICP-MS analysis via four acid digestion to determine individual metal content (ME-MS61). Zinc and silver values greater the 1% and 100 ppm, respectively were subject to overlimit analysis via fouracid ICP-AES (ME-OG62). The QP followed industry standard procedures for the work carried out on the Logan Project, with a quality assurance/quality control ("QA/QC") program. Blank, duplicate, and standard samples were inserted into the sample sequence sent to the laboratory for analysis. The QP detected no significant QA/QC issues during review of the data. Almadex and the QP's are not aware of any drilling, sampling, recovery, or other factors that could materially affect the accuracy or reliability of the data referred to herein.

The scientific and technical information contained in this news release has been reviewed and approved by Michael Dufresne, M.Sc., P.Geol., P.Geo. (AB-BC), Kristopher J. Raffle, P.Geo. (BC) and Alfonso Rodriquez, M.Sc. P.Geo. (BC), President, Principal and Consultant, and Senior Geologist, of APEX Geoscience Ltd. of Edmonton, AB, and are independent "Qualified Persons" as defined in National

Instrument 43-101 – Standards of Disclosure for Mineral Projects. Mr. Dufresne, Mr. Raffle and Mr. Rodriguez verified the data disclosed which includes a review of the analytical and test data underlying the information and opinions contained therein.

#### About Almadex

Almadex Minerals Ltd. is an exploration company that holds a large mineral portfolio consisting of projects and NSR royalties in Canada, the U.S., and Mexico. This portfolio is the direct result of many years of prospecting and deal-making by Almadex's management team. The Company owns a number of portable diamond drill rigs, enabling it to conduct cost effective first pass exploration drilling in house.

On behalf of the Board of Directors,

"J. Duane Poliquin"

J. Duane Poliquin, Chairman Almadex Minerals Ltd.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release. This news release includes forward-looking information that is subject to risks and uncertainties. All statements within this news release, other than statements of historical fact, are to be considered forward looking. Although the Company believes the expectations expressed in such forward-looking information are based on reasonable assumptions, such as those set forth in this news release, such statements are not guarantees of future performance and known and unknown risks, uncertainties, and other factors may cause actual results or developments to differ materially from those as expressed or implied in forward-looking information. Factors that could cause actual results to differ materially from those expressed or implied in forward-looking information include those stated in the news release, and, among others, market prices, exploitation and exploration successes, risks related to international operations, continued availability of capital and financing, and general economic, market or business conditions. There can be no assurances that such statements will prove accurate and, therefore, readers are advised to rely on their own evaluation of such uncertainties. The Company does not assume any obligation to update any forward-looking statements, other than as required pursuant to applicable securities laws.

Contact Information: Almadex Minerals Ltd. Tel. 604.689.7644 Email: info@almadexminerals.com http://www.almadexminerals.com/