Argyle Resources Announces Exploration Results and Filing of Updated Technical Report for the Frenchvale Graphite Property, Nova Scotia

Calgary, Alberta--(Newsfile Corp. - March 13, 2025) - **Argyle Resources Corp. (CSE: ARGL)** (OTCQB: ARLYF) (FSE: ME0) ("Argyle" or the "Company") is pleased to announce exploration results and filing of an updated Technical Report with for the Frenchvale Graphite Property with an effective date of February 21, 2025 ("the Report"). The Report is pursuant to National Instrument 43-101 ("NI43-101") and incorporates results from induced polarization ("IP") geophysical surveying and diamond drilling conducted at the Frenchvale Graphite Property in Nova Scotia, Canada (the "Property") between September and October 2024.

The Report further details drill hole locations, sampling protocols, QA/QC procedures, analytical methods, and additional geological context. A copy of the Report is available under the Company's profile on <u>www.sedarplus.ca</u>.

"The latest exploration results confirm that the Main Zone hosts high-purity, large-flake graphite mineralization within a favorable geological setting. Says, Jeff Stevens, CEO of the Company. Our ongoing work continues to demonstrate the potential for a significant flake graphite deposit, with strong indications of high graphite liberation and coarse flake sizes-key factors for premium market applications. With a strategic multi-phase exploration program ahead, we are focused on expanding and refining our understanding of the deposit, validating historical data, and unlocking additional high-grade graphite mineralization. We are excited about the opportunities this project presents and look forward to advancing it to the next stage."

Exploration Highlights

- 12.9 kilometres of IP and resistivity completed over the previously-drilled Main Zone (Figure 1)
- 425 metres of diamond drilling completed over four drill holes:
 - two exploratory drill holes based on geophysical results
 - two QA/QC drill holes that twinned drillholes completed in 2008 and 2010
- 153 new drill core samples were submitted for graphitic carbon analysis
 - 38 of which were also submitted for mineral liberation analysis and quantitative evaluation of minerals by scanning electron microscopy ("MLA/QEMSCAN") quantifying graphite purity, flake size, and liberation characteristics
- 4 drill core samples from 2010 drilling were re-sampled and submitted for graphitic carbon analysis
 - 1 of which was also submitted for MLA/QEMSCAN
- 6 surface samples were collected and submitted for graphitic carbon analysis
 - 2 of which were also submitted for MLA/QEMSCAN
- Notable drill core intercepts include:

- 2.56% graphitic carbon over 4.15 metres in FV-24-03 from 50.05 to 54.20 metres
- 1.80% graphitic carbon over 8.82 metres in FV-24-01 from 14.23 to 23.05 metres
- 2.56% graphitic carbon over 5.94 metres in a resampled interval from 2010 drillhole FV-10-05 from 15.60 to 21.54 metres

Table 1 - 2024 Diamond Drill Hole Locations

DDH Name	Easting (m)	Northing (m)	Azimuth, TN (°)	Plunge (°)	Total Depth (m)	Туре
FV-24-01	696989	5103607	110	-45	98	Twin of FV-08-01
FV-24-02	696694	5103299	145	-45	125	Twin of FV-10-05
FV-24-03	696864	5103515	120	-45	101	Exploration
FV-24-04	697048	5103333	120	-45	101	Exploration



Figure 1 - Main Zone 2024 Drillhole Locations and IP Chargeability at 25 metres depth

To view an enhanced version of this graphic, please visit: <u>https://images.newsfilecorp.com/files/10451/244408_6ce8c10054a89a06_001full.jpg</u>

Report Observations

The Main Zone contains predominantly graphitic marble and graphitic schist host rocks with demonstrated high-purity and large flake graphite. Integration of historic and current exploration data into

a 3D digital model suggests a shallow northwestward dip for the main lithologies and mineralization at the Main Zone. Graphite grades are, on average, slightly higher in schist-hosted intervals than in marble-hosted intervals within identified higher-grade zones.

Of all 15 MLA/QEMSCAN samples from 2023 and 2024 grading over 1.0% graphitic carbon, the average proportion of graphite (by weight) in the medium or coarse size fractions is 9.2%, with the highest recorded value at 21.0%. Jumbo-sized graphite flakes have been observed in marble-hosted samples, however, their full quantification may be limited by MLA/QEMSCAN analytical constraints.

A total of 14.5% of graphite flakes in marble samples exhibit 90-99% liberation upon grinding, with an additional 9.6% considered fully liberated. Marble-hosted intervals contain a higher proportion of coarse and medium-sized graphite flakes than schist-hosted intervals, and less contamination (fewer impurities or "dirty" graphite) than schist-hosted graphite.

Report Recommendations

Exploration to date confirms the Property contains the geological conditions favorable for high-purity flake graphite mineralization. Further work is required to validate graphite occurrences, refine geophysical and structural models, and expand graphite-bearing intervals at the Main Zone. A multiphase exploration program is recommended to assess the flake graphite deposit potential, focusing on delineating additional and higher-grade flake graphite mineralization by validating documented graphite prospects and conducting check-assays on pre-2023 drill core to verify reported results.

Key activities of the first phase include detailed mapping and sampling of a documented graphitic zone on the Property coincident with 2008 VLF and 2017 TDEM anomalies, prospecting of historical graphite showings to assess its mineralization style and potential, and re-sampling of Property drill core, both at the Main Zone and areas southwest of the Main Zone.

Favorable results from the first phase will inform a second phase that will focus on refining exploration targets using geophysical surveys followed by diamond drilling to evaluate the extent and continuity of graphite mineralization. IP geophysical surveying has been shown to delineate major lithologic units and more conductive graphitic horizons within the marble units.

Quality Assurance / Quality Control ("QA/QC")

All 2024 rock and drill core samples were analyzed by Activation Laboratories Ltd. ("Actlabs") using the 4F-C-Graphitic method, which measures total graphitic carbon through high-temperature combustion. Sample preparation included drying, crushing to 80% passing 2 mm, riffle splitting, and pulverizing to 95% passing 105 µm. Certified graphite standards from CDN Resource Laboratories were inserted at a rate of 1 in 40 samples, with all four submitted standards returning values within the accepted range. Blanks were inserted at a rate of 1 in 30, all reporting graphite concentrations below the detection limit. Actlabs conducted internal QA/QC procedures, including 27 reference standards and 20 duplicate assays, with all but three duplicates falling within 10% variance, primarily affecting low-grade samples (<0.4% graphitic carbon). The rigorous QA/QC measures confirm the reliability of the reported data for exploration purposes.

In addition to standard graphitic carbon analysis, 38 drill core intervals from the 2024 program were also submitted to Actlabs to receive MLA/QEMSCAN. These techniques provide detailed graphite flake size distribution, mineral associations, and liberation characteristics. This analysis aids in assessing the potential for high-purity flake graphite mineralization at the Property. Samples are prepared for QEMSCAN analysis by Actlabs from a sample of a coarse reject material screened and crushed to 100% passing 850 μ m, then screened again to 300 μ m to prepare as polished sections. Grains in excess of 300 μ m are excluded from the analysis.

About the Property

The Frenchvale Graphite Property is located in northeastern Nova Scotia on the island of Cape Breton and is 19 kilometres west-southwest of Sydney. The Property consists of 124 mineral claims contained within six contiguous exploration licences and a single non-contiguous licence covering an area of approximately 2,024 hectares, as issued by the Nova Scotia Department of Natural Resources.

Several varieties of metallic skarns and numerous graphite occurrences at various stages of exploration and development have been identified on the Property. Exploration work since 2005 has focused on a graphite zone approximately 800 metres west of Campbell Lake, called the Main Zone, though several other documented graphite prospects exist on the Property.

About Argyle Resources Corp.

Argyle Resources Corp. is a junior mineral exploration company engaged in the business of acquiring, exploring, staking and evaluating natural resource properties in North America. The Company currently holds an option to acquire up to 100% of the Frenchvale Graphite Property located in Nova Scotia, Canada and owns 100% interest in the Pilgrim Islands, Matapedia and Lac Comporté quartzite silica projects in Quebec, Canada. Argyle is engaged in a research partnership with the National Institute of Scientific Research ("INRS"), a high-level research and training institute funded by the Quebec government to conduct exploration programs on the Company's silica projects. The Company was incorporated in 2023 and its head office is located in Calgary, Alberta, Canada.

Argyle believes the 2023 ban on the exportation of natural graphite from China underscores the importance of developing domestic sources of this critical mineral. As graphite is essential for the production of batteries and fuel cells, it is now considered a critical mineral in many jurisdictions, including the United States, Canada, and Nova Scotia. Argyle is focused on advancing its understanding of the Frenchvale Graphite Property's potential in an effort to meet this growing demand and contribute to supply chain stability and economic growth.

Qualified Person

Jesse Halle (P.Geo), a consultant to the Company and an independent Qualified Person in accordance with National Instrument 43-101 - Standards of Disclosure for Mineral Projects, has reviewed and approved the technical material contained in this news release.

For a discussion of the Company's QA/QC and data verification processes and procedures, please see its technical report entitled, NI 43-101 Technical Report Update for the Frenchvale Graphite Property, dated February 21, 2025, which is available under the Company's profile at www.sedarplus.ca.

ON BEHALF OF THE BOARD OF DIRECTORS

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Forward-Looking Statements

This news release contains forward-looking statements and other statements that are not historical facts. Forward-Looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expects" and similar expressions. All statements other than statements of historical fact, included in this news release are forward-looking statements that involve risks and uncertainties. Such

statements in this news release include, but are not limited to, the statements with respect to the Company's planned exploration program; and the initiation of work programs generally. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to vary from forward-looking statements or may affect the operations, performance, development and results of the Company's business include, among other things that mineral exploration plans may change and be re-defined based on a number of factors, many of which are outside of the Company's control. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-Looking statements contained in this news release are expressly qualified by this cautionary statement. The forward-looking statements contained in this news release are publicly any of the included forward-looking statements as expressly required by applicable law.

The Canadian Securities Exchange (CSE) has not reviewed and does not accept responsibility for the adequacy or the accuracy of the contents of this release.



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