

One of the Largest Known Lithium Deposits in US Identified at American Battery Technology Company Tonopah Flats Property - Inferred Resource Estimated through S-K 1300 Compliant Study

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Third-party audited analysis estimates inferred resource of 15.8 million tons of lithium carbonate equivalent

RENO, Feb. 28, 2023 - American Battery Technology Company (ABTC) (OTCQX: ABML), an American critical battery materials company that is commercializing both its primary minerals manufacturing and secondary minerals lithium-ion battery recycling technologies, announced results of its third-party Qualified Person (QP) audited Inferred Resource Report that details the analysis of its lithium deposit at its Tonopah Flats Lithium Project in Big Smoky Valley, Nev., which has resulted in the identification of one of the largest known lithium deposits in the United States.

One of the Largest Known Lithium Deposits in US Identified at American Battery Technology Company Tonopah Flats Property

The ABTC Tonopah Flats Lithium Project encompasses 517 unpatented lode claims covering approximately 10,340 acres, and ABTC controls 100% of the mining lode claims comprising the Tonopah Flats property and the rights to all locatable subsurface minerals without any royalties. ABTC began surface sampling of these claims in the Summer of 2021, and subsequently performed multiple subsurface drilling programs totaling 12,000 feet of exploration covering approximately 65% of its property.

In order to perform an unbiased analysis of this data, the mineral resource estimates presented in the ABTC Tonopah Flats Inferred Resource Report were performed by third-party qualified person (QP) RESPEC, LLC, and were classified by geological and quantitative confidence in accordance with the Securities and Exchange Commission (SEC) Regulation S-K 1300. Through this analysis an open-pit resource estimate was developed that would support a processing rate of at least 200,000 tons of claystone per day.

"Having identified one of the largest premier lithium deposits in the U.S. is extremely exciting," stated ABTC CEO Ryan Melsert. "However, the identification of an inferred resource in and of itself is not enough to address our critical challenges of increasing our domestic production of critical battery metals, reducing the costs of manufacturing of these battery metals, and decreasing the environmental impacts of their production."

Melsert continued, "The development of a resource needs to be paired with the development of targeted technologies for the extraction of these metals, and we are proud to have spent the past several years developing technologies specifically targeted at these Nevada-based claystone lithium resources and to have been recognized by the U.S. Department of Energy for the performance of these technologies through our selection for a competitive R&D scale grant in 2021 and for a competitive grant to construct a commercial scale claystone lithium hydroxide refinery in 2022."

Report Highlights

- The ABTC Tonopah Flats inferred resource is one of the largest known lithium deposits in the U.S. with an estimated 15.8 million tons of lithium carbonate equivalent
- The large-tonnage nature of the deposit, combined with the company's internally-developed lithium extraction and hydroxide manufacturing techniques validated and supported through numerous government awards, makes it a potentially critical source of domestically produced lithium to meet increasing demand for lithium products

- There is potential to significantly expand the resources with further drilling extending to the north and south property boundaries and at greater depths
- Leaching trials were carried out in-house by ABTC using statistically representative homogenized bulk samples, and these trials demonstrated that over 90% of lithium can be extracted from the Tonopah Flats property claystone within a few hours
- The project is ideally situated close to infrastructure and the town of Tonopah, making it attractive for future development
- Resource estimates were calculated based on a pit-constraint, conservative cutoff concentration of 300 ppm Li that support a 200,000 ton per day claystone process rate
- Click here for a 3D interactive walkthrough of ABTC's Tonopah Flats Inferred Resources: <https://vrify.com/decks/12566-tonopahflats>

Tonopah Flats Mineral Resource Estimate

Classification	Cutoff (ppm Li)	Total Resource Ktons	Avg Li ppm	Lithium Tons	Lithium Carbonate Equivalent (LCE) Tons
Inferred	300	5,289,000	561	2,970,000	15,800,000

The mineral resource estimates for the ABTC Resource Report were classified by geological and quantitative confidence in accordance with the SEC Regulation S-K 1300. The mineral resources for Tonopah Flats described and tabulated in this report are entirely classified as Inferred and were estimated to reflect potential open-pit extraction.

The lithium resources at Tonopah Flats were modeled and estimated by:

- Developing a geological model of the deposit
- Evaluating the drill-hole lithium assay data statistically
- Utilizing the geological model as the base for interpreting lithium mineral domains on a set of cross sections spaced at 500-foot intervals
- Projecting the sectional mineral-domain polygons horizontally to the drill data within each sectional window, thereby creating three-dimensional polygons
- Using the polygons to create three-dimensional wireframe solids of the mineral domains
- Coding a block model comprised of 100 x 100 x 20 (x, y, z) -foot blocks to the mineral domains using the wireframe mineral-domain solids
- Analyzing the modeled mineralization domains statistically to aid in the establishment of estimation and classification parameters
- Interpolating lithium grades by inverse-distance to the third power into the block model using the coded lithium-domain percentages to explicitly constrain the grade estimations
- Constraining the resource with a pit optimization to determine a shape and cutoff grade satisfactory to meet the requirement of reasonable prospects for eventual economic extraction

Status of Exploration, Development, and Operations

Exploration conducted by ABTC commenced in the Summer of 2021 and has included both surface sampling and drilling. ABTC collected 29 surface samples in June 2021 to confirm elevated lithium values from samples collected by a previous owner. The surface samples returned an average of 314 ppm lithium with a maximum of 882 ppm lithium. ABTC commenced drilling at the Tonopah Flats property in December of 2021. A total of 12,000 feet were drilled in 10 reverse circulation holes and 12 air core holes during two phases of drilling prior to October of 2022. Drill holes were spaced approximately 200 ft to 3,500 feet apart. All holes were drilled vertically and ranged from 400 to 885 feet in depth. Lithium mineralization was encountered in all 21 drill holes submitted for analysis.

Metallurgical Testing and Mineral Processing

The Tonopah Flats deposit is comprised of lithium-rich sedimentary claystone with negligible work index and abrasion, and readily disaggregates when suspended in water. Standard assaying of head grades was performed using a representative array of samples selected from 21 drill holes. For metallurgical leaching

trials, bulk samples from the Tonopah Flats project were prepared for lithium leach trials using roughly 700 pounds of cuttings from the 2021-2022 drill hole program. These metallurgical leaching trial samples were collected from drill hole TF-2208, where the average head-grade for lithium was found to be about 790 ppm. The sample was homogenized by cone-and-quarter methods and pulverized to 100 mesh to obtain a statistically repetitive sample. Mineral processing was carried out at the University of Nevada, Reno's Ore Dressing Laboratory. The claystone is responsive to dilute acid leaching as well as several methods of selective lithium leaching.

Leaching trials were carried out in-house by ABTC using statistically representative homogenized bulk samples, and these trials demonstrated that over 90% of lithium can be leached from the claystone within a few hours. Following leaching, treatment of the pregnant leaching solution by pH adjustment/neutralization, filtration, solution purification, concentration, conversion, and final solution polishing/crystallization, battery grade lithium hydroxide monohydrate can be realized.

To further validate and optimize these metallurgical and mineral processing techniques, ABTC summarized the results of its bench scale trials for the manufacturing of battery grade lithium hydroxide specifically from these Nevada-based claystone materials in a \$4.5M proposal to the U.S. Department of Energy (DOE), Advanced Manufacturing Office (AMO). In this application, the ABTC team and its partner, DuPont Water Solutions, described its integrated mineral processing train in detail and proposed a plan for evolving these bench scale trials to a multi-ton per day continuous integrated field pilot plant to demonstrate the performance and economics of the overall system. In January 2021, ABTC was notified that the U.S. DOE AMO had selected its proposal for funding and the project initiated in October 2021. Substantial trials, validations, and optimizations of these mineral processing unit operations have been performed to date within this government supported project.

Due to the positive results from these bench scale validations, the ABTC team applied for a second round of U.S. DOE funding in the Spring of 2022 to further evolve this project and to construct a commercial scale lithium hydroxide refinery utilizing this system design and the bench and pilot scale results from the initial program. In October 2022, ABTC with its partners, DuPont Water Solutions, University of Nevada, Reno, and Argonne National Laboratory, was notified that its proposal for its \$115M commercial scale refinery project was selected for funding. ABTC is now in the process of detailed construction design for this commercial scale lithium hydroxide refinery based on these fundamental metallurgical and mineral processing techniques.

"We are extremely pleased with the results of our Resource Report for our Tonopah Flats Lithium Project," commented Scott Jolcover, ABTC Chief Mineral Resource Officer. "Our team mobilized quickly to accomplish several initial key steps to mature this resource. There are several steps remaining to pursue as we progress the project and we are moving forward with recommended next steps to advance the project through the feasibility stage."

Next Steps

With the data generated in this report, ABTC intends to take the following steps to further advance this project.

- Perform a Preliminary Economic Assessment (PEA) to analyze the potential viability of this resource and the related commercial scale lithium hydroxide facility
- Perform additional infill and extension drilling to further expand the mineral resource to the North, South, and at depth and to advance the resource from Inferred to Measured and Indicated
- Publish an updated mineral resource report based on the additional drill data and continued metallurgical test work
- Evaluate the performance of the field pilot plant that is being constructed as part of the current U.S. DOE Advanced Manufacturing Office grant in order to further detail the economic viability of the lithium hydroxide refinery
- Perform a Pre-Feasibility Study (PFS) to quantify the impacts of developing this resource and constructing the commercial scale lithium hydroxide refinery

For more information on ABTC's Tonopah Flats Lithium Project and Resource including geology, mineralization, exploration summary, metallurgical testing, mineral processing and resource estimation methodology, refer to the full Resource Report.

Qualified Person

The mineral resource estimates presented in the ABTC Tonopah Flats Resource Report were performed by third-party QP RESPEC, LLC and were classified by geological and quantitative confidence in accordance with the Securities and Exchange Commission (SEC) Regulation S-K 1300.

Inferred Resource

Inferred mineral resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project, and may not be converted to a mineral reserve.

About American Battery Technology Company

American Battery Technology Company, which recently changed its name from [American Battery Metals Corp.](#), is uniquely positioned to supply low-cost, low-environmental impact, and domestically sourced battery metals through its three divisions: lithium-ion battery recycling, primary battery metal extraction technologies, and primary resources development.

American Battery Technology Company has built a clean technology platform that is used to provide a key source of domestically manufactured critical and strategic battery metals to help meet the near insatiable demand from the electric vehicle, electrical grid storage, and consumer electronics industries. This ESG-principled platform works to create a closed-loop circular economy for battery metals that champions ethical and environmentally sustainable sourcing of critical and strategic materials.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, are forward-looking statements. Although the American Battery Technology Company's (the "Company") management believes that such forward-looking statements are reasonable, it cannot guarantee that such expectations are, or will be, correct. These forward-looking statements involve a number of risks and uncertainties which could cause the Company's future results to differ materially from those anticipated. Potential risks and uncertainties include, among others, interpretations or misinterpretations of geologic information, unfavorable exploration results, inability to obtain permits required for future exploration, development or production, general economic conditions and conditions affecting the industries in which the Company operates, the uncertainty of regulatory requirements and approvals, fluctuating mineral and commodity prices, final investment approval and the ability to obtain necessary financing on acceptable terms or at all. Additional information regarding the factors that may cause actual results to differ materially from these forward-looking statements is available in the Company's filings with the Securities and Exchange Commission, including the Annual Report on Form 10-K for the year ended June 30, 2022. The Company assumes no obligation to update any of the information contained or referenced in this press release.

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