# Lancaster Resources Reports High Lithium Values at Its Alkali Flat Lithium Project in New Mexico, USA

Vancouver, British Columbia--(Newsfile Corp. - July 11, 2023) - Lancaster Resources Inc. (CSE: LCR) (OTC Pink: LANRF) (FSE: 6UF) ("Lancaster"), an energy transition metals company, reports results from its geochemical sampling program on its Alkali Flat Lithium Project in New Mexico (the "Property"). The samples were taken in March 2023 to assess the distribution of lithium and lithium pathfinder elements over a broad portion of the Property.

The geochemical results of lithium values in the 143 sediment samples taken ranged from 69.6 ppm Li to 149.5 ppm Li, and the Mean was 113.8 ppm Li. The results show several zones of notably high lithium concentrations in the sediments found in the northern and eastern part of the Property. These results line up with the sediment analysis reported by Arizona Lithium Ltd. from its adjacent Lordsburg Lithium Project.

"We are following up these strong results with seismic surveys to cover the anomalous area with a goal to select initial drill targets and brine sampling programs this summer," says Andrew Watson, P.Eng, Lancaster Resources' Vice President of Engineering and Operations.

The source of the lithium at Alkali Flat has not been determined as of this date, however, three potential sources of lithium have been identified in the project area:

1. Eruptive volcanic rocks associated with the Steins caldera dated at 34.4 Ma (million years before present) and the Muir caldera eruptive center near Lordsburg, New Mexico dated at 35.3 million years;

2. Alkaline intrusive rock formations and associated pegmatites in the area near Lordsburg; and

3. Geothermal groundwater system at the Lightning Dock KGRA (Known Geothermal Resource Area) located six miles south of Alkali Flat.

## The Geochemical Program

The sediment geochemical sampling program was undertaken on behalf of Lancaster by Rodney Blakestad, J.D., C.P.G.

A total of 143 sediment samples were obtained to assess the distribution of lithium and other elements in the near surface sediments of the Property. Samples were obtained using battery powered auger drills to obtain representative samples between 10 to 20 inches (25-51 cm) below surface.

Sediment samples were obtained on a grid system over the Property. Samples were collected at intervals of 1,200 feet (366 m) on lines oriented east-west. The east-west lines were spaced 2,400 feet (732 m) apart from north to south. A total of 143 samples were taken, including 14 samples from an earlier test-case sediment sample program, and 20 samples obtained for a sediment depth profile assessment.

Two sample pits were excavated with hand tools to a depth of one meter in the playa. From the sidewall of those pits, representative samples were obtained over each 10 cm interval from surface to 100 cm depth.

The maximum lithium value obtained from sediments at Alkali Flat, at 149.5 ppm Li, would be the 4th highest sample in the southern New Mexico regional sample database of 3,487 sediment samples published under the U.S. Geological Survey Hydrogeochemical and Stream Sediment Reconnaissance

program. In addition, the mean lithium value and the mean plus two times the standard deviation (M+2StDev) of the data distribution (representing the 95th percentile of the sample distribution), indicating that Alkali Flat sediments are highly anomalous compared to the regional database.

Rodney Blakestad, a Qualified Person under NI 43-101, noted, "the results from the initial geochemical sampling provides strong support that the property is an excellent target for exploration of a lithium brine deposit. The size and strength of the Lithium anomalous sediments at the Alkali Flat Lithium Project is particularly exceptional as they are among the highest values of lithium in sediment samples ever reported in New Mexico, USA and appear to be analogous to Clayton Valley while in a more geologically mature playa setting."

Lancaster aims to confirm the subsurface brine aquifers and geology through a phase 1 seismic program in late summer followed by an initial drilling program targeting seismically located aquifers. If the surface sediment geochemistry is representative of the subsurface, there could be substantial lithium brine reserves in the subsurface aquifer with a direct analogy being the brine deposits of Clayton Valley.

Clayton Valley hosts the only significant lithium mine in North America, known as the Albemarle Silver Peak in Nevada. The operations at Silver Peak, which originally were centered around the production of lithium carbonate, were purchased by Albemarle Corporation from Rockwood in 2014 for a sum of \$6.2 billion.

Lancaster Resources has an option to acquire a 100% interest in the Alkali Flat Lithium Project. Lancaster has fulfilled its option payment obligations through to December 2024.

Andrew Watson, P. Eng., a Qualified Person, as defined by the National Instrument 43-101, has reviewed and approved the scientific and technical disclosure contained in this release. He is not independent.

# About Lancaster Resources Inc.

Lancaster Resources is engaged in exploring energy transition metals to take advantage of the global shift towards decarbonization and electrification. Its Alkali Flat Lithium Project, in Lordsburg, New Mexico, USA, involves the exploration of a below-surface lithium brine target. Lancaster's goal is to produce Climate-Positive Lithium. Lancaster's strategic plan includes the utilization of direct lithium extraction (DLE) and the application of solar power to bring the carbon footprint of its prospective lithium extraction facility close to net-zero. Lancaster's endeavors align with the vision of leveraging sustainable energy sources and state-of-the-art technologies to facilitate climate-positive resource extraction. Guiding Lancaster Resources' journey is a skilled management and technical team, with collective involvement in over 15 commercial mineral discoveries, and endowed with extensive experience in the creation of lithium brine targets and the exploration and development of Lithium projects across Canada, the American West, Mexico, and South America.

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The Canadian Securities Exchange has not reviewed, approved nor disapproved the contents of this news release.

## Cautionary Statement Regarding Forward-Looking Statements

Certain statements contained in this press release constitute forward-looking information. These statements relate to future events, or Lancaster's future performance. The use of any of the words "could", "expect", "believe", "will", "projected", "estimated" and similar expressions and statements

relating to matters that are not historical facts are intended to identify forward-looking information and are based on Lancaster's current belief or assumptions as to the outcome and timing of such future events. Actual future results may differ materially. In particular, the ability of Lancaster to execute its exploration plans, retain key personnel, identify, acquire, explore, and develop high-quality mineralrich properties and integrate sustainable energy sources and innovative technologies for climatepositive resource production constitute forward-looking information. Actual results and developments may differ materially from those contemplated by forward-looking information.

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