Uranium Resources Develops Energy Metals Business and Acquires Its First Lithium Property in Nevada

CENTENNIAL, Colo., August 23, 2016 – Uranium Resources, Inc. (URI) (Nasdaq: URRE; ASX: URI), announced today that it has staked approximately 4,600 acres (1,860 hectares) of placer mining claims covering a prospective target for lithium-enriched brines in the Columbus Salt Marsh area of west-central Nevada. The target area, known as the *Nina Project*, is situated within a region of known lithium mineralization and is approximately 27 miles (43 kilometers) northwest of the Clayton Valley/Silver Peak lithium brine mine of Albemarle Corporation, the only operating lithium brine recovery operation in the United States.

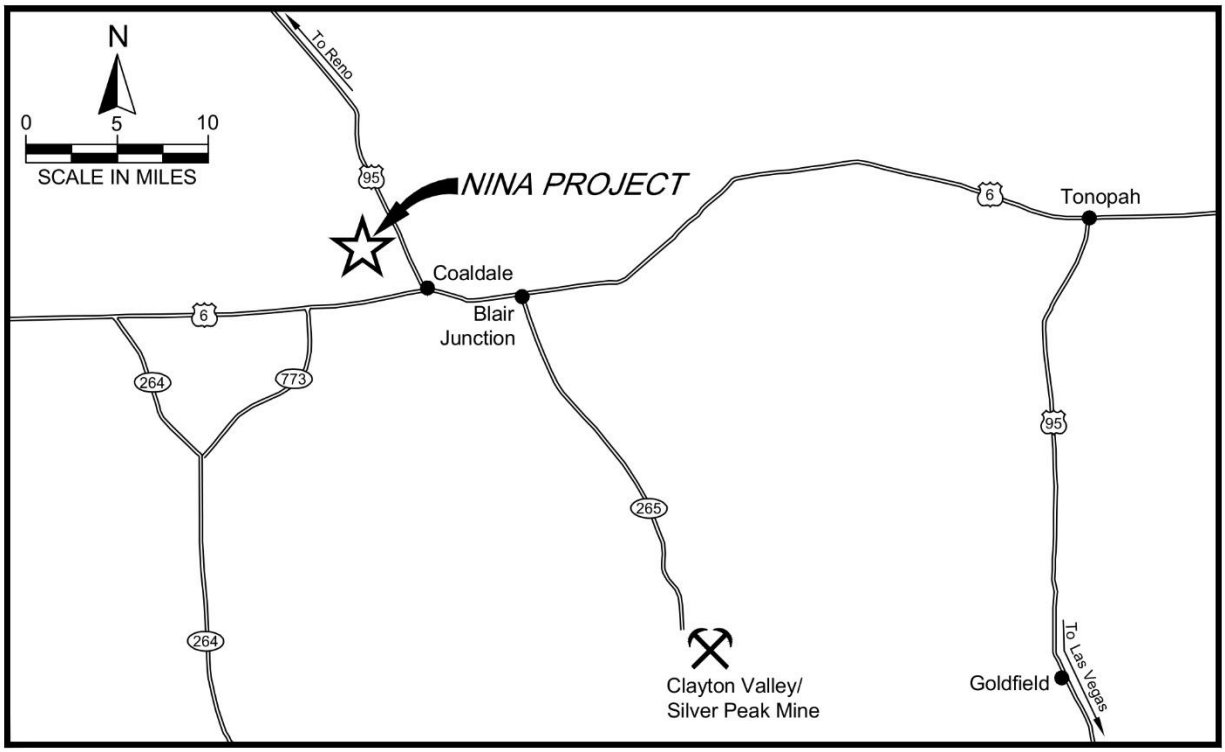
The acquisition of the Nina Project signals URI's intent to expand and broaden our corporate efforts into other energy metal commodities, synergistic with the Company's existing business operations and technical capabilities, in order to create increased shareholder value through exposure to rapidly expanding global energy demand. URI has advanced its internal program of target identification, exploration and evaluation rapidly, and is now actively acquiring lithium prospects to build a robust and prospective lithium project portfolio.

About the Nina Project:

The Nina Project is located approximately 45 miles (72 kilometers) west of Tonopah, Nevada, is bordered by US highways 6 and 95, and is located near electrical power. The target was initially identified by Company staff through literature reviews of historical geological and geochemical data from the US Geological Survey as well as other information sources, followed by field reconnaissance of the target area. Geochemical sampling returned lithium assay values from near-surface brines that ranged up to 70 and 124 parts per million (ppm) lithium, as determined by the Company's Kingsville, Texas analytical laboratory and by ALS Minerals in Reno, Nevada, USA. Sediment samples collected from the target area ranged from 98 to 176 ppm lithium as determined through geochemical analyses carried out by ALS Minerals. These assay results generally confirm several of the lithium values from samples collected by the US Geological Survey in 1976, and indicate the target area warrants additional investigation to further characterize the subsurface environment.

The Columbus Salt Marsh, site of the Nina project, is a closed drainage basin covering an area of approximately 370 square miles (960 square kilometers) and whose geology is dominated by lake and evaporite sediments that have been sources of borate, potash and salt in the past.

Near term investigations at the Nina Project will focus on the chemical characterization of the lithium bearing brine aquifers, as well as the vertical and lateral extent of lithium-bearing brines.



Location Map: Nina Project, Esmeralda County, Nevada USA.

The nearby Clayton Valley (27 miles southeast) is the site of Albemarle Corporation's Silver Peak lithium-brine mine; the only lithium brine production facility in the United States, which produces approximately 6,000 tonnes of lithium carbonate annually. The Columbus Salt Marsh is geologically similar to the Clayton Valley, and provides URI with a cornerstone project from which a complete lithium resource portfolio can be built.

About the Lithium Market

Lithium is a critical component for the manufacture of batteries for electrical storage and used in a wide range of devices ranging from cell phones to automobiles. The battery market is expected to grow 500% over the next 10 years, with lithium batteries accounting for 35% of this growth. At the same time, the transportation sub-market alone is expected to experience a 23% compounded annual growth rate during this same period.

With large battery plants such as Tesla's "Gigafactory" near Reno, Nevada and Faraday Motor Works' proposed facility near Las Vegas, Nevada – URI's Nina Project is at the epicenter of lithium brine development, production and consumption in the United States.

Lithium enriched brines are proven to be less expensive to explore for, develop and operate than other sources of lithium, such as lithium rich pegmatites and hectorite clays. This advantage of brines is coupled with a small environmental footprint and minimal carbon emissions, which makes ISR mining of brines an attractive method for producing lithium.

For more on the Lithium Market please go to a new page on the Company's website at www.uraniumresources.com.

Taking advantage of URI's Expertise

With nearly forty years of corporate experience in the development, operation and restoration of ISR uranium recovery operations, URI is uniquely qualified to expand its business ventures into the lithium brine business. URI is positioned to take advantage of its extensive expertise in:

- Design, construction, and operation of well fields;
- The extraction and recovery (hydrometallurgy) of metals from groundwater;
- Exploration of mineral properties; and
- Permitting of new projects on privately-owned properties and lands administered by the US Bureau of Land Management and the US Forest Service.

The URI team has successfully explored for a wide range of mineral commodities, from industrial and agricultural minerals, precious metals, uranium and, now, lithium, in the United States and throughout the world. Using a disciplined approach, URI has centered its geological focus to locales, like the Columbus Salt Marsh, that fit a preferred geologic criteria and have the potential to host economic resources of lithium. Furthermore, the Company's decades of wellfield design, management, and hydrometallurgical operations experience is directly transferrable to lithium brine extraction and processing. In addition, the Company's existing facilities also present value in a diversification into lithium, as demonstrated in the use of the existing in-house analytical laboratory at the Kingsville Dome Mine to provide rapid analysis of brine screening samples collected as part of ongoing exploration and evaluation activities.

Christopher M. Jones, President and Chief Executive Officer, said, "Expanding our business into lithium brine exploration and development is a logical next step for URI and capitalizes on our wide range of experience. Diversifying our mineral portfolio while maintaining our uranium business portfolio in readiness for the predicted price rise allows investors increased exposure to the energy industry. We are excited about this new chapter for URI."

This press release shall not constitute an offer to sell or the solicitation of an offer to buy these securities, nor shall there be any sale of these securities in any jurisdiction in which such an offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction.

About Uranium Resources (URI)

URI is focused on developing energy-related metals. In addition to the Nina Project, URI remains focused on advancing the Temrezli in-situ recovery (ISR) uranium project in Central Turkey. URI controls extensive exploration properties under nine exploration and operating licenses covering approximately 32,000 acres (over 13,000 ha) with numerous exploration targets, including the potential satellite Sefaatli Project, which is 30 miles (48 km) southwest of the Temrezli Project. In Texas, the Company has two licensed and currently idled processing facilities and approximately 11,000 acres (4,400 ha) of prospective ISR uranium projects. In New Mexico, the Company controls mineral rights encompassing approximately 190,000 acres (76,900 ha) in the prolific Grants Mineral Belt, which is one of the largest concentrations of sandstone-hosted uranium deposits in the world. Incorporated in 1977, URI also owns an extensive uranium information database of historic drill hole logs, assay certificates, maps and technical reports for the Western United States.

Cautionary Statement

This news release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are subject to risks, uncertainties and assumptions and are identified by words such as "expects," "estimates," "projects," "anticipates," "believes," "could," and other similar words. All statements addressing events or developments that the Company expects or anticipates will occur in the future, including but not limited to statements relating to mineralization and other developments at the Company's lithium and uranium projects, synergies between the Company's uranium and lithium businesses, and future prices and demand for lithium and uranium are forward-looking statements. Because they are forward-looking, they should be evaluated in light of important risk factors and uncertainties. These risk factors and uncertainties include, but are not limited to, (a) the Company's ability to raise additional capital in the future; (b) spot price and long-term contract price of uranium and lithium; (c) risks associated with our foreign operations; (d) risks associated with the Company expanding its business into lithium; (e) competition from more experienced or better capitalized companies (f) operating conditions at the Company's projects; (g) government and tribal regulation of the uranium industry and the nuclear power industry; (h) world-wide lithium and uranium supply and demand; (i) maintaining sufficient financial assurance in the form of sufficiently collateralized surety instruments; (j) unanticipated geological, processing, regulatory and legal or other problems the Company may encounter, including in Turkey and in expanding into the lithium business; (k) the ability of the Company to enter into and successfully close acquisitions or other material transactions, including the transaction with Laramide, and other factors which are more fully described in the Company's Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and other filings with the Securities and Exchange Commission. Should one or more of these risks or uncertainties materialize, or should any of the Company's underlying assumptions prove incorrect, actual results may vary materially from those currently anticipated. In addition, undue reliance should not be placed on the Company's forward-looking statements. Except as required by law, the Company disclaims any obligation to update or publicly announce any revisions to any of the forward-looking statements contained in this news release.

Competent Person's Statement

Technical information in this press release is based on data reviewed by Dean T. Wilton, who is Chief Geologist and Vice President of Uranium Resources, Inc. Mr. Wilton is a "Qualified Person" as defined by Canadian National Instrument 43-101, and a "Competent Person" as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). He is a Certified Professional Geologist (CPG-7659), as designated by the American Institute of Professional Geologists, and is a Member of the Australian Institute of Geoscientists (MAIG #6384). Mr. Wilton has appropriate experience that is relevant to the evaluation of the style of mineral deposits relating to this document. Mr. Wilton consents to the inclusion in this release of the matters based on their information in the form and context in which they appear.

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