

Uranium Resources Acquires Second Lithium Brine Project, Expanding Its Exploration Portfolio into Utah

CENTENNIAL, Colo., September 21, 2016 – Uranium Resources, Inc. (URI) (Nasdaq: URRE; ASX: URI), announced today that it has entered into an agreement to acquire certain placer mining claims comprising the Sal Rica lithium brine project from Mesa Exploration Corporation (Mesa Exploration) (TSX-V: MSA; OTCPK: MSAJF). The project is comprised of approximately 9,800 acres (3,960 hectares) of placer mining claims covering a highly prospective target for lithium-enriched brines in the Pilot Valley region of northwestern Utah. The target area is situated within a region of known brine-hosted lithium mineralization and is approximately 25 miles (40 kilometers) north of the town of Wendover, Utah in Box Elder County.

Under the terms of the agreement between URI and Mesa Exploration, URI will acquire an undivided 100 percent interest in the Sal Rica project, subject to a 2 percent net smelter return royalty (NSR), for the following consideration:

- \$50,000 cash paid to Mesa at closing;
- 100,000 URI restricted shares at closing, with a registration statement to be filed with the SEC within 28 days of issue;
- And 100,000 restricted shares at the first anniversary date of closing, with a registration statement to be filed with the SEC within 28 days of issue;
- Closing is expected on or before October 21, 2016, subject to customary closing conditions.

Results from a shallow drilling program carried out by Quintana Petroleum in 1966 on the Sal Rica Project demonstrated the widespread presence of significant levels of lithium in brines associated with near surface aquifers. Geophysical studies by the University of Utah between 1957 and 1961 indicate that in the project area basin-fill sediments, which are potential host rocks for lithium enriched brines, have a depth range of up to 5,300 feet (1,615 meters). With lithium assay values ranging from 22 to 81 parts per million (ppm), as sampled by Quintana Petroleum over 13 drill holes, the data clearly demonstrates the high technical merit of the Sal Rica target area. Confirmation brine samples recently collected by Mesa Exploration personnel returned lithium grades averaging 66 ppm lithium, with values as high as 80 ppm, consistent with the results Quintana obtained from their previous drilling. Initial sampling of sediments in the project area by URI personnel also yielded lithium values ranging from 82 ppm to 213 ppm Li. All of the samples collected from the programs of Mesa Exploration and Uranium Resources were analyzed by ALS Minerals, Reno, Nevada USA.

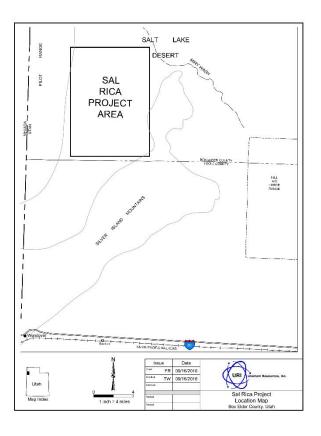
The acquisition of the Sal Rica Project along with the recently acquired Nina claims in Nevada enhances URI's intent to expand and broaden its corporate efforts to develop energy metal commodities, complimentary to the Company's existing business operations and extensive technical expertise, in order to create increased shareholder value through exposure to rapidly expanding global energy demand. URI has rapidly advanced its internal program of lithium brine target identification, exploration and evaluation, and is now actively acquiring additional lithium prospects to build a robust and prospective lithium project portfolio.

About the Sal Rica Project:

The Sal Rica Project is located approximately 25 miles (40 kilometers) north of Wendover, Utah and 100 miles (160 kilometers) west-northwest of Salt Lake City. URI staff initially identified the Sal Rica Project target area through literature reviews of historical geological and geochemical data from the US Geological Survey as well as other public and private information sources, followed by field reconnaissance of the target area. As such, the Sal Rica Project area fulfills many of the technical criteria of the Company's geological model for lithium-enriched brine deposits. The Pilot Valley, site of the Sal Rica project, is a closed drainage basin covering an area of approximately 130 square miles (337 square kilometers) and whose geology is dominated by lake and evaporite sediments that have been sources of potash and salt. In 1966 Quintana Petroleum carried out a shallow auger drilling program to evaluate the potential for shallow potash-enriched brines in the target area. During the course of their drilling program

all of the brine samples collected from the drill holes were analyzed for a range of elements, including lithium. An analysis of the geochemical results from this "historical" drilling program indicated the wide-spread presence of lithium-enriched brines, ranging from 22 to 81 parts per million lithium in 13 drill holes. Recent "offset sampling" of the historic Quintana drill holes by Mesa Exploration confirmed the range of Quintana's assay results. Mesa Exploration's samples were analyzed by ALS Minerals at their analytic facility located in Reno, Nevada.

Sediment samples collected by URI personnel from the target area ranged from 82 to 213 ppm lithium as determined through geochemical analyses carried out by ALS Minerals. These recently completed assay results also confirm the range and magnitude of results obtained by the US Geological Survey, and Quintana, indicating the high quality and technical merits of the Sal Rica project. These results warrant future investigation to further characterize the



potential for lithium-enriched brines in the subsurface environment. Near term exploration by URI at the Sal Rica 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. The Sal Rica project is geologically similar to Nevada's Clayton Valley, the site of Albemarle Corporation's Silver Peak lithium-brine mine; the only lithium brine production facility in the United States. This acquisition provides URI with a second cornerstone project, with its previously announced Nina Project in Nevada, 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, according to Bloomberg.

With large battery plants such as Tesla's "Gigafactory" near Reno, Nevada and Faraday Motor Works' proposed facility near Las Vegas, Nevada – URI's Sal Rica Project is well placed within the evolving lithium brine production and consumption industry 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 our Company's website located at www.uraniumresources.com.

Taking advantage of URI's Expertise

With nearly forty years of corporate experience in the exploration, 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 those found in Utah and Nevada, 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 "Continuing our expansion into the lithium brine exploration business strengthens our portfolio of high-value projects. Diversifying our mineral project pipeline while maintaining our uranium business portfolio in readiness for the predicted price rise allows investors increased exposure to the energy industry. We remain optimistic about this new chapter in our development of 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 both the Sal Rica and the previously announced 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 the future financing of the Company, the Company's expected burn rate, and developments at the Company's projects 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 lithium and uranium; (c) risks associated with our foreign operations, (d) operating conditions at the Company's projects; (e) government and tribal regulation of the uranium industry, the lithium industry, and the power industry; (f) world-wide uranium and lithium supply and demand, including the supply and demand for lithium based batteries; (g) maintaining sufficient financial assurance in the form of sufficiently collateralized surety instruments; (h) unanticipated geological, processing, regulatory and legal or other problems the Company may encounter, including in Utah and Turkey; (i) the ability of the Company to enter into and successfully close acquisitions or other material transactions, including the proposed transactions with Laramide; (j) the ability of the company to successfully close the transaction with Mesa; (k) 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.

Uranium Resources Contact:

Christopher M. Jones, President and CEO 303.531.0472

info@uraniumresources.com www.uraniumresources.com Jeff Vigil, CFO and VP Finance 303.531.0473