

DENVER, Oct. 02, 2017 (GLOBE NEWSWIRE) -- [Pure Energy Minerals Ltd.](#) (TSX VENTURE:PE) (OTCQB:PEMIF) (the "Company" or "Pure Energy") is pleased to announce positive initial results from the geophysical exploration program at its Terra Cotta Project (TCP or "the Project") located on the Pocitos Salar in Salta Province, Argentina. Preliminary reviews of the geophysical data show extensive zones of high electrical conductivity that may indicate the presence of correspondingly high-density brine. The geophysical survey delineates a central basin that is 18km by 9km oriented along a northwest-southeast axis. The technical team interprets the basin to be filled with clastic sediments and evaporites that appear to be saturated over considerable thicknesses. Results from the geophysical survey combined with data collected during a surface-sampling program, which is currently underway, will be used to select targets for an upcoming drilling program.

Vertical Electrical Sounding survey on the Pocitos Salar

VES Data, Line 4, Looking North – Sept 2017

The geophysical exploration program consisted of a Vertical Electrical Sounding (VES) survey that included 63 points at nominal 1-kilometer spacing along five transects shown in the figure to the right. The transects span Pure Energy's 13,000 hectare mining concession on the Pocitos Salar. Conhidro S.R.L., a hydrogeological consultancy based in the city of Salta, Argentina, performed the work under contract to Pure Energy.

A photo accompanying this announcement is available at <http://www.globenewswire.com/NewsRoom/AttachmentNg/ef326ebc-a00a-4acb-a468-02bfb9b7882>

The VES method is widely used to identify zones of low electrical resistivity (high electrical conductivity) in the subsurface. Zones of relatively high electrical conductivity are often portions of an aquifer with correspondingly high brine concentrations.

Conhidro's team of geophysicists and hydrogeologists constructed five east-west cross-sections and one north-south cross-section using the data collected during the geophysical survey. Each of the cross-sections showed zones of high electrical conductivity located in the center of the salar at depths ranging from the surface to over 400 meters (1,300 feet) below ground surface. The high-conductivity zones are interpreted as brine-saturated, evaporite-related clastic facies. Thin zones of higher electrical resistivity (lower electrical conductivity) near the surface are interpreted to be alluvium or other sediments that are either dry or bear fresh-water. Deeper zones of higher electrical resistivity are likely related to bedrock or halite units. The zones of high electrical conductivity extend beneath the shallow alluvial fans in the western portions of the TCP properties. The cross-section from VES Line 4 shown below illustrates the interpreted results from the geophysical survey. The highly conductive material shows up as warm red and orange colors, which are interpreted in this section to extend to over 400m below surface. Interpretations of basin stratigraphy and margins are shown in blue.

A photo accompanying this announcement is available at <http://www.globenewswire.com/NewsRoom/AttachmentNg/ca80f53d-671f-43b3-baa5-1cec7cc028f1>

Walter Weinig, Pure Energy's Vice President of Projects and Permitting, commented, *"Results from the geophysical program at the Terra Cotta Project are very encouraging. The data indicate the presence of potential lithium-bearing brine over a very large basin from near surface to depths greater than we had initially expected. We look forward to the results of the shallow brine-sampling program and the selection of drill targets. We are preparing the necessary permitting documents and plan to be drilling in the fourth quarter of this year."*

Pure Energy's Terra Cotta Project is located in the heart of Argentina's lithium-rich Puna Region. Significant proven deposits of lithium in brine occur approximately 32 km (20 miles) north at Rincon Salar and approximately 90 km (56 miles) south at Salar del Hombre Muerto. The Pocitos Salar is directly accessible by Salta Provincial Highway 17 and enjoys excellent infrastructure, including a gas pipeline and rail line on the eastern edge of the salar and a high voltage power line only 30 km (18 miles) to the north.

Quality Assurance

Walter Weinig, Professional Geologist and SME Registered Member (SME Registered Member # 4168729), is a qualified person as defined by NI 43-101 and supervised the preparation of the scientific and technical information that forms the basis for this news release. Mr. Weinig is not independent of the Company as he is an officer.

About Pure Energy Minerals Limited

Pure Energy Minerals is a lithium resource developer that is driven to become a low-cost supplier for the growing lithium battery

industry. The Company is developing the Clayton Valley (CV) Project in Clayton Valley, Nevada. The Company is also exploring a major new lithium brine project in the Lithium Triangle of South America, the Terra Cotta Project (“TCP”). The TCP is located on Pocitos Salar in Salta, Argentina, where it enjoys some of the best infrastructure and access of any lithium brine exploration project in Argentina.

Pure Energy has developed core strengths in innovative development and processing technologies for lithium brines and lithium mineral deposits. Key attributes and activities include:

- A large, strategic land position with excellent infrastructure in a first-class mining jurisdiction: approximately 9,900 hectares (24,500 acres) in Clayton Valley, Esmeralda County, Nevada, located a 3-hour drive from the Gigafactory;
- An inferred mineral resource of approximately 247,000 tonnes of lithium hydroxide (218,000 tonnes of LCE) at the Clayton Valley Project with an average grade of 123 mg/L lithium;
- The only lithium brine resource in North America to yield a positive Preliminary Economic Assessment including after-tax NPV (8% discount) of US \$264 million and an IRR of 21%;
- Advanced metallurgical testwork demonstrating the improved efficacy of a new, environmentally responsible, lithium processing technology that produces low-cost battery grade lithium hydroxide;
- An early stage exploration program on the 13,000-hectare (32,000 acre) Terra Cotta Project (TCP), located on Pocitos Salar in Salta Province; and
- An active business development program, applying Company expertise to the evaluation of new lithium targets around the world.

On behalf of the Board of Directors,

“Patrick Highsmith”
Chief Executive Officer

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Forward-Looking Information

The information in this news release contains forward looking statements that are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in our forward looking statements. Factors that could cause such differences include: changes in world commodity markets, equity markets, costs and supply of materials relevant to the mining industry, change in government and changes to regulations affecting the mining industry. Forward-looking statements in this release may include statements regarding planned test or exploration work, future exploration programs, operation plans, geological or geophysical interpretations, and mineral tenure issues. Although we believe the expectations reflected in our forward looking statements are reasonable, results may vary, and we cannot guarantee future results, levels of activity, performance or achievements.

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