Pure Energy Minerals Announces Positive New Results From Geophysical Exploration at Its Clayton Valley Lithium Project

31.10.2017 | GlobeNewswire

DENVER, Oct. 31, 2017 (GLOBE NEWSWIRE) -- Pure Energy Minerals Ltd. (TSX-V:PE) (OTCQB:PEMIF) (the “Company” or “Pure Energy”) is pleased to announce results from the latest phase of geophysical exploration at its Clayton Valley Project (“CV Project” or “the Project”) located in Esmeralda County, Nevada. Preliminary reviews of the geophysical data show zones of low electrical resistivity from near the surface to depths up to 1,000 meters that may indicate the presence of lithium bearing brine in new target areas. Results from the new geophysical survey combined with existing geophysical, geochemical, and geological data will be used to select targets for an upcoming drilling program.

Figure 1 - CV Project and HSAMT Survey Locations

Figure 2 - Depth Sections of Electrical Resistivity in the South Valley of the CV Project

Figure 3 - Depth Sections of Electrical Resistivity in the North Valley of the CV Project

The geophysical exploration program at the CV Project consisted of a Hybrid Source Audio-Magnetotellurics (HSAMT) survey that covered portions of the South Valley, including part of the Company’s inferred lithium brine resource, and the North Valley, which has seen very limited exploration. The objectives of the HSAMT survey were to: define the extent of conductors that may represent lithium-bearing brine units; map the continuity, thickness, dip, and extent of potential brine-hosting units; and identify drill targets or additional data needed prior to drilling. HSAMT data were acquired at 85 stations located along five transects illustrated in Figure 1. Hasbrouck Geophysics, a firm with extensive experience in Clayton Valley and other southwestern US evaporite basins, performed the work under contract to Pure Energy.

Figure 1 accompanying this announcement is available at
http://www.globenewswire.com/NewsRoom/AttachmentNg/a645bbad-d7ab-43ab-8e6d-4fad1d639d66

The HSAMT method is a relatively new adaptation of Controlled Source Audio-Magnetotellurics (CSAMT), which is commonly used in the mineral exploration industry. It determines the electrical resistivity distribution underground by measuring time-dependent variations of the earth’s natural electrical and magnetic fields, as well as the electrical and magnetic fields resulting from high frequency induced waves. The resistivity information can be used to evaluate subsurface geologic and hydrogeologic conditions and geologic structure. The Company previously conducted limited HSAMT surveys over the existing inferred lithium brine resource in order to calibrate the technology for this survey over the newly expanded land position.

One emphasis of the HSAMT survey was to link areas of known lithium brine with untested areas. The surveys in the South Valley area of the Project tied in brine sampling and well logging results from CV-3, CV-7, and CV-8 as well as earlier brine sampling data from CV-1 and CV-3. Some of the interpreted results from the three HSAMT lines in the South Valley are shown in Figure 2. Zones of relatively low electrical resistivity (high electrical conductivity) exist along each of lines D, G, and K (shown in warm colors). In some cases, these zones can be correlated with known lithium brine in exploration wells kilometers away,

generating new targets to the west, south, and north. Some anomalous zones of low electrical resistivity extending below the bottoms of wells CV-4, CV-5, and CV-6 exhibit similar electrical resistivities to those associated with the high quality lithium brine near the bottom of well CV-8.

Figure 2 accompanying this announcement is available at
http://www.globenewswire.com/NewsRoom/AttachmentNg/2d340855-da61-4f1f-939e-7a40d08e44ea

Results from the HSAMT survey in the North Valley are summarized in Figure 3 below. Line H trends past the location of exploration well LX-1, where a lithium-bearing sand/silt/gravel aquifer system was identified at depths up to 370 meters during drilling and sampling by Lithium X Energy Corp. Zones of low electrical resistivity (warm colors) can be seen extending southeast, past LX-1, and to the northwest into areas that have not previously been drilled or sampled. Potential geophysical targets where the characteristics are similar to the conditions at LX-1 extend over an area larger than 4km by 2km.

Figure 3 accompanying this announcement is available at
http://www.globenewswire.com/NewsRoom/AttachmentNg/66416541-778f-4e68-a719-1fc404349a8b

Walter Weinig, Pure Energy’s Vice President of Projects and Permitting, commented *“Results from this phase of geophysical work highlight some strong targets for further exploration. The low electrical resistivities at depth, to the west of our current resource, and in the previously unexplored North Valley illustrate the potential for discovery of additional lithium-rich brines in Clayton Valley. We look forward to launching the next phase of drilling during the Winter, in parallel with the engineering work on the Clayton Valley pilot plant.”*

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 an estimated after-tax NPV (8% discount) of US $264 million and an estimated 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

CONTACT:

Pure Energy Minerals Ltd. (www.pureenergyminerals.com)
Email: info@pureenergyminerals.com
Telephone – 604 608 6611, ext 5

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, the location of future geophysical targets, operational plans, geological or geophysical interpretations, and estimated after-tax NPV and IRR in respect of the CV Project in accordance with the Preliminary Economic Assessment, 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.

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.