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PURE ENERGY MINERALS COMMENCES DRILLING NEW LITHIUM BRINE EXPLORATION BOREHOLE AT CLAYTON VALLEY SOUTH PROJECT, NEVADA

VANCOUVER, BC–(17 Nov., 2016) – Pure Energy Minerals Limited (TSX VENTURE: PE) (FRANKFURT: A111EG) (OTCQB: PEMIF) (the “Company” or “Pure Energy”) is pleased to announce that it has commenced drilling its newest exploration borehole, CV-7, on the Clayton Valley South Project (“CVS Project”). Pure Energy has all necessary permits and government permissions in hand to commence work, and the Company’s drilling contractor has already completed collaring of the borehole. All ancillary works are in place to immediately commence rotary coring of the basin-fill sediments. CV-7 is located approximately 1.75 km (1.1 miles) southwest of the recently drilled CV-3 well.

The technical team selected the drill site based on a detailed review of various technical data in three dimensions, including previously conducted gravity and seismic reflection geophysical surveys as well as new subsurface data from the CV-3 well. Based on recent successful drilling and aquifer testing at CV-3, the Company expects this borehole to target depths of approximately 450 – 610m (1,500-2,000 ft) below ground level. Successful drilling of this hole should yield the deepest continuous core samples yet obtained from the CVS Project. Once completed to target depth, the Company expects to collect new brine samples for lithium analysis and integrate that data into its existing inferred lithium brine resource.

Patrick Highsmith, Pure Energy Minerals CEO commented, *“The best way to grow a lithium brine resource is to identify quality targets and keep drilling. We are excited to see the results of CV-7 as we are targeting high quality geophysical and geological targets just south of our best drill hole to date, CV-3. We also expect to collar CV-8 in the very near future as we wind down the phase 3 drill program. The technical team has worked very closely on these drill holes and we look forward to the results.”*

Patrick Highsmith, Certified Professional Geologist (AIPG CPG # 11702), is a qualified person as defined by NI 43-101, and has supervised the preparation of the scientific and technical information that forms the basis for this news release. Mr. Highsmith is not independent of the Company as he is an officer and director.

About Pure Energy Minerals Ltd.

Pure Energy is a lithium-brine resource developer that is driven to become the lowest-cost lithium supplier for the burgeoning North American lithium battery industry. Pure Energy is currently focused on the development of our prospective CVS Lithium Brine Project, which has the following key attributes:

- A large land position with excellent existing infrastructure in a first-class mining jurisdiction: Approximately 9,544 acres in three main claim groups in the southern half of Clayton Valley, Esmeralda County, Nevada;
- Adjacent to the only producing lithium operation in the United States (Albemarle's Silver Peak lithium brine mine);
- An inferred mineral resource of 816,000 metric tonnes of Lithium Carbonate Equivalent (LCE), reported in accordance with NI 43-101;
- Metallurgical and process studies underway to better understand the feasibility and economics of using modern environmentally-responsible processing technology to convert the CVS brines into high purity lithium products for new energy storage uses.

On behalf of the Board of Directors,

"Patrick Highsmith"
Chief Executive Officer

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Forward Looking Statements: 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 mineral processing, adaptation of test work to larger scale and/or future operational scales, estimates of reduced future capital and operating expenses, delivery of a preliminary economic assessment, future exploration programs, operation plans, geological 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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