

**FORM 51-102F3  
MATERIAL CHANGE REPORT**

**Item 1            Name and Address of Company**

Pan American Energy Corp. (the “Company”)  
100 - 521 3rd Avenue SW  
Calgary, Alberta  
Canada T2P 3T3

**Item 2            Date of Material Change**

August 9, 2023.

**Item 3            News Release**

The Company disseminated a news release announcing the material change described herein through the news dissemination services of Globe Newswire on August 9, 2023, and a copy was subsequently filed on SEDAR.

**Item 4            Summary of Material Change**

The Company announced assay results from its surface sampling program on the Big Mack Lithium Project. The results from the sampling program have provided valuable geochemical insight into the high-grade lithium mineralization observed at the Big Mack Pegmatite and Eleven Zone, as well as confirmed that high-grade lithium exists on the surface at the 6059 Pegmatite. The sampling program also identified other LCT pegmatites within the project area which are prospective for lithium, tantalum, and tin.

**Item 5            Full Description of Material Change**

**5.1                Full Description of Material Change**

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The program was carried out by Axiom Exploration Group Ltd (“Axiom”) from May 18th, 2023 to June 7th, 2023, and consisted of sampling historically mapped surface exposed pegmatite occurrences across the Big Mack Lithium Project, as well as both known showings and other outcropping pegmatites along strike of the Big Mack and Sprinkler Zones. Channel sampling was used as a prospecting tool to obtain samples over pegmatites which were too flat and, therefore, difficult to acquire representative samples with a rock hammer/sledge. The program was designed to further refine drill targets and to test numerous surface mapped pegmatite occurrences that have not been historically analyzed for lithium.

**Highlights of the 2023 Prospecting Program**

- A total of 342 grab/channel samples were collected. Following analysis (described below under the heading “Sampling, analytical methods and QA/QC protocols”), 98 of the samples collected were shown to be above determined background threshold lithium values in the pegmatites and host rocks.
- Samples graded up to 3.21 % Li<sub>2</sub>O, with 25 samples reporting lithium assays above 1.00% Li<sub>2</sub>O from the Eleven, Big Mack, and 6059 zones. All three of these pegmatites have visible petalite on surface.

- Assays appear to show a geochemical trend (>1 km) continuing along strike between the Big Mack and Sprinkler/6059 Pegmatites, indicated by showings of anomalous lithium and other rare earth indicator elements.
- Channel sampling results returned 1.06 % Li<sub>2</sub>O over 19.30 m across the Eleven Zone, and 1.72 % Li<sub>2</sub>O over 6.30 m at the 6059 Pegmatite.
- Assays showed anomalous tantalum, tin, and rubidium, associated with the complex-type petalite bearing LCT pegmatites, including assays up to 150 ppm tantalum and 4200 ppm tin.

The program was successful in further evidencing the extent of the high-grade lithium mineralization on the surface at the Big Mack, Eleven Zone, and 6059 Zone pegmatites, as well as identifying anomalous values in nearby previously unsampled pegmatites. Samples graded up to 3.21% Li<sub>2</sub>O, with 25 samples reporting lithium assays above 1.00 % Li<sub>2</sub>O from the Eleven, Big Mack, and 6059 zones. All three of these pegmatites have visible petalite on surface. A channel sample over the Eleven Zone graded 1.06 % Li<sub>2</sub>O over 19.30 m, and a channel sample over the 6059 Zone graded 1.72 % Li<sub>2</sub>O over 6.30 m. Anomalous tin and tantalum values (up to 150 ppm tantalum and 4200 ppm tin) were identified in aplitic dykes located outside the main zones of the high-grade lithium showings. The anomalous assay values from rare earth indicator elements (Ta, Nb, Sn, Be, Rb) observed across the Big Mack Lithium Project appear to outline a highly-fractionated geochemical trend that stretches over a kilometer along strike between the Eleven/Big Mack and Sprinkler/6059 Pegmatites. See all assay results in attached Appendix I: 2023 Surface Sampling Program - Assay Results to this news release

Four rock samples were taken from the Big Mack Pegmatite and delivered to the Saskatchewan Research Council's Advanced Microanalysis Centre in Saskatoon, SK for QEMSCAN (Quantitative Evaluation of Materials by Scanning Electron Microscope) analysis. This analysis provided detailed information regarding the quantitative mineralogy of the petalite-bearing pegmatites on the Big Mack Lithium Project.

QEMSCAN results from Sample SRC198159 from the high-grade zone of the Big Mack Pegmatite showed the sample contained 75.87% petalite (LiAlSi<sub>4</sub>O<sub>10</sub>), the main ore mineral responsible for identifying the Big Mack Lithium Project as being prospective for high-grade lithium mineralization.

The positive results from the prospecting assays have reinforced the Company's commitment to advancing the Big Mack Lithium Project and further understanding the potential of this project. The Company is actively working towards advancing exploration at the Big Mack Lithium Project and is preparing for the next stages of the program.

### **Sampling, analytical methods and QA/QC protocols**

A thorough chain-of-custody and quality assurance and quality control ("QA/QC") program was carried out during the field program. Samples were obtained by rock hammer and rock saw. Sample locations were recorded by handheld Garmin GPS and samples were photographed with the documented number tags, then placed in poly sample bags and zip tied.

The Company's implemented QA/QC procedures included the routine insertion of LCT (lithium-caesium-tantalum) pegmatite certified standard control samples, lab duplicates, and silica blanks in accordance with industry recommended practices. This was used to test for natural variability, sampling bias, and homogeneity during sample preparation processes within the lab as well as testing the precision of the sample and any possible contamination from the lab and ensure proper calibration of lab equipment. Analytical results of certified reference materials were verified graphically and determined to be within the allowable error of 2 standards deviations of the certified lithium values.

Samples were delivered to ALS Canada Geochemistry's sample preparation laboratory in Winnipeg, MB. The rock samples were then crushed to 2 millimetres with a sub sample pulverized to 75 microns. Quality control testing of crushing efficiency and pulverizing fineness was conducted in-lab approximately every 50 samples. The prepared samples were then sent to the ALS Geochemistry laboratory in Vancouver, BC. A subset of the sample weighing 0.2 grams was added to a sodium peroxide flux and dissolved in hydrochloric acid with the final solution analyzed by Inductively Coupled Plasma – Mass Spectrometry (ICPMS). ALS Canada is independent of the Company.

## **Qualified Person**

The scientific and technical information in this news release has been reviewed and approved by Lynde Guillaume, P.Geol. (Exploration Manager, Axiom), who is a “Qualified Person” as defined under National Instrument 43-101 – Standards of Disclosure for Mineral Projects. Ms. Guillaume is independent of the Company.

### **5.2 Disclosure for Restructuring Transactions**

Not applicable.

### **Item 6 Reliance on Subsection 7.1(2) of National Instrument 51-102**

Not applicable.

### **Item 7 Omitted Information**

Not applicable.

### **Item 8 Executive Officer**

For further information, please contact Jason Latkowcer, Chief Executive Officer and Director of the Company, at 585-885-5970 or via email to [info@panam-energy.com](mailto:info@panam-energy.com).

### **Item 9 Date of Report**

August 17, 2023.