

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

**Item 1            Name and Address of Company**

Pan American Energy Corp. (the “**Company**”)  
#610, 505 3 Street SW  
Calgary, Alberta  
Canada T2P 3E6

**Item 2            Date of Material Change**

January 4, 2024

**Item 3            News Release**

The Company disseminated a news release (the “**News Release**”) announcing the material change described herein through the news dissemination services of Globe Newswire on January 5, 2023, and a copy was subsequently filed on SEDAR+.

**Item 4            Summary of Material Change**

The Company announced that, further to its news release dated November 20, 2023 announcing the maiden mineral resource estimate (the “**MRE**”) for the Horizon Lithium Project (the “**Project**”), it has filed a technical report pursuant to National Instrument 43-101 - Standards of Disclosure for Mineral Projects (“**43-101**”) entitled “NI 43-101 Technical Report for the Horizon Lithium Project” with an effective date of December 21, 2023 (the “**Technical Report**”).

**Item 5            Full Description of Material Change**

**5.1                Full Description of Material Change**

The Company announced that it has filed the Technical Report on the Company’s SEDAR+ profile at [www.sedarplus.ca](http://www.sedarplus.ca) and the Technical Report is also available on the Company’s website. The Technical Report was prepared by Tabetta Stirrett, P. Geo., and Erik Hemstad, PE, each of RESPEC, LLC (“**RESPEC**”), and each of whom is a “Qualified Person” for the purposes of 43-101 and independent of the Company.

**Key Highlights of the Technical Report**

- **One of the largest identified lithium deposits in the U.S.** with an estimated Indicated Mineral Resource of 1,325 Lithium Carbonate Equivalent (“**LCE**”) Kilo tonnes (“**KTonnes**”) and Inferred Mineral Resource of 8,879 LCE KTonnes, with an average grade of 678 ppm lithium (“**Li**”) (see table below for additional details regarding the calculation of the MRE and the average Li grades for the Inferred Mineral Resources and Indicated Mineral Resources).
- **High-Grade Mineral Resources.** Estimates were calculated based on a conservative 300 ppm Li cut-off within an optimized pit.
- **Rapid advancement in a short timeframe.** The MRE is based on 20 diamond drill holes completed in 2023, within one year of the Company acquiring rights to the Project pursuant to the property option agreement entered into with the owner of the Project, Horizon Lithium LLC. One hole was abandoned due to hole conditions and was not used in the MRE.

- **Significant expansion potential** through step-out drilling to extend the deposit to the Northwest, South, East and West and at greater depths. The Company is actively evaluating geophysical exploration techniques and Phase 3 drill planning, as recommended by the authors of the Technical Report.
- **Project engineering.** The authors of the Technical Report recommend that a Preliminary Economic Assessment (“PEA”) be completed for the Project, pending results from geochemical testing of samples gathered during the recommended drilling and planned metallurgical testwork. The Company has begun the work necessary to complete the necessary metallurgical testwork, and the Company is targeting the completion of a PEA in Q4-2024.
- **Access and infrastructure.** The Project benefits from an ideal location near essential infrastructure and the town of Tonopah with limited impediments (i.e. no highway intersects impacting pit design).

Readers are encouraged to review the Company’s related November 20, 2023, news release with respect to the MRE and the Technical Report, each of which is filed on the Company’s SEDAR+ profile at [www.sedarplus.ca](http://www.sedarplus.ca). There are no material differences as between the MRE disclosed in the Technical Report and that disclosed in the Company’s November 20, 2023, news release.

### MRE Preparation

The MRE was estimated and reported with an effective date of November 15, 2023. The estimated mineral resources at the Project were classified by geological and quantitative confidence in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum *Definition Standards for Mineral Resources and Reserves* and 43-101. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that any mineral resource will be converted into a mineral reserve, and there are currently no mineral reserves estimated at the Project.

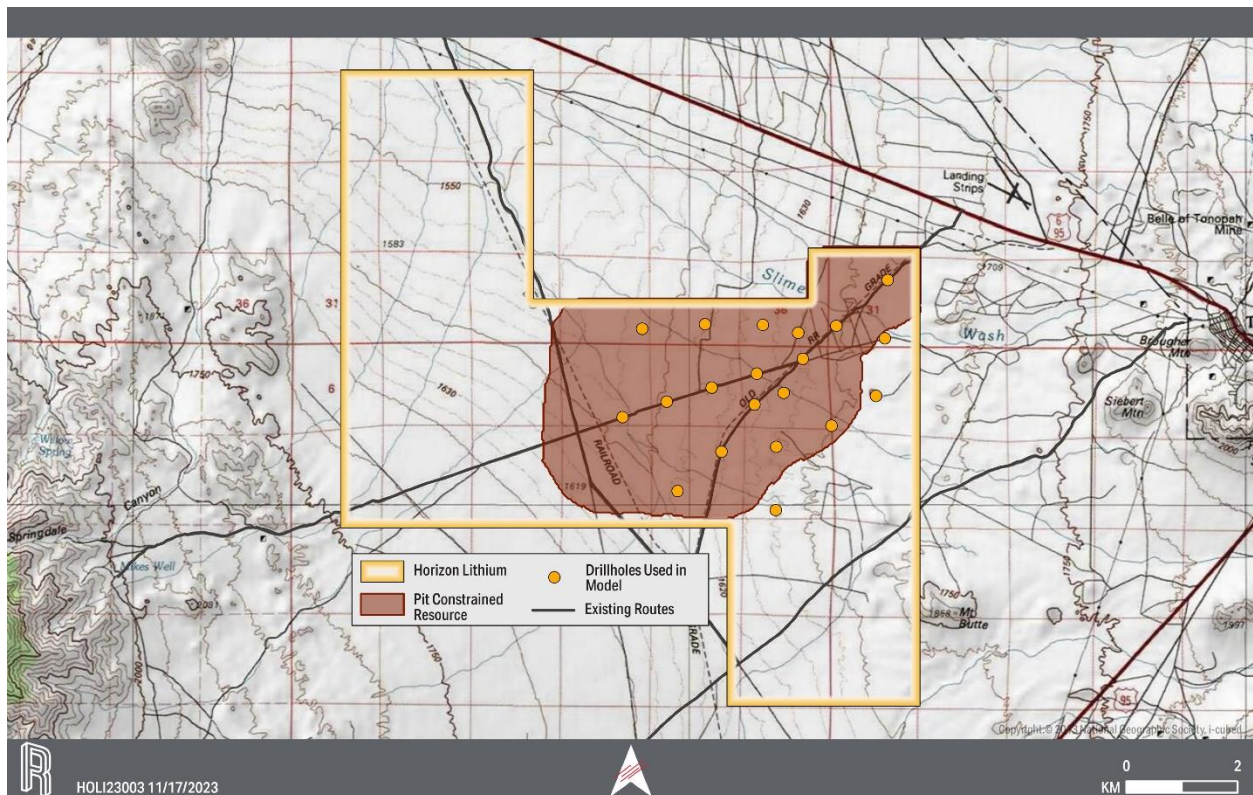
The mineral resources were estimated by inverse distance to the second power. Two estimation passes were performed independently for each of the three mineral domains. Estimated grades and partial percentages of the domains were used to calculate weight-averaged lithium grades for each block. Grades and percentages outside modeled domains were included in calculations to produce fully block-diluted grades. The mineral resources were tabulated to reflect potential open pit mining extraction as the primary scenario. A pit optimization was produced to meet the requirement of reasonable prospects for eventual economic extraction and reports production as LCE. The in-pit mineral resources are reported at a cutoff grade of 300 parts per million Li. For additional information regarding the calculation of the MRE, please refer to the Technical Report.

<b>Table 1. Mineral Resource Estimate for the Horizon Lithium Project</b>					
<b>Classification</b>	<b>Cut-off (ppm Li)</b>	<b>Total KTonnes</b>	<b>Average Grade (ppm Li)</b>	<b>Li KTonnes</b>	<b>LCE KTonnes</b>
Indicated	300	372,845	669	249	1,325
Inferred	300	2,453,963	680	1,668	8,879

Notes:

- The mineral resource estimate is in metric tonnes.
- Mineral resources comprised all model blocks at a 300 ppm Li cut-off within an optimized pit.
- Mineral resources within the optimized pit are block-diluted tabulations.
- To describe the resource in terms of industry-standard LCE, a conversion factor of 5.323 was used to convert elemental lithium to LCE.
- 20 drillholes were used in the mineral resource estimate.
- An inferred mineral resource has a lower confidence level than measured and indicated mineral resources and must not be converted to mineral reserves. It is reasonably expected that most of the inferred mineral resources could be upgraded to indicated mineral resources with continued delineation drilling.

- Mineral resources potentially amenable to open pit mining methods and leach processing are reported using a Li carbonate price of US\$20,000/tonne, a throughput of 30,000 tonnes/day, assumed metallurgical recoveries of 66 percent, mining costs of US\$2.20/tonne mined, processing costs of US\$14.12/tonne processed, and general and administrative costs of US\$0.42/tonne processed. The results from pit optimization are used solely to test for “reasonable prospects for economic extraction” and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in preparing the mineral resource estimate and selecting an appropriate resource reporting cutoff grade.
- The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing or other relevant issues.
- The effective date of the mineral resource estimate is November 15, 2023.
- All figures are rounded to reflect the relative accuracy of the estimate, and sums may vary because of rounding.



**Figure 1 — The Project boundary, 20 exploratory drillholes used in the MRE, and the Mineral resource body showing unexplored areas to the west, northwest, east and south.**

## Technical Report Recommendations

The authors of the Technical Report have recommended that the Company conduct two phases of additional work on the Project, including exploration and metallurgical testing, while concurrently developing a PEA. The authors recommend a phased approach to the further exploration of the Project, including:

- **Phase 1:**
  - **Geophysical Survey** – Conducting a seismic survey of the Project to define the thickness of overburden sediments and gain a better understanding of underlying structural features;
  - **Exploration and Infill Drilling** – Completing drillholes in the western and southern portions of the Project to laterally expand the stratigraphic understanding and potentially grow the mineral resource; completing infill drilling with the aim of

upgrading the mineral resource classification and extending the mineral resource to greater depth; and

- **Metallurgical Testing** – Developing a processing strategy, which is paramount to Project advancement and overall de-risking of the Project. The authors recommend that the Company continue pursuing partnerships with select academic and institutional and research groups to develop the process for the recovery of claystone-hosted Li.
- **Phase 2 – PEA** – To define the economic viability of the Project, the authors recommend the Company complete a thorough scoping study of the potential profitability and risks associated with the Project.

The Company is actively evaluating geophysical exploration techniques and engaged in Phase 3 drill planning. The Company has also begun the work necessary to complete the necessary metallurgical testwork, and the Company is targeting the completion of the PEA in Q4-2024.

### **Qualified Person**

The scientific and technical contents of the News Release have been reviewed and approved by Tabetha Stirrett, P.Geol, who is a consulting geologist at RESPEC, an independent consultant to the Company, and a “Qualified Person” as defined by 43-101.

For additional information regarding the scientific and technical information contained in the News Release, including data verification, collection and compilation information and QA/QC procedures undertaken please refer to the Technical Report.

### **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**

January 10, 2024