



## 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

February 12, 2024

### 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 February 12, 2024, and a copy was subsequently filed on SEDAR+.

### Item 4 Summary of Material Change

The Company announced additional assay results on nine holes from the ongoing 2023/2024 diamond drill program on the Big Mack Lithium Project (“Property”), including the intersection of 16.00 meters at 1.55% Li<sub>2</sub>O.

### Item 5 Full Description of Material Change

#### 5.1 Full Description of Material Change

The Company announced additional assay results on nine holes from the ongoing 2023/2024 diamond drill program on the Property.

### HIGHLIGHTS

- Drilling encountered high grade lithium-bearing intercepts within the Big Mack pegmatites:
  - **1.96% Li<sub>2</sub>O over 8.50 meters** within the west to central flank of the Big Mack pegmatite of **1.55% Li<sub>2</sub>O over 16.00 meters** (BM23-025)
  - **1.66% Li<sub>2</sub>O over 3.00 meters** within the central body at depth of the Big Mack pegmatite of **1.16% Li<sub>2</sub>O over 8.90 meters** (BM23-026)
  - **1.34% Li<sub>2</sub>O over 3.50 meters** at depth near center of the Big Mack pegmatite of **0.99% Li<sub>2</sub>O over 7.90 meters** (BM23-024)
- Holes 23 and 24 show an interesting occurrence where lithium values start decreasing with depth, but appear to increase again in hole 24 (Figure 3), the deepest hole through the west of center flank of the Big Mack pegmatite.

Drill holes BM23-023 to BM23-027 were drilled to test along the Big Mack pegmatite at depth, while BM23-028 to BM23-031 were drilled as exploration holes to test magnetic anomalies to the north and southwest of the Big Mack pegmatite. Big Mack targets BM23-024, BM23-025 and BM23-026 returned encouraging values of 0.99% Li<sub>2</sub>O over 7.90 meters, 1.55% Li<sub>2</sub>O over 16.0 meters and 1.16% Li<sub>2</sub>O over 8.9 meters respectively. These results indicate that mineralization is likely to continue at depth through the central zone of the Big Mack pegmatite and could potentially increase with depth as observed in hole BM23-024. These results provide valuable insight into mapping the internal structure of the Big Mack pegmatite. Table 1 highlights the assay result details on holes BM23-023 to BM23-031, and Table 2 describes the attributes associated with these drill holes.



Table 1: 2023 Big Mack Drill Hole Assay Highlights Table

*\*(not true widths)*

Hole ID	From (m)	To (m)	Interval (m)	Li <sub>2</sub> O (wt%)
BM23-023	96.25	99.4	3.15	0.39
BM23-024	121.5	129.4	7.9	0.99
<i>Inc.</i>	122.5	126	3.5	1.34
BM23-025	55.5	71.5	16	1.55
<i>Inc.</i>	58.5	67	8.5	1.96
<i>Inc.</i>	70.13	71.5	1.37	1.82
BM23-026	93.1	102	8.9	1.16
<i>Inc.</i>	96	99	3	1.66
<i>And</i>	117.7	121.45	3.75	0.38
BM23-027	147.4	153.3	5.9	0.76
BM23-028				<i>No Significant Values</i>
BM23-029				<i>No Significant Values</i>
BM23-030				<i>No Significant Values</i>
BM23-031				<i>No Significant Values</i>

Table 2: Attributes for Drill Hole BM23-023 to BM23-031

Hole ID	Easting NAD 83/UTM Zone 15N	Northing NAD 83/UTM Zone 15N	Elevation (m)	Dip (°)	Azimuth (°)	Total Depth (m)	Core Size	Target
BM23-023	5569952.29	386495.48	352.19	-46	179	156	NQ	Big Mack
BM23-024	5569952.29	386495.48	352.19	-60	178	168	NQ	Big Mack
BM23-025	5569928.84	386470.90	356.65	-46	179	111	NQ	Big Mack
BM23-026	5569945.87	386558.77	357.95	-45	178	165	NQ	Big Mack
BM23-027	5569945.87	386558.77	357.95	-50	40	300	NQ	Big Mack
BM23-028	5569945.87	386558.77	357.95	-70	180	204	NQ	Exploration
BM23-029	5569920.47	386349.74	359.09	-45	200	201	NQ	Exploration
BM23-030	5569884.14	386391.72	364.87	-45	200	150	NQ	Exploration
BM23-031	5569926.48	386315.32	353.01	-46	358.5	162	NQ	Exploration

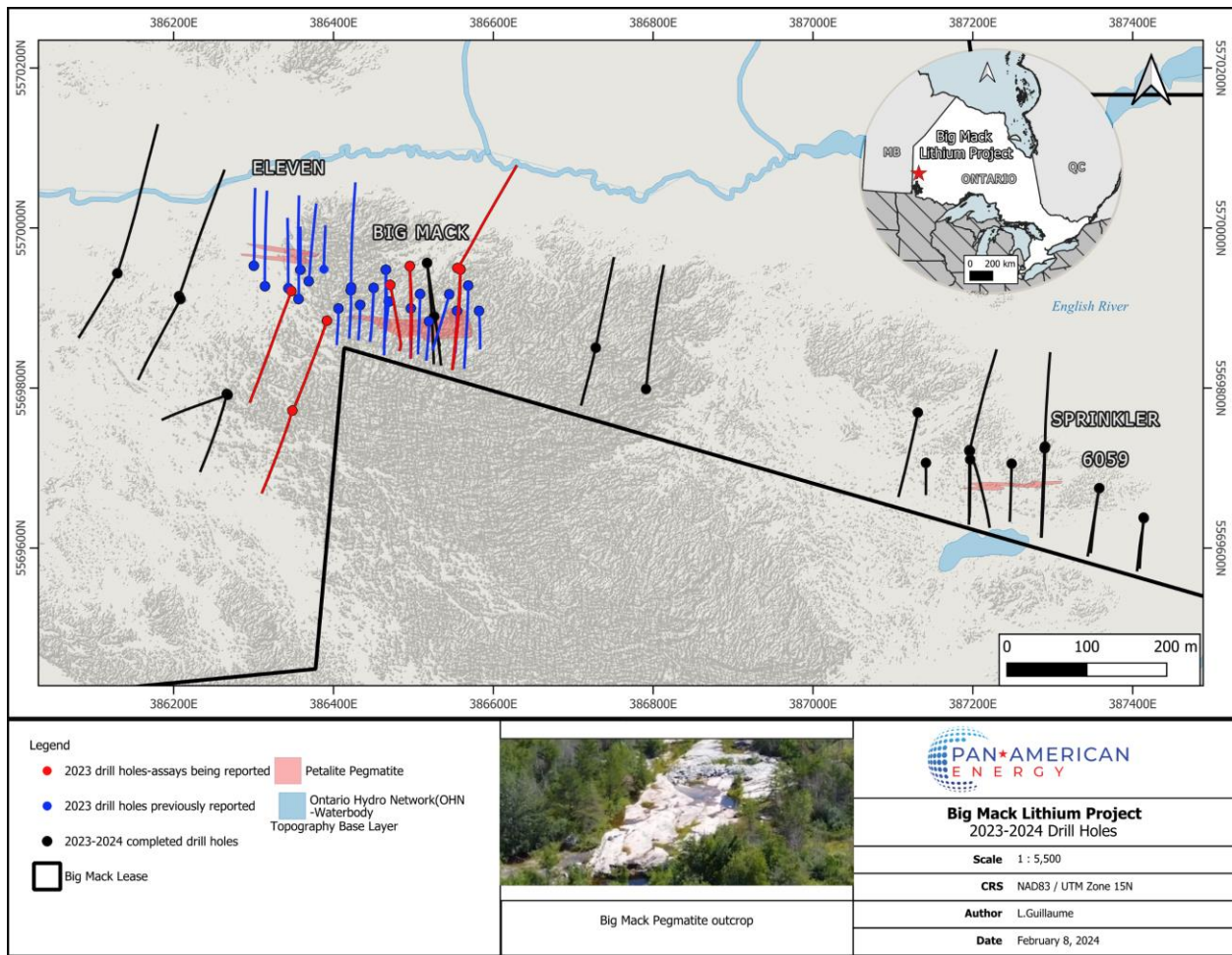


Figure 1: Completed and 2023-2024 drillholes (Assays reported on holes in red, assays pending in black).

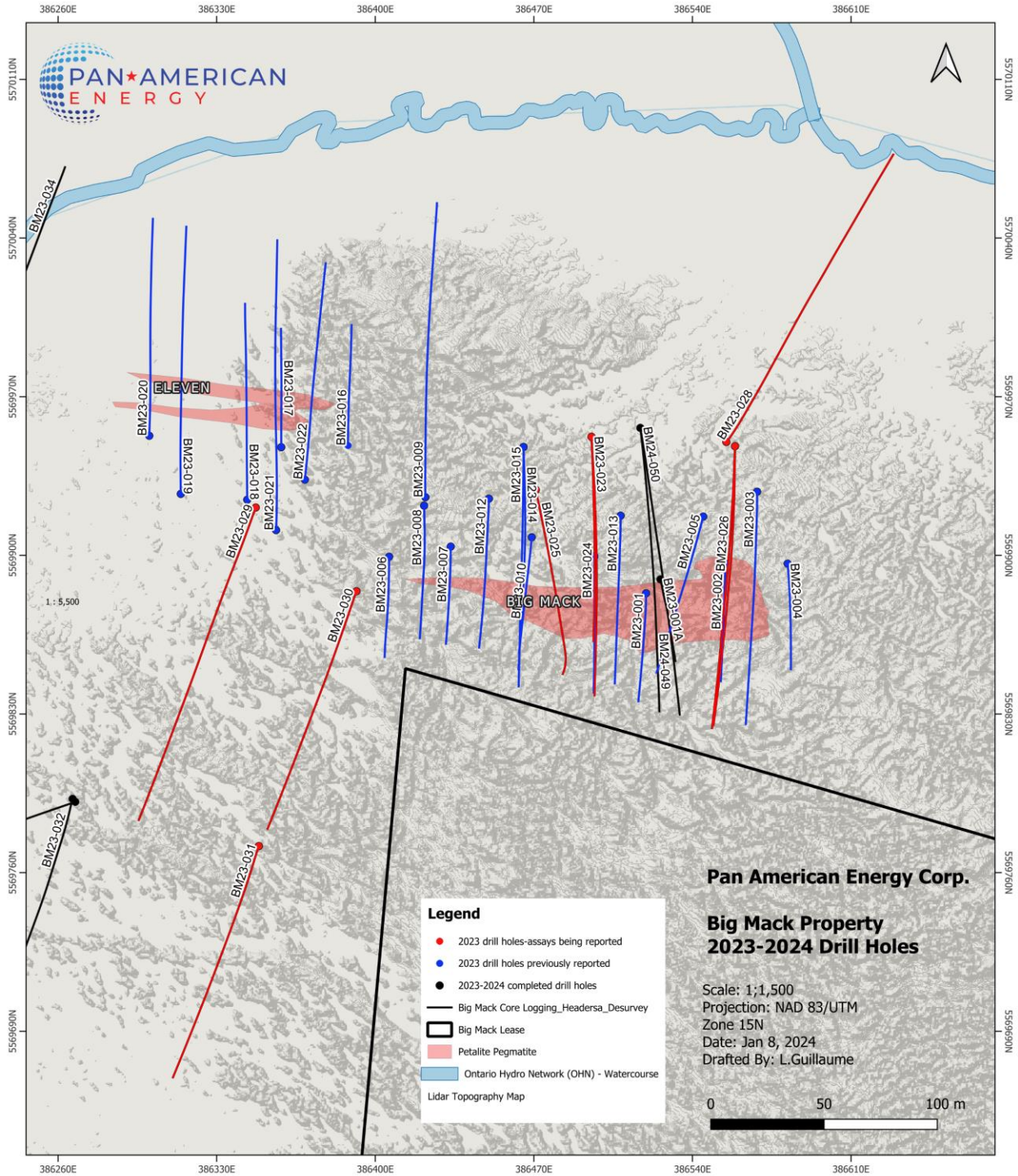


Figure 2: Close up view of Big Mack (Reported drill holes in Red)

### BM23-023, BM23-024 & BM23-025 (Looking West)

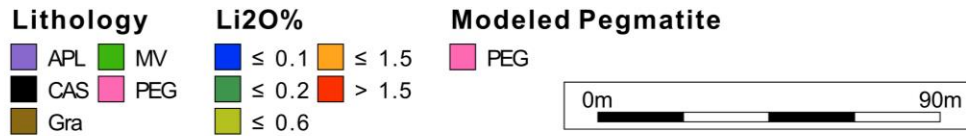
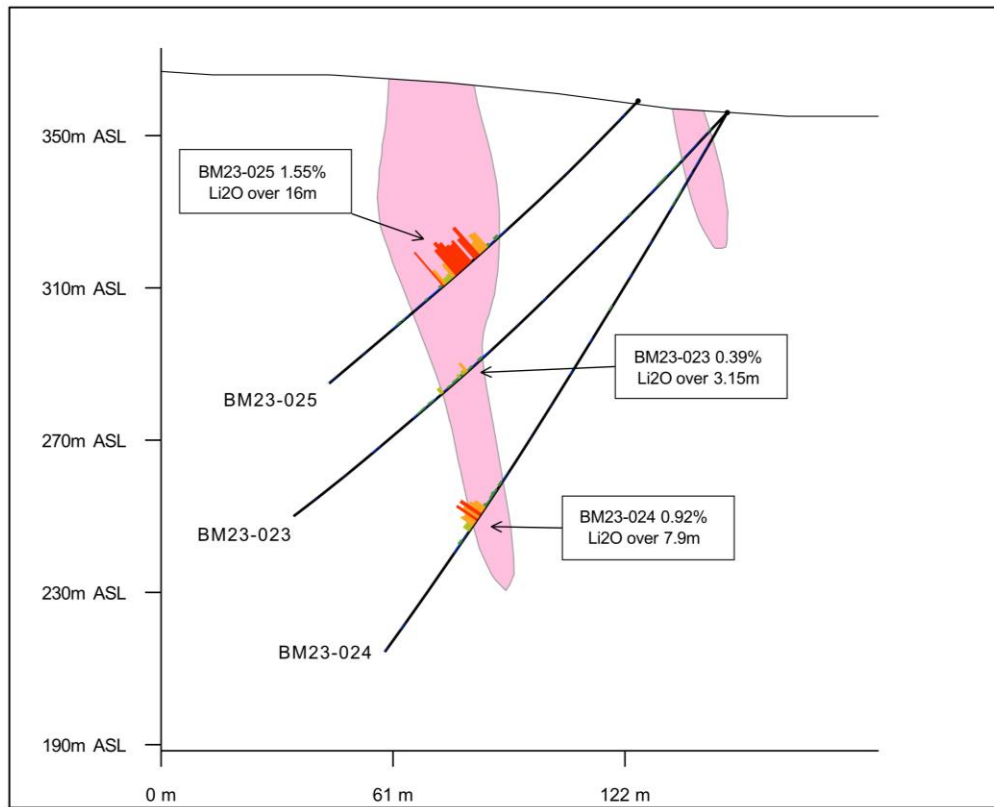
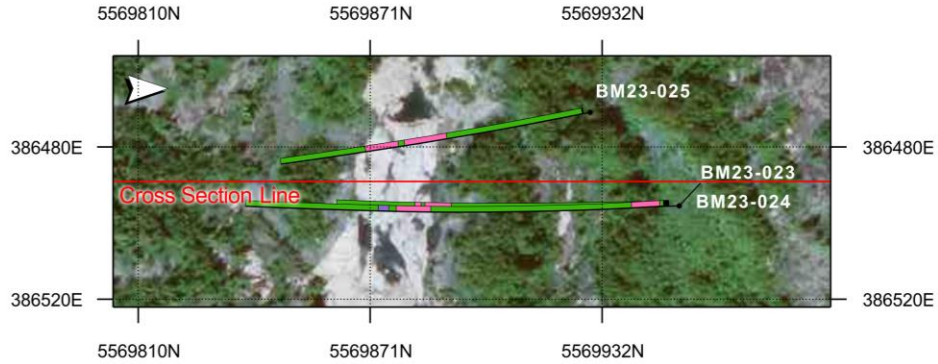


Figure 3: Cross section of BM23-023, -024, -025.

# BM23-026 & BM23-027 (Looking West)

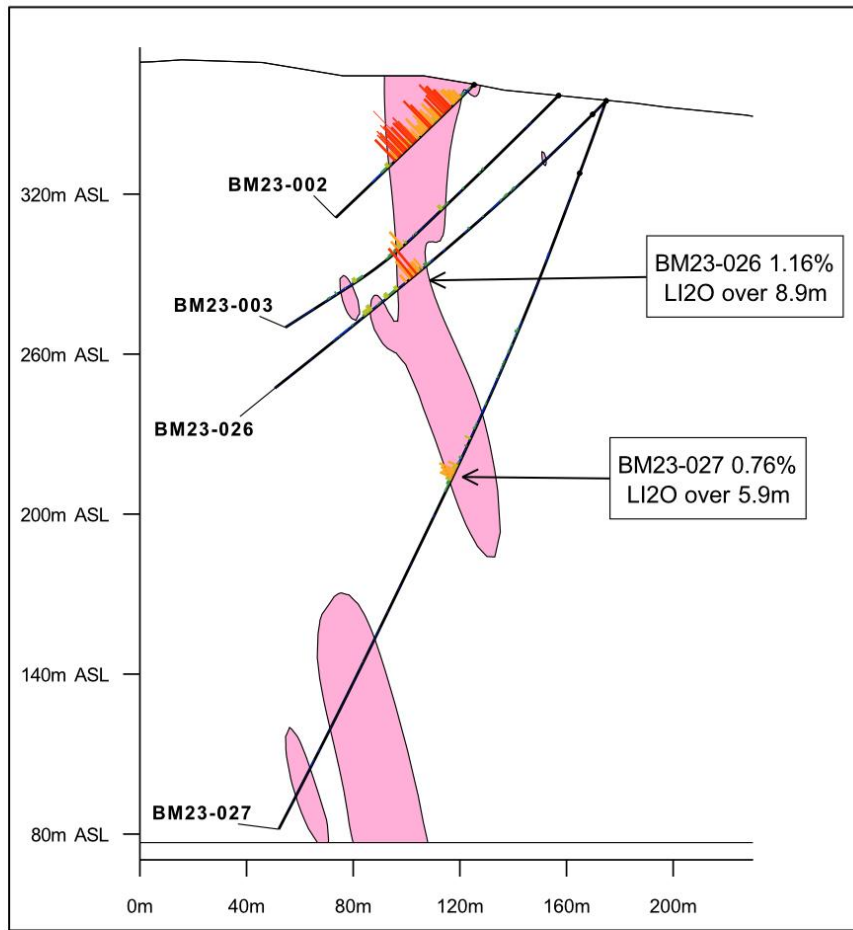
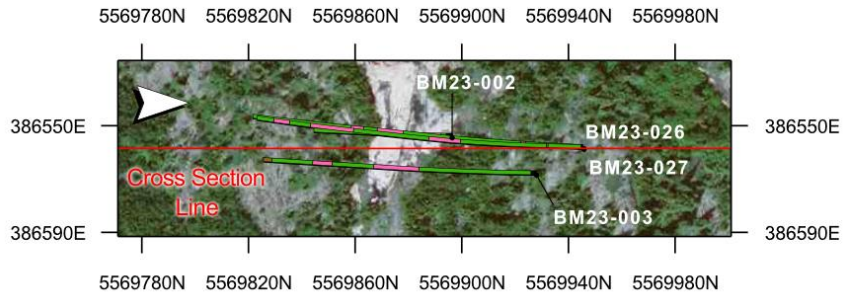


Figure 4: Cross section of BM23-002, -003, -026, -027.

## **General Statements**

Holes BM23-023 to BM23-027 described in this material change report targeting the Big Mack pegmatite were drilled broadly perpendicular and inclined to the pegmatite orientations so that the true thickness of reported intercepts is estimated to range somewhere between 50-80% of the drilled widths. Holes BM23-028 to BM23-031 were exploration holes targeting magnetic anomalies identified from the UAV-borne magnetics survey completed in 2023 by EarthEx Geophysical Solutions Inc. A collar header table is provided below. Visual core logging indicates that the predominant host mineral for the Big Mack pegmatites is petalite.

## **Sample Quality Assurance / Quality Control**

A thorough chain-of-custody and QA/QC program is being carried out on the ongoing drill program. Samples are taken across all pegmatite intervals with shoulder samples into the host rock on either side of the dykes. Sample lengths are ranging from 0.3 m – 1.5 m, dependant on internal zoning of the dykes, mineralization, and lithology contacts. Core to be sampled is cut in half onsite, with half being sent for analysis and the other half remaining in the box for future reference and re-sampling, if needed.

A malfunction of downhole location survey equipment could cause inaccurate dip and azimuth tracking due to drillhole deviation, which would affect the planned drillhole spacing and required density for the resource estimation. To ensure accuracy, downhole surveys are performed every 30 meters of drilling, with survey tests repeated in the event of results that are outside planned drillhole drift. Additional downhole survey tools are kept on-site in the event of malfunction during drilling.

The Company's implemented QA/QC procedures include the insertion of certified standard control samples, ¼ cut duplicates, and blanks. This is being used to test for natural variability / sampling bias / testing the lab for homogeneity during sample preparation processes within the lab, as well as testing the precision and any possible contamination from the lab and ensure proper calibration of lab equipment.

Sample analyses are being conducted by ALS Canada LTD (ALS), an independent lab. Samples are shipped to the Winnipeg, Manitoba prep lab, and then shipped by ALS to the geochemistry analysis lab in North Vancouver, British Columbia. Drill core samples are subject to sodium peroxide fusion analyses using ICP-MS for Trace element values on total digestion and ICP-AES on samples with values greater than 25,000 ppm Li. ALS follows the quality management and operational guidelines set out in the international standards ISO/IEC 17025 – “General Requirement for the Competence of Testing and Calibration Laboratories” and ISO 9001 – “Quality Management Systems”.

## **Qualified Person**

The technical content of this material change report has been reviewed and approved by Jared Suchan, Ph.D., P.Geo., who is a consultant of the Company, and a “Qualified Person” as defined by NI 43-101. Dr. Suchan verified the data disclosed (or underlying the information disclosed) in this material change report by reviewing imported and sorted assay data; checking the performance of blank samples and certified reference materials; reviewing the variance in field duplicate results; and reviewing grade calculation formulas.

## **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**

February 21, 2024