Mach Natural Resources LP

14201 Wireless Way, Suite 300 Oklahoma City, Oklahoma 73134

October 5, 2023

VIA EDGAR

Attention: Lily Dang

Robert Babula Sandra Wall John Hodgin Michael Purcell Karina Dorin

United States Securities and Exchange Commission Division of Corporation Finance Office of Energy & Transportation 100 F Street, NE Washington, D.C. 20549

Re: Mach Natural Resources LP Registration Statement on Form S-1

> Filed September 22, 2023 File No. 333-274662

Ladies and Gentlemen:

This letter sets forth the responses of Mach Natural Resources LP, a Delaware limited partnership (the "Company") to the comments of the Staff (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission") set forth in your letter, dated October 4, 2023, with respect to the Company's Registration Statement on Form S-1, publicly filed with the Commission on September 22, 2023, CIK No. 0001980088 (the "Registration Statement"). On September 28, 2023, the Company filed Amendment No. 1 to the Registration Statement as an Exhibits-Only filing.

We have revised the Registration Statement in response to the Staff's comments and, concurrently with delivery of this letter, publicly filed with the Commission a revised Registration Statement ("Amendment No. 2"). Capitalized terms used but not otherwise defined herein shall have the meanings ascribed thereto in Amendment No. 2. For your convenience, each of the Staff's comments is reprinted in bold, italicized text below, followed by the Company's responses thereto.

Registration Statement on Form S-1

Prospectus Summary

Expected Refinancing Transaction, page 11

1. You disclose here that the BCE-Mach III credit facility, and potentially the BCE-Mach credit facility depending on the net proceeds of this offering, will remain outstanding after this offering. However, your disclosure under Use of Proceeds and elsewhere states that you intend to use the net proceeds of this offering to repay in full and terminate the BCE-Mach credit facility. Please advise or revise.

Response:

The Company acknowledges the Staff's comment and has revised the disclosure on page 12 of Amendment No. 2 to remove the reference to the BCE-Mach credit facility as it will be repaid in full using the proceeds of the offering.

<u>Summary of Reserve, Production and Operating Data</u> <u>Summary of Reserves, page 25</u>

2. Please expand your disclosure to include an explanation for the significant decrease in proved developed, undeveloped and total proved reserves, total proved reserves standardized measure and PV-10 during the period from December 31, 2022 to June 30, 2023.

Response:

The Company acknowledges the Staff's comment and has revised the disclosure on pages 25 and 127 of Amendment No. 2 to include disclosure that such reduction was driven primarily by a decrease in oil and natural gas prices (based on SEC pricing) at January 1, 2023 as compared to June 30, 2023.

Business and Properties

Preparation of Reserve Estimates, page 128

3. Please expand your discussion to clarify that the estimates of probable undeveloped reserves as of June 30, 2023 are part of a development plan and a budget, supported by a reasonable expectation of the financing required to fund the development costs disclosed in the Risk Factor on page 32 with respect to such reserves, that is reviewed annually and adopted by management. Refer to Rule 4-10(a)(26) of Regulation S-X and Question 131.04 in our Compliance and Disclosure Interpretations regarding Oil and Gas Rules.

Response:

The Company acknowledges the Staff's comment and has revised the disclosure on pages 128 and 130 of Amendment No. 2 to clarify that the estimates of probable undeveloped reserves are part of a development plan and a budget that is supported by a reasonable expectation of the financing required to fund the estimated future development costs of its probable reserves.

Exhibits

4. We note your response to prior comment 1 and reissue the comment in part as we are unable to locate the disclosure revisions to Exhibit 99.4. Please obtain and file a revised reserves report, Exhibit 99.4, that clearly and consistently includes the producing status category relating to the probable reserves included in the report. For example, revise the column header "Probable" on page one and the column header "Probable Midstream" on page 3. Refer to the disclosure requirements in Items 1202(a)(2) and (a)(8)(ix) of Regulation S-K.

Response:

The Company acknowledges the Staff's comment and has filed a revised reserve report from Cawley, Gillespie & Associates as Exhibit 99.4 to Amendment No. 2.

2

We respectfully request the Staff's assistance in completing the review of Amendment No. 2 as soon as possible. Should you have any questions relating to any of the foregoing, please contact Julian J. Seiguer or Michael W. Rigdon at (713) 836-3334 or (713) 836-3647, respectively.

Sincerely,

MACH NATURAL RESOURCES LP

/s/ Tom L. Ward

Name: Tom L. Ward

Title: Chief Executive Officer

cc: Tom L. Ward (Chief Executive Officer, Mach Natural Resources GP LLC) Kevin R. White (Chief Financial Officer, Mach Natural Resources GP LLC)

Daniel T. Reineke, Jr. (Executive Vice President, Business Development, Mach Natural Resources GP LLC)

Julian J. Seiguer, P.C. (Kirkland & Ellis LLP)

Michael W. Rigdon, P.C. (Kirkland & Ellis LLP)