

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

October 4, 2023

Tom L. Ward Chief Executive Officer Mach Natural Resources LP 14201 Wireless Way, Suite 300 Oklahoma City, Oklahoma 73134

> Re: Mach Natural Resources LP Registration Statement on Form S-1 Filed September 22, 2023 File No. 333-274662

Dear Tom L. Ward:

We have reviewed your amended registration statement and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this letter, we may have additional comments. Unless we note otherwise, any references to prior comments are to comments in our September 12, 2023 letter.

Registration Statement on Form S-1

<u>Prospectus Summary</u> <u>Expected Refinancing Transaction, page 11</u>

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.

Tom L. Ward Mach Natural Resources LP October 4, 2023 Page 2

Summary of Reserve, Production and Operating Data Summary of Reserves, page 25

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.

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.

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.

You may contact Lily Dang, Staff Accountant, at 202-551-3867 or Robert Babula, Staff Accountant, at 202-551-3339 if you have questions regarding comments on the financial statements and related matters. For engineering related questions, contact Sandra Wall, Petroleum Engineer, at 202-551-4727 or John Hodgin, Petroleum Engineer, at 202-551-3699. Please contact Michael Purcell, Staff Attorney, at 202-551-5351 or Karina Dorin, Staff Attorney, at 202-551-3763 with any other questions.

Sincerely,

Division of Corporation Finance Office of Energy & Transportation

cc: Michael Rigdon