Mach Natural Resources LP

14201 Wireless Way, Suite 300 Oklahoma City, Oklahoma 73134

September 22, 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

Amendment No. 1 to Draft Registration Statement on Form S-1

Submitted August 30, 2023 CIK No. 0001980088

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 September 12, 2023, with respect to the Company's Draft Registration Statement on Form S-1, confidentially submitted on August 30, 2023, CIK No. 0001980088 (the "Registration Statement").

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 ("Public Filing No. 1"). Capitalized terms used but not otherwise defined herein shall have the meanings ascribed thereto in Public Filing No. 1. For your convenience, each of the Staff's comments is reprinted in bold, italicized text below, followed by the Company's responses thereto.

Amendment No. 1 to Draft Registration Statement on Form S-1

Prospectus Summary

Summary of Reserve, Production and Operating Data

Summary of Reserves, page 24

Please expand the tabular presentation of reserves by individual product type, as of June 30, 2023, to additionally identify the net quantities of probable reserves as
developed and/or undeveloped. This comment also applies to the tabular presentation of reserves on page 126 and in Exhibit 99.4. Refer to the disclosure requirements
in Item 1202(a)(2) of Regulation S-K.

Response:

The Company acknowledges the Staff's comment and respectfully advises the Staff that all of the Company's probable reserves are undeveloped and therefore has not revised the tabular presentation; however, the Company has revised the disclosure on pages 3, 26, 120 and 128 of Public Filing No. 1 to note this fact.

Risk Factors

Risks Related to Our Business

The development of our estimated PUDs..., page 31

Please expand the risk factor to additionally discuss the development of your probable undeveloped reserves, including the dollar amount and the sources of the
estimated future development capital required to convert the probable undeveloped reserves as of June 30, 2023. Refer to the requirements in Rule 4-10(a)(26) of
Regulation S-X.

Response:

The Company acknowledges the Staff's comment and has revised the disclosure on page 32 of Public Filing No. 1.

Executive Compensation and Other Information

Equity Incentives, page 154

3. Please expand your disclosure to include the information included in your response to prior comment 11.

Response:

The Company acknowledges the Staff's comment and has revised the disclosure on page 155 of Public Filing No. 1.

Certain Relationships and Related Party Transactions, page 160

4. We note your response to prior comment 12 and reissue the comment in part. Please revise to provide all of the disclosure required by Item 404 of Regulation S-K. For example, please revise to clarify the related party relationship.

Response:

The Company acknowledges the Staff's comment and has revised the disclosure on pages 162 and 163 of Public Filing No. 1.

Financial Statements

Mach Natural Resources LP

Pro Forma Condensed Consolidated Financial Statements, page F-2

5. Please expand your disclosure to explain how you determined BCE-Mach III LLC was the Predecessor, similar to the explanation provided in your response to prior comment 14.

Response:

The Company acknowledges the Staff's comment and has revised the disclosure on page F-2 of Public Filing No. 1.

BCE-Mach III LLC

Historical Financial Statements, page F-11

6. Please confirm your understanding that there will be no lapse in audited periods for the Predecessor, such that any Predecessor interim financial statement period prior to the Reorganization Transactions will be audited when audited financial statements for the period after the Reorganization Transactions are presented in a filing.

Response:

The Company acknowledges the Staff's comment and confirms its understanding is that there will be no lapse in audited periods for the Predecessor, such that any Predecessor interim financial statement period prior to the Reorganization Transactions will be audited when audited financial statements for the period after the Reorganization Transactions are presented in a filing.

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We respectfully request the Staff's assistance in completing the review of Public Filing No. 1 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)