June 24, 2024

Keyvan Samini President and Chief Financial Officer Mobix Labs, Inc. 15420 Laguna Canyon Road, Suite 100 Irvine, California 92618

Re: Mobix Labs, Inc.
Amendment No. 1 to

Registration Statement on Form S-1

Filed June 6, 2024 File No. 333-278710

Dear Keyvan Samini:

 $$\operatorname{\textsc{We}}$$  have conducted a limited review of 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

 $% \left( 1\right) =\left( 1\right) \left( 1\right)$  or do not believe an amendment is appropriate, please tell us why in your response.

 $\label{eq:After reviewing any amendment to your registration statement and the information you$ 

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 April 23, 2024 letter.

Amendment No. 1 to Registration Statement on Form S-1 filed June 6, 2024

Security Ownership of Certain Beneficial Owners and Management, page 92

1. We note your response to prior comment 8. As previously requested, ensure that the disclosure about the amount of beneficial ownership in the table on page 92 is consistent with the disclosure in

the table beginning on page 95. For example, the disclosure in the

table on page 92 about

the number of shares concerning Michael Long is not consistent

with the disclosure in

the table on page 95 concerning Michael Long.

Keyvan Samini

FirstName LastNameKeyvan Samini

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FirstName LastName

Plan of Distribution, page 107

2. We note your disclosure on page 107 that your selling securityholders may sell their

securities in one or more underwritten offerings. Please confirm your understanding that

 $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left($ 

to your plan of distribution requiring a post-effective amendment. Refer to your  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +\left$ 

undertaking provided pursuant to Item 512(a)(1)(iii) of Regulation S-K.

Please contact Thomas Jones at 202-551-3602 or Erin Purnell at 202-551-3454 with any questions.

Sincerely,

Division of

Office of

Corporation Finance

Manufacturing cc: Raymond Lee, Esq.