

DIVISION OF CORPORATION FINANCE

April 2, 2024

Gary M. Owens Chief Executive Officer Mesa Laboratories, Inc. 12100 West Sixth Avenue Lakewood, Colorado 80228

> Re: Mesa Laboratories, Inc. Form 10-K for the Fiscal Year Ended March 31, 2023 Filed May 30, 2023 File No. 000-11740

Dear Gary M. Owens:

We have completed our review of your filing. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

Division of Corporation Finance Office of Industrial Applications and Services