

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

March 23, 2020

Gregory Gorgas
President, Chief Executive Officer and Chief Financial Officer
Artelo Biosciences, Inc.
888 Prospect Street, Suite 210
La Jolla, CA 92037

Re: Artelo Biosciences, Inc. Form 10-K for the Fiscal Year Ended August 31, 2019 Filed November 25, 2019 File No. 1-38951

Dear Mr. Gorgas:

We have limited our review of your filing to the financial statements and related disclosures and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

Form 10-K for the Fiscal Year Ended August 31, 2019

Consolidated Notes to Financial Statements, page 54

1. Please provide us with a reconciliation of the numerator and denominator of the diluted loss per-share computation for the most recent year presented. In addition, provide a reconciliation of the numerator and the denominator of the basic and diluted loss per-share computation in the notes to financial statements in future filings. Please refer to ASC 260-10-50-1.

In closing, 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.

You may contact Scott Stringer at 202-551-3272 or me at 202-551-3344 with any questions.

Gregory Gorgas Artelo Biosciences, Inc. March 23, 2020 Page 2

Sincerely,

Division of Corporation Finance Office of Trade & Services

cc: Randy Schreckhise, Vice President, Finance and Operations