



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3561

December 20, 2016

Ronald L. Stotish
Chief Executive Officer
AquaBounty Technologies, Inc.
2 Mill and Main Place, Suite 395
Maynard, MA 01754

**Re: AquaBounty Technologies, Inc.
Amendment No. 1 to Form 10-12B
Filed December 12, 2016
File No. 001-36426**

Dear Mr. Stotish:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments 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 comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our December 2, 2016 letter.

Exhibit 99.1

Atlantic Salmon Disease Impact, page 58

1. We note your response to comment 15. Please briefly discuss the reasons for your belief that the RAS that you use comprise a less disease-prone environment than the sea cages employed in conventional salmon aquaculture.

Our Product, page 59

2. We note your response to prior comment 16. Please clarify that you relied on internally generated data to support your statement that AquaAdvantage salmon do not reach a

Ronald L. Stotish
AquaBounty Technologies, Inc.
December 20, 2016
Page 2

larger final size than their traditional counterparts. Additionally, please briefly explain to us how the table that you present in your response supports this conclusion.

You may contact Patrick Kuhn at 202-551-3308 or Doug Jones at 202-551-3309 if you have questions regarding comments on the financial statements and related matters. Please contact Julie Griffith at 202-551-3267 or me at 202-551-3217 with any other questions.

Sincerely,

/s/ J. Nolan McWilliams

J. Nolan McWilliams
Attorney-Advisor
Office of Transportation and Leisure