



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

February 5, 2016

Via E-mail

Ryan Ashton
Chief Executive Officer
Great Basin Scientific, Inc.
2441 South 3850 West
Salt Lake City, UT 84120

**Re: Great Basin Scientific, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed January 14, 2016
File No. 333-207761**

Dear Mr. Ashton:

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 this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our November 30, 2015 letter.

General

1. We will continue to evaluate your response to prior comment 1 when you provide the missing information that you say you will provide in a subsequently filed amendment. In addition, clarify what you mean when you say that the offering prices are "assumed." If you intend to conduct this offering at other than a fixed price, please tell us the authority you intend to rely upon to do so.
2. We note your response to prior comment 6; however, please remove the uncertainty that your placement agent "may" be an underwriter on your prospectus cover and your disclosure on page 123 or advise.

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3. We note your response to prior comment 7. Revise to disclose the mechanics of a termination of the offering as your response to prior comment 7 suggests. As an example only, disclose when you will return any collected proceeds to investors in the event of termination. Refer to Rule 15c2-4.

Description of Offered Securities, page 114

4. We note your added disclosure in response to comment 10. However, please tell us how warrants will be exercised on a cashless basis if you are unable to register the underlying securities.

Exhibits Index

5. We note your response to prior comment 2. Please file a complete copy of your amended articles of incorporation as an exhibit to your registration statement. Refer to Item 601(b)(3)(i) of Regulation S-K.

Please contact Heather Percival at (202) 551-3498 or me at (202) 551-3528 with any questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Jason K. Brenkert
Dorsey & Whitney LLP