



DIVISION OF
CORPORATION FINANCE

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

January 6, 2012

Via Facsimile

Alexander Walsh
President and Principal Executive Officer
Lithium Exploration Group, Inc.
3200 N. Hayden Road, Suite 235
Scottsdale, Arizona 85251

**Re: Lithium Exploration Group, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed December 22, 2011
File No. 333-175883**

Dear Mr. Walsh:

We have reviewed your amended registration statement and letter dated December 22, 2011, and we 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.

Amendment No. 2 to Registration Statement on Form S-1

General

1. When you respond to our comments by adding disclosure to your filing, do not merely state "[t]he registration statement has been revised" as you have done with respect to prior comments 5 and 6 from our letter to you dated November 23, 2011; instead, please provide page numbers where your responsive disclosure may be found.

2. We note your response to comment 2 from our letter to you dated November 23, 2011 and remind you that you will need to resolve any comments relating to the confidential treatment request for your letter agreement with Glottech-USA, LLC prior to requesting acceleration of effectiveness of this Form S-1.
3. Please provide be sure to provide updated disclosure with each amendment. For example, please provide an update as to whether you have paid the \$60,000 due in December 2011 with respect to the mineral permits in Alberta, Canada and the \$100,000 due January 2012 with respect to the Argentine mineral claims. As another example, please update the disclosure on page 37 and elsewhere regarding the number of shares of your common stock issued and outstanding.
4. We note that your "Selling Stockholder" disclosure on page 42 indicates only one selling stockholder, and yet you refer multiple times in the filing to "selling stockholders" (plural). Please revise as appropriate.
5. We note your response to the prior comment 6 from our letter to you dated November 23, 2011, and we reissue the comment in part. We note several instances in which you mention the interest payable at maturity of the convertible debenture but do not clarify that the conversion price of \$0.83 may be at a discount to the market price of common stock at the time of maturity. Please revise to clarify, including in the following instances:
 - Page 7, Selling Stockholder Financing Transaction, second paragraph.
 - Page 15, MD&A, Plan of Operation, second paragraph.
 - Page 16, under the subheading Anticipated Cash Requirements, third paragraph.
 - Page 39, under the heading Convertible Securities – Debentures, second paragraph.

Selling Stockholder Financing Transaction, page 7

6. We note that on November 22, 2011, Hagen Investments converted \$585,000 of the debenture and received 2,000,000 shares of your common stock. Please disclose the conversion price and how that price was determined.

Business, page 21

7. We note your disclosure that as part of the letter agreement, Alexander Walsh, your director and officer, will also provide Glottech with the option, for a period of 12 months, to acquire 2,000,000 shares of your common stock currently held by him, for a total price of \$1. We also note your statement that if, for any reason, Mr. Walsh fails to deliver the

2,000,000 shares of your common stock to Glottech, it will be your responsibility to issue the shares from treasury. Please disclose at what price you would issue the shares from treasury and how you would account for such issuance.

Certain Relationships and Related Transactions, page 37

8. We note your response to our prior comment 15. Please revise to clarify the meaning of and correct the apparent typographical errors in the following statements on page 37:
- “The decision by Mr. Walsh to pledge his shares was made as part of the negation [sic] of the debenture transaction in order to give the debenture purchase [sic] security in case the debenture was not paid back or the Company otherwise breached is [sic] obligations under the debenture documents [emphasis added].” (This statement also appears on page 7; please make any corresponding corrections there as well.)
 - “Mr. Walsh has [sic] received any consideration for entering into the guaranty and pledge agreement [emphasis added].” This statement appears to be contradicted by a statement on page 7 that “Mr. Walsh has not received any consideration for entering into the guaranty and pledge agreement.”

If Mr. Walsh did receive or will receive any consideration for entering into the guaranty and pledge agreement, please specify what the consideration is or will be.

Exhibits, page 47

9. We note your response to our prior comment 18 and reissue the comment in part. We note your statement in your response letter that “A description of the verbal agreement between the Company and Mr. Walsh has been included as exhibit 10.13. No other agreements between the Company and Mr. Walsh or the Company and its directors are in existence.” However, we note the mention on page 36 of a “management agreement” between the company and Mr. Walsh, which was apparently in effect until very recently, having been “terminated in September 2011.” Please file this agreement, or if it was a verbal agreement, file a description of it.

Closing Comments

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Norman von Holtendorff at (202) 551-3237, or in his absence, me at (202) 551-3611 with any questions.

Sincerely,

/s/ A.N. Parker

Anne Nguyen Parker
Branch Chief

cc: Via Facsimile
Thomas A. Rose, Esq.
Sichenzia Ross Friedman Ference LLP