



DIVISION OF
CORPORATION FINANCE
MAIL STOP 7010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
100 F STREET, N.E.
WASHINGTON, D.C. 20549-7010

March 20, 2008

Mr. Jason S. Weber
President and Chief Executive Officer
Rimfire Minerals Corporation
700-700 West Pender Street
Vancouver, BC V6C 1G8, Canada

**Re: Rimfire Minerals Corporation
Form 20-F for Fiscal Year Ended January 31, 2007
Filed May 11, 2007
Response Letter Dated February 28, 2008
File No. 000-31100**

Dear Mr. Weber:

We have reviewed your response letter and have the following comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Form 20-F Filed May 11, 2007

Item 11: Quantitative And Qualitative Disclosure About Market Risk

1. In your response to our prior comment number four, we note that your proposed disclosure does not include summarized market risk information for the preceding fiscal year. Please expand your disclosure to include summarized market risk information for the preceding fiscal year. Refer to Item 11(a)(3) of Form 20-F.

Statement of Cash Flows

2. We note your response to our prior comment number 11 where you confirm that operating cash inflows and outflows are presented on a gross basis. Accordingly, please clarify the titles in your statement of cash flows to provide a better indication of the nature of the flow. For example, your statement of cash flows

contains an item for “joint venture project deposits,” without indication as to whether the amount was paid or received. Refer to the classes of operating cash receipts and payments in Section 1540.16 and Illustrative Example 1 of the CICA Accounting Handbook, as well as paragraph 27 and Appendix C of FAS 95. These examples illustrate, under the direct method, the nature of the cash flow when such flow is not otherwise readily apparent.

3. In your response to our prior comment number 12, we note you have determined there are no material differences between your statement of cash flows and one prepared in accordance with US GAAP. We also note in your response to our prior comment number 11 you assert that your statement of cash flows is prepared under the direct method of presenting operating cash flows. Please note that US GAAP requires the separate presentation of a reconciliation of net income to net cash flow from operating activities for business enterprises that present operating cash flows under the direct method. Refer to paragraph 30 of FAS 95. Please expand your disclosure to include such reconciliation pursuant to Item 17(c)(2)(iii) of Form 20-F.

Mineral Property Interests

4. We note in your response to our prior comment number 13 you assert that EITF 04-2 requires “that acquisition and development costs will only be capitalized once an economically viable resource has been identified on the property.” Please note that paragraph 9 of EITF 04-2 does not contemplate the identification of an economically viable resource on the property as a criterion for recognition of the acquisition cost as a tangible asset. For US GAAP purposes, mineral rights, as defined in EITF 04-2, are recognized as tangible assets. We also note, for Canadian GAAP purposes, that “Mining properties” are defined in CICA Section 3061.06 as “items of property, plant and equipment represented by the capitalized costs of acquired mineral rights and the costs associated with exploration for and development of mineral reserves.” Based on the guidance we have cited, we believe that your mineral interests represent a right to explore, extract and retain at least a portion of the benefits from mineral deposits and therefore, should be capitalized for both Canadian and US GAAP purposes. As such, please contact us at your convenience to further discuss this issue.
5. We also note that you included “development costs” in your response to our prior comment number 13. Please note that EITF 04-2 does not contemplate nor does it define development costs. Please confirm, if true, that you have not yet incurred development costs for any of your properties. If you have incurred development costs, please explain to us how you have accounted for those costs for both Canadian GAAP and US GAAP purposes.

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Foreign Currency Translation

6. We note your response to our prior comment number 14 in which you have determined your response is dependent upon the resolution of the proceeding comment. Please reconsider your accounting for foreign currency translation adjustments after you revisit the prior comment and assess the impact of foreign currency denominated mineral rights thereon. If you determine that foreign currency translation adjustments and cumulative translation adjustments for foreign currency denominated assets are necessary, please indicate whether this will result in a reconciling difference between US GAAP and Canadian GAAP to be reported pursuant to Item 17 of Form 20-F.

Closing Comments

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact James Giugliano at (202) 551-3319 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3683 with any other questions.

Sincerely,

Jill Davis
Branch Chief