



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-7010

April 14, 2009

Mr. Jason S. Weber  
President and Chief Executive Officer  
Rimfire Minerals Corporation  
1350-650 West Georgia Street  
Vancouver, B.C. V6B 4N9  
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**  
**Response Letter Dated April 15, 2008**  
**Response Letter Dated May 5, 2008**  
**Form 20-F for Fiscal Year Ended January 31, 2008**  
**Filed May 21, 2008**  
**Response Letter Dated June 19, 2008**  
**Response Letter Dated August 13, 2008**  
**Response Letter Dated October 31, 2008**  
**Response Letter Dated November 12, 2008**  
**Response Letter Dated February 17, 2009**  
**Response Letter Dated March 16, 2009**  
**Forms 20-F/A for Fiscal Years Ended January 31, 2006, 2007 and**  
**2008 Filed April 3, 2009**  
**File No. 000-31100**

Dear Mr. Weber:

We have completed our review of your Form 20-F and related filings and have no further comments at this time.

Sincerely,

Jill Davis  
Branch Chief