



DIVISION OF
CORPORATION FINANCE

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

February 9, 2011

Mr. Michael A. Gerlich
Vice President and Chief Financial Officer
Gastar Exploration Ltd.
1331 Lamar Street
Houston, TX 77010

**Re: Gastar Exploration Ltd.
Form 10-K for Fiscal Year Ended December 31, 2009
Filed March 25, 2010
File No. 1-32714**

Dear Mr. Gerlich:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

Ethan Horowitz
Branch Chief