



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 4628

April 27, 2017

J. Russell Porter
Chief Executive Officer
Gastar Exploration Inc.
1331 Lamar Street, Suite 650
Houston, TX 77010

**Re: Gastar Exploration Inc.
Registration Statement on Form S-3
Filed April 6, 2017
File No. 333-217168**

Dear Mr. Porter:

We have limited our review of your registration statement to those issues we have addressed in our 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.

General

1. We note that you are registering the guarantee of your debt securities by Northwest Properties Ventures LLC. Please revise your registration statement to include Northwest Properties Ventures LLC as a co-registrant on the registration statement cover-page and have Northwest Properties Ventures LLC sign the registration statement. Refer to General Instruction I.C. to Form S-3 and the note thereto. In addition, please ensure that Northwest Properties Ventures LLC has properly filed the registration statement on EDGAR with its own separate CIK number.

Exhibit 5.1

2. We note counsel's opinion is "limited to the laws of the State of New York and the DGCL." However, Northwest Properties Ventures LLC is incorporated in the State of

J. Russell Porter
Gastar Exploration Inc.
April 27, 2017
Page 2

Oklahoma. Please provide a legal opinion that covers the laws of the State of Oklahoma. For each guarantee, counsel must provide an opinion that such guarantee is the guarantor's binding obligation. For guidance, see Section II.B.1.e. of Staff Legal Bulletin No. 19 (CF), Legality and Tax Opinions in Registered Offerings (October 14, 2011), available at <https://www.sec.gov/interps/legal/cfslb19.htm>.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Lisa Krestynick, Staff Attorney, at (202) 551-3056 or Karina Dorin, Staff Attorney, at (202) 551-3763 with any questions.

Sincerely,

/s/H. Roger Schwall

H. Roger Schwall
Assistant Director
Office of Natural Resources

cc: James M. Prince
Vinson & Elkins LLP