



DIVISION OF
CORPORATION FINANCE

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

October 21, 2013

Via Email

Mr. Michael A. Gerlich
Chief Financial Officer
Gastar Exploration Ltd.
Gastar Exploration USA, Inc.
1331 Lamar Street, Suite 650
Houston, Texas 77010

**Re: Gastar Exploration Ltd.
Form 10-K for Fiscal Year Ended December 31, 2012
Filed March 11, 2013
Form 8-K filed March 11, 2013
Supplemental Response dated September 20, 2013
File No. 001-32714**

**Gastar Exploration USA, Inc.
Form 10-K for Fiscal Year Ended December 31, 2012
Filed March 11, 2013
Form 8-K filed March 11, 2013
Supplemental Response dated September 20, 2013
File No. 001-35211**

Dear Mr. Gerlich:

We have reviewed your response and 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 within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. 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 filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2012

Notes to Consolidated Financial Statements

Note 2 – Summary of Significant Accounting Policies

Derivative Instruments and Hedging Activity, page F-14

1. We note your response to comment 4 in our letter dated September 12, 2013. Please identify the specific provisions of the relevant authoritative literature that support the separate disclosure of realized and unrealized gains / losses on derivative contracts not designated as cash flow hedges. As part of your response, explain to us why the measure of unrealized gains / losses that you have presented is an amount calculated in accordance with U.S. GAAP. In addition, please tell us whether unrealized gains / losses on derivative contracts not designated as cash flow hedges represents both unrealized gains / losses on instruments held at period end and the reversal of previously recognized gains / losses on instruments settled during the period.
2. Separately, in view of our question regarding the support under U.S. GAAP for your separate presentation of realized and unrealized gains and losses, please explain your basis for concluding the following presentations are appropriate:
 - Separate disclosure of unrealized gains and losses on the face of your consolidated statements of operations;
 - The line items for “Unrealized hedge loss (gain)” and “Realized (gain) loss on derivative contracts” in your consolidated statements of cash flows;
 - Disaggregated presentation of realized and unrealized gains / losses in the notes to your consolidated financial statements;
 - Separate presentation and discussion of realized and unrealized gains / losses in both tables and text provided in your MD&A; and
 - Disclosure of average sales price per unit including the impact of realized hedging activities.

As part of your response to these points, explain to us why you believe presentations based solely on total net GAAP gain or loss and/or total net proceeds, as may be relevant to the circumstances of a particular presentation, would not be preferable.

3. Your response to comment 4 in our letter dated September 12, 2013 states that unrealized gains or losses on unsettled commodity instruments are presented separately on the face

of your statement of operations because periodic changes in the fair value of these contracts do not relate to production reported in the current period. Separate presentation of these amounts on the face of the statement of operations does not appear to be appropriate. Please revise to present changes in the fair value of your commodity derivative contracts as part of a single line item in your statement of operations.

Note 19 – Supplemental Oil and Gas Disclosures, page F-41

Standardized Measure of Discounted Future Net Cash Flows Relating to Proved Oil and Gas Reserves, page F-44

4. We note your response to comment 7 in our letter dated September 12, 2013 regarding your calculation of the standardized measure of discounted future cash flows. Your response states that future cash inflows were calculated based on the 12-month arithmetic average first-day-of-the-month benchmark prices identified and used in the reserve reports of your independent engineers. However, it does not appear that the disclosure on page F-44 of your Form 10-K of the prices used in the calculation of future cash inflows is consistent with the average adjusted product prices used to estimate proved reserves as disclosed in the reserve reports. Please revise this disclosure accordingly.

Form 8-K filed March 11, 2013

Non-GAAP Financial Information and Reconciliation

Reconciliation of Net Income (Loss) to Net Income (Loss) Excluding Special Items, page 12

5. We note your response to comment 10 in our letter dated September 12, 2013. As noted in our prior comment, it appears that the reconciliation of the non-GAAP measures presented should be revised to replace the adjustment for unrealized hedge gains / losses with two separate line items: one for the total gain / loss recognized and another for the net cash received / paid for oil and natural gas derivatives not designated as hedging instruments which were settled during the period.

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

Michael A. Gerlich
Gastar Exploration Ltd.
Gastar Exploration USA, Inc.
October 21, 2013
Page 4

- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Wei Lu, Staff Accountant, at (202) 551-3725 or me at (202) 551-3311 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Brad Skinner for

Ethan Horowitz
Branch Chief