



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 4628

November 21, 2016

Jay C. Graham
Chief Executive Officer
WildHorse Resource Development Corporation
9805 Katy Freeway, Suite 400
Houston, TX 77024

**Re: WildHorse Resource Development Corporation
Registration Statement on Form S-1
Filed November 10, 2016
File No. 333-214569**

Dear Mr. Graham:

We have reviewed your registration statement 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 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. Unless we note otherwise, our references to prior comments are to comments in our November 4, 2016 letter.

Prospectus Forepart

1. The graphical illustration presenting the "Historical Production Growth" is footnoted to clarify that the figures exclude the Burleson North Acquisition. In this regard, we note the figure in the graphical presentation for Q3 2016 is 14 MBoe/d. However, the Q3 2016 production figure shown in the illustration above for the Total WRD is 17.9 MBoe/d and appears to give effect to the Burleson North Acquisition. Please modify your disclosure as appropriate to clarify or resolve the inconsistencies in your presentation.
2. We also note the figures relating to the Total WRD, North Louisiana and Eagle Ford net acres, Q3 2016 production, and the gross and net drilling locations appear to give effect to the Burleson North Acquisition. However, the information relating to the proved, probable and possible reserves shown in the same illustration does not appear to give

effect to the Burleson North Acquisition. Please expand your presentation as appropriate to clarify the differences in the information as presented.

Prospectus Cover Page

3. We note your revisions to the first and fourth paragraphs of the prospectus cover page. Your revised disclosures indicate that the shares being offered by the selling shareholders only relate to the over-allotment of shares. However, this disclosure appears to be inconsistent with other disclosures in your filing. Please confirm or revise your disclosure as necessary.

Prospectus Summary, page 1

Our Reserve Information, page 7

4. Please expand your disclosure to clarify that the reserves of WildHorse and Esquisto presented on a combined basis as of June 30, 2016 on page 7 and elsewhere on pages 20 and 106, and on page 113 as of June 30, 2016 and December 31, 2015 does not give effect to the Burleson North Acquisition.

Business, page 100

Production, Realized Prices and Production Costs, page 118

5. We note you present separate disclosure of the production, average sales prices and average cost per Boe figures for WildHorse and Esquisto on page 118. However, it appears that such information presented in summary form on a Pro Forma basis on page 119 incorporates additional information not otherwise provided relating to the Burleson North Acquisition. Please expand your tabular presentation to provide separate disclosure of the figures relating to the Burleson North Acquisition consistent with such disclosure relating to WildHorse and Esquisto on page 118.

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.

You may contact Ethan Horowitz, Accounting Branch Chief, at (202) 551-3311 if you have questions regarding comments on the financial statements and related matters. You may contact John Hodgin, Petroleum Engineer, at (202) 551-3699 with questions about engineering

Jay C. Graham
WildHorse Resource Development Corporation
November 21, 2016
Page 3

comments. Please contact Jerard Gibson, Staff Attorney, at (202) 551-3473 or, in his absence, me at (202) 551-3642 with any other questions.

Sincerely,

/s/ Loan Lauren P. Nguyen

Loan Lauren P. Nguyen
Legal Branch Chief
Office of Natural Resources

cc: Douglas E. McWilliams
Michael S. Telle
Vinson & Elkins L.L.P.