



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4628

September 8, 2016

Anthony Bahr
Chief Executive Officer
WildHorse Resource Development Corporation
9805 Katy Freeway, Suite 400
Houston, TX 77024

**Re: WildHorse Resource Development Corporation
Draft Registration Statement on Form S-1
Submitted August 12, 2016
CIK No. 0001681714**

Dear Mr. Bahr:

We have reviewed your draft 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 providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

General

1. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

Table of Contents

2. We note that immediately following the Table of Contents you state that “the information contained in this prospectus is accurate only as of any date of this prospectus,” and further, that your “business, financial condition, results of operations and prospectus may have changed since that date.” Please supplement here to clarify that the prospectus will

be updated to the extent required by law and acknowledge that you will update the prospectus during the offering for all material changes.

Prospectus Summary

WildHorse Development, page 1

3. You indicate here that one of your predecessors' involvement in the horizontal redevelopment of the Terryville Complex consisted of some of the "highest initial-producing natural gas wells in the United States." Please provide us with the relevant portions of the publicly available data supporting this assertion, specifically related to your predecessor's involvement.
4. Please also expand your disclosure in this section to include a brief discussion of any significant adverse business developments or conditions experienced by your sponsor, its affiliates or any predecessor entity that would be material to investors in this offering.
5. Please clarify your use of the term "compound annual growth rate" and explain the underlying assumptions utilized to calculate this figure.
6. We note your discussion of increased drilling activity due to new drilling technologies and improved procedures. Please balance the disclosure on page 2 regarding your production growth and elsewhere regarding your increased drilling activity by also briefly discussing reduced drilling operations and completion activities during your most recent fiscal periods ended due to the commodity pricing environment, consistent with your later disclosure under the Drilling Activity subheading in the MD&A section.
7. In footnote 2 to the table at the top of page 3, you state that the column titled "Average NRI%" represents "our average net revenue interest as if we owned a 100% working interest in all wells ("8/8ths NRI")." Please explain to us why you use a 100% working interest in your calculation here, given that the percentages in your "Weighted WI%" column are generally less than 100%.

Maintain a disciplined, growth-oriented financial strategy, page 5

8. We note your use of proceeds and your liquidity position disclosure here. Please clarify the disclosure that you intend to use a portion of the offering proceeds to repay in full and terminate the WildHorse revolving credit facility, the Esquisto revolving credit facility and certain notes payable to the Esquisto members.

Our Principal Stockholders, page 8

9. Please update this disclosure with your next amendment to include the applicable percentages of the securities holdings of your principal stockholders. Please also revise

throughout your registration statement to include disclosures which may not be omitted pursuant to Rule 430A of the Securities Act.

Risk Factors

Risks Related to Our Business

Oil, natural gas and NGL prices are volatile. A sustained decline in oil, natural gas and NGL prices, page 16

10. Disclosure in the third paragraph from the top of page 17 states: "...using lower prices in estimating proved reserves may result in a reduction in proved reserve volumes due to economic limits." If your estimate of disclosed proved reserve quantities would be lower based on current commodity prices, quantified information regarding the reasonably possible effects of current commodity prices should be provided based on potential scenarios deemed reasonably likely to occur by management, to the extent quantified information is reasonably available. Refer to the guidance in FRC 501.12.a, FRC 501.12.b.3, and FRC 501.14 (Sections III.A, III.B.3, and V of SEC Release Nos. 33-8350; 34-48960; FR-72), as it relates to providing corresponding disclosures throughout your submission regarding the effects of material trends and uncertainties that will promote understanding of the potential impacts to your financial condition, results of operations, and reserve quantities.

Risks Related to this Offering and Our Common Stock

NGP and its affiliates are not limited in their ability to compete with us..., page 38

11. We note the disclosure that you will "renounce" your interest and expectancy in any business opportunity that may be, from time to time, presented to NGP or its affiliates. Please supplement your disclosure in this section and elsewhere in your prospectus to specifically address any conflicts that may arise from interests currently held by NGP and NGP affiliates that are separate from yours.

Use of Proceeds, page 46

12. We note that you intend to pay off "certain" notes payable by Esquisto to its members. Please revise your disclosure in the fourth paragraph in this section and elsewhere in the prospectus to clarify, consistent with your later disclosure in the MD&A section, that you intend to fully discharge these notes.
13. We note that you intend to use a portion of the net proceeds for "general corporate purposes," which may include the funding of your drilling program, working capital and acquisitions. Please revise to specify the amounts for each purpose or clarify that you have no specific plan for a significant portion of the proceeds to be used for each purpose.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Factors Affecting the Comparability of Our Results of Operations to the Historical Results of Operations of Our Predecessor, page 57

14. Expand the disclosure regarding your derivative arrangements and hedging strategy to provide additional information that will enable an investor to ascertain the likelihood that your past results are indicative of future performance. Your revised disclosure should compare derivative agreements entered into in prior periods to those currently in place and explain how differences in terms are expected to affect your ability to reduce the potential effects of changes in oil and natural gas prices on your operating results and cash flow from operations. Refer to FRC 501.12.

Pro Forma Results of Operations and Operating Expense, page 58

15. We note that you have presented an analysis of your operating results on a pro forma basis. Revise to explain how the pro forma presentation was derived, why management believes it is useful, and any potential risks associated with using such a presentation.

Capital Resources and Liquidity, page 72

16. Expand the discussion of your 2016 capital budget here to address amounts you plan to expend for lease extensions and renewals, as disclosed on page 97 of your submission.
17. Disclosure on page 73 states that operating cash flows and available capacity under your new revolving credit facility will be sufficient to fully fund your capital expenditure budget for 2016 and 2017 and meet other cash requirements after giving effect to your proposed offering. Expand this disclosure to quantify the amount of capital expenditures budgeted for these years and the expected available capacity under your new revolving credit facility.

Debt Agreements, page 74

18. We note your reference in the risk factors section to various restrictions that may be imposed by your new credit facility. Please update this disclosure in future amendments to include the material terms of your new revolving credit facility, including the restrictive covenants contained therein.

Critical Accounting Policies and Estimates, page 79

19. Provide a more robust discussion of your critical accounting policies and estimates, focusing on the assumptions and uncertainties underlying your critical accounting estimates. Quantify, where material, and provide an analysis of the impact of critical accounting estimates on your financial position and results of operations for the periods presented. In addition, include a qualitative and quantitative analysis of the sensitivity of

reported results to changes in your assumptions, judgments, and estimates, including the likelihood of obtaining materially different results if different assumptions were applied and, if reasonably likely changes would have a material effect on your financial condition or results of operations, the impact that could result, given the range of reasonable outcomes, should be disclosed and quantified. Refer to FRC 501.14.

Impairment of Oil and Natural Gas Properties, page 80

20. Your predecessor, WildHorse Resources II, LLC recognized impairment charges for its proved oil and gas properties of \$9.3 million and \$24.7 million in the fiscal years ended December 31, 2015 and 2014, respectively. In addition, disclosure on page 25 of your submission states lower commodity prices in the future could result in impairments of your properties, which could have a material adverse effect on your results of operations for the periods in which such charges are taken. Revise your corresponding critical accounting policy and estimate disclosure to also address the following:
- Describe how you determined the key assumptions used to calculate expected future cash flows;
 - Discuss the degree of uncertainty associated with these key assumptions;
 - Identify potential events and/or changes in circumstances reasonably expected to negatively affect these key assumptions; and
 - State the percentage by which undiscounted cash flows exceeded the carrying value of your oil and gas properties.

Incentive Units, page 80

21. We note that incentive units were granted to certain key employees which entitle the grantee to distributions after cumulative distribution thresholds have been achieved. Revise to disclose whether your planned offering will result in the achievement of these distribution thresholds and, if so, state the amount of compensation expense that will be recognized as a result.

Business

Overview, page 83

22. We note your discussion here and in the prospectus summary regarding improved drilling technologies and procedures which yielded increased efficiency in your drilled wells per rig. Expand your disclosure in this section to briefly discuss such technologies, including the distinctions between your Generation 1 and Generation 3 hydraulic fracturing designs that contributed to such efficiencies.

Our Properties

Eagle Ford Acreage, page 89

23. Please provide us copies of the relevant portions of public industry data that you cite or rely on in your filing, including, but not limited to, market research data prepared by Baker Hughes. Please note that the requested information should be filed as EDGAR correspondence or, alternatively, should be sent in paper form accompanied by a cover letter indicating that the material is being provided pursuant to Securities Act Rule 418 and that such material should be returned to the registrant upon completion of the staff review process.
24. Please also provide support for your assertion in this section regarding your targeted areas “in the lowest stratigraphic interval” within the Eagle Ford Shale and explain the significance of such targets relative to other positions with the formation.

Reserve Data, page 91

Proved Undeveloped Reserves, page 92

25. The disclosure relating to the changes in your proved undeveloped reserves indicates the 3.6 MMBoe in negative revisions of previous estimates was “primarily” attributable to a decrease in commodity prices which affected the economic lives of the wells. Your disclosure should reconcile the overall change for the line item by separately identifying and quantifying each factor that contributed to a material change in your proved undeveloped reserves so that the change in net reserves between periods is fully explained. To the extent that two or more factors contribute to a material change, indicate the net amount attributable to each factor accompanied by a narrative explanation. In regards to your disclosure of revisions in previous estimates, please identify such factors as changes caused by commodity prices, well performance, uneconomic proved undeveloped locations or changes resulting from the removal of proved undeveloped locations due to changes in a previously adopted development plan. Refer to Item 1203(b) of Regulation S-K.

Preparation of Reserves Estimates, page 93

26. Expand the disclosure relating to your proved undeveloped locations that are more than one offset from a proved developed well to identify the total number of such locations and the related reserve quantities, if material. As part of your expanded disclosure, please clarify the total number and net quantities of reserves related to similar locations which have been drilled and were either determined to be uneconomic upon drilling or for which the pre-drill reserves were significantly revised downward upon initial completion and production. Refer to FASB ASC 932-235-50-10 and Rule 4-10(a)(24) of Regulation S-X.

Production, Realized Prices and Production Costs, page 95

27. We note your tabular disclosure of production for the periods shown on pages 95 and 96; however, it does not appear that you have provided disclosure here or elsewhere of the production relating to the fields that contain 15% or more of the total proved reserves of each entity or the entities on a combined pro forma basis. Please advise or revise your disclosure to comply with the requirements set forth in Item 1204(a) of Regulation S-K.

Undeveloped Acreage Expirations, page 97

28. Expand your disclosure to clarify if there are any proved undeveloped reserves as of December 31, 2015 assigned to locations which are currently scheduled to be drilled after lease expiration.

Drilling Activity, page 98

29. We note that you have provided certain combined disclosures related to WildHorse II, LLC and Esquisto Resources II, LLC. To the extent that you have provided information on a combined basis, please also provide separate disclosure for each entity throughout your submission pursuant to disclosure under Item 1201 of Regulation S-K, including with regard to information required by Items 1202, 1203, 1205, 1206, and 1208 of Regulation S-K. We note that you present separate financial statements for WildHorse Resources II, LLC and Esquisto Resources II, LLC.

Our Operations

Marketing and Customers, page 99

30. We note your reference to two customers that accounted for, respectively, 57% and 72% of your total revenue. Please identify such parties and also file these agreements as exhibits to your registration statement pursuant to Item 601(b)(10) of Regulation S-K or tell us why you believe this is not required.

Management, page 111

31. Please provide the disclosures regarding your executive officers and directors. With respect to your directors, briefly discuss the specific experience, qualifications, attributes, or skills that led to the conclusion that the person is suited to serve as a director of the company pursuant to Item 401(e) of Regulation S-K.

Executive Compensation, page 113

32. Please provide the executive compensation disclosure for fiscal year ended 2015 and expand your disclosure in this section to provide historical compensation disclosure for Mr. Bahr and the other officers of your predecessor, WildHorse Resources II, LLC.

33. We further note disclosure on page 81 that your predecessor, WildHorse Resources II, LLC, granted certain incentive units to certain of its key employees. As applicable, please update this section to disclose any grants of incentive units to officers of WildHorse Resources II, LLC and clarify who will be responsible for payments made in connection with the incentive units subsequent to the reorganization and in connection with this offering.

Underwriting (Other Relationships), page 132

34. Disclosure on the prospectus cover page appears to indicate that the underwriters will enter into an underwriting agreement with you and the selling stockholders with respect to the securities being offered. However, disclosure in the last paragraph on page 132 appears to only discuss the option of the underwriters to purchase additional shares from the selling stockholders. Please revise this section or advise.

Financial Statements

WildHorse Resource Development Corporation

Notes to Unaudited Pro Forma Combined Financial Statements

Supplemental Disclosure of Oil and Natural Gas Operations, page F-12

Net Proved Oil and Natural Gas Reserves, page F-12

35. Expand the disclosure provided as barrel of oil equivalent amounts to present the total net proved reserves and the changes therein along with the total proved developed and total proved undeveloped reserves by individual product type for each of the entities and on a combined pro forma basis for the periods ending December 31, 2014 and 2015, respectively. Refer to FASB ASC 932-235-50-4 and 50-9.
36. Expand the disclosure of the changes in total net proved reserves relating to each of the entities for the periods ending December 31, 2014 and 2015, respectively, to include an appropriate narrative explanation of the significant changes for each line item other than production. Refer to FASB ASC 932-235-50-5.

Report of Independent Registered Public Accounting Firm and Independent Auditors Report, pages F-17 and F-20, respectively

37. Provide revised accountants' reports identifying the city and state in which such reports were issued. Refer to Rule 2-02(a)(3) of Regulation S-X.

WildHorse Resources II, LLC

Notes to Consolidated Financial Statements

Supplemental Oil and Gas Information (Unaudited), page F-42

38. The disclosure on page F-42 indicates that “proved reserves as of December 31, 2015 and 2014 were prepared by qualified petroleum engineers on our staff and audited by the independent petroleum engineering firm of CG&A.” Please obtain and file a report and consent of the third party as exhibits relating to the estimates for the periods ending December 31, 2015 and 2014, respectively. Refer to Item 1202(a)(8) of Regulation S-K.
39. Revise the disclosure relating to your presentation of reserves in terms of gas equivalent amounts to present the net quantities of your reserves on a consistent basis throughout your filing as barrel of oil equivalent amounts.
40. Expand the disclosure relating to the changes in total net proved reserves to provide an appropriate narrative explanation for the significant changes relating to each line item entry within your reconciliation, such as revisions of previous estimates, improved recovery, extensions and discoveries, acquisitions and divestitures. Your explanation should address the change for the line item by separately identifying and quantifying each factor that contributed to a significant change so that the change in net reserves between periods is fully explained. To the extent that two or more factors contribute to a significant change, indicate the net amount attributable to each factor accompanied by a narrative explanation. Refer to FASB ASC 932-235-50-5.

Esquisto Resources II, LLC and Subsidiaries

Notes to Consolidated Financial Statements

Unaudited Supplementary Information

Reserve Quantity Information, page F-82

41. The disclosure on page F-82 indicates that “the estimates of the Company’s proved reserves as of December 31, 2015 and 2014 were based on evaluations by independent petroleum engineers, Calwey, Gillespie and Associates, Inc.” Please obtain and file a report and consent of the third party as exhibits relating to the estimates for the periods ending December 31, 2015 and 2014, respectively. Refer to Item 1202(a)(8) of Regulation S-K.
42. The disclosure relating to the changes in your total proved reserves indicates that revisions of previous estimates during 2015 were “primarily” attributable to decreased commodity prices which decreased the useful lives of the wells. Your disclosure should reconcile the overall change for the line item by separately identifying and quantifying

each factor that contributed to a significant change in your proved reserves so that the change in net reserves between periods is fully explained. To the extent that two or more factors contribute to a significant change, indicate the net amount attributable to each factor accompanied by a narrative explanation. In regards to your disclosure of revisions in previous estimates, please identify such factors as changes caused by commodity prices, well performance, uneconomic proved undeveloped locations or changes resulting from the removal of proved undeveloped locations due to changes in a previously adopted development plan. Refer to FASB ASC 932-235-50-5.

Notes to Statements of Revenues and Direct Operating Expenses of the Comstock Properties Working Interest

Supplementary Oil and Gas Disclosures (Unaudited), page F-109

43. Please provide us with a reconciliation and narrative explanation of the difference in the disclosure of the total proved reserves and changes therein provided on page F-110 for the period beginning January 1, 2015 and the disclosure provided elsewhere on page F-13 relating to the Comstock Acquisition.
44. Expand the disclosure to provide a narrative explanation for the significant changes in total net proved reserves relating to extensions, discoveries and other additions for each of the periods presented on page F-110. Refer to FASB ASC 932-235-50-5.

You may contact Donald Delaney, Staff Accountant, at (202) 551-3863 or Ethan Horowitz, Staff Accountant, at (202) 551-3311 if you have questions regarding comments on the financial statements and related matters. 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.