

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

Mail Stop 4628

October 5, 2017

Frank A. Lodzinski President and Chief Executive Officer Earthstone Energy Inc. 1800 Woodloch Forest Drive, Suite 300 The Woodlands, TX 77380

Re: Earthstone Energy Inc.

Form 10-K for the Fiscal Year ended December 31, 2016

Filed March 15, 2017

Form 10-K/A for the Fiscal Year ended December 31, 2016

Filed September 1, 2017

Response dated September 1, 2017

File No. 001-35049

Dear Mr. Lodzinski:

We have reviewed your September 1, 2017 response to our comment letter and the amended filing 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our August 18, 2017 letter.

Form 10-K for the Fiscal Year ended December 31, 2016

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 40

Obligations and Commitments, page 50

1. We note your response to prior comment 3 indicates that the non-cancelable fees under the contract represent a fixed amount regardless of the number of wells or volumes produced. Please tell us how the expected economic life of your proved producing reserves compares to the full term of the contract period. Please quantify the contract costs, including any portion that pertains to periods beyond the remaining economic life

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of your proved producing reserves, and explain how these have been considered in the economic analyses underlying your proved reserve estimates.

2. Your disclosure and response to prior comment 3 appear to indicate that the fixed contract costs were captured solely within the proved developed producing cash flows. If these costs are incurred in order to deliver your production to market and are likewise necessary to the future production and development of your proved reserves, tell us why you believe it is appropriate to omit such costs in preparing the cash flows for proved developed non-producing and undeveloped reserves.

If the pipelines will be utilized for production from new wells once drilled and put into production, but such costs were not considered in the cash flows utilized in the economic analyses of the developed non-producing and undeveloped properties for which you have reported proved reserves, tell us how you confirmed that these reserves are economically producible and satisfy the requirements for classification as proved reserves. Refer to the definitions of economic producibility and proved reserves under Rule 4-10(a)(10) and (a)(22) of Regulation S-X.

You may contact John Cannerella, Staff Accountant, at (202) 551-3337 or Karl Hiller, Accounting Branch Chief, at (202) 551-3686 if you have questions regarding the financial statements and related matters. For questions regarding these comments, you may contact John Hodgin, Petroleum Engineer, at (202) 551-3699. Please contact Jerard Gibson, Staff Attorney, at (202) 551-3473 or Loan Lauren P. Nguyen, Legal Branch Chief, at (202) 551-3642 with any other questions.

Sincerely,

/s/ Loan Lauren P. Nguyen for

H. Roger Schwall Assistant Director Office of Natural Resources

cc: Reid A. Godbolt Jones & Keller, P.C.