September 10, 2021

David Lancaster Chief Financial Officer Matador Resources Company 5400 LBJ Freeway, Suite 1500 Dallas, Texas 75240

Company

Re: Matador Resources Form 10-K for Filed February 26, File No. 001-35410

Fiscal Year Ended December 31, 2020

2021

Dear Mr. Lancaster:

We have reviewed your 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.

Form 10-K for Fiscal Year Ended December 31, 2020

Business Estimated Proved Reserves, page 17

Your explanation of the 1. changes in proved undeveloped reserves related to revisions of prior estimates appears to include changes from two or more unrelated factors as well as both positive and negative changes summed into a single quantity without further explanation. For example, the revisions for 2020 identified the removal of certain undeveloped reserves as a result of lower weighted average oil and natural gas prices; however, the proved undeveloped reserves revisions of prior estimates shown is positive. Revise your disclosure to address the overall change by separately identifying and quantifying the net amount attributable to each contributing factor, including offsetting factors, so the change in proved undeveloped reserves due to revisions of prior estimates is fully explained. Refer to the disclosure requirements in Item 1203(b) of Regulation S-K. David Lancaster FirstName LastNameDavid Lancaster Matador Resources Company Comapany 10, September NameMatador 2021 **Resources Company** September 10, 2021 Page 2 Page 2 FirstName LastName Drilling Results, page 22 Expand your disclosure to address your present activities, including 2. the number of gross and net wells in the process of being drilled, completed, or waiting on completion, and

other related activities of material importance as of December 31,

2020. Refer to the disclosure requirements in Item 1206 of Regulation S-K Undeveloped Acreage Expiration, page 22 We note that approximately 39%, 25% and 13% of your total net 3. undeveloped acres will expire over the next three years, respectively. Expand your disclosure to clarify the extent that you have any proved undeveloped locations currently scheduled to be drilled after the expiration date of the lease. If there are material quantities of proved undeveloped reserves attributable to these locations, also disclose the costs which would be necessary to extend the time to the expiration of your acreage. Refer to Rule 4-10(a)(26) of Regulation S-X and FASB ASC 932-235-50-10. Unaudited Supplementary Information Supplemental Oil and Natural Gas Disclosures, page F-38 4 Your explanation of the changes in total proved reserves related to revisions of prior estimates appears to include changes from two or more unrelated factors as well as both positive and negative changes summed into a single quantity without further details. For example, your 2020 revision of prior estimates identified better-than-projected well performance from certain wells which were offset by downward revisions attributable to lower weighted average oil and natural gas prices. Revise your disclosure to identify and quantify the net amount, if significant, relating to each contributing factor separately, including offsetting factors so the change due to revisions of prior estimates is fully explained. Refer to the disclosure requirements in FASB ASC 932-235-50-5. Your disclosure of changes to total proved reserves attributed to 5. extensions and discoveries on pages 18 and F-40 appears to be significantly greater than the corresponding change in the net quantities of proved undeveloped reserves disclosed on page 20 for the year ended 2020. For example, the change in total proved reserves for the year ended December 31, 2020 is 35.3 MMBoe compared to the change in proved undeveloped reserves of 20.1 MMBoe. We note similar differences in the estimates for the years ended December 31, 2019 and 2018, respectively. Expand the discussion of the changes in your total proved reserves attributable to extensions and discoveries for each period presented to include the reason(s) for this difference. Refer to the disclosure requirements in FASB 932-235-50-5. Standardized Measure of Discounted Future Net Cash Flows and Changes Therein Relating to Proved Oil and Natural Gas Reserves, page F-41 The reserve report, filed as Exhibit 99.1, indicates that the 6. estimates of future net revenue David Lancaster Matador Resources Company September 10, 2021 Page 3 do not include any salvage value for the lease and well equipment or the cost of abandoning the properties. However, disclosure provided in footnote (4) on page 18 appears to indicate that estimates of the standardized measure presented in Form 10-K for the year ended December 31, 2020 represent the present value of estimated future net cash flows less the estimated costs for plugging and abandonment. Please resolve for us this apparent inconsistency in disclosure relating to the costs included in your calculation of the standardized measure. 7. If the abandonment costs, including the costs related to your proved

undeveloped locations, have not been included in your calculation of the standardized measure, please tell us the undiscounted dollar amounts and the dollar amounts discounted at ten percent for each of the periods presented, e.g. as of December 31, 2020, 2019 and 2018, respectively, and explain to us your rationale for excluding these costs from your calculation of the standardized measure. 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. You may contact Sandra Wall, Petroleum Engineer, at (202) 551-4727 if you have questions regarding the engineering comments. Please contact Ethan Horowitz,

FirstName LastNameDavid LancasterSincerely,Comapany NameMatador Resources CompanyDivision ofCorporation FinanceSeptember 10, 2021 Page 3& TransportationOffice of EnergyFirstName LastNameSeptember 10, 2021 Page 3

Branch Chief, at

(202) 551-3311 with any other questions.