

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

May 10, 2016

Mail Stop 4631

Via E-Mail
Robert P. Capps
Co-Chief Executive Officer and
Chief Financial Officer
Mitcham Industries, Inc.
8141 SH 75 South
P.O. Box 1175
Huntsville, TX 77342

Re: Mitcham Industries, Inc.

Amendment No. 2 to Registration Statement on Form S-1

Filed April 22, 2016 File No. 333-208177

Dear Mr. Capps:

We have reviewed your amended registration statement and have the following comment. Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies 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 this comment, we may have additional comments.

Summary Historical Financial Data, page 10

Selected Historical Financial Data, page 23

We note your presentation of EBITDA includes an adjustment for impairment of
intangible assets. Measures referred to as EBITDA should not exclude items other than
interest, taxes, depreciation and amortization. Please revise your presentation
accordingly. Refer to Question 103.01 of the Compliance and Disclosure Interpretations
for Non-GAAP Financial Measures. Please also revise your presentation of EBITDA in
future Exchange Act filings.

Robert P. Capps Mitcham Industries, Inc. May 10, 2016 Page 2

You may contact Melinda Hooker (Staff Accountant) at 202-551-3732 or Dale Welcome (Staff Accountant) at 202-551-3865 if you have questions regarding comments on the financial statements and related matters. Please contact Frank Pigott (Staff Attorney) at 202-551-3570 or me at 202-551-3729 with any other questions.

Sincerely,

/s/ Craig Slivka, for

Pamela Long Assistant Director Office of Manufacturing and Construction

cc: Gillian A. Hobson Vinson & Elkins, L.L.P.