

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

February 19, 2009

Mr. Robert P. Capps
Executive Vice-President-Finance and Chief Financial Officer, Mitcham Industries, Inc. 8141 SH75 South
P.O. Box 1175
Huntsville, TX 77342

Re: Mitcham Industries, Inc.

Form 10-K for the year ended January 31, 2008 Form 10-Q for the quarter ended October 31, 2008

File No. 0-25142

Dear Mr. Capps:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

If you have any questions regarding our review of your filings, please direct them to Mindy Hooker, Staff Accountant, at (202) 551-3732, Jeanne Baker, Assistant Chief Accountant at, (202) 551-3691 or to the undersigned at (202) 551-3768.

Sincerely,

John Cash Branch Chief