

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

March 1, 2011

Mitcham Industries, Inc.
Robert P. Capps, Executive Vice President – Finance and Chief Financial Officer
8141 SH 75 South
P.O. Box 1175
Huntsville, TX 33742

**Re:** Mitcham Industries, Inc.

Form 10-K for the year ended January 31, 2010 filed April 9, 2010

Form 10-Q for the quarter ended October 31, 2010 filed December 8, 2010

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.

You may contact Mindy Hooker at (202) 551-3732, Jeanne Baker at (202) 551-3691 or me at (202) 551-3768 with any questions.

Sincerely,

John Cash Branch Chief