January 10, 2006

Mr. Michael A. Pugh
Chief Financial Officer, Mitcham Industries, Inc.
8141 SH 75 South
P.O. Box 1175
Huntsville, TX 77342

Re: Mitcham Industries, Inc.
Form 10-K for the fiscal year ended January 31, 2005
Form 10-Q for the quarter ended October 31, 2005
File No. 0-25142

Dear Mr. Pugh:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended January 31, 2005

Management`s Discussion and Analysis - Revenues, page 14

1. Separately quantify new seismic equipment sales and sales of depreciated seismic equipment being sold from your lease pool. Also quantify the related cost of goods sold associated with these sales. In this regard, we note you disclosure that gross margins can be significantly impacted by the mix of sales revenue between new versus depreciated equipment. Expand your disclosure to clarify why gross margins are significantly different between new versus depreciated equipment.

2. Disclose the business decisions management considers with regard selling depreciated equipment to customers versus holding such assets for lease.

Management`s Discussion and Analysis - Liquidity, page 15

3. We note that you have had significant equipment sales during the last three fiscal years and that these sales have had a significant impact on your operating income. In this regard, we also note that your seismic equipment lease pool has decreased significantly. Expand your discussion of liquidity to adequately address how this decrease in your seismic equipment lease pool will impact your ability to

generate equipment leasing revenues in future periods. Address whether you will have to invest in significant amounts of seismic equipment in the near term to sustain equipment leasing revenue growth.

4. Provide a comprehensive discussion of your cash flows from operating activities for each period presented. Specifically address the reasons for your significant increase in cash flows from operations. This discussion should be made in light of our comment below regarding discontinued operations.

Item 9A - Controls and Procedures, page 18

5. We note your disclosure that your "principal executive officer and principal financial officer have concluded that your current disclosure controls and procedures are effective to timely alert them to material information regarding the Company that is required to be included in your periodic reports filed with the SEC." Revise to clarify, if true, that your officers concluded that your disclosure controls and procedures are also effective to give reasonable assurance that the information required to be disclosed by the Company in reports that it files under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. Alternatively, you may simply state that your principal executive officer and principal financial officer have concluded that your current disclosure controls and procedures are effective.

Consolidated Statements of Cash Flows, F-6

6. We note that cash flows relating to discontinued operations are not required to be set out separately in the statement of cash flows. However, whether or not cash flows from discontinued operations are set out separately, the reconciliation of net income to net cash flows from operations must begin with net income, as required by paragraphs 28 and 29 of Statement 95. Please revise your statements of cash flows accordingly.

7. Tell us and revise to clarify what the net book value of equipment sold represents within your cash flows from operating activities. Reconcile the net book value of equipment sold to the cost of equipment sales reflected in your Consolidated Statements of Operations.

8. We note you have no inventory reflected on your balance sheet, however, your Management Discussion and Analysis and Business sections indicate that you have sales of new equipment during the periods presented. Please tell us and revise to clarify whether you had new equipment on hand as of each balance sheet date presented. If so, quantify such amounts and clarify why inventory is not reflected on your balance sheet and changes in this asset account are not reflected within your cash flows from operating activities.

Note 1 - Organization and Summary of Significant Accounting Policies - Revenue Recognition of Equipment Sales, page F-7

9. We note that you buy equipment for resale in response to specific customer orders and on occasion will hold equipment of third parties and sell such equipment on consignment. We also note that SAP sells

equipment, consumables and engineering hardware.   Please expand your
disclosure to clarify whether you take title of such equipment, and if
so, why you do not appear to have inventory reflected on your balance
sheets. With regard to the sales of such equipment, please tell us
and expand your disclosure to address the appropriateness of reporting
revenue gross versus net. Refer to EITF 99-19 and address the
indicators of gross and net revenue reporting.

Note 1 - Organization and Summary of Significant Accounting Policies -
Sales Allowances and incentives, page F-7

10. You indicate that from time to time you offer incentives to
customers as part of leasing transactions. You indicate that these
allowances and incentives are accounted for as a reduction of revenue.
Tell us and expand your disclosures to indicate when the reduction to
revenue is reflected in your financial statements. Identify the
authoritative literature you relied on with regard to credits on
future purchases and credits on existing equipment repair charges. We
assume that free equipment rent is recognized ratably over the lease
term in accordance with SFAS 13 and FTB 85-3.

Note 1 - Organization and Summary of Significant Accounting Policies -
Seismic Equipment Lease Pool, page F-8

11. We note that the estimated useful life of channel boxes is five
years and that for other peripheral equipment, the average useful
lives is 2 to 10 years. We have the following comments regarding
these management estimates.

* Please tell us and expand your disclosure to indicate whether any
salvage value is assigned to this equipment and if not, clarify why
not.
* We note that depreciation expense has decreased significantly during
the past three fiscal years because, as you indicate in Management`s
Discussion and Analysis, certain equipment reached the end of its
depreciable life coupled with sales of assets with remaining
depreciable life. Disclose the cost basis of the seismic equipment
lease pool that has been fully depreciated as of each balance sheet
date. Clarify whether such equipment is still on lease and if not,
address management`s intentions with regard to such assets. If such
amounts are material, tell us what consideration you gave to changing
the estimated useful life of your leased equipment.

Note 1 - Organization and Summary of Significant Accounting Policies -
Income Taxes,
page F-8

12. We note that your accounting policy as well as your discussion
within your Critical Accounting Policies indicates that the company is
not assured that their net deferred taxes assets will be realized and
have recorded a valuation allowance related to these assets. As
indicated in paragraph17e of SFAS 109, deferred taxes assets should be
reduced by a valuation allowance if, based on the weight of available
evidence, it is more likely than not (a likelihood of more than 50
percent) that some portion or all of the deferred tax assets will

not
be realized. Please confirm that such an assessment would not
change
the valuation allowance you have recorded as of each balance sheet
date presented. Revise your disclosures accordingly. In
addition,
expand Management`s Discussion and Analysis to address the
negative
available evidence that led you to conclude that a valuation
allowance
was necessary to reduce your deferred tax assets to zero.

Note 6 - Discontinued Operations, page F-12

13. You indicate that the proceeds from the sale of DSI were
$250,000
cash and an $800,000 note receivable due over three years. You
also
indicate that during fiscal 2004, the company recorded asset
impairment charge of $700,000 related to "those assets". If those
assets relate to the $800,000 note receivable, the write-down of
this
note receivable should be reported within continuing operations in
accordance with the guidance set forth in SAB Topic 5.Z.5,
Question 1.

Form 10-Q for the quarter ended October 31, 2005

Note 3 - Acquisitions, page 6

14. We note that you have allocated $5.3 million of the total
purchase
price of Seamap to goodwill. Expand your disclosures to provide a
description of the factors that contributed to this very
significant
portion of the purchase price being allocated to goodwill and
address
for us why you have not allocated any of your purchase price to
identifiable intangible assets.

As appropriate, please amend your filing and respond to
these
comments within 10 business days or tell us when you will provide
us
with a response. Please provide us with a supplemental response
letter that keys your responses to our comments and provides any
requested supplemental information. Detailed letters greatly
facilitate our review. Please file your supplemental response on
EDGAR as a correspondence file. Please understand that we may
have
additional comments after reviewing your responses to our
comments.

We urge all persons who are responsible for the accuracy and
adequacy of the disclosure in the filing to be certain that the
filing
includes all information required under the Securities and
Exchange
Act of 1934 and that they have provided all information investors
require for an informed investment decision. Since the company
and
its management are in possession of all facts relating to a
company`s
disclosure, they are responsible for the accuracy and adequacy of
the
disclosures they have made.

In connection with responding to our comments, please
provide,
in writing, a statement from the company acknowledging that:

* the company is responsible for the adequacy and accuracy of the
disclosure in their filings;
* staff comments or changes to disclosure in response to staff
comments do not foreclose the Commission from taking any action
with
respect to the filing; and
* the company may not assert staff comments as a defense in any
proceeding initiated by the Commission or any person under the
federal
securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

If you have any questions regarding these comments, 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

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

DIVISION OF
CORPORATION FINANCE