

April 6, 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
File No. 0-25142

Dear Mr. Pugh:

We have reviewed your response to our letter dated February 28, 2006 and have the following comments. We ask that you respond by April 20, 2006.

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.

Statement of Consolidated Cash Flows
Lease pool equipment and new equipment sales

1. In response to our prior comment one you indicate that beginning with the 2006 Form10-K you will classify cash received from the sale of used lease pool equipment as an investing activity and you will reflect the gross profit from the sale of lease pool equipment as a reduction of income from operations and the cash recipes from the sale of lease pool equipment as investing activities in the statement of cash flows for all periods presented. Please provide us with an analysis of the impact of these corrections on the cash flow statement for all periods presented in your 2006 Form 10-K as well as for fiscal year 2003. Also, provide your analysis for your fiscal year 2006 quarterly reports.

2. If such above restatements are material, we remind you of the following:
* An explanatory paragraph in the audit opinion must be presented,
* Fully comply with SFAS 154, paragraphs 25 and 26,
* Ensure your Item 9A disclosures includes the following:
o A discussion of the restatement and the facts and circumstances surrounding it,
o How the restatement impacted the CEO and CFO`s original conclusions regarding the effectiveness of the their disclosure controls and procedures,
o Address any changes to internal controls over financial reporting,
and
o Address any anticipated changes to disclosure controls and procedures and/or internal controls over financial reporting to prevent future misstatements of a similar nature.

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

3. We note your response to prior comment three. Based on your response it appears that you have been able to create a program which

will allow you to determine the amount of lease pool assets that were fully depreciated at January 31, 2005. Please tell us the amount of lease pool assets that were fully depreciated as of January 31, 2005 and additionally, please tell us what your policy will be regarding the removal of assets which are fully depreciated from your books. Specifically address how you will identify those assets which are fully depreciated but still generating lease revenues. In this regard, we assume that those assets should not be removed from your books.

4. As indicated in Note 8 - Seismic Equipment Lease Pool, Property and Equipment, we note that your gross seismic equipment lease pool decreased \$10,027,000 from January 31, 2004 to January 31, 2005. In addition, we note from your Consolidated Statements of Cash Flows that you purchased \$5,668,000 of seismic equipment held for lease during the year ended January 31, 2005. We also note from Note 4 - Supplemental Statements of Cash Flows that you acquired \$685,000 of seismic equipment in exchange for cancellation of accounts receivable. Based on the fact that you have not historically removed fully depreciated equipment from your book and given the information noted above, we assume that the gross book value of lease pool equipment sold related to the \$1,944,000 net book value of lease pool equipment sold during the year ended January 31, 2005 was \$16,380,000. Please confirm our understanding.

5. We reviewed your proposed disclosures for your critical accounting policies regarding your long-lived assets. Please provide additional information regarding management's specific estimates and assumptions underlying your accounting for your long-term assets so that your readers can more fully understand your bases for establishing the useful lives of these assets. In addition, please also provide additional information regarding management's specific estimates and assumptions underlying your SFAS 144 impairment assessment at each reporting date. In this regard, we note that depreciation continues each month until the equipment is fully depreciated "...whether the equipment is actually in use during that period." Specifically address how you determine whether the assets not currently under lease are impaired.

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

6. We have reviewed your response to prior comment four. We note that you intend to maintain the recorded valuation allowances until sufficient positive evidence exists to support a reversal of the tax valuation allowances. Please provide us with your enhanced disclosures which should include a discussion of the specific positive and negative indicators which you analyzed in order to determine the 2006 valuation allowance.

Additional Comments

7. We have reviewed your response to prior comment five. It remains unclear to us how you will address utilization trends when you do not

compute utilization rates for your equipment lease pool. Please provide us with your expanded disclosure which addresses how you determine utilization rates and trends and how that information is assessed with respect to your business.

Please 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 filings reviewed by the staff to be certain that they have provided all information investors require. 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.

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
Mr. Michael Pugh
Mitcham Industries, Inc.
April 6, 2006
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

DIVISION OF
CORPORATION FINANCE