

Mail Stop 6010

July 31, 2007

James R. Gibson
Interim Principal Financial Officer
Affymetrix, Inc.
3420 Central Expressway
Santa Clara, California 95051

RE: Affymetrix, Inc.
Form 10-K for the fiscal year ended December 31, 2006
Filed March 1, 2007
Form 10-K/A for the fiscal year ended December 31, 2005
File No. 000-28218

Dear Mr. Gibson:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Martin F. James
Senior Assistant Chief Accountant