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