



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

December 20, 2007

VIA U.S. MAIL

Ms. Maureen L. Lamb
Chief Financial Officer
Kyphon Inc.
1221 Crossman Avenue
Sunnyvale, California 94089

Re: Kyphon Inc.
Form 10-K for the year ended December 31, 2006
Filed February 28, 2007
File No. 000-49804

Dear Ms. Lamb:

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