

Via Facsimile and U.S. Mail
Mail Stop 6010

August 2, 2007

Ms. B. Lynne Parshall, J.D.
Chief Financial Officer
Isis Pharmaceuticals, Inc.
1896 Rutherford Road
Carlsbad, CA 92008

**Re: Isis Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2006
Filed March 16, 2007
File No. 000-19125**

Dear Ms. Parshall:

We have completed our review of your Form 10-K and have no further comments at this time.

Sincerely,

Joel N. Parker
Accounting Branch Chief