



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3030

September 17, 2009

Via U.S. Mail

Ms. Laurie McKenzie-Carter
Chief Financial Officer
International Isotopes Inc.
4137 Commerce Circle
Idaho Falls, Idaho 83401

**Re: International Isotopes Inc.
Form 10-K for the Fiscal Year Ended December 31, 2008
Filed March 26, 2009
Forms 10-Q for the Quarterly Periods Ended March 31, and
June 30, 2009
File No. 000-22923**

Dear Ms. McKenzie-Carter:

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

Sincerely,

Jeff Jaramillo
Accounting Branch Chief