



DIVISION OF
CORPORATION FINANCE

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

March 28, 2011

Dr. Lawrence Helson
Chief Executive Officer and Chief Financial Officer
SignPath Pharma Inc.
1375 California Road
Quakertown, PA 18951

Re: SignPath Pharma Inc.
Form 10-Q for the Quarter Ended June 30, 2010
Filed August 23, 2010
File No. 333-158474

Dear Dr. Helson:

We have completed our review of the above filing and have no further comments at this time.

Sincerely,

Gus Rodriguez
Accounting Branch Chief