



Certificate

To: Solarium Biotechnology SA & Alimentos Esenciales para la Humanidad SA de CV
From: Ann St. Amand, Ph.D., CLP
Date: December 7, 2005
Subject: Culture Algal Identification

Dear Dr. Shamosh, I have spent considerable time with the two algal samples received by PhycoTech 11/16/2005. Both samples represent a single species of algae in high concentrations, *Arthrospira maxima* (*Spirulina maxima*). In the material I examined, I found no other algal taxa present.

All filaments were of similar morphology, grey green or dark blue-green, loosely spiraled, with cells 6-8 μm wide and 3-5 μm long. Cells contained aerotopes or gas vesicles, and were generally not constricted at the cross walls. Filaments often gradually attenuated at the terminal ends as well. Spirals were 20-50 μm , a slightly larger range than reported in the literature for wild-type material, but that is not unusual for culture material.

Representative images appear below. Please let me know if you have further questions.



Image at upper left was taken at 320x.
Image at upper right was taken at 500x.
Image at lower left was taken at 800x.