

# CWSF 2008 - Ottawa, Ontario



## Stephanie Gaglione

### The Effects of Nitrogen and Phosphorus Fertilizers on the Bioremediation of Oil

**Division:** Engineering & Computing Sciences / Environmental Innovation

**Category:** Junior

**Region:** York

**City:** Woodbridge, ON

**School:** St. Clare Catholic E.S.

**Abstract:** To test the stimulation of microorganisms utilized in bioremediation, additions of phosphorus and nitrogen were added to oil contaminated soils and water. The results indicated that an increased addition of nitrogen proved the most effective, while phosphorus and nitrogen mixtures were secondary. The supplements proved effective in increasing levels of bioremediation.

#### Biography

As a 13 year old, Stephanie Gaglione has a passion for the wilderness, frequently spending her summers at summer camp in Algonquin Provincial Park camping, canoeing, and adventure tripping. A sports enthusiast, as well, she enjoys cross-country and downhill skiing, distance running, and, above all, figure skating. In academic terms, Stephanie maintains a 95% grade average, excelling in mathematics, especially algebra, the sciences, and human geography. She is an accomplished public speaker, representing both her school, St. Clare CES, and area in the regional finals this past April. Her future aspirations are to become an aerospace engineer, biologist, or scientist. Graduating from Gr.8 this year, Stephanie will be attending St. Joseph Morrow Park in Toronto, Ontario this September. This is her first participation in the CWSF.

#### Awards

#### Value

The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Earth & Environmental Sciences - Junior Sponsor: Petro-Canada	\$300
<b>Total</b>	<b>\$1 300</b>