

# CWSF 2010 - Peterborough, Ontario



## Kelcie Miller-Anderson

### Phytoremediation of the Oil Sands

**Division:** Physical & Mathematical Sciences

**Category:** Intermediate

**Region:** Calgary Youth

**City:** Calgary, AB

**School:** Central Memorial High School

**Abstract:** This project used Mycorrhizal inoculated soybean plants as a means of phytoremediation in the Alberta Oil sands. The plants were grown in tailing sands soil, to determine if the Mycorrhizal addition allowed growth in the barren soil, and remediation of the hydrocarbons in the soil. The addition of the Mycorrhizal fungus increased the growth in the soybean plants allowing them to remediate the soil.

#### Biography

My name is Kelcie Miller-Anderson and I'm currently in Grade 10. This will be my second year participating at the CWSF and I am looking forward to the opportunity. This year my project received a Gold medal, the BP Canada Award of Excellence, Devon Canada Top Intermediate Award, Grass Roots N.W. Intermediate Environmental Awareness Award and the Canadian Society of Petroleum Geologists Travel Award at the Calgary Youth Science Fair. Dance occupies most of my time as I attend a performing arts school for dance, as well as dancing every day after school. Besides dance, I enjoy skiing, snowboarding and horseback riding as well as volunteer work. After high school I would like to attend the University of Victoria to become either a lawyer or a research biologist.

#### Awards

#### Value

The University of Western Ontario Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
Silver Medal - Environmental Innovation - Intermediate Sponsor: EnviroExpo, Presented by VIA Rail Canada	\$700
<b>Total</b>	<b>\$2 700</b>