



PHASE II ENVIRONMENTAL SITE ASSESSMENT FIELD BEST PRACTICES

Course Objective:

To provide professionals with a practical introduction to field best practices for completing Phase II Environmental Site Assessments.

Course Content:

- **Participate in an Introduction to Environmental Site Assessments & Geophysics** – Get exposure to tools like the EM31, EM38, and Electrical Resistivity Tomography (ERT).
- **Get Involved with Test Pitting** – Take part in observing and documenting soil conditions as test pits are excavated. Learn to operate a mechanical excavator and get behind the controls to put your skills to the test.
- **Be Part of Drilling Operations** – Observe and assist with solid stem, direct push, and sonic drilling technologies, and partake in the process of groundwater well and soil vapour well installations.
- **Engage with Field Instruments & Techniques** – Work alongside professionals using field instruments to take measurements, conduct field screening, and participate in logging, taking measurements and data recording.
- **Participate in Soil and Groundwater Sampling** – Collect soil samples, complete groundwater monitoring and sampling and complete chain of custody documents.

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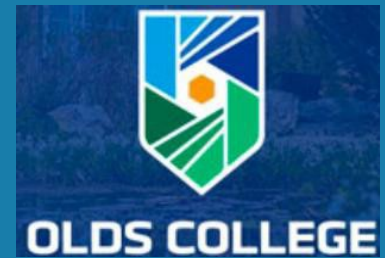
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Josh Ernst



Thursday, April 30

8:00 - 10:00
Olds College Classroom
Course Introduction and Objectives
Participate in an Introduction to Environmental Site Assessments & Geophysics

10:00-12:00
Olds College Heavy Equipment Training Centre
Line Locating, Hydrovac/Daylighting
EM31, EM 38 and ERT

12:00-13:30
Lunch (Provided) and Networking Break

13:30-16:30
Borehole Drilling, Testpitting and Soil Logging
Soil Sampling, Field Screening Methods

Friday, May 1

8:00 - 12:00
Olds College Field Classroom (Groundwater)
Field Tailgate Meeting - SOW and Safety
Monitoring Well Abandonment
Drilling and Monitoring Well Installation
Groundwater well Development, Monitoring, Sampling, Conductivity Tests
Soil Vapour Well Installation

12:00-13:30
Lunch (Provided) and Networking Break

13:30-15:30
Olds College Classroom
Groundwater Flow Direction Mapping
Analytical Results Review, Develop Conclusions

COURSE DETAILS

Day 1

Students will begin with an introduction to Phase I Environmental Site Assessments (ESAs), including the identification of Areas of Potential Environmental Concern (APECs) and Potential Contaminants of Concern (PCOCs). They will also explore geoscience tools and their application in developing Phase II ESA plans.

The training then moves outdoors, where students will gain hands-on experience using Electromagnetic Surveying Equipment. They will participate in line locating and hydrovac operations for daylighting underground utilities.

A catered lunch and networking session will follow, offering students the opportunity to connect with peers, industry professionals, and environmental consultants.

In the afternoon, students will excavate actual test pits, log soil characteristics, and collect soil samples. They will be actively involved in drilling operations, working with solid stem, direct push, and sonic drilling technologies. Emphasis will be placed on understanding the appropriate applications, benefits, and limitations of each method.

Students will learn about and use field instruments for soil screening, including headspace vapour analysis, electrical conductivity, pH, petroleum hydrocarbon field-screening kits, and chloride testing.

Finally, students will collect soil samples using appropriate containers, complete chain of custody documentation, and fill out laboratory requisition forms for analytical testing.



Day 2

Day 2 begins at the groundwater field laboratory at Olds College. Students will continue with drilling operations and assist in the installation and development of groundwater monitoring wells.

They will measure water levels and headspace vapours. Students will be introduced to a variety of groundwater sampling techniques, including low-flow, standard purge, and passive (no-purge) methods.

Groundwater samples will be collected in appropriate containers, with students completing all necessary chain of custody and laboratory submission paperwork.

Students will conduct hydraulic conductivity testing on a groundwater well using pressure transducers to measure groundwater recharge. Students will review conductivity curves to determine hydraulic conductivity (K) values.

Students will take part in the installation of soil vapour wells and will participate in leak testing, purging, vapour measurement, and sampling.

Following fieldwork, students will return to the classroom for data review and interpretation. They will review conductivity test results and groundwater flow direction maps, and compare analytical data to environmental criteria.

The day concludes with students drawing conclusions based on their findings and formulating site recommendations.

We are excited to offer the Phase II Environmental Site Assessment Field Best Practices Course for \$799 CAD plus GST. Secure your spot today—pay the course fee using any major credit card.

For further details on the course, or to register, please contact:

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