

Petroleum Information Module

Explanations of Module Material

[Welcome Educators.doc](#)

- ▲ Welcoming you to the first Petroleum Industry and GIS Information Module. This includes explanations of curriculum, clusters and learning outcomes from this module.

[Educator Form.doc](#)

- ▲ Please fill out this form to let us know you are using this module in your class. It will help us keep track and also allow us to keep you updated on changes and new lessons.

[Introduction to Manitoba's Oil Industry.ppt](#)

- ▲ This PowerPoint presentation is used as the introduction to the Petroleum Industry and GIS Module.

[Oil Field Lesson – Teachers Notes.doc](#)

- ▲ The full lesson including answers and extension exercises.

[Oil Field Lesson – Students.doc](#)

- ▲ Students copy of the lesson.

[Oil Field Lesson.mxd](#)

- ▲ Map project file.

[Oil Field Definitions.doc](#)

- ▲ A compiled list of basic definitions, Oil Well Status Symbols and pictures of core samples with their descriptions. To be used as companion to the module to help understand the industry and infrastructure.

[Data \(Shapefile\) Explanations:](#)

- ▲ [Bakken Formations](#) – This is the largest oil pool within the Daly Sinclair Field.
- ▲ [Daly Sinclair Field](#) – A region with an abundance of oil wells. There has been a large amount of drilling in this area since 2005. This Field boundary gives a visual representation used for licensing and naming of wells. Field boundaries are not fixed and can change every year if the drilling continues in that area. The Daly and the Sinclair Field were consolidated in 2010 due to their boundaries overlapping.
- ▲ [Land Use](#) - This dataset contains coverage of various sizes, depicting land use / land cover features, which were compiled based on Landsat Thematic Mapper (TM) imagery. The pixel resolution of this data is 30 meters. Upon classification, sixteen land classes are mapped, these being agricultural crop land, forage crops, grassland, open deciduous, deciduous, coniferous, mixedwood forests, treed rock, bogs, marshes and fens, bare rock, burnt areas, forest cutovers, open water, cultural features, roads and trails.
- ▲ [Manitoba](#) – A file of the provincial boundary for students to view where the oil fields are located.
- ▲ [MB Oil Wells](#) – All oil wells in the Province.
- ▲ [Mineral Ownership](#) – A map file containing all mineral ownership within the Daly Sinclair Oil Field Boundary
- ▲ [Oil Production 2009](#) – All producing wells in the Daly Sinclair Field for 2009.
- ▲ [Towns](#) – All Manitoba Towns

- ◆ Township Grid – Grid surrounding the Daly Sinclair Field.
- ◆ Manios.ttp and Map_status_symbols.lyr – The Manios font contains the symbols for the wells. Both files need to be added to each machine. Symbols are set based on the map_status column of the attribute table for the Daly Sinclair Wells.

Oil Field Map.pdf

- ◆ This map shows all 13 Oil Fields within the province and includes an inset map of the entire province showing where the fields are located. All wells are shown on this map including producing, dry and abandoned etc.

Geologic Column.pdf

- ◆ This handout can be located at <http://www.manitoba.ca/iem/petroleum/pubcat/stratcolumn.pdf> It shows the geologic formations in South Western Manitoba. It also includes the productive intervals and documented oil and gas formations. Within the module students will link to the internet or look at the handout to answer questions.

Sinclair 2003- 2010.pdf

- ◆ This is a yearly map we create to show the growth of the Daly Sinclair Oilfield since 2003

2010 Oil Facts.pdf

- ◆ A compiled list of industry information and statistics

Average Wages and Cost Sheet – 2011.xls

- ◆ A compiled list of average wages and cost per metre to drill both horizontal and vertical wells. This will be used within the module to help students find the answers to some of the module questions.

Helpful Links:

Information for Educators Page: <http://www.manitoba.ca/iem/petroleum/educators/index.html>

Manitoba Petroleum Branch Home Page: <http://www.manitoba.ca/iem/petroleum/>

About the Petroleum Branch: <http://www.manitoba.ca/iem/petroleum/role.html>

Petroleum Branch GIS Map Gallery: <http://www.manitoba.ca/iem/petroleum/gis/index.html>

If you have any questions regarding this lesson please contact:

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