

User Manual

Mineral Tenure Map Viewer – User Manual

Version 1.0

For:

Government of Northwest Territories - Lands

By:

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1.0 INTRODUCTION

1.1 Overview

The Mineral Tenure Map Viewer allows users to browse online map information and real-time data maintained by the GNWT MITS (expand acronym) database. This help document provides an introduction to the components of the Map Viewer and how to use them.

The Map Viewer is designed to be used with minimal technical support through intuitive and standard web mapping functions. The easiest way to familiarize yourself with the Map Viewer is to review the *Quick Reference Guide* (on the next page) and then explore the website by trying out each tool. If further information is required, it is recommended to use the full User Manual as a reference with details outlining each specific map function.

The Map Viewer *Home (About)* page is found on the left side of the map. It provides basic information about the website and an introduction to the functions and support documentation for the *Mineral Tenure Map Viewer* application.



Pay attention to these symbols for important guidance.

1.2 Getting Started

While using the Map Viewer, explore information in the map window while also opening dialog windows with search results and tables related to the mapped information. View maps and tables online or export tabular data and maps to common formats for use in spreadsheets, e-mail, or documents. For GIS users, functions exist to clip data to a desired extent and export map data for use in your desktop applications.

Keep in mind these common characteristics of the application to help you get started quickly:

- Read the welcome message left of the map to get a quick introduction to Mineral Tenure Map Viewer.
- Use the **Toolbars** and *I want to...* shortcuts to complete most tasks.
- Maximize the **Map Window** when needed by collapsing the **Information Window** left of the map window and/or the toolbar above the map window.
- Use the tabs on the bottom-left of the Information Window to view map layers or to show the map legend and also to see various tool dialog messages or search results.
- This User Manual is accessible from the **About** page.
- Hover the mouse over the tools to view **Tool Tips** that provide a description of each button.

Review the Quick Reference Guide on the following pages.

Quick Reference Guide

Toolbar Menu Tabs:

The Navigation toolbar is open by default. Click on other menu tabs to review other Tools and Search functions for various tenure types:

- Mineral Claims
- Mineral Leases
- Prospecting Permits
- Coal Exploration Licenses

Toolbar Buttons:

Use these buttons to perform specific tasks to move around in the map window, explore data, and mark-up the map for printing. See Sections 1.3 to 1.10 in the user manual for a description of each individual toolbar button. Hold the mouse over a button to see the tool tips that describe its function.


Information Window (Left):

By default this window contains some key information about the Mineral Tenure Map Viewer.

This window can be toggled on/off to add space for the map window.

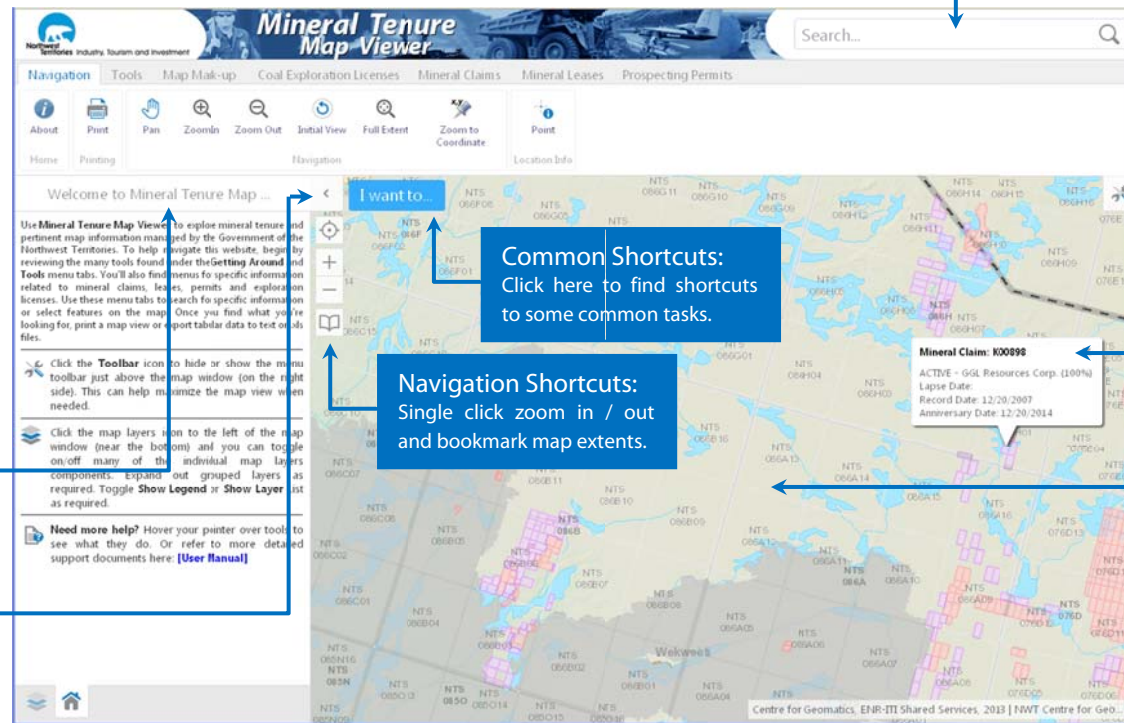
These tabs control what you see in the Information Window. You will want to toggle between map layers and legend view frequently.

Global Search:

The global search tool will find results for geographic place names, NTS map sheet names, and most fields in all mineral tenure layers. All results will be listed to the left of the map. Select one of the results to automatically zoom to that location. Press  (located below the search results) to open the results in a table view below the map window.

Toggle Toolbar:

Toggles the toolbar on / off to leave more space for the map window.



Common Shortcuts:
Click here to find shortcuts to some common tasks.

Navigation Shortcuts:
Single click zoom in / out and bookmark map extents.

Quick Information:
Single click on any mineral tenure polygon to open a concise description.

Map Window:
Dynamic map includes base mapping layers, real-time display of MITS (Mineral Tenure) information and land-use reference data layers that may influence mineral tenure decisions.

Layers can be toggled on / off as required with the Map Layers tab.

Quick Reference Guide

Managing Map Layers:

Map Layers:

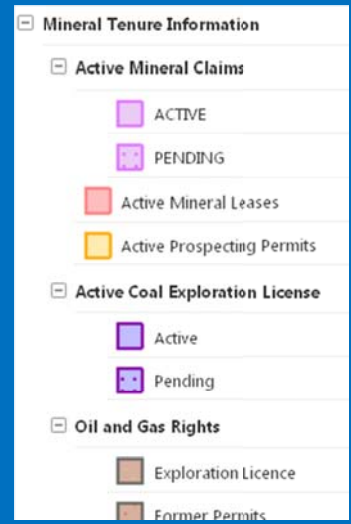
Use the Map Layers tab to customize the layers that are visible in the map window.

Use check boxes to toggle visibility of individual map layers or groups of layers. (Lighter fonts refer to layers that automatically become visible at other map scales.)

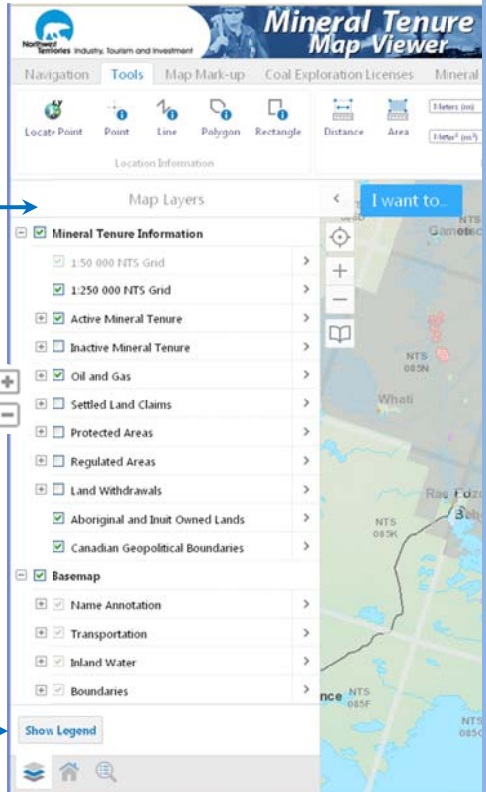
Press + and - to expand or collapse map layers or grouped layers.

Show / Hide Legend:

Click here to show the Map Legend symbols or click again to return to Map Layers .

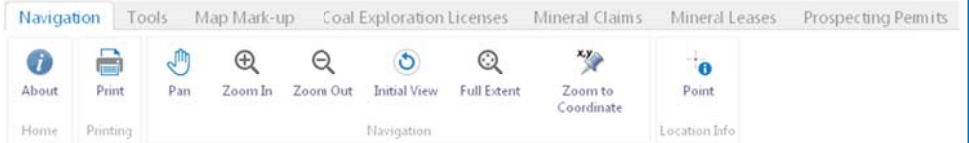


- Mineral Tenure Information
 - 1:50 000 NTS Grid
 - 1:250 000 NTS Grid
 - Active Mineral Tenure
 - Inactive Mineral Tenure
 - Oil and Gas
 - Settled Land Claims
 - Protected Areas
 - Regulated Areas
 - Land Withdrawals
 - Aboriginal and Inuit Owned Lands
 - Canadian Geopolitical Boundaries
- Basemap
 - Name Annotation
 - Transportation
 - Inland Water
 - Boundaries
- Mineral Tenure Information Legend
 - Active Mineral Claims
 - ACTIVE
 - PENDING
 - Active Mineral Leases
 - Active Prospecting Permits
 - Active Coal Exploration License
 - Active
 - Pending
 - Oil and Gas Rights
 - Exploration Licence
 - Former Permits



Index of Tools by Toolbar Menu:

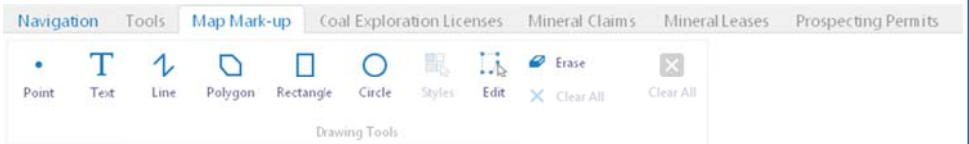
Navigation: Refer to user manual Section 1.5




Location and Measurement Tools: Refer to user manual Section 1.6



Map Mark-up Tools: Refer to user manual Section 1.7



Mineral Tenure Search Tools: Refer to user manual Sections 1.8 to 1.11



Note: Similar buttons exist on each of the 4 Mineral Tenure toolbars, however the Search / Select functions are customized to each specific data type. Follow, directions provided to the left of the map window. Once specific tenure polygons are selected, tabular information can be viewed and exported.

- Mineral Claims
- Mineral Leases
- Prospecting Permits
- Coal Exploration Licenses

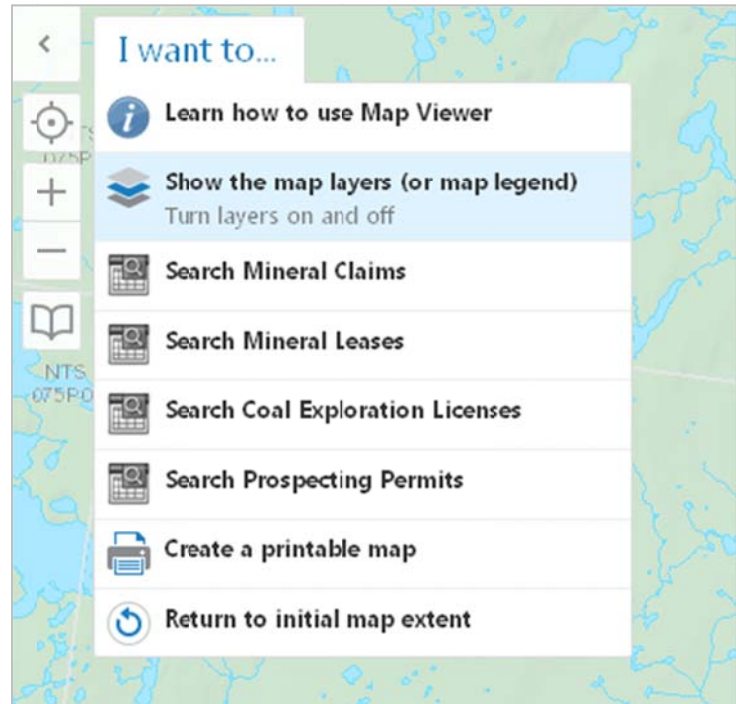
Advanced Search (by map layer) allows users to search for data in any of the available map layers. (For example: Oil and Gas, Land Withdrawals, or Aboriginal and Inuit Owner Lands.) Refer to Section 1.12.

1.4 Common tasks

The information contained within this section outlines key ways to complete common tasks using the Mineral Tenure Map Viewer.

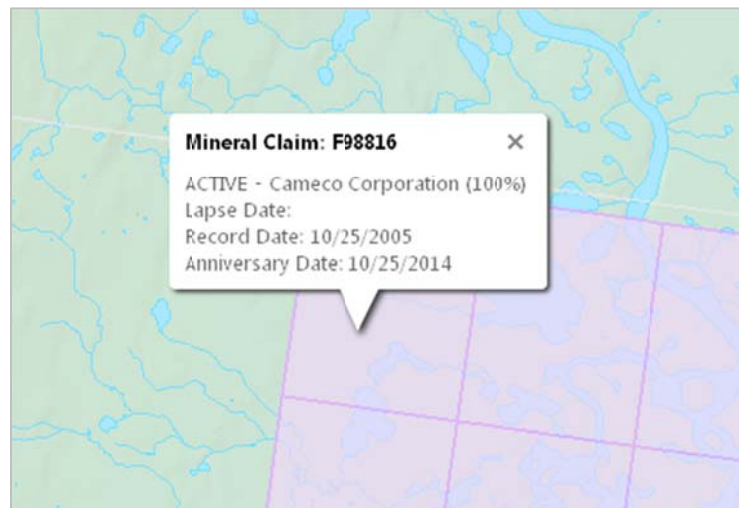
I Want To...

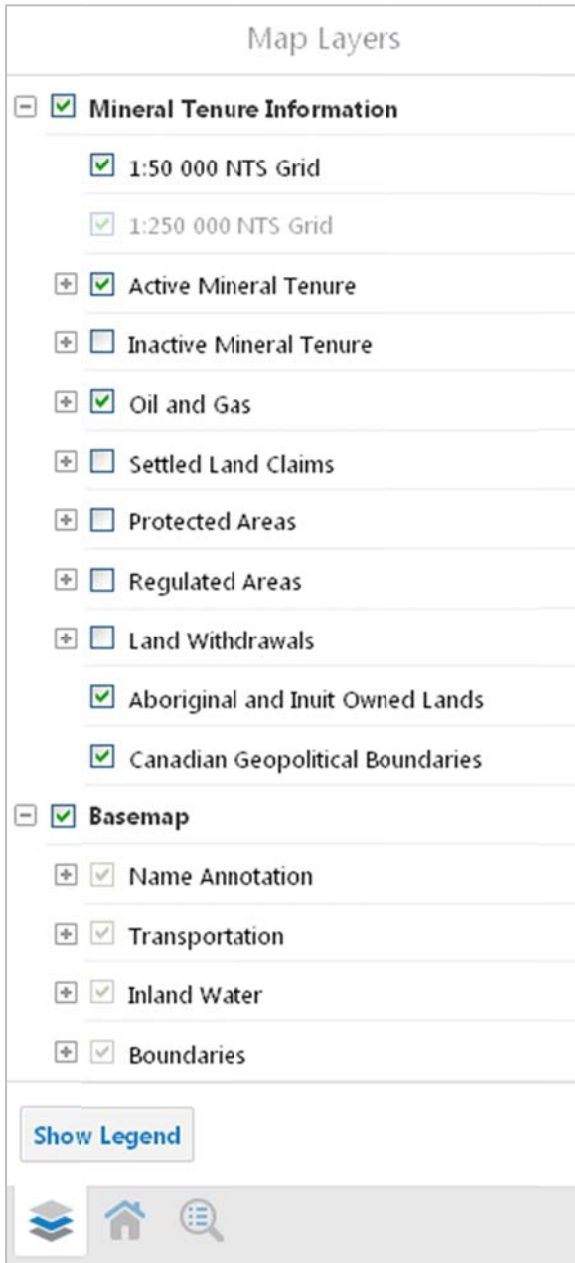
Use this menu located inside the map window to quickly find and launch common tasks.



To find basic information about any mineral tenure polygon, click on it to open a *Map Tip* containing the key information specific to a Mineral Lease, Mineral Claim, Prospecting Permit, or Coal Exploration Lease. Use the Search tools for these layers found on each associated toolbar tab or the *Global Search* located in the top right-hand corner of the window to find more information.

Tenure polygons and many other data layers have labels that become visible as the map is zoomed in.





Press the *Map Layers* tab (bottom left corner) to customize the map by turning on/off individual map layers or grouped layers. Layers are grouped primarily as 'Basemap' layers (below) with 'Mineral Tenure Information' above. Several map layers are turned off by default but may prove to be valuable for mineral tenure planning. Toggle on/off the *Map Legend* to see cartographic symbols.

1.5 Map Navigation

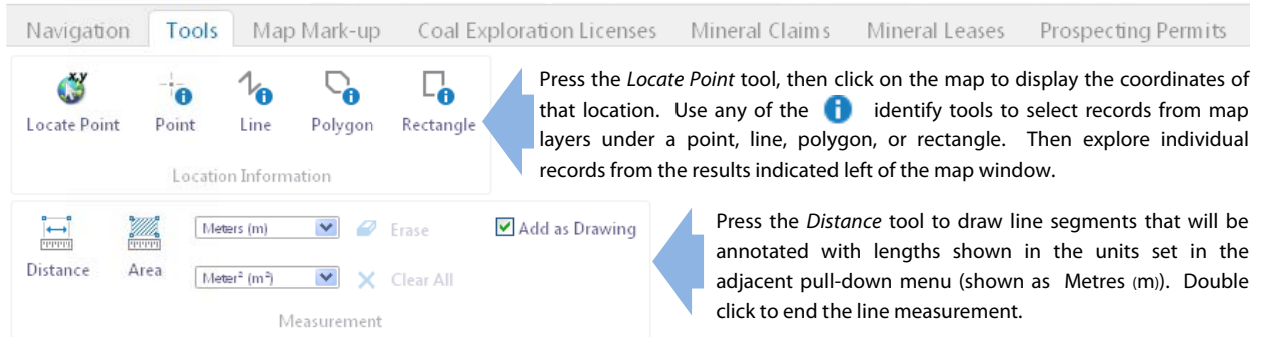
The *Navigation Toolbar* includes several tools to help zoom to an area of interest or browse the mineral tenure landscape cartographically. Review the following section to learn about key ways to move around in the map view and find more information concerning particular layers at the selected location.

<p>Navigation Tools Map Mark-up Coal Exploration Licenses Mineral Claims Mineral Leases Prospecting Permits</p>	
<p>About Home</p> <p>Print Printing</p>	<p>Press the <i>About</i> tool to open the <i>Home Page</i> with information to help guide you through the use of the Map Viewer. Use the <i>Print</i> dialog to save a map view as a PDF (or other common image file formats). Selecting a map scale of ⚠ <i>Current Scale</i> or <i>Current Extent</i> will result in the printed map being created and a non-standard map scale when printed to letter-size (8.5x11) paper.</p>
<p>Pan</p> <p>Zoom In</p> <p>Zoom Out</p> <p>Navigation</p>	<p>Press these navigation tools, and then drag the mouse in the map window to complete pan or zoom functions.</p>
<p>Initial View</p> <p>Full Extent</p> <p>Navigation</p>	<p>Return to the <i>Initial View</i> map extent to quickly locate and zoom to another location. Or press <i>Full Extent</i> to zoom to the full extent of the map data.</p>
<p>Zoom to Coordinate</p> <p>Point Location Info</p>	<p><i>Zoom to Coordinate</i> prompts users to enter a known coordinate and then the map will zoom to that location (as illustrated below). <i>Point Location Information</i> is used to click on a location on the map and return results for the map layers that overlap that location. In GIS applications this is commonly referred to as the <i>Identify Tool</i>.</p>

The *Zoom to Coordinate* tool is used to pan the map directly to a specific coordinate that users enter. Be sure to select the appropriate *Spatial Reference* (Coordinate System) from the available choices. Then enter the pair of coordinate values and press *Zoom* to complete the task.

1.6 Common Tools

The *Tools* Toolbar includes tools to measure distances or areas, and view the information of map features at any point location or larger area of interest on the map.



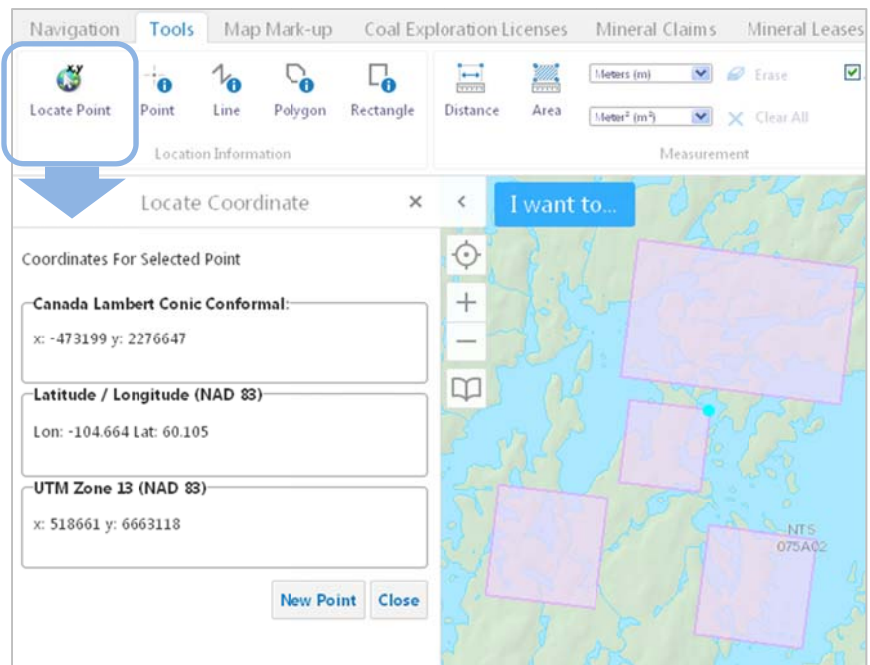
Press the *Locate Point* tool, then click on the map to display the coordinates of that location. Use any of the **i** identify tools to select records from map layers under a point, line, polygon, or rectangle. Then explore individual records from the results indicated left of the map window.

Press the *Distance* tool to draw line segments that will be annotated with lengths shown in the units set in the adjacent pull-down menu (shown as Metres (m)). Double click to end the line measurement.

Press the *Area* tool to draw a polygon annotated with total area measures in the units indicated.

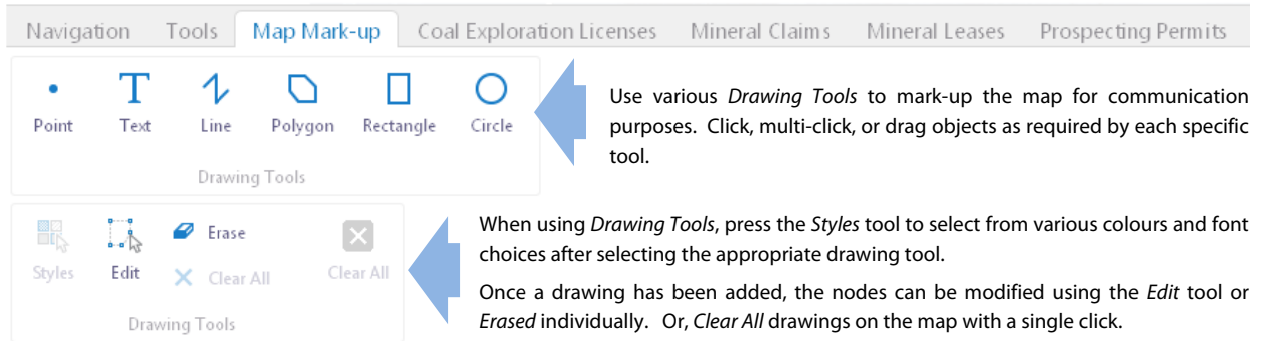
Erase individual measurements or *Clear All* measurements from the map. Unclick the *Add as Drawing* dialog to make measurements without map mark-up.

When using the *Locate Point* Tool, click on a location within the map and coordinates are displayed in common coordinate systems as illustrated below. UTM (North American Datum 1983) coordinates are automatically assigned to the correct UTM zone. Press *New Point* to display another location or *Close* to continue with another task.

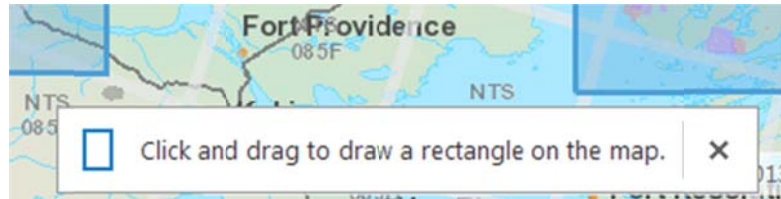


1.7 Map Mark-up Tools

The *Map Mark-up* toolbar includes drawing tools to add *points, lines, polygons* and *text* annotation to the dynamic map. This can be useful document ideas prior to printing (.PDF) or exporting the map view as an image (.GIF, .JPG, .PNG). Graphics can be added, symbolized, altered, labeled, or erased prior to printing. Due to the nature of web mapping, these graphics are only intended to be temporary and can only be saved as an image or PDF map output using the *Print* tool. Often, mark-up tools can serve to mark an area of interest to a map that can be shared with colleagues or other stakeholders.

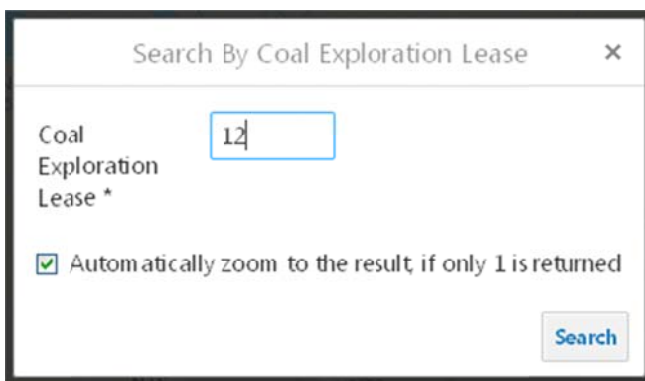


! A dialog on the bottom of the map window provides guidance to any drawing tool that has been selected. Be sure to press the **X** to close this dialog before beginning the next task.



1.8 Coal Exploration Licenses

The *Coal Exploration Licenses* toolbar includes specific tools to search for information pertaining to the coal tenure system. Unlike other Mineral Tenure map layers, Coal Exploration Licenses are not connected through the MITS database but through regular updates managed by the NWT Centre for Geomatics. In addition this toolbar includes an *Advanced Search* wizard that allows users to develop custom queries to search for information specific to any map layer in the map legend (Refer to Section 1.12 for detailed guidance to use the *Advanced Search* by map layer).



Press the *Search / Select License(s) by table* button to open the search dialog. Alternatively use *by map* and follow the guidance to the left of the map window to interactively select tenure information on the map.

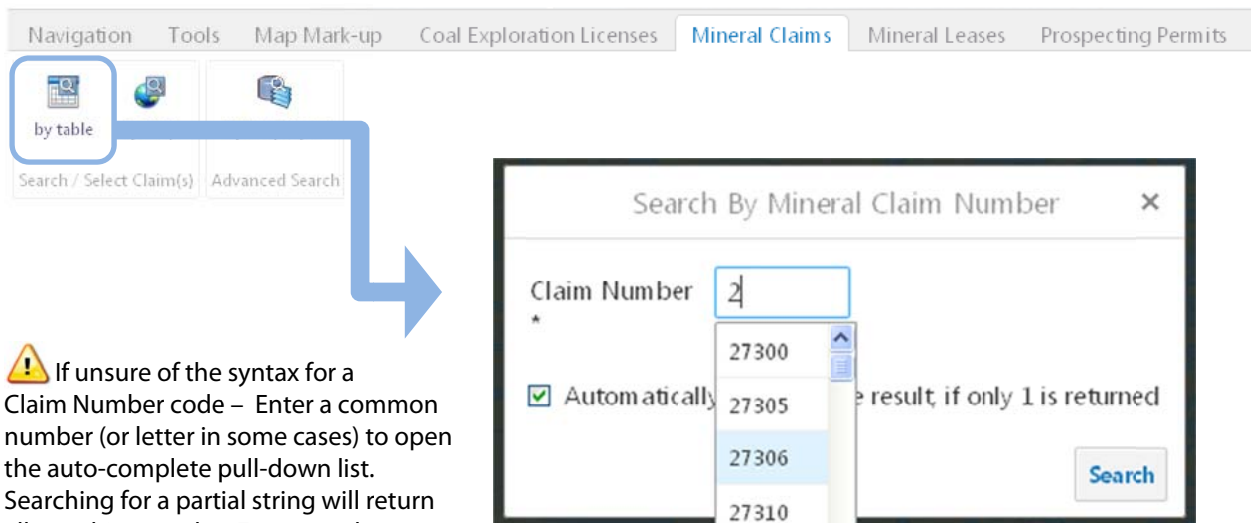


! If you are unsure of the syntax for a Coal Exploration Lease code – Enter a common number (or letter in some cases) to open the auto-complete pull-down list.

1.9 Mineral Claims

The *Mineral Claims* toolbar has specific tools to search for real-time information pertaining to the claims data managed in the MITS database. In addition, this toolbar includes an Advanced Search wizard that allows users to develop custom queries to search for information specific to any map layer in the map legend (Refer to Section 1.12 for detailed guidance to use the *Advanced Search* by map layer).

Press the *Search / Select Claim(s) by table* button to open the search dialog. Alternatively use *by map* and follow the guidance to the left of the map window to interactively select tenure information on the map.



! If unsure of the syntax for a Claim Number code – Enter a common number (or letter in some cases) to open the auto-complete pull-down list. Searching for a partial string will return all matching results. For example, enter 273 to return all Claims that include the Numbers 273 in the code.

! Use the *Global Search* dialog on the top right of the map window to search for mineral claims, however using the tools on the *Mineral Claims Toolbar* will simplify search results by not including search results from other map layers. The *Global Search* approach is illustrated on the following page. Note the K03 value entered in the top right search field and the 58 Search results that match K03 in the window to the left of the map. These results may also include items that are not mineral claim codes. These results will remain on a tab to the left of the map window until another search is completed. Click a specific result to open the database information pertaining to that location and automatically zoom the map to that location. Press the left arrow on the information panel to return back to the list of search results.

Mineral Tenure Map Viewer

Navigation Tools Map Mark-up Coal Exploration Licenses **Mineral Claims** Mineral Leases Prospecting Permits

by table by map by map layer

Search / Select Claim(s) Advanced Search

Search Results: K03 (58)

Mineral Claim: K03838
ACTIVE - Strongbow Exploration Inc (100%)
Lapse Date:
Record Date: Thursday, November 30, 2006 4:00:00 PM
Anniversary Date: Wednesday, November 30, 2016 4:00:00 PM

Mineral Claim: K03839
ACTIVE - Strongbow Exploration Inc (100%)
Lapse Date:
Record Date: Thursday, November 30, 2006 4:00:00 PM
Anniversary Date: Wednesday, November 30, 2016 4:00:00 PM

Mineral Claim: K03840
ACTIVE - Strongbow Exploration Inc (100%)
Lapse Date:
Record Date: Thursday, November 30, 2006 4:00:00 PM
Anniversary Date: Wednesday, November 30, 2016 4:00:00 PM

Mineral Claim: K03841
ACTIVE - Strongbow Exploration Inc (100%)
Lapse Date:
Record Date: Thursday, November 30, 2006 4:00:00 PM
Anniversary Date: Wednesday, November 30, 2016 4:00:00 PM

Displaying 1 - 50 (Total: 58)

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To learn what's there, click or tap and drag to draw a rectangle on the map.

Mineral Tenure Map Viewer

Navigation Tools Map Mark-up Coal Exploration Licenses **Mineral Claims** Mineral Leases Prospecting Permits

by table by map by map layer

Search / Select Claim(s) Advanced Search

Mineral Claim: K03839

Actions

- Zoom to Feature**
Zoom to this feature on the map.
- Pan**
Pan the map to center this feature.

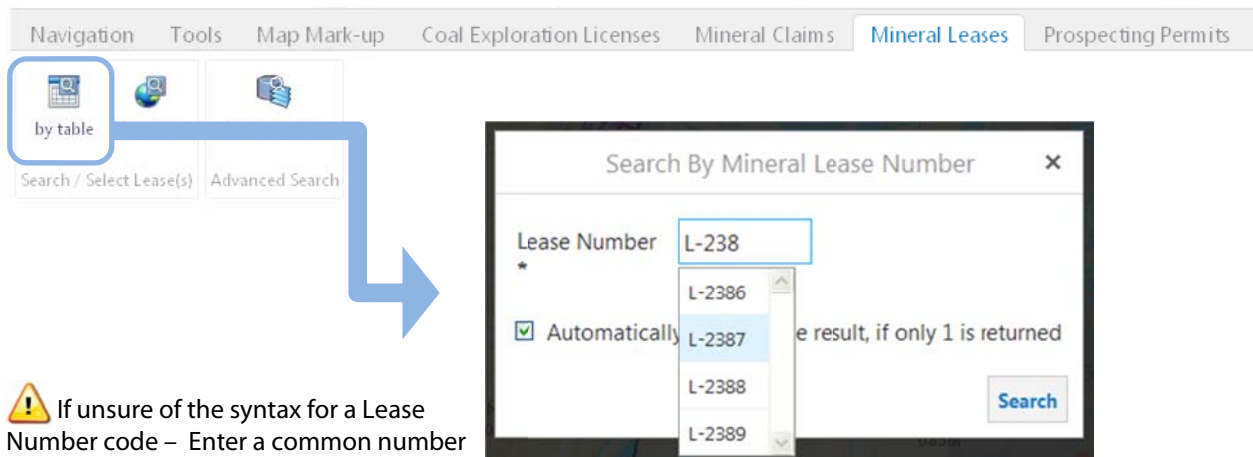
Details

CLAIM NUMBER	K03839
CLAIM STATUS	ACTIVE
DISTRICT	2
LAPSE DATE	N/A
RECORD DATE	Thursday, November 30, 2006 4:00:00 PM
ANNIVERSARY DATE	Wednesday, November 30, 2016 4:00:00 PM
AREA (Acres)	1045.1
OWNER NAME	Strongbow Exploration Inc.
PERCENTAGE	100

To learn what's there, click or tap and drag to draw a rectangle on the map.

1.10 Mineral Leases

The *Mineral Leases* toolbar has specific tools to search for real-time information pertaining to the license data managed in the MITS database. In addition, this toolbar includes an *Advanced Search* wizard that allows users to develop custom queries to search for information specific to any map layer in the map legend (Refer to Section 1.12 for detailed guidance to use the Advanced Search by map layer).



⚠ If unsure of the syntax for a Lease Number code – Enter a common number (or letter in some cases) to open the auto-complete pull-down list. Searching for a partial string will return all matching results. For example, enter L-238 (or just 238) to return all Claims that include those numbers in the code.

⚠ Use the *Global Search* dialog on the top right of the map window to search for mineral claims, however using the tools on the *Mineral Leases toolbar* will simplify search results by not including search results from other map layers. The *Global Search* approach is illustrated on the previous page. Note the K03 value entered in the top right search field and the 58 Search results that match K03 in the window to the left of the map. These results may also include items that are not mineral lease codes (as illustrated by the example that has found mineral claims, not leases). These results will remain on a tab to the left of the map window until another search is completed. Press on a specific result to open the database information pertaining to that location and automatically zoom the map to that location. Press the left arrow on the information panel to return back to the list of search results.

1.11 Prospecting Permits

The Prospecting Permits toolbar has specific tools to search for real-time information pertaining to the permit data managed in the MITS database. In addition, this toolbar includes an *Advanced Search* wizard that allows users to develop custom queries to search for information specific to any map layer in the map legend (Refer to Section 1.12 for detailed guidance to the Advanced Search by map layer).

Oil and Gas Rights Search Results

Do you want to generate XLS and CSV files of the search results?

[Generate Reports](#) [Close](#)

OBJE.TID	LAND CODE	CURRENT AREA HECTARES	INITIAL AREA HECTARES	AGREEMENT TYPE	COORDINATE	REGION_E	RE
92	PL10	3818	3818	PL	NAD27	Mackenzie Valley	Val
119	SDL013	5688	5688	SDL	NAD27	Mackenzie Valley	Val
193	SDL090	319	319	SDL	NAD27	Mackenzie Valley	Val
201	SDL098	2547	2547	SDL	NAD27	Mackenzie Valley	Val

Displaying 1 - 12 (Total: 12) Page 1 of 1

Search Results Download Links

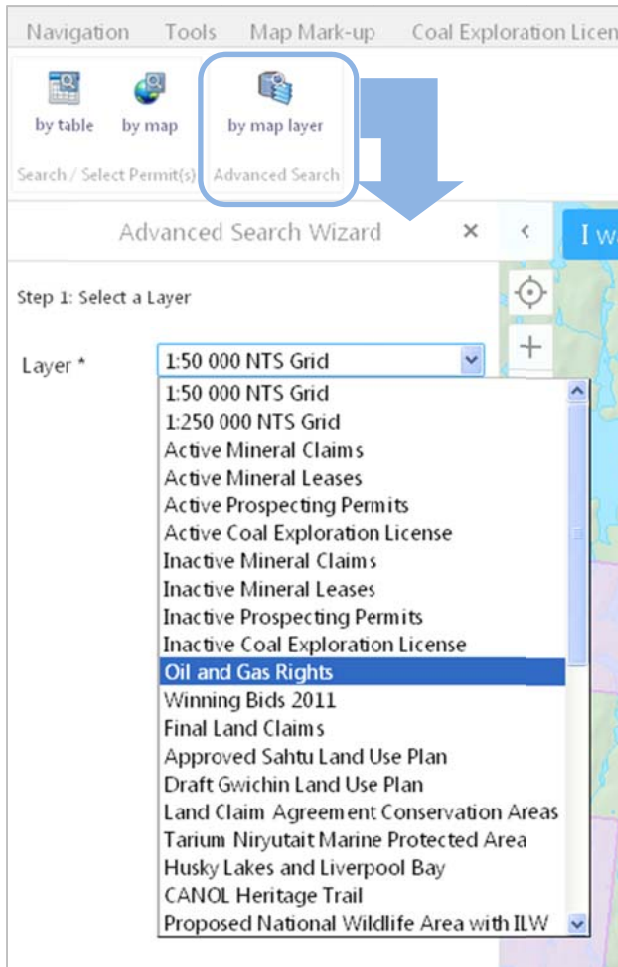
[Click to download Excel Format](#)

[Click to Download CSV Format](#)

[Close](#)

1.12 Advanced Search by Map Layer

An *Advanced Search (by map layer)* tool is found on each of the four operational mineral tenure toolbars (Coal Exploration Licenses, Mineral Claims, Mineral Leases, and Prospecting Permits). Each of these four buttons launches the same *Advanced Search Wizard* which allows users to develop custom queries to search for information for any map layer in the map viewer. Common uses could include searching for oil and gas tenure information, specific land withdrawals, regulated areas, or to search mineral tenure files by a data field other than the unique (license number, claim number or permit number) codes.



Step 1

After clicking the Advanced Search (by map layer) button, Select the desired layer to search.

Step 2

Select the *field* from the map layer that contains the data that is to be searched. Notice that the *Query Details* window illustrates the SQL query string as it is developed by the query wizard.

Step 3

Select the *operator* and search *value* for the query. The value can include a selection of a specific name (eg. 065A03) or just use the entered text (eg. 65) to return all results with those values contained in the field. Notice that the *Query Details* window now illustrates the revised SQL query string as it is developed by the query wizard.

Step 4

Click *Finish* if satisfied with the query statement or modify the WHERE clause of the SQL statement to develop more complex queries.

1.13 Global Search


The search window on the top right of the application banner is designed to search many key map layers to quickly locate information when the search string is known. Specifically, place names, NTS map sheet codes, land withdrawals and protected areas can be entered to quickly find an area of interest. Partial names or codes can be entered to return a list of suitable results.





The following map layers are searchable using the *Global Search*.

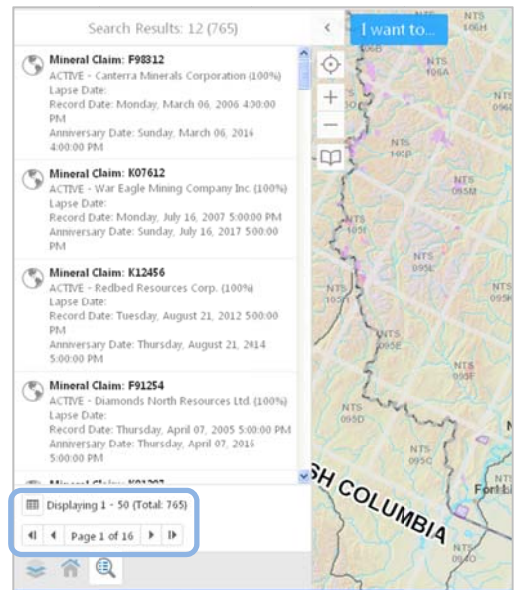
- Place Names (Including communities, lakes and rivers, geographic features)
- NTS Mapsheets (Including 1:50,000 and 1:250,000)
- Mineral Tenure polygons (Including Claims, Leases, Licenses and Permits)
- Oil and Gas
- Settled Land Claims
- Protected Areas
- Regulated Areas
- Land Withdrawals
- Aboriginal and Inuit Owned Lands

Global Search can act as a simple way to find mineral tenure results as well. The search example shown right demonstrates this process.

 Keep in mind that *Global Search* does not link to the *Generate Reports* tools (see Section 1.11) that export result to .XLS and .CSV formats. Users must carefully highlight the table, copy, and paste into applications like MS Excel. (Be sure to include the headings as well.)

In this example the user entered 12 in the global search field and has returned 765 results with 50 results shown per page over 16 pages. Clicking any single result record will jump to that individual result, however users can also open the full set of results in table views by clicking on the open tables icon.


 Click  to open *Global Search* results in table view with each map layer shown on an individual table tab.



Search Results: 12

CLAIM NUMBER	CLAIM STATUS	DISTRICT	LAPSE DATE	RECORD DATE	ANNIVERSARY DATE	AREA (Acres)
F98312	ACTIVE	2		Monday, March 06, 2006 4:00:00 PM	Sunday, March 06, 2016 4:00:00 PM	668.86
K07612	ACTIVE	2		Monday, July 16, 2007 5:00:00 PM	Sunday, July 16, 2017 5:00:00 PM	480.77
K12456	ACTIVE	2		Tuesday, August 21, 2012 5:00:00 PM	Thursday, August 21, 2014 5:00:00 PM	264.3
F91254	ACTIVE	2		Thursday, April 07, 2005 5:00:00 PM	Thursday, April 07, 2016 5:00:00 PM	10451

Displaying 1 - 54 (Total: 62)

 Highlight results in the table shown above to copy and paste information into other applications.

1.14 Managing Search Results and Tabular Information

Searching for mineral tenure information will display a list of matching results that are displayed in the information window to the left of the map window (as shown below). The global search function will return any number of matched results and you can click individual results to select and view the information for that record. Global search is currently not designed to generate tables or results for export, although tabular information can be copy and pasted into MS Excel or similar applications (Review Section 1.13 for further instructions). Use the specific searches or selection tools on each of the tabs for Licenses, Claims, Lease, or Permits to select multiple results (or multiple polygons) and then view tabular data which can then be exported to your desktop. The image below illustrates how a Mineral Claim search displays data in 3 places:

1. Search results listed to the left of the map window. Click these results to zoom to individual polygons on the map.
2. Search results are formatted as a single table below the map window. You can scroll through the data to locate specific information of interest or click the Generate Reports button that automatically opens to the left of the map window. The reports that are generated can be exported to XLS or CSV formats for use in application such as MS Excel.
3. Search results are also highlighted in yellow on the map.



Search results list or individual record information displayed to left of map. Selection is highlighted in yellow on the map. Tabular results displayed below with option to generate reports for export.

CLAIM NUMBER	CLAIM STATUS	DISTRICT	LAPSE DATE	RECORD DATE	ANNIVERSARY DATE
K03961	ACTIVE	2		Wed Feb 07 2007 16:00:00 GMT-0800 (Pacific Daylight Time)	Fri Feb 07 2014 16:00:00 G
K03962	ACTIVE	2		Wed Feb 07 2007 16:00:00 GMT-0800 (Pacific Daylight Time)	Tue Feb 07 2017 16:00:00 G
K03963	ACTIVE	2		Wed Feb 07 2007 16:00:00 GMT-0800 (Pacific Daylight Time)	Tue Feb 07 2017 16:00:00 G
K03964	ACTIVE	2		Wed Feb 07 2007 16:00:00 GMT-0800 (Pacific Daylight Time)	Tue Feb 07 2017 16:00:00 G

Displaying 1 - 9 (Total: 9)
Page 1 of 1

Displaying 1 - 9 (Total: 9)
Page 1 of 1

⚠ Navigate through pages of results if several results are found. Use the tabs shown to flip between showing map layers, showing the home(about) page, displaying search results list, or displaying a specific tool such as the generate reports tool that open automatically when a mineral tenure search function is completed.

⚠ Click  to display table views below the map window. Click  to return to the search result view.

2.0 CONTACT INFORMATION

For more information related to the Mineral Tenure Map Viewer contact:

NWT Centre for Geomatics

Shared Services Centre for
Environment and Natural Resources,
Industry, Tourism and Investment
5102 – 50th Avenue, 7th floor
Yellowknife, NT X1A 3S8

www.geomatics.gov.nt.ca

The map viewer has been developed with the assistance of Caslys Consulting Ltd.

Caslys Consulting Ltd.

Unit 102A, 6683 Oldfield Road
Saanichton, B.C., V8M 2A1

Contact: Justin McPherson
Tel: (250) 652-9268; Fax: (250) 652-9269
Email: jmcperson@caslys.ca